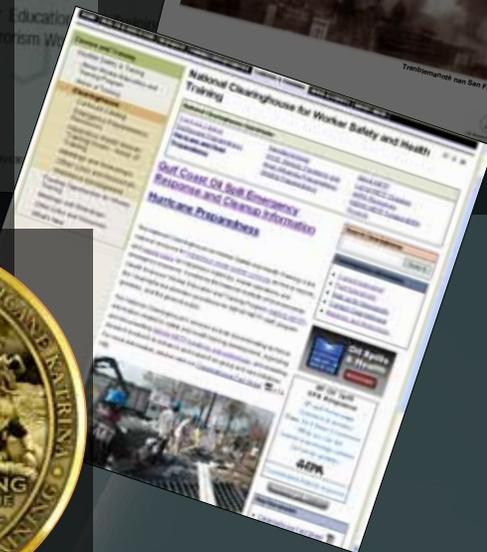
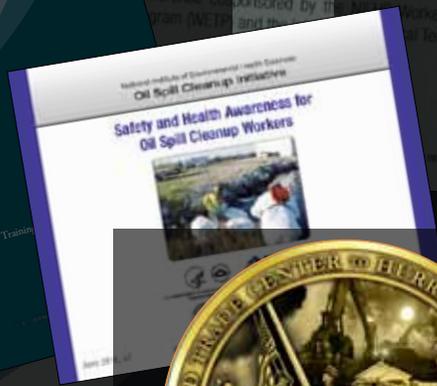
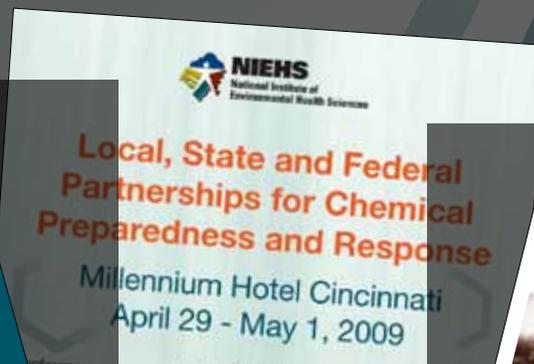
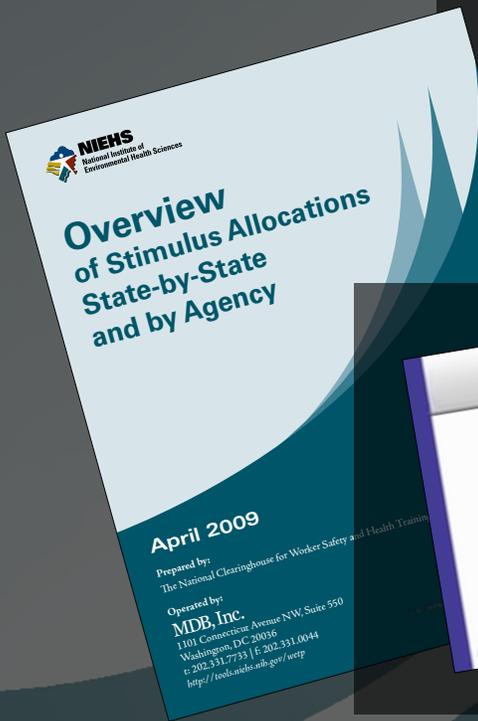




**NIEHS**  
National Institute of  
Environmental Health Sciences

Worker Education and Training Program

# National Clearinghouse for Worker Safety and Health Training Final Report for 2005-2010



Operated by **MDB, Inc.**

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Contract # 273-05-C-0017



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
National Institutes of Health



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## Introduction

This final report for MDB, Inc.'s 2005-2010 Clearinghouse contract describes the broad range of technical and research support provided to the National Institute for Environmental Health Sciences' (NIEHS) Worker Education and Training Program (WETP) under Contract # 273-05-C-0017. This report covers the work completed during the entire five-year contract period, beginning September 16, 2005 and ending on September 15, 2010.

During the last five years, MDB has helped develop multiple awareness-level health and safety training materials for emergency response workers, improved the structure and functionality of the Clearinghouse website, facilitated communications between emergency response agencies and organizations, and improved the quality of the technical meetings and generated substantive, peer reviewed reports. The past five years have been a challenging and exciting time for worker safety and health issues. MDB's support of the NIEHS WETP National Clearinghouse and WETP Awardees has increased awareness of and hopefully made a difference in the health and safety of American workers.

## Executive Summary

Over the past five years, MDB has provided technical and research support for the NIEHS WETP and ensured the smooth operation of the WETP National Clearinghouse. It has been an extraordinarily productive and innovative time. In 2005, WETP received formal activation by OSHA and FEMA under the Worker Safety and Health Annex of the National Response Plan (now the National Response Framework) in response to Hurricane Katrina. The program has developed multiple worker safety and health technical workshops and informational conferences on issues like avian influenza, green jobs, nanotechnology, and environmental justice. The Clearinghouse has developed multiple training tools and resource pages that help protect skilled support personnel in disaster situations beyond the original DHS disaster scenarios. The program has increased its profile in the hazardous waste worker community by testifying at Congressional and federal agency hearings, hosting multiple stakeholder worker safety and health meetings and increased communication between WETP Awardees, NIEHS, unions, trade groups and other federal agencies. Simply put, the Clearinghouse has grown beyond being a recognized national resource for hazardous waste worker curricula, technical reports, and weekly news on hazardous materials, waste operations and emergency response.

There were many additions to the Clearinghouse staff. Deborah Weinstock joined as Clearinghouse Director in October 2005, taking over for Bruce Lippy. Ms. Weinstock has nearly 20 years of experience in the safety and health field, including seven years as an Occupational Safety and Health Specialist in the AFL-CIO Department of Occupational Safety and Health. In September 2007, Daniel Youhas joined the clearinghouse staff as a Communications Specialist. Mr. Youhas served as an OSHA Program Analyst in the Directorate of Cooperative and State Programs and was the Manager of Government Affairs at the Shipbuilders Council of America. Joy Lee joined the Clearinghouse in October 2008, first as a graduate intern, then as a Public Health Specialist. Ms. Lee earned her Masters in International Studies, with a concentration in Conflict and Cooperation from Old Dominion University and a Graduate Certificate in Public Health and Emergency Management from George Washington University. Kerri Moran, our events planner, joined MDB in December 2006. Ms. Moran has worked for Congressman Jim Nussle (R-IA) and the National Foundation for Women Legislators. MDB and the Clearinghouse said goodbye to Paul Bisceglia in the fall of 2006 and research associates Maria Polis and Xanthia James moved on to other opportunities as well.

## Activities and Deliverables

The remaining section of this narrative report describes the work completed under each of the four tasks of the contract.

### 1.0 Prime Task One

Establish, manage and operate an information clearinghouse for the distribution of technical information produced by the Worker Education and Training Program (WETP) of the National Institute of Environmental Health Sciences.

#### Monthly Meetings Summaries

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Ms. Deborah Weinstock made monthly trips to Research Triangle Park, NC to meet with the Worker Education and Training Branch (WETB) staff to discuss the past, current and future contract activities, as well as examine remaining budget allocations. Each month, Ms. Weinstock disseminates a new report, which includes a budget spreadsheet and a summary of contract tasks to the WETB. This form of reporting maintains accountability for the project, while introducing a necessary degree of flexibility when faced with changing priorities. Other Clearinghouse team members either accompany Ms. Weinstock or join via teleconference as needed. The meetings provide an opportunity to set priorities and move forward on specific projects.

#### HAZWOPER Technical Information Collection and Curricula Catalog

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The HAZWOPER Training & Information Collection, also referred to as the HAZWOPER Health and Safety Library (HASL), is a cataloged collection of technical documents, reference materials, and materials produced by the NIEHS WETP Awardees. The curricula catalog is a web-based system for entering, editing, displaying and querying curricula for WETP consortia, the WETP staff at NIEHS, and the public.

Since 2005, MDB has made numerous upgrades to the information collection systems of both HASL and the Curricula Catalog. Some of the highlights include:

- Streamlining the document uploading process by displaying a more concise description of curricula orders and providing a link to a web page that allows users to download all associated course material files
- Integrating the HASL file upload system into the National Clearinghouse web site
- Updating the National Clearinghouse web site to conform with the NIEHS web migration

The MDB, Inc. IT team, spearheaded by Manfred Stanfield, updated HASL and the Curricula Catalog.

Timeframe	Documents added to HASL	Documents downloaded from HASL	Curricula Catalog Downloads
2005/2006	113	74,067	1,220 files by 193 users*
2006/2007	250	17,386	1,765 files by 325 users
2007/2008	462	N/A	819 files by 159 users
2008/2009	223	30,465	1,835 files by 279 users
2009/2010	91	67,631	3,389 files by 264 users

\* Note the large number of HASL downloads during the 2005/2006 contract year was likely due to the Hurricane Katrina PPT and booklet downloads.

## Strategic Plan and Advisory Board

The advisory board is an integral part of the decision-making process of the Clearinghouse. In 2007, the staffs of the NIEHS WETP and the National Clearinghouse met in Charleston, SC to begin the process of reviewing and updating the WETP Strategic Plan published in 2002. Key issues were identified and shared throughout 2007 with the Clearinghouse Advisory Board and those outside the organization but familiar with the program.

In 2008, the Clearinghouse released the five-year strategic plan document and overview (both located in HASL) to provide model safety and health training and education to those who work with and clean up hazardous materials, and for those who respond to emergencies involving hazardous substances. This model safety and health training is designed to protect these workers, and the communities in which they work, from injury and illness.

