



Hazardous Waste Worker Training Program

# FY 2004 Accomplishments and Highlights:

September 1, 2003 ~ August 31, 2004

**Published March, 2005**

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## 1

### Introduction: Training Partnerships for Prevention, Protection, and Preparedness

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In April, 2004, the National Institute of Environmental Health Sciences (NIEHS) Worker Education and Training Program (WETP) sponsored an important conference on partnerships for prevention, for protection, and for preparedness. It discussed the partnerships that NIEHS and its awardees have forged within the public and private sectors. It identified successful models and sought to build upon these successes. This included looking at the federal partnerships that continue to be key to the NIEHS WETP program. The missions of the Department of Homeland Security, the Occupational Safety and Health Administration, and the Environmental Protection Agency are critical to this country's future and to the health and safety of workers and communities. The NIEHS WETP seeks to assist these and other agencies in meeting their goals and obligations. It is in this spirit that this report has been prepared.

The NIEHS WETP funds training through competitively awarded cooperative agreements. The recipients are non-profit organizations with demonstrated access to appropriate worker populations and experience in implementing and operating worker health and safety education training programs. The training awards are divided into a number of program areas including:

- **Hazardous Waste Worker Training Program (HWWTP)** –provides model occupational safety and health training for workers who are or may be engaged in activities related to hazardous waste removal or containment or chemical emergency response.
- **Minority Worker Training Program (MWTP)** –focuses on delivering comprehensive training to disadvantaged urban young adults in order to prepare them for employment in the construction and environmental cleanup fields.
- **Brownfields Minority Worker Training Program (BMWTP)** - broadens the MWT Program to provide comprehensive training to disadvantaged residents and to foster economic and environmental restoration to communities impacted by brownfields.

These programs are reported on in Sections 2.1, 2.2, and 2.3.

In Section 2.4, the small business e-learning award program is described.

In Section 2.5, there is a final update on supplemental awards for Weapons of Mass Destruction Training.

Funded by the WETP, the National Clearinghouse for Worker Safety and Health Training is the primary communications channel through which the WETP distributes technical reports, news updates, and training information to its awardees, interested members of the hazardous waste worker-training community, and the public. An update of these activities is provided in Section 2.6 .

In section 2.7, there is an executive summary of the conference “**Training Partnerships for Prevention, Protection and Preparedness.**”

In Section 2.8, there is a program update for the period September 1, 2004- August 31, 2005.

## 2

### 2003- 2004 Program Highlights

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The WETP has established an effective national framework to develop and provide comprehensive training that is needed to address the complex needs of Superfund cleanups, chemical emergency response, RCRA corrective actions, and urban communities surrounding brownfields sites.

In completing the 17<sup>th</sup> year of the Superfund WETP (FY 1987-2004), the NIEHS has successfully supported twenty primary awardees. These represent over one hundred different institutions that have trained more than 1.2 million workers across the country and presented 69,000 classroom and hands-on training courses, which have accounted for nearly 18 million contact hours of actual training (See Appendix 1).

Approximately thirty million dollars of the September 1, 2003 to August 31, 2004 funds were allocated to continue support to the NIEHS Awardees. Of the \$30 million, \$21,063,198 supported the HWWTP to train hazardous waste workers and emergency responders. One supplemental action was made, which included \$4,337,275 for Weapons of Mass Destruction (WMD) Training Response. Over three million dollars of the funds were allocated to continue support for the MWTP. The WETP allocated \$858,527 to support the Small Business Innovation Research (SBIR) Program.

- 17 HWWTP awardees received awards totaling \$21,063,198
- 5 MWTP awardees received awards totaling \$3,300,000
- 4 SBIR awardees received awards totaling \$858,527
- 12 WMD awardees received awards totaling \$4,337,275

During the past year, health and safety training occurred in all regions of the country to relevant target populations with the prime focus on 29 CFR 1910.120 (See Appendix 3). The seventeen primary worker-training awardees, in conjunction with over eighty collaborating institutions, have delivered 7,054 courses, reaching 124,127 workers, which account for 1,222,333 contact hours of health and safety training. This training ranges from 4-hour refresher programs through more complex train-the-trainer courses lasting up to 120 hours in duration (See Appendix 4). Between September 1, 2003 and August 31, 2004, 33% of the training focused on delivering CERCLA cleanup worker training. This comprises 40,474 workers who received 80 hour training, basic 40 hour training, or 4-8 hour refresher courses out of the annual total of workers reached by the program (See Appendix 5).