MDB used the strategic plan to help the advisory board keep the program properly guided. The advisory board meets once or twice per year and is made up of a rotating group of awardee members. The meetings are typically held before technical workshops and the meeting minutes are always generated and acted upon. Advisory Board meetings were held in Birmingham, AL, Las Vegas, NV, Bethesda, MD and Cincinnati, OH.

## 2.0 Prime Task Two

Arrange and manage technical meetings and workshops related to scientific, administrative, and regulatory issues associated with training for hazardous waste workers and emergency responders. A minimum of two such meetings or workshops shall be held during the contract year.

### Workshop Facilitation

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Each year, the NIEHS Worker Safety and Training Program host several workshops and meetings. These workshops serve as a platform for Awardees and other professionals interested in worker safety and training to learn about various training programs of awardees and outside organizations, share the accomplishments of their programs, increase access to resources that can be implemented in their own programs, and collaboratively determine the needs and future direction of the WETP.

Over the past five years, MDB, Inc. has provided support in the planning and facilitation of NIEHS WETP National Clearinghouse workshops. MDB's goal is to never stop trying to make each meeting and workshop better than the last. Because of this, attendees of the workshops have consistently rated MDB's management of WETP workshops as superior.

Each workshop has one MDB project manager who has ultimate authority and responsibility. The firm has supported dozens of meetings and is intimately familiar with the myriad details that need to be handled. Much of the programming and graphic design templates needed for the workshops have been created by MDB and are modified for each new workshop. This saves considerable money for the government. The A/V requirements have been handled in a cost-effective way over the years using a combination of internal resources and outside contractors for large or complex meetings.

The satisfaction of conference attendees is always the top priority for MDB, which is why each conference attendee is encouraged to complete a post conference survey. The survey results are carefully reviewed and participant suggestions and comments are incorporated into the planning of future meetings.

MDB brings to the process a solid understanding of the awardee organizations, which are primarily unions and universities. The Project Director, Deborah Weinstock, has worked with the awardees for a number of years and brings an understanding of their programs to her work. She is joined by Donald Elisburg, Senior Advisor and others as needed. Ms. Weinstock and Mr. Elisburg have written multiple technical documents that came out of the workshops. Having this level of technical expertise and understanding of the audience ensures that one contractor can successfully handle the entire conference process.

The Clearinghouse arranged, managed and participated in dozens of conferences, meetings and workshops over the past five years. The following are highlights of these events from 2005-2010.

## **“Protecting the Protectors” Medical, Psychological, and Environmental Surveillance Needs for Workers Involved in Incident Response Under the National Response Plan**

*September 27-28, 2005  
East Brunswick, NJ*

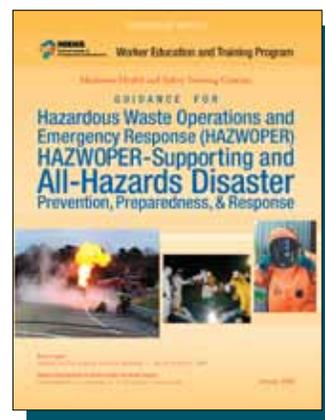
The MDB Staff assisted the University of Medicine and Dentistry of New Jersey School of Public Health and Johns Hopkins Bloomberg School of Public Health in preparing and convening the “Protecting the Protectors” two-day conference. The purpose of the conference was to develop surveillance recommendations to protect workers who may be involved in a national emergency response. The National Clearinghouse former Director, Dr. Bruce Lippy participated as a guest panelist. Topics covered include:

- Post-Disaster surveillance: industrial accidents, exposures and CBRNE weapons
- Identification and definition of at-risk populations: first responders/ receivers
- Critical factors in implementing surveillance programs

## **Final Version of the Minimum Health and Safety Training Criteria: Guidance for Hazardous Waste Operations and Emergency Response, HAZWOPER- Supporting, and All-Hazards Disaster Prevention, Preparedness and Response**

*Released January 2006*

The National Technical Workshop sponsored by the WETP was conducted March 30-April 1, 2005 in Los Angeles, CA. This was the last of three workshops facilitated to address minimum health and safety training requirements for workers. The 2005 workshop was facilitated by NIEHS WETP to update the minimum health and safety training criteria document by including advances in adult education in the hazardous waste operations and emergency response field. More than 110 participants from the WETP, the WETP grantees, and outside organizations from the public and private sectors attended the conference. The following are the major changes made to the Minimum Health and Safety Training Criteria document:



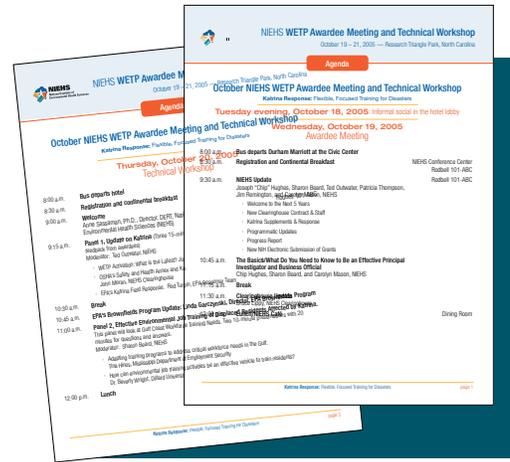
- Advanced training technologies application and integration
- Requirements for additional training programs to support HAZWOPER work
- Post-9/11 all-hazards preparedness training, including that for skilled support personnel as identified in HSPD#8

## **NIEHS WETP Fall 2005 Awardee Meeting and Technical Workshop Katrina Response: Flexible, Focused Training for Disasters**

*October 19-21, 2005  
Durham, NC*

This conference was divided into a half-day business meeting followed by a one and a half day Technical Workshop entitled “Katrina Response: Flexible, Focused Training for Disasters.” The conference fostered a collaborative effort between the new and existing awardees, NIEHS WETP, other individuals from both the public and private sectors to strategically address current and future activities of WETP related to the Hurricane Katrina Response initiative.

The Technical Workshop highlighted the response to Hurricane Katrina and ways to enhance and continue focused training for disasters. Panelists discussed topics including Hurricane Katrina updates, effective environmental job training of displaced residents affected by Katrina, training responders in the Gulf Coast, and new tools for disaster response training. Attendees also participated in one of four breakout sessions related to: safety and health hazards in the Katrina site orientation; adapting NIEHS training programs to train non-federally funded workers for cleanup and rebuilding in the Gulf Coast; revising the OSHA Disaster Site Worker Course; and fleshing out a WETP training deployment plan for the Gulf.



## NIEHS Supplemental Funding for Gulf Coast Response Briefing

**February 22, 2006**  
**Baton Rouge, LA**

In February 2006, the NIEHS WETP prepared a briefing for awardees that received supplemental grants to train in the Gulf Coast region. The briefing was provided to orient grantees to the training environment and to outline WETP Standard Operating Procedures for the Katrina response. The NIEHS WETP Clearinghouse Katrina Field Office Concept of operations and a CD-Rom with relevant materials was distributed to participants. The briefing also sought to increase awareness of overarching objectives of the WETP and its training activities in response to Katrina.

The February 22, 2006 meeting pulled together the awardees that had been doing work in the Gulf since the initial NIEHS WETP activation to share what they had learned with those grantees just beginning work in the Gulf Coast. Representatives from the federal government, community and support organizations were also present. The meeting facilitated the process of partnership building among awardees who had an opportunity to learn and discuss what challenges they face, the resources that exist internally and externally, and how they can best work together to provide workers the safety and health training they need as the Gulf Coast tries to clean up and rebuild.

## NIEHS WETP Spring 2006 Awardee Meeting and Technical Workshop

### Learning from Disasters: Katrina Response Safety and Health Training

**March 8-9, 2006**  
**Birmingham, AL**

While the Fall Awardee Meeting and Technical Workshop focused on fine-tuning current training program operations in relation to the Hurricane Katrina response, the Spring workshop focused on the lessons learned during the NIEHS WETP Hurricane Katrina response. "Learning from Disasters" examined the first six months of the WETP Katrina response from the perspectives of



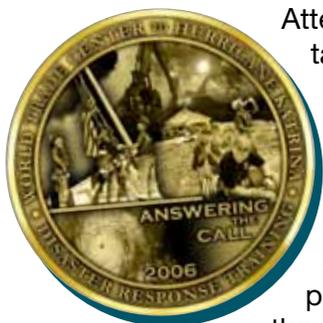
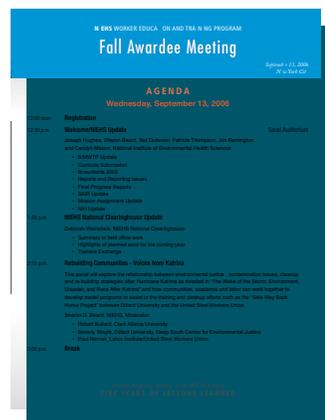
WETP, WETP awardees, and other federal agencies working collaboratively with the WETP and its awardee programs.

The major accomplishment of the Spring 2006 NIEHS WETP Awardee Meeting and Technical Workshop was that it facilitated discussion of barriers to providing effective safety and health training to emergency response workers and identified solutions and future objectives for disaster response training development and facilitation. The report generated by the workshop is called “Learning from Disasters: Katrina Response Safety and Health Training.” The report found that the National Response Plan’s worker protection measures – the Worker Safety and Health Annex - needs to be strengthened and that when the National Response Plan is activated, the worker safety and health annex should also be activated. The report found three general areas on which to focus improvement: Barriers to effective Katrina response safety and health training; Training issues for disaster responders; and Training issues for NIEHS WETP. The report provides suggestions for improvements in each of the areas.

## NIEHS WETP Fall 2006 Awardee Meeting and Technical Workshop Disaster Response Training: From WTC to Katrina- Five Years of Lessons Learned

*September 13-15, 2006  
New York, NY*

The 2006 Fall Awardee Meeting and Technical Workshop focused on lessons learned from events of national significance, hence the theme, Disaster Response Training: From WTC to Katrina-Five Years of Lessons Learned. The unique character of this conference was that it provided attendees with a combined focus on the experiences from both the World Trade Center terrorist attacks and Hurricane Katrina, as opposed to focusing solely on either event as other non-NIEHS agencies have done. The attendees were able to learn and participate in discussions about the real-life experiences of professionals from a broad spectrum within the emergency response realm, from both events.



Attendees were able to compare and contrast the response measures taken by agencies during a terrorist attack and a natural disaster. Overall, the conference highlighted the successes, shortcomings, and lessons learned by federal agencies, grantee training programs involved in the deployment as a part of the NIEHS WETP response effort, and academic institutions with grantee programs involved in the Katrina response and recovery efforts. The breakout sessions during the workshop helped show how to best move forward to prepare for the next disaster, so as to eliminate to the extent possible, the problems encountered during both the World Trade Center and Hurricane Katrina responses.

## Avian/Pandemic Influenza Briefing

*November 2, 2006*

*Research Triangle Park, NC*

The National Clearinghouse coordinated and co-facilitated an interagency meeting on worker training for avian influenza and pandemic influenza. The meeting's purpose was threefold. First, it pulled together people who are interested in and potentially working on training and education materials for workers who will need to be protected in the event of either an avian or pandemic flu outbreak to share what they are working on. Second, the meeting helped WETP and the National Clearinghouse determine what materials should be developed by the National Clearinghouse to best supplement what others are already doing. Third, the meeting synthesized the many different materials and guidance documents to concentrate on the core issues of worker protection training. Eighteen different organizations were represented. The meeting served to bring people together to share materials and make contact with others who are developing materials to protect workers. A need to engage with additional organizations was identified.

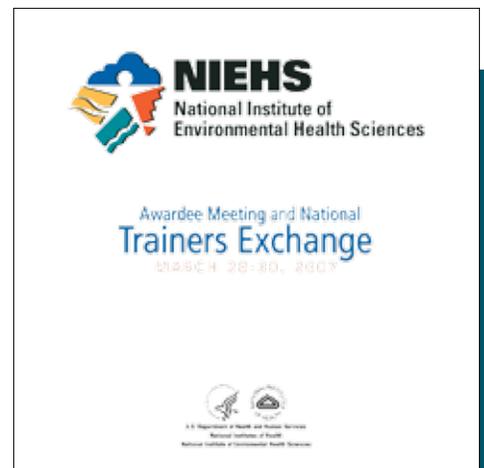
As part of the avian/pandemic influenza initiative, several web pages that provided information on avian and pandemic influenza of import to the worker training community were added to the National Clearinghouse for Worker Safety and Training website.

## NIEHS Awardee Meeting and Fifth National Trainers' Exchange: "Looking Back and Moving Forward: 20 Years of Worker Education and Training"

*March 28-30, 2007*

*Las Vegas, NV*

The Clearinghouse helped coordinate and co-facilitate the Trainers Exchange which was held at the Flamingo Hotel. The meeting provided attendees with 43 workshops to choose from. All of the workshops were facilitated by WETP awardees. A total of 217 participants attended this National Training Exchange. Following the theme of the 2007 NIEHS WETP National Trainer's Exchange, the Clearinghouse staff prepared a life-sized banner entitled, "The Social Political Context for WETP," on which participants placed photos and notes of important historical events of the worker training movement dating from 1970 to 2010.



## Avian Influenza Response: Worker Safety and Health Training

*April 10, 2007*

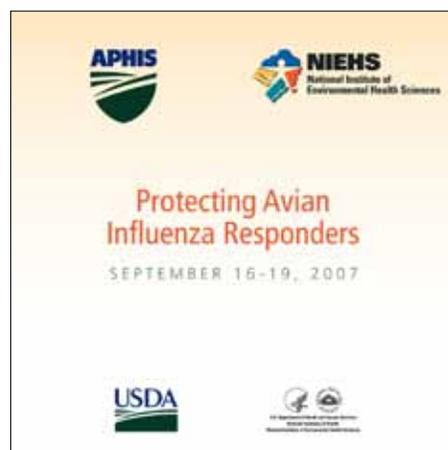
*Riverdale, MD*

In the spring of 2007, WETP co-sponsored an avian influenza conference with USDA APHIS to foster collaboration on training workers for an avian influenza outbreak in the U.S. This meeting provided an opportunity for NIEHS and APHIS to learn what training was being developed or already existed to help protect workers during a response. Representatives from EPA also participated in the meeting. This led to an even larger joint NIEHS/APHIS meeting, Protecting Avian Influenza Responders in September 2007.

## Protecting Avian Influenza Responders

*September 17-19, 2007  
Bethesda, MD*

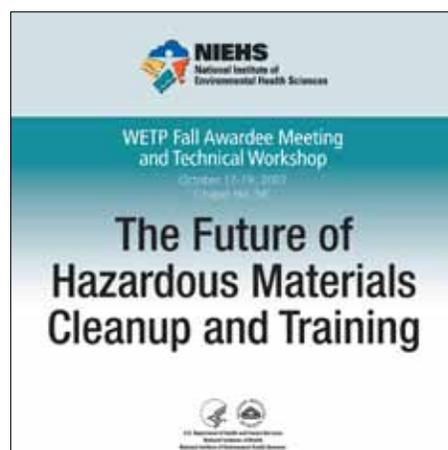
This 2 ½ day meeting had more than 250 participants from a variety of federal, state and local governments as well as private industry, unions and academia. Conference attendees heard from state, federal and industry representatives, as well as from an international panel and participated in a game/exercise where they were able to make decisions regarding resource allocations during a mock avian influenza outbreak. Participants had an opportunity to see a variety of training products and programs that have been developed to protect workers responding an avian influenza outbreak and also attended breakout sessions on issues ranging from HAZWOPER and Incident Command to the hazards of depopulation operations and critical stress management.



## NIEHS WETP 2007 Fall Conference: The Future of Hazardous Materials Cleanup & Training

*October 17-19, 2007  
Chapel Hill, NC*

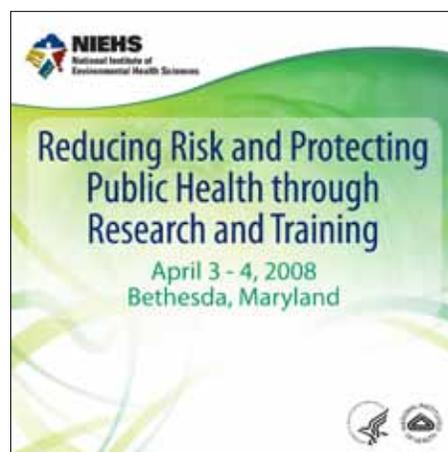
The National Clearinghouse coordinated and assisted in the facilitation of the NIEHS WETP 2007 Fall Conference: The Future of Hazardous Materials Cleanup & Training from October 17-19, 2007 in Chapel Hill, NC. The conference brought together over 100 NIEHS and WETP awardee representatives to mark the 20th anniversary of the WETP program, and discuss past, current, and future program initiatives.



## Joint NIEHS SBRP-WETP Technical Workshop and WETP Spring Awardee Meeting: Reducing Risk and Protecting Public Health through Research and Training

*April 2-4, 2008  
Bethesda, MD*

The National Clearinghouse coordinated and assisted in the facilitation of the Joint NIEHS SBRP-WETP Technical Workshop and WETP Spring Awardee Meeting from April 2-4, 2008 at the Natcher Conference Center on the National Institutes of Health (NIH) Campus in Bethesda, MD. The joint meeting brought together over 130 representatives from the NIEHS SBRP and WETP programs. At the meeting, the representatives discussed each Program's benefits, e.g., protecting human health



from hazardous substances, and explored not just their Program's strengths, but also how the WETP and SBRP Programs could interact, while sharing a goal to enhance collaboration. (All of the workshops were jointly facilitated by WETP and SBRP awardees.)

## Brownfields 2008

**May 5-7, 2008**  
**Detroit, MI**

NIEHS Brownfields and Minority Worker Training Program (BMWTP) awardees participated in seven sessions at Brownfields 2008, May 5-7, Detroit Cobo Center in Detroit, MI. The conference was the largest, most comprehensive event in the U.S., which focused on cleaning up and redeveloping abandoned, underutilized, and potentially contaminated properties. Session topics included training and educating the brownfields workplace (the NIEHS model); economic and workforce development; job training and brownfields revitalization; and health and safety of brownfields. An NIEHS Brownfields/MWTP Awardee Meeting and Brownfields Environmental Justice Forum were also held in conjunction with Brownfields 2008.



## Disaster Site Worker Course Workshop: Ensuring Skilled and Other Support Personnel are Prepared for Disasters

**May 21-22, 2008**  
**Beaver, WV**

On May 21-22, the National Clearinghouse facilitated a Disaster Site Worker Course Workshop: Ensuring Skilled and Other Support Personnel are Prepared for Disasters at the National Mine Health and Safety Academy (MSHA) in Beaver, WV. Sponsored by NIEHS WETP and the U.S. Department of Labor, Occupational Safety and Health Administration's, OSHA Training Institute, the workshop sought to provide recommendations for revising the Disaster Site Worker courses (OSHA 7600 and OSHA 5600) and developing a refresher course for the OSHA 5600; as a result, better pre-incident training would be rendered for skilled and other support personnel who may find themselves responding to a disaster. In February 2008, National Clearinghouse representatives and WETP awardees met with OSHA's Directorate of Training Institute and laid the framework for the May workshop. The workshop resulted in recommendations on 1) how to revise the OSHA 7600 and 5600 courses, and 2) the content of a refresher course for DSW trainers (now referred to as OSHA 5602).