As the fifth and final year of the current cooperative agreements approached, the NIEHS WETP released the Request for Applications (RFA) ES-04-005 entitled Hazardous Material Worker Health and Safety Training. This RFA opened competition for the next five year funding cycle. The application deadline was set for September 22, 2004 with final funding decisions to be announced after May, 2005. The RFA included 4 distinct program areas: Hazardous Waste Worker Training Program (HWWTP), Minority Worker Training Program (MWTP), Brownfields Minority Worker Training Program (BMWTP), and the Hazmat Disaster Preparedness Training Program (HDPTP). For more information on the RFA go to [www.niehs.nih.gov/wetp/rfaguidelines.html](http://www.niehs.nih.gov/wetp/rfaguidelines.html)

## 2.1 Hazardous Waste Worker Training Program Update

**Introduction:** After the completion of the third year of the five-year cooperative agreements to support worker-training activities, 17 organizations submitted progress reports and training data. Continuation awards were made on September 1, 2003 after the NIEHS review showed that satisfactory progress had been achieved by all awardees.

The cooperative agreements were made to these non-profit organizations with the NIEHS providing substantial programmatic involvement to support these training activities. These consist of consortia that are collectively made up of over eighty member institutions including universities, community colleges, public health groups, labor-management trust funds, labor organizations, and state and local government units.

Participating programs have developed model curricula and training programs. The core curriculum includes: hazard recognition and control; air, soil, and water sampling aspects; selection, care and use of respirators and other personal protective equipment; engineering controls and their use; safe work practices; proper decontamination procedures; medical surveillance requirements; confined space entry; spill containment and other emergency procedures; community health protection, legal rights and responsibilities; on-site record keeping requirements; and other elements required by the OSHA and EPA regulations.

Training programs have implemented qualitative and quantitative systems to monitor the training. The program has worked closely with EPA, OSHA, NIOSH, DOE, DOT, FEMA and other federal agencies to maintain technical accuracy of training materials and to assure training of the highest quality. The NIEHS refers to this as “gold standard” training. The high quality curricula and other training-related materials developed by the program are available to the public through a NIEHS-sponsored National Clearinghouse for Hazardous Waste Worker Training and its Internet home page at <http://www.wetp.org>.

*Who are these consortia? Who benefits from their services? How many benefit? Are there specific examples or anecdotes from their programs that provide useful insights into the nature of health and safety training in this country? To answer these fundamental questions, each of the current NIEHS awardees will be briefly considered.*

# NIEHS Hazardous Waste Worker Training Program

## The New Jersey/ New York Consortium (NJ/NY Consortium)

**Who they are:** The NJ/NY Consortium consists of the University of Medicine and Dentistry of New Jersey (UMDNJ); Hunter College, City University of New York; New Jersey State Police; New York Committee for Occupational Safety and Health; New York District Council of Carpenters Labor Technical College Health and Safety Department; University at Buffalo; and Universidad Metropolitana, Puerto Rico. The NJ/NY Consortium also receives funding under the Minority Worker Training Program and the Brownfields Minority Worker Training Program reported on separately.

**Who benefits:** Private sector and city, state, and federal employees in New York, New Jersey, and Puerto Rico. These include police officers, environmental investigators, OSHA compliance inspectors, carpenters and carpenter apprentices, subway workers, radiation workers, emergency medical responders, and hazardous materials remediation workers.

**How many:** The Consortium provided training to 23,999 workers in 1,238 courses, for 172,952 contact hours.

**How to Protect a State:** One consortium member, the New Jersey State Police offers a comprehensive series of training modules designed to allow the participant to achieve the level of training appropriate to their response role. The program is designed to meet the training needs of the emergency response community of the State. Participants in their training include police and fire personnel, emergency medical technicians, hospital emergency room staff, public works and some private sector emergency workers. The training also addresses the requirements of employees who will be responding to hazardous materials or Weapons of Mass Destruction (CBRNE) incidents.

Their 8-hour First Responder Awareness course, which reached 4,728 workers, offered training in recognition of hazmat incidents and their associated hazards, proper procedures to safely identify the materials involved and to initiate the emergency response sequence by notifying the proper authorities of the release.



*Photograph: UMDNJ students suit up.*

# NIEHS Hazardous Waste Worker Training Program

## National Puerto Rican Forum (NPRF)

**Who they are:** NPRF, located in New York City, New York heads up a consortium that includes OAI, Inc., Chicago, Illinois; Maine Labor Group on Health (MLGH), Augusta, Maine; Latin American Youth Center (LAYC), Washington, DC; and Era Environmental, Independence, Missouri.

**Who benefits:** First responders in Kentucky, Maine, Puerto Rico and the Midwest, as well as hazardous materials workers in Maine, Kentucky, Louisiana, Georgia, California, Indiana, Nevada, Texas, New Jersey, Tennessee, and North Carolina. MWTP/BMWTP: Disadvantaged minority youth and adults in environmentally distressed communities in Chicago, IL; Washington, DC, New York City, NY; and Kansas City, MO.

**How many:** The consortium trained a total of 1,890 workers through the delivery of 126 courses generating 38,212 instructional hours.

**New Collaborations For Effective Training:** This year the Chicago Fire Department (CFD) Fire Academy joined in a training partnership with OAI, Inc., and the International Association of Fire Fighters (IAFF),

another NIEHS awardee. This is the first time for this type of collaboration in the history of CFD. The project establishes an on-going training program to upgrade the skills of fire fighters from the operations to technician level. The first phase was training a cadre of trainers selected by IAFF and CFD. The Train-the-Trainer course was held at the CFD Training Academy and attended by 31 individuals. Phase two involved new trainers delivering the two 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) Technician training to Chicago HAZMAT team members and other CFD personnel. The partnership continues to evolve as new leadership joins the CFD.