## Earthquake Safety and Health Training Tool Stakeholders Meeting

**July 9, 2008**  
**Emeryville, CA**

The WETP and National Clearinghouse arranged and facilitated an Earthquake Safety and Health Training Tool Stakeholders Meeting on July 9, 2008 in Emeryville, CA.

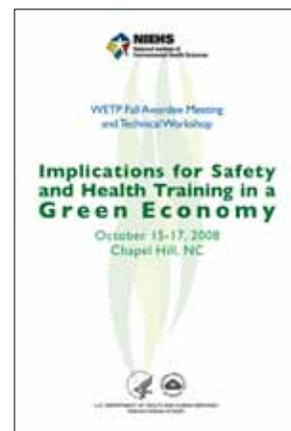


The meeting reviewed a draft earthquake training tool that addressed the health and safety hazards that support personnel may face following an earthquake. The 50-plus participants who attended this meeting included those who oversee disaster response activities; contractors who deploy workers to response cleanup and/or recovery operations at disaster sites; NIEHS awardees interested in earthquake response training; and state and local emergency response and support personnel. These meeting participants not only reviewed the training tool, but provided feedback that has been included in the final training tool.

### **NIEHS WETP 2008 Fall Workshop: Implications for Safety and Health Training in a Green Economy**

*October 15 - 17, 2008  
Chapel Hill, NC*

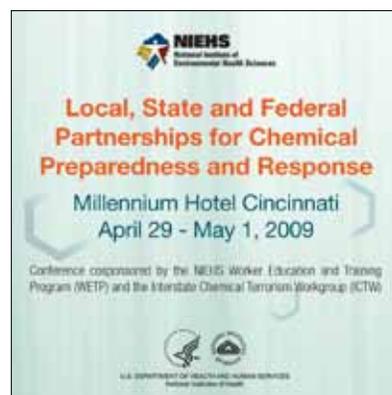
The National Clearinghouse coordinated and assisted in the facilitation of the NIEHS WETP 2008 Fall Conference: Implications for Safety and Health Training in a Green Economy from October 15-17, 2008 in Chapel Hill, NC. The conference brought together over 100 NIEHS and WETP awardee representatives and interested parties to explore issues in the green economy, including green jobs and industries, green remediation, green chemistry and the safety and health training that will be needed in each area. On October 15 the Awardee Meeting took place. The technical workshop was held October 16th and 17th. The final workshop report can be found at <http://tools.niehs.nih.gov/wetp/newsbriefs/Jan09/WETPFallmeeting08.pdf>.



### **NIEHS WETP 2009 Spring Awardee Meeting and Workshop: Local, State and Federal Partnerships for Chemical Preparedness and Response**

*April 29-May 1, 2009  
Cincinnati, OH*

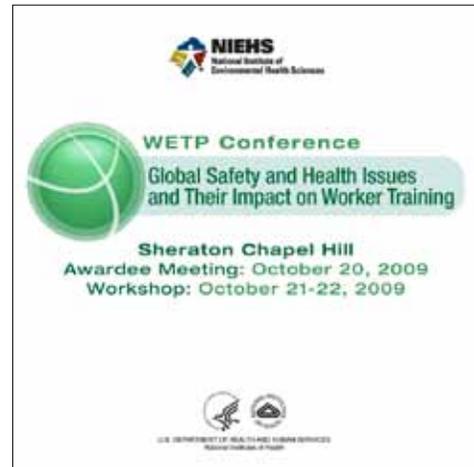
The National Clearinghouse coordinated and assisted in the facilitation of the NIEHS WETP Spring 2009 Awardee Meeting and Workshop: Local, State and Federal Partnerships for Chemical Preparedness and Response, which was cosponsored by the Interstate Chemical Terrorism Workgroup (ICTW) and the City of Cincinnati. The workshop brought together about 150 people from local, state and federal government as well as those from labor, academia and other non-profit groups. Participants heard about partnerships for chemical preparedness and response, were shown a variety of resources that can be used during a chemical response to help protect responders and the surrounding community. Concurrent breakout sessions covered: emergency response; training; risk communication, community preparedness; health care, public health, and mental health; and advanced training technologies. Some of these resources and advanced technologies were then used the next day during a disaster training exercise in which participants worked through the response and recovery phases of the simulated incident, focusing specifically on the health and safety aspects of those workers who would be impacted. Conference presentations can be found at <http://tools.niehs.nih.gov/wetp/events.cfm?id=2474>.



## NIEHS WETP Fall 2009 Workshop: Global Safety and Health Issues and Their Impact on Worker Training

*October 21-22, 2009  
Chapel Hill, NC*

The National Clearinghouse coordinated and assisted in the facilitation of the NIEHS WETP Fall 2009 Workshop: Global Safety and Health Issues and Their Impact on Worker Training from October 21-22, 2009 in Chapel Hill, NC. The conference brought together over 100 NIEHS and WETP awardee representatives and interested parties to explore emerging developments in global health and safety that promise to have a major impact on worker training, including new developments in nanomaterials manufacturing, hazard communication and regulation of chemicals in the European Union that could fundamentally influence workplace safety and health in the U.S. and abroad. On October 20 the Awardee Meeting took place. The technical workshop was held October 21 and 22. Conference presentations can be found at: <http://tools.niehs.nih.gov/wetp/events.cfm?id=2481>. A report on Training Workers for the Risks of Nanotechnology is currently in draft final format and being circulated for comment.



## Brownfields 2009

*November 16-18, 2009  
New Orleans, LA*

Clearinghouse staff helped plan and participated in the NIEHS Minority Worker Training Program Meeting on November 15 at Dillard University. Clearinghouse staff also attended multiple Brownfields and NIEHS sessions at the Brownfields Conference.



## NIEHS WETP Winter 2010 Conference: Environmental Justice (EJ), Air Quality, Goods Movement and Green Jobs, Evolution and Innovation

*January 25-27, 2010  
New Orleans, LA*

The National Clearinghouse coordinated and assisted in the facilitation of the NIEHS WETP Winter 2010 Conference: Environmental Justice (EJ), Air Quality, Goods Movement and Green Jobs, Evolution and Innovation from January 25-27, 2010 in New Orleans, LA. The conference brought together over almost 450 EPA, Dillard University, NIEHS and WETP awardee representatives and interested parties to explore new EJ initiatives, disproportionate impacts on EJ communities, sustainability and green jobs, funding and resourcing grass roots. The technical workshop was held January 25-27. The Awardee Meeting took place in the afternoon of January 27. The National Environmental Justice Advisory Council (NEJAC) also met on January 27. Conference presentations can be found at: <http://tools.niehs.nih.gov/wetp/events.cfm?id=2484>.



## 2010 National Action Summit for Latino Worker Health and Safety

*April 14-15, 2010  
Houston, TX*

Nearly a thousand workers, employers, labor leaders, representatives from community- and faith-based organizations, consulates and government gathered for two days to seek new and effective ways to improve workers' knowledge of their workplace rights and their ability to exercise those rights. The Summit sought ways to leverage resources through increased partnerships and collaborations to reach Latino workers. The event showcased effective education materials and programs that can be used by employers, community organizations and others. Clearinghouse staff served on the planning committee and provided resources and general administrative support for the OSHA/NIOSH/NIEHS sponsored summit, including developing a website and process for submission poster and presentation abstracts.



## Green Jobs Training: Resource Sharing Session

*May 3, 2010  
Washington, DC*

In advance of the 2010 Good Jobs Green Jobs conference, NIEHS WETP joined with the Blue Green Alliance to host a meeting on green jobs training to ensure that green jobs are safe jobs. Fifty participants met to explore new strategies while learning what others are doing in the field. They were interested in how federal agencies can better work together, such as the creation of an interagency working group on green jobs. In addition, participants addressed the following issues: how health and safety can be integrated and imbedded early into green jobs training; how to improve current health and safety programs; how to apply “lessons learned” to a program; and how to import green jobs training into construction and weatherization.

## Fall 2010 Awardee Meeting and Workshop

*October 25-26, 2010  
Chapel Hill, NC*

The National Clearinghouse and WETP began organizing the NIEHS WETP Fall 2010 Awardee Meeting and Workshop, to be held October 25-26, 2010 in Chapel Hill, NC. The workshop will focus on multiple issues, including the various program areas of the NIEHS WETP awards which will just have been awarded and gone into effect, including integration of DOE's 10 CFR 851 into awardee programs, green jobs and the Gulf Oil Spill disaster response. The Awardee Meeting is scheduled for the morning of October 25.

## 3.0 Prime Task Three

Facilitate the transmission of technical information related to the development of safety and health training programs for hazardous waste workers and emergency responders.

### Website Development and Website Maintenance

Since 2005, web site technology has greatly increased the user's ability to access and download multiple types of information. From webcasts and podcasts to RSS feeds, MDB has kept the National Clearinghouse web site up-to-date with the latest technologies.

Below are some examples of the improvements MDB has made to the National Clearinghouse web site:

In 2006, the Clearinghouse developed a seven-point plan to improve the content management and growth of the WETP Clearinghouse web site. This involved: 1) Newsbrief publishing improvements; 2) content maintenance improvements; 3) improvements to the WYSIWYG editor functionality; 4) streamlining the curricula catalog public display and ordering systems; 5) improving the ability to add new or enhance existing features; 6) redoing the site's design and navigation systems; and 7) incorporating the many FuseAction style pages into the HASL library menu system. All of the tasks have been completed.



The Clearinghouse migrated its website to a new URL (<http://tools.niehs.nih.gov/wetp/>) and ensured that the new site was in compliance with the new NEIHS style manual as the entire NIEHS website went through an overhaul. The transition was successfully completed in August 2007.

MDB began the initial process of redesigning the National Clearinghouse Website by redesigning the home page to include a condensed left side toolbar, a new quickfinder topic section, redesigned Clearinghouse search function, developed new Clearinghouse Information, Key Documents and Clearinghouse Resources boxes, and revised home page text and National Clearinghouse Highlights section.

Clearinghouse staff worked to ensure that documents already posted and those to be posted on the Website were made "508 compliant," in compliance with the Rehabilitation Act of 1998. The law requires Federal agencies to make their electronic and information technology accessible to people with disabilities in order to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals. Documents on the web site are made 508 compliant in an ongoing process in which documents are identified, made 508 compliant using Adobe and other tools, and posted (or reposted) to the site.

MDB has also provided technical support to administrators when HTML input errors or server errors occurred, troubleshooted and fixed site errors as they occurred. MDB developed a workshop abstract submittal form and new administrative screen for workshop registration, and an RSS Feed on the home page.

## Help Desk

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MDB efficiently responds to all inquiries about the Clearinghouse website, curricula catalog orders, eNewsbrief submissions, and technical information through e-mails, personal phone calls, or group conference calls.

MDB staff support the Awardees and other interested parties by answering phone calls and emails. A majority of the questions focus on upcoming technical conferences, awareness-level safety and health tools and emergency response activities, like the Gulf oil disaster response.

MDB staff also monitor emails submitted to the info@wetp.org email address on a daily basis. Staff members respond rapidly to all info@wetp.org e-mail requests for resources and documents associated with the Health and Safety Library, curricula catalog orders, suggestions for the eNewsbrief, and any other worker safety and health questions that arise.

## Weekly Digital Newsbrief

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Since its inception, the National Clearinghouse weekly Newsbrief has served as a unique resource for keeping up to date on issues surrounding worker safety, health, and training. The weekly Newsbrief features current news articles, research studies, government reports, upcoming events, and employment opportunities within the topic areas of emergency preparedness and response, homeland security, environmental cleanup, and chemical safety as they relate to worker training and worker safety.

The National Clearinghouse weekly Newsbrief is unique for two reasons: it is the only newsbrief distributed by a federal government agency solely devoted to worker training and safety in the areas mentioned, and rather than feature frontliners, its purpose is to feature articles and documents that don't normally make front page news. The Newsbrief has recently expanded to include information about environmental justice, green jobs, and the American Resource and Recovery Act as they relate to hazardous waste worker training. The Newsbrief is electronically delivered to more than 1,100 recipients each Friday.

Behind the scenes, MDB has simplified the tool used to format and upload the Newsbrief, saving staff time and money.

## NIEHS WETP National Clearinghouse Compendium

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The NIEHS WETP National Clearinghouse Compendium compiles relevant technical articles, reports, and reviews related to the primary topics of worker safety and health training for hazardous waste workers and emergency responders. Written by NIEHS WETP Awardees, it is an opportunity for the Clearinghouse to highlight its recent achievements, as well as the successes of the NIEHS, the Worker Safety and Health Training Program, and NIEHS WETP Awardees as they relate to worker training, health, and safety in the areas of hazardous waste, emergency preparedness and response, homeland security, environmental cleanup, and chemical safety. The 2005-2006 Compendium was the last to be published. In 2006 the resources for the Compendium were reallocated to provide for other activities.

## Disaster Resource Web Pages

The National Clearinghouse web site is the national resource for hazardous waste worker curricula, technical reports, and weekly news on hazardous materials, waste operations and emergency response. In response to disasters, such as hurricanes, wildfires, floods or earthquakes, MDB developed web pages to provide documents and resources that address government preparedness and public preparedness in these situations. MDB also helped develop awareness-level health and safety resources for skilled and other support personnel who participate in disaster response, assessment and cleanup. These tools help workers understand at an awareness level: characteristics of what the disaster and a disaster response is and how to protect against and control hazards associated with the response, assessment and cleanup activities associated with the disaster (described in Task 4).

Over the past five years, MDB has developed multiple topic pages that helped keep emergency responders and those affected by the disaster aware of the dangers associated with their environment and activities. These web pages included local, state and federal information that address issues in government and public preparedness in the following man-made and natural disasters:

- Hurricanes Katrina and Rita
- October 2007 San Diego, CA Wildfires
- Summer 2008 Iowa Floods
- Chemical Incidents
- Radiological Dispersion Devices (Dirty Bombs)
- H1N1 (Swine) Influenza
- Pandemic Influenza
- Avian Influenza
- January 2010 Haiti Earthquake
- April 2010 Gulf Oil Spill

These web pages complimented the awareness-level training materials and WETP activities associated with each disaster (described in Task 4). All of the pages are accessible from the National Clearinghouse QuickFinder on the homepage and are Section 508 compliant.

## Materials Highlighting National Clearinghouse and WETP Activity

Over the past five years, the MDB worked to publicize the Clearinghouse and the resources it has available to the public and WETP Awardees.

### National Clearinghouse Fact Sheet

The fact sheet highlights the overall WETP program accomplishments and the role of the Clearinghouse. Specific sections describe the weekly Newsbrief, Health and Safety Library (HASL), Curricula Catalog, workshops and technical meetings, and activities and training tools developed in response to national emergencies. The fact sheet is available on the Clearinghouse home page.



### Hurricane Katrina Field Office Brochure

In response to Hurricane Katrina, the National Clearinghouse opened a temporary field office in Baton Rouge, LA to provide information related to post-Katrina cleanup to NIEHS Awardees, other Federal agencies, contractors, workers and the public. The office acted as a liaison between NIEHS Awardees working in the Katrina zone and Federal agencies, state and local government agencies, contractors, and community groups, facilitating the development of training partnerships.



In an effort to ensure agencies knew of NIEHS' ability to provide training, the Clearinghouse developed a brochure that highlighted NIEHS, WETP, the National Response Plan, and the agency's role in the aftermath of Katrina to provide safety and health training of the cleanup workers.

### Minority Worker Training Program Brochure and Fact Sheet

A Minority Worker Training Program (MWTP) brochure and fact sheet were both developed to share the program's accomplishments at multiple annual Brownfields and other conferences. In 2006 the Clearinghouse updated the Brownfields/MWT brochure. And in 2009 the MWT factsheet was developed. The Brownfields Conference brings together over 5,000 local, state, and federal government leaders, contractors, real estate developers and investors, economic development officials, community development organizations, academic institutions and students for the largest, most comprehensive national conference focused on environmental revitalization and economic redevelopment.

Since 1995, WETP has awarded nearly \$3 million annually under the MWTP for training to increase the number of underrepresented minorities in the environmental remediation, restoration and construction fields and to work safely and successfully in restoring Brownfields sites. Both the brochure and fact sheet provide background information on the program and Awardee highlights.

### NIEHS WETP Funded ARRA Projects

The National Clearinghouse designed a fact sheet on NIEHS WETP funded American Recovery and Reinvestment Act (ARRA) projects. The NIEHS WETP has awarded \$6,784,076 in ARRA funds to provide administrative supplements to eligible awardees. Priorities for ARRA supplemental applications included health and safety training for target populations that will be employed in the hazardous components of jobs that will be supported by the federal stimulus and recovery program. The emerging "green" sector includes the customization of safety and health training for emerging jobs in commercial and residential weatherization, alternative energy development, green remediation, green construction and emerging industries like nanotechnology.

## 4.0 Prime Task Four

Develop, analyze and compile program research products to enhance on-going initiatives and to support new training initiatives and the continuation of program efficiency measures.

### Training Tools - Activities in Response to Disasters

The National Clearinghouse has provided a needed, central location to house hazardous waste worker and emergency response safety and health information. Over the past five years, the Clearinghouse and WETP have provided advice and expertise in developing safety and health awareness-level training tools to help disaster responders and cleanup workers be aware of environmental danger and protect themselves. These activities began in 2005 (immediately following Hurricane Katrina), and focused on developing more training tools for skilled (and other support) support personnel who respond to emergencies. The framework for choosing the tools was originally based on the Department of Homeland Security's (DHS) 15 Disaster Planning Scenarios. However, it became clear there was a need for some training tools outside of the DHS framework. All of the training tools listed below are available for download on the National Clearinghouse web site.

- Avian Influenza
- Chemical Incidents
- Earthquakes
- Floods
- H1N1 (Swine Flu)
- Hurricanes
- Oil Spills
- Radiological Dispersion Devices (Dirty Bombs)
- Wildfires

#### Activities in Response to Hurricane Katrina

Fiscal year 2006 was marked by the impact of Hurricane Katrina, a hurricane that devastated the gulf coast region, both temporarily and permanently displacing thousands of residents. The National Clearinghouse was activated in the nation's response through the National Response Plan for the first time in history.

In compliance with the National Response Plan, OSHA and FEMA allocated funds to the NIEHS in October 2005 to provide disaster site worker training to federal employees and federally deployed contractors responding to Hurricane Katrina. NIEHS deployed trainers to the gulf region to conduct training needs assessments, develop site-specific training programs, and establish relationships with other federal agencies actively involved in the gulf



coast response effort. The training effort resulted in the training of 10,000 workers, including staff from FEMA, U.S. Army Corps of Engineers, United States Coast Guard, and Federal Contractors.

The National Clearinghouse was instrumental in the NIEHS WETP response and recovery efforts for Hurricane Katrina, developing and distributing the pocket-sized “Protecting Yourself While Helping Others” awareness booklet. The booklet serves as a guide for skilled (and other) support workers operating in the Katrina-devastated gulf region. The booklet provides emergency response workers with essential safety knowledge on 28 common hazards workers may encounter during the gulf coast cleanup. The “Protecting Yourself While Helping Others” booklet has become the most widely utilized worker health and safety guide. Instructors also use the booklet/training tool as a guide for developing curricula. For training purposes, the booklet is accompanied by a power point presentation designed for briefing workers. The training tool and booklet are available in English, Spanish and Vietnamese.

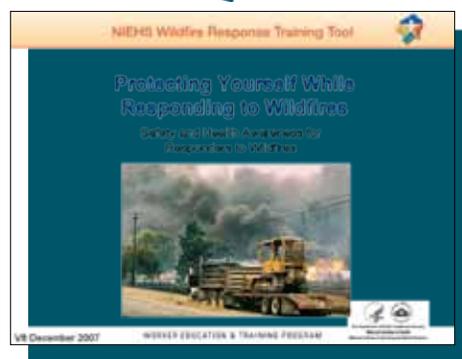
#### Development and production of the Protecting Avian Influenza Responders training tool and booklet

This joint effort between NIEHS and the U.S. Department of Agriculture - Animal and Plant Health Inspection Service (USDA-APHIS) began in November 2006 with the Fall 2006 NIEHS Workshop in Research Triangle Park, NC. The training tool and booklet is an awareness level health and safety resource for workers, skilled (and other) support personnel, who might come in contact with Avian Influenza infected animals or contaminated materials. The booklet and training tool are available in English and Spanish.



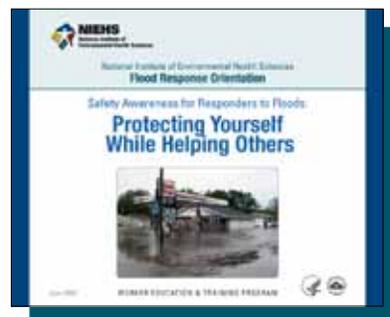
#### Development and production of an NIEHS Wildfire training tool

When the wildfires hit California in October 2007, the National Clearinghouse quickly developed a training tool that could be used to make workers aware of the hazards they face when responding to wildfires. This training tool is an awareness-level health and safety resource for “skilled support personnel” who will participate in a wildfire assessment and cleanup. It helps workers understand at an awareness level: characteristics of what a wildfire and a wildfire response is and how to protect against and control hazards associated with the response, assessment and cleanup activities associated with a wildfire.



#### Development and production of an NIEHS Flood Response training tool

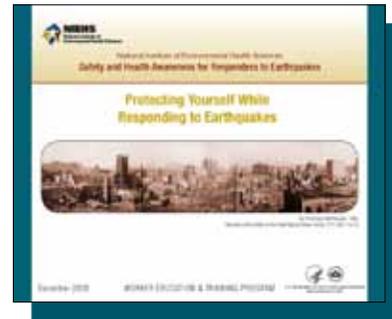
When the Iowa floods struck in June 2008, the National Clearinghouse assembled WETP awardees and interested



stakeholders to develop a flood response orientation safety awareness booklet. The booklet was developed, produced, and distributed to emergency responders and skilled (and other) support personnel in Iowa in less than one month following the floods.

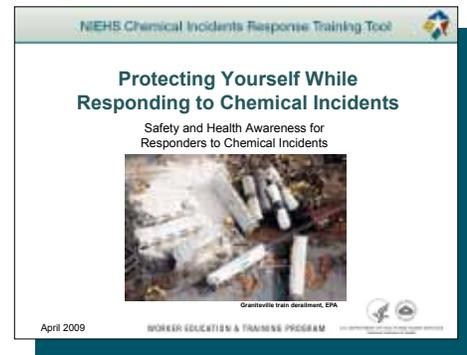
### Development and production of an NIEHS Earthquake training tool

In July 2008 WETP and the National Clearinghouse arranged and facilitated an Earthquake Safety and Health Training Tool Stakeholders Meeting in Emeryville, CA. WETP and the National Clearinghouse used comments from the 50-plus participants who attended to develop upgrade the training tool. An Earthquake Emergency Responder Booklet was finalized and the booklet can be downloaded from the Clearinghouse web site. The training tool is also available in Spanish and Haitian Creole.



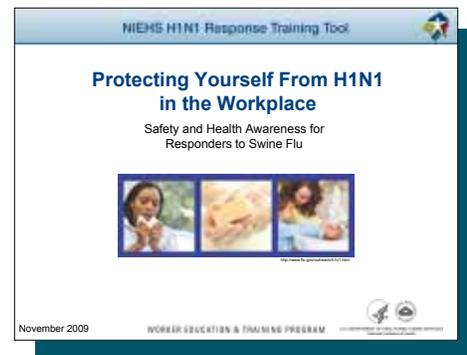
### Development of a Chemical Incidents training tool

A tool was designed as an awareness-level health and safety resource for skilled (and other) support personnel who will participate in a response to a chemical release (including weapons and industrial chemicals) and who are not required to get chemical training under 1910.120. This tool helps workers understand at an awareness level: the basics of chemical weapons deployment, how to protect against chemicals and other hazards associated with a chemical release and response.



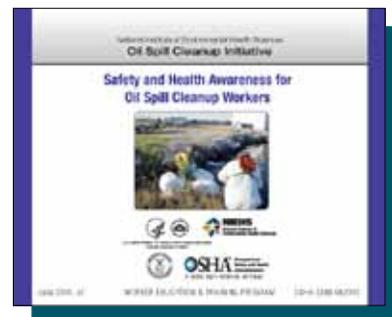
### Development of an H1N1 Response Training Tool

In November 2009, the National Clearinghouse finalized the NIEHS Protecting Yourself From H1N1 in the Workplace: Safety and Health Awareness for Responders to Swine Flu PPT presentation and booklet and posted both on the Clearinghouse website. The awareness training tool aimed at helping stem the transmission of the virus and to protect workers who will be in direct contact with the virus, such as health care workers, school employees and janitorial staff and others asked to clean public spaces or their own work places. The National Clearinghouse also amended a Pandemic and Avian Influenza page to provide information on worker health and safety for H1N1 (Swine) Flu.



### Development and production of an NIEHS Oil Spill training tool

In response to the April 2010 Gulf Oil Spill, NIEHS worked with multiple federal agencies and awardees in developing the NIEHS Oil Spill Response Training Tool, which is posted on the resource page. The tool is an awareness-level health and safety resource for those who are working to clean up the oil and helps workers understand at an awareness level: what an oil spill is, characteristics of an oil spill response, and how to identify and control hazards pertaining to the



response and cleanup activities associated with an oil spill. More than 5,000 pocket-sized booklets titled “Safety And Health Awareness for Oil Spill Cleanup Workers” have been distributed to instructors, safety officials, front-line responders participating in the BP Vessels Of Opportunity Program, and beach workers in the Shoreline Cleanup assessment Team. The booklets and training tool are available in English, Spanish and Vietnamese.



### Safety and Health Training Podcasts

The Clearinghouse web site houses multiple podcasts that provide safety and health training in hurricane and avian influenza responses. Produced by MetaMedia under a contract with the Clearinghouse, the podcasts are available for download through iTunes and other podcast software.



The hurricane podcasts cover the following topics:

- Mold Awareness
- Hazards Not Found in Construction
- Dealing with Debris
- Electrical Hazards
- Respiratory Protection
- Operating Equipment Safely
- Responsibilities and Training

The avian influenza podcasts cover the following topics:

- Environmental Hazards
- Protection from Avian Flu
- Safety Tips for Avian Flu
- Symptoms from Avian Flu
- Who Does Avian Flu Effect

### Department of Energy (DOE)

The National Clearinghouse and WETP staff have actively engaged DOE in order to promote worker safety and health initiatives.

In 2006, the Clearinghouse designed a questionnaire to give to DOE awardees in an effort to better understand the training occurring across the DOE complex. The questionnaire was distributed to each of the DOE awardee PIs or program contacts prior to the end of calendar year 2006. Responses were analyzed and recommendations developed.

In 2007, the Clearinghouse began developing a training tool on DOE’s Safety and Health Program Rule, 10 CFR 851. This involved developing the training tool and arranging meetings to share the tool and get feedback on it from workers and DOE officials and contractors around the Hanford and Oak Ridge sites. Meetings were held February 21-22, 2007 and April 26,

2007 respectively. The Clearinghouse developed a fact sheet on the rule and a PowerPoint presentation explaining the key sections of the rule and how workers can use the rule to ensure their safety and health.

The Clearinghouse also developed a training tool on the hazards of responding to an incident caused by Radiological Dispersal Devices (RDD). This task was undertaken jointly with HAMMER with the “consent” of the HAMMER Steering Committee as proposed to the committee at the September 21, 2006 meeting in Richland, Washington. HAMMER’s role in the project was to provide content expertise and assist with identifying key DOE staff to involve in the development process. Input on the RDD training tool and booklet – “Protecting Yourself During a Dirty Bomb Response” was also provided at the Hanford and Oak Ridge Meetings mentioned above.

### DOE/NIEHS Safety Training Collaboration Meetings

In partnership with DOE’s National Training Center, WETP and Clearinghouse staff participated in three Safety Training Collaboration meetings across the DOE complex. Meetings took place at the Oak Ridge, Savannah River and Los Alamos facilities to identify efficiencies in the safety training programs across each of the sites. Representatives from federal, contractor, and union organizations took part in these workshops as well as staff from the HAMMER Training and Education Center and members of the WETP and its Clearinghouse. The National Training Center (NTC) within the Office of Health, Safety and Security (HSS) acted as the lead facilitator for the workshops which included presentations from federal as well as union leadership, HAMMER staff, and NIEHS representatives. The focus of the effort was primarily health and safety training that meets the requirements of Title 10 CFR Part 851, Worker Health and Safety Program Rule. At each meeting, Deborah Weinstock made a presentation on the site’s safety and health profile from the Clearinghouse’s DOE Needs Assessment report.

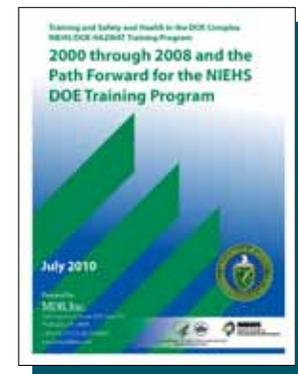
The goal of these meetings is:

- Strengthening the safety of site operations;
- Enhancing the quality and efficiency of safety training programs; and
- Reducing the redundancy/duplication of safety training programs.



### DOE Training Needs Assessment

Clearinghouse staff prepared a training assessment for the DOE complex that involved developing safety and health profiles for each of the DOE sites where awardees provide training. Safety and health profiles are comprised of background and history of the site, including cleanup activities and amount of ARRA money received; injury and illness statistics from 2000 to 2008 from the CAIRs system; data on occurrences from the ORPS system; and training data from the DMS. Rather than being a traditional training needs assessment, this document provides a road map for how DOE should move forward on worker training and particularly worker involvement in safety and health under 10 CFR 851, Integrated Safety Management and Voluntary Protection Programs.



## Development of Research Materials

### Hazardous Waste Worker Labor Market Study

The National Clearinghouse worked with Dr. David Cormier, a labor economist from West Virginia University, to evaluate the size and scope of the hazardous waste and Brownfields market for the next five years, using primarily electronic economic data available publicly from the EPA, BLS, DOE, NIEHS, the Army Corps of Engineers and the Laborers International Union, among others.

Finalized in January 2006, the Hazardous Waste Workers Labor Market Study sought to update the Ruttenberg estimation of number of workers that will be needed by the year 2010 and determine other, less resource-intensive, approaches for gathering this information. Findings from the study concluded that the total cost assumptions from 1994-96 used in the RRA model was too high. For political and other reasons, expenditures since then fell well below the assumed levels. Consequently, the projected employment levels are too high since employment depends directly on total cost in the RRA model.

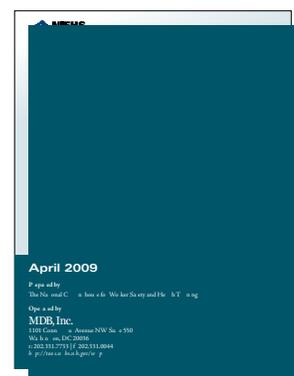
The study was able to identify three alternatives for collecting data:

- Contact hazardous waste contractors and/or contractor associations to obtain either labor cost information or actual labor demand estimates;
- Conduct a work sampling approach to obtain information that could be used to determine labor demand for hazardous waste workers; and
- Examination of the labor demand from labor productivity data, using projected output data.

Overall, the research study stressed the need for collecting realistic projections of hazardous waste workers and found that the major problem with gathering this data is the unavailability of data, thus hampering the collection of this type of data. Recommendations made from the findings include the development of a labor demand-technology matrix, a work sampling system to obtain labor demand information from actual projects, and a strategy to contact cooperative contractors to obtain labor demand estimates. The study is available on the National Clearinghouse web site.

### Overview of Stimulus Allocations

Clearinghouse staff developed a paper that provided a snapshot of where federal agencies and states were allocating money from the American Recovery and Reinvestment Act (ARRA). The document was prepared for use by NIEHS WETP awardees applying for Administrative Supplements available from NIEHS WETP as a result of ARRA. WETP supplements were focused on 1) health and safety training for target populations employed in the hazardous components of jobs that will be supported by ARRA; 2) for the emerging green sector, the customization of safety and health training for emerging jobs in commercial and residential weatherization, alternative energy development, green remediation, green construction and emerging industries like nanotechnology; 3) for newly recruited workers to stimulus projects and emerging green jobs, career-enhancement and life skills components to supplement basic required safety and health training and 4) the development of federal, state and local safety and health training partnerships to facilitate integration with ongoing stimulus and economic recovery activities is strongly encouraged.



### Development of a factsheet on Worker Safety Training in a Green Environment: The On-Going Role of the National Institute of Environmental Health Sciences Worker Education and Training Program

In an effort to communicate that the NIEHS WETP has always been a “green” program, Clearinghouse staff developed a fact sheet describing the program and its mission to ensure that green jobs are safe jobs.

### Importance of Disaster Preparedness Training paper

The Clearinghouse developed a paper that emphasizes the critical need for workers who will be responding to disasters to be properly and comprehensively trained prior to their deployment to the disaster site. The paper was submitted for publication to the *Journal of Homeland Security and Emergency Management*.

### Review of OSHA 10 and 30 Outreach Courses

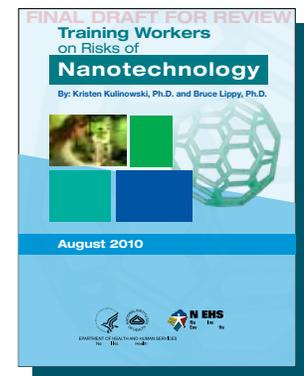
In 2009 the Clearinghouse began the process of evaluating the OSHA 10- and 30-hour construction and general industry safety and health training courses (OSHA Outreach Training Courses) provided with the support of NIEHS funding. Clearinghouse staff looked at current training program quality control criteria included in the NIEHS Minimum Criteria document to evaluate the possibility of creating an easily adoptable evaluation process and quality control criteria for OSHA to use with its OSHA 10- and 30-hour courses. NIEHS WETP and the Clearinghouse plan to meet with OSHA officials to discuss the recommendations to improve quality control for the Outreach Program.

### Hazard Communication Proposed Rule Comments

On September 30, 2009, OSHA issued a request for comment on its proposal to modify its existing Hazard Communication Standard (HCS) to conform with the United Nations’ (UN) Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Based on discussions at the WETP Fall 2009 Workshop, two issues emerged as the main concerns of the proposed rule. They are the lack of requirement or directives on training and the proposed modification of language on signs in substance-specific health standards. On December 26, NIEHS WETP submitted comments on these and other issues in the response. On March 2, 2010, Deborah Weinstock testified during the hearing on the proposed Hazard Communication Standard in Washington, DC.

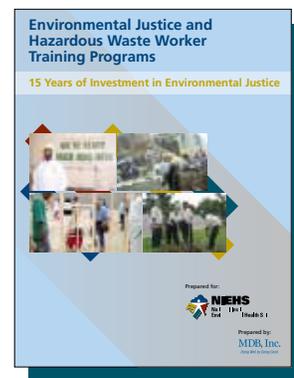
### Training Workers on the Risks of Nanotechnology

During the Fall 2009 Workshop: Global Safety and Health Issues and Their Impact on Worker Training, a panel that included Drs. Kristen Kulinowski, Rice University and Bruce Lippy, The Lippy Group addressed nanotechnology and control banding and the implication for worker training. The development of this paper is a direct result of the panel discussions. Regulatory agencies are having difficulties keeping up with the growth of nanotechnologies. The Government Accountability Office (GAO) noted in its May 2010 report on nanotechnology, “Although the body of research related to nanomaterials is growing, the current understanding of the risks posed by these materials is limited.” This report addresses the critical issue of how workers who are creating and handling nanomaterials should be trained about the hazards they face. A final draft of the paper is ready for external review.



## Environmental Justice and Hazardous Waste Worker Training Programs: 15 Years of Investment in Environmental Justice

Clearinghouse staff are developing a report titled “Environmental Justice and Hazardous Waste Worker Training Programs: 15 Years of Investment in Environmental Justice” that documents the implications and benefits of federal hazardous waste worker training programs in addressing environmental justice, in particular for the benefit of the residents of low-income and minority communities. The report provides a brief history of environmental justice and federally funded hazardous waste worker training programs, in particular NIEHS WETP and EPA hazardous waste worker training programs; a statistical analysis of these hazardous waste worker training programs; and documentation of the benefits, best practices, and major findings based upon a literature review and expert interviews. It also provides recommendations based on lessons learned and major findings on how these training programs could address environmental justice concerns and create green jobs even more effectively in the future, and how similar job training programs should be expanded to other Federal agencies. The final draft report is awaiting external review and is expected to be completed by September 2010.



## NIEHS WETP ARRA Supported Accomplishments Report

The Clearinghouse is in the process of creating an NIEHS WETP ARRA Supported Accomplishments report which will document the projects and activities of the NIEHS WETP awardees that have received Recovery Act funds and highlight the subsequent successes and best practices of worker safety and health training organizations. The report is expected to be completed in September 2010.

## Issues and Trend Identification

Donald Elisburg continued “scouting efforts” to effectively monitor Congressional and other relevant federal agency activities (DHS, DOL, DOE, and EPA), provide feedback and recommendations to WETB staff and the Clearinghouse Director on how legislation and outside agency initiatives could affect WETP, and how WETP might consider responding to such issues, trends, and initiatives.

Over the past five years, the Clearinghouse has focused on identifying safety and health worker issues in emerging issues, like “green” jobs and nanotechnology. The Clearinghouse and WETP have developed, executed and participated in multiple technical workshops, conferences and meetings designed to share information and make recommendations on how to move forward.

Through the WETP Advisory Board, emerging issues are discussed and workshop topics are approved. At these workshops, experts and interested parties share information on topics of interest, pitfalls, recommendations and ways to move forward. Workshop reports compile these discussions and list recommendations for future action.

## Expert Editorial Review

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The Clearinghouse provided expert editorial review of a CDC document “Mold: Prevention Strategies and Possible Health Effects in the Aftermath of Hurricanes Katrina and Rita” and the OSHA Worker Protection Matrix for Hurricanes Katrina and Rita.

The Clearinghouse also prepared comments on OSHA’s Request for Information on Emergency Response and Preparedness, and on the Department of Homeland Security’s draft National Response Framework.

## Partnerships and Representation

Members of the Clearinghouse staff represented the Clearinghouse and the WETP at many major conferences, symposiums, meetings, workshops and conference calls. From agency and union worker safety and health, to social media in emergency response, Clearinghouse staff have participated in and provided key expertise at these events. Below are summaries of the events by year:

### 2005/2006

- Dr. Lippy participated in the “Protecting the Protectors” conference
- Deborah Weinstock participated in the National Response Team meetings and calls
- Deborah Weinstock participated in the NRT Target Capabilities List meetings
- Deborah Weinstock participated in the 2005 APHA meeting
- Deborah Weinstock participated in the 2005 SBRP meeting
- Donald Elisburg participated in the APA/NIOSH Work, Stress and Health 2006 Conference
- Deborah Weinstock participated in the Spring 2006 DOE HAMMER Steering Committee Meeting
- Deborah Weinstock participated in the EPA/Labor Superfund Task Force meeting
- Maria Polis attended the Brownfields Leadership Summit, Public Session
- Manfred Stanfield participated in the NIEHS Web Coordinating Committee
- Deborah Weinstock attended the HHS WTC Programs Coordination Meeting

### 2006/2007

- Deborah Weinstock participated in the National Response Team meetings and calls
- Deborah Weinstock participated in the 2006 APHA meeting
- Deborah Weinstock participated in the 2006 SBRP meeting
- Donald Elisburg participated in the APA/NIOSH Work, Stress and Health 2006 Conference
- Deborah Weinstock participated in the Fall 2006 DOE HAMMER Steering Committee Meeting

- Deborah Weinstock and Xanthia James participated in the 2006 Brownfields Conference, November 2006. Xanthia staffed the booth and Deborah presented at a session on Health and Safety Tools and Resources
- Manfred Stanfield participated in the NIEHS Web Coordinating Committee

## 2007/2008

- Deborah Weinstock presented during a session at the Brownfields 2008 Conference
- Daniel Youhas participated in the NIOSH/Emergency Preparedness and Response Research Portfolio Town Hall Meeting
- Deborah Weinstock participated in the National Response Team, Worker Safety and Health Subcommittee meetings and calls
- Deborah Weinstock presented at the 2007 APHA meeting
- Donald Elisburg presented at the APA/NIOSH Work, Stress and Health 2007 Conference
- Donald Elisburg presented at the 25th Annual Voluntary Protection Programs Participant's Association (VPPPA) conference
- Deborah Weinstock participated in the Fall 2007 and Spring 2008 DOE HAMMER Steering Committee Meetings
- Deborah Weinstock participated in a series of DOE Health, Safety and Security/ Labor Union meetings
- Deborah Weinstock presented an update on NIEHS Disaster Preparedness Activities during an Interstate Chemical Terrorism Workgroup call
- Donald Elisburg presented at the Race, Place and the Environment after Katrina: Reclaiming, Rebuilding, Revitalizing Conference
- Donald Elisburg presented at The Nexus Between Environmental & Economic Justice: Harnessing the Green Economy for Community Reinvestment
- Bernie Mizula presented at the USDA Animal and Plant Health Inspection Service's Safety and Health Conference

## 2008/2009

- Deborah Weinstock participated in the National Response Team, Worker Safety and Health Subcommittee meetings and calls
- Deborah Weinstock participated in the American Public Health Association Meeting in San Diego, CA in October 2008
- Donald Elisburg, Deborah Weinstock and Daniel Youhas attended the Good Jobs Green Jobs Conference in February 2009 in Washington, DC
- Donald Elisburg participated in the 2008 Worker Safety & Health Technical Conference sponsored by the National Response Team Safety and Health Subcommittee in October 2008 in Washington, DC
- Daniel Youhas participated in the 2008 NIOSH Dream Workshop in November 2008 in Washington, DC
- Daniel Youhas participated in the Social Media in Government Training Workshop in February 2009 in Washington, DC
- Daniel Youhas participated in the NIOSH Emergency Preparedness and Response Strategy Meeting in February 2009 in Washington, DC
- Daniel Youhas participated in the ANTI-Social Media: What Not to Do in Web 2.0 in February 2009 in Washington, DC
- Deborah Weinstock participated in the HAMMER Steering Committee Meetings in October 2008 in Washington State and May 2009 in Washington, DC
- Daniel Youhas and Deborah Weinstock attended some of the DOE Nuclear Cleanup Caucus briefings
- Deborah Weinstock spoke at the United Steelworkers Atomic Energy Worker Council Meeting in May 2009
- Deborah Weinstock and Tim Fields participated in the Environmental Justice in America Conference in May 2009 in Washington, DC. The Clearinghouse organized a Green Jobs panel comprised of WETP awardees to highlight their training activities in this area; Deborah Weinstock participated in COSH Network calls on Green Jobs
- Deborah Weinstock participated in the National Response Team, Safety and Health Subcommittee meetings and calls
- Deborah Weinstock helped organize and attended the Healthy Aging for Workers: Anticipating the Occupational Safety and Health Needs of an Increasingly Aging Workforce February 17-18, 2009 in Washington, DC
- Deborah Weinstock presented on Disaster preparedness: Current activities of the NIEHS Worker Education and Training Program and its awardees in preparing skilled support personnel for disaster response and recovery at the 2008 APHA conference in San Diego, CA

- Deborah Weinstock participated in the Department of Energy National Training Center's Safety Training Advisory Committee Meeting April 2009 in Albuquerque, NM
- Deborah Weinstock participated in part of the Energy Facility Contractors Group meeting in Washington, DC, followed by a joint meeting with EFCOG members, union representatives and NIEHS
- Donald Elisburg and Deborah Weinstock met with Acting Assistant Secretary for OSHA, Jordan Barab regarding training issues
- Donald Elisburg participated in the Center for Construction Research and Training Technical Advisory Board meetings
- Deborah Weinstock participated in the IUOE HAZMAT Program Advisory Board Meeting;
- Deborah Weinstock and Katherine Secrest participated in the Oak Ridge Safety Training Collaboration Meeting in Oak Ridge, TN in July 2009
- Deborah Weinstock participated in the planning committee meeting for the NIOSH Make Green Jobs Safe workshop to be held in December 2009
- Deborah Weinstock and Tim Fields met with the Deputy Associate Director for Policy Outreach and the Deputy Associate Director for Green Jobs at the Council on Environmental Quality
- Deborah Weinstock participated in the DOE ISM Conference in Knoxville, TN in August 2009;
- Donald Elisburg presented at the 26th Annual Voluntary Protection Programs Participant's Association (VPPPA) conference in August 2009
- Joy Lee attended the EPA Community Involvement Training in August 2009 in Seattle, WA;
- Daniel Youhas and Joy Lee participated in many of the Interstate Chemical Working Group conference calls throughout the year
- Donald Elisburg and Tim Fields participated in the LIUNA Education and Safety Fund (formerly Laborers-AGC) Advisory Board Meeting in September 2009
- Deborah Weinstock and Daniel Youhas attended the Green Jobs/Green Homes New York: Expanding Home Energy and Efficiency and Creating Good Jobs in a Clean-Energy Economy briefing, sponsored by the Center for American Progress

## 2009/2010

- Deborah Weinstock participated in the National Response Team, Worker Safety and Health Subcommittee meetings and calls
- Deborah Weinstock participated in the HAMMER Medical Surveillance Subcommittee meetings and attended the HAMMER Steering Committees meeting in Pasco, WA, October 2009 and in DC, May 2010
- Deborah Weinstock participated in the DOE 10 CFR 851 workshop in DC, October 2009
- Deborah Weinstock presented a poster at the American Public Health Association Conference in Philadelphia, PA, on the *Implications for health and safety training in a green economy (How the Recovery Act impacts worker safety and health)*, November 2009
- Daniel Youhas made a presentation to the Interstate Chemical Threats Workgroup on Social Media in Emergency Response, November 2009
- Joy Lee, Tim Fields and Daniel Youhas participated in the Brownfields 2009 Conference in New Orleans, November 2009
- Deborah Weinstock and Joy Lee participated in the DOE Safety Training Collaboration Meeting at Savannah River, December 2009
- Daniel Youhas and Deborah Weinstock participated in the NIOSH Making Green Jobs Safe Workshop: Integrating Occupational Safety and Health into Green and Sustainability in Washington, DC, December 2009
- Deborah Weinstock testified at the OSHA Hazard Communication Hearing in Washington, DC, March 2010
- Deborah Weinstock and Joy Lee participated in the National Action Summit for Latino Worker Health and Safety in Houston, TX, April 2010
- Deborah Weinstock and Daniel Youhas attended the 2010 Good Jobs, Green Jobs National Conference in Washington, DC, May 2010
- Daniel Youhas participated in the IUOE Board Meeting in Beaver, WV, June 2010
- Deborah Weinstock and Joy Lee participated in the DOE Safety Training Collaboration Meeting at Los Alamos National Laboratory, July 2010
- Daniel Youhas participated in the Emergency Responder Health Monitoring and Surveillance Work Group Face to Face Meeting at NIOSH, July 2010
- Deborah Weinstock participated in the OSHA I2P2 Stakeholder Meeting in Washington, DC, July 2010
- Daniel Youhas and Ryan Campbell delivered a poster presentation on “Social Media in Emergency Response” at the 2010 National Conference on Health Communication, Marketing, and Media in Atlanta, GA, August 2010
- Deborah Weinstock and Donald Elisburg presented at the VPPPA conference on the Integration of 10 CFR 851, ISMS and VPP.

## Conclusion

In the past five years, the Clearinghouse has served as a national resource for hazardous waste worker training tools and information. This 2005-2010 WETP National Clearinghouse Report is designed to highlight Clearinghouse activities and, in turn, the Program's achievements for the past five years. MDB, Inc. has assisted with building partnerships between WETP and other agencies, and enhanced the operational research capabilities of the NIEHS WETP National Clearinghouse.