*Photograph: NPRF trainees overpack a drum.*



# NIEHS Hazardous Waste Worker Training Program

## The New England Consortium (TNEC)

**Who they are:** The New England Consortium (TNEC) is headed by the University of Massachusetts, Lowell and includes the Massachusetts Coalition for Occupational Safety and Health (MASSCOSH), Connecticut Committee for Occupational Safety and Health (ConnectiCOSH), Rhode Island Committee for Occupational Safety and Health (RICOSH), Western Massachusetts Coalition for Occupational Safety and Health, and the New Hampshire Coalition for Occupational Safety and Health.

**Who benefits:** TNEC has been working since 1987 to provide top quality participatory hands-on health and safety training to workers throughout the region including. In addition to labor unions and community organizations, examples of organizations whose members received TNEC training include the New England Native American Tribes, OSHA Inspectors Region 1, Boston Environmental Strike Team, U.S. Geological Service, Public Service of New Hampshire, Narragansett Bay Authority, Boston Public Health Department, Covanta Energy, OSHA Region 1 Compliance Officers, Region 6 HAZMAT Team, JFY Networks (formerly Jobs for Youth), and the Essex Agricultural Technical High School (MA).

**How many:** TNEC conducted sixty-nine courses for 1,043 workers involving 16,830 hours of instruction in its core HAZWOPER training program and through a special supplemental hazard disaster training program for public health first receivers and local health officers. TNEC has delivered 40-hour site worker sessions, 24-hour emergency response courses, separate 8-hour refreshers for site workers and emergency responders, general awareness ER courses. TNEC also offered 8-hour hazard disaster preparedness training awareness and a 24-hour Hazard Disaster Preparedness Emergency Response Course.

**Firefighters Get Hands-On Rail Car Training:** TNEC hosted and assisted in the delivery of three-day ammonia rail car suppression training in late August of 2004 in Leominster, MA. These all day sessions introduced responders to safety procedures, inspections and basic leak repair techniques in the classroom. Donning full safety gear and armed with the right tools to make repairs on valves and pipes, local firefighters practiced skills needed to stop a simulated rail car leak. The use of a custom-built rail car during this training was the result of a partnership between TNEC, the Region 6 HAZMAT Team and the PotashCorp Inc.



*Photographs: Hands-on training in ammonia rail car suppression.*

# NIEHS Hazardous Waste Worker Training Program

## International Union, United Auto Workers (UAW)

**Who they are:** The International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) is one of the largest and most diverse unions in North America, with members in virtually every sector of the economy.

**Who benefits:** UAWs' primary target sector is 3,000 smaller establishments with about 375,000 members, emphasizing the automobile, metalworking, and transportation industry. In addition UAW represents public sector employees with wastewater treatment and transportation assignments and works with minority and underserved community residents who work in or live near hazardous waste sites or industrial facilities.

**How many:** The UAW conducted 285 programs and delivered training to 5,615 participants with 17,380 contact hours. This included four 24-hour Operations Level Industrial Emergency Response (IER) courses for 55 trainees, totaling 1,320 contact hours.

**Using Local Union Discussion Leaders:** After a 3-day walk-around inspection and assessment conducted at the Electrolux factory in Greenville, MI, UAW Local 137 identified a number of health and safety training needs, the UAW and Electrolux decided to train members of the health and safety committee to be instructors, who would then facilitate training for the rest of the hourly employees throughout Electrolux. Eight members of the health and safety committee volunteered to go through a 24-hour training program led by a UAW Health and Safety Department training staff person (Luis Vazquez), and two Local Union Discussion Leaders (LUDLs). The LUDLs are worker trainers that UAW uses extensively throughout their programs.

The newly trained group of instructors started training Electrolux employees in the OSHA Right to Know or Hazard Communication standard, with mentoring and oversight by UAW LUDLs. In order to keep production from being affected by large numbers of employees needing to attend the training program, plant foremen were allowed to send a few people from each department at a time to classes scheduled throughout all three work shifts.

Between September 1, 2003 and May 31, 2004, a total of 156 HazCom classes were conducted by the Electrolux trainers yielding 2,731 trainees and 5,462 contact hours. Additionally, Electrolux trainers received a train-the-trainer program in confined space entry and conducted a total of 8 confined space classes yielding 94 trainees and 564 contact hours. The Electrolux example effectively demonstrates that the UAW's LUDL model of training worksite trainers to provide health and safety training has a multiplier effect. The UAW estimates the cost savings to Electrolux will exceed \$250,000.



*Photograph: UAW Right to Know training session.*

# NIEHS Hazardous Waste Worker Training Program

## University of Alabama at Birmingham (UAB)

**Who they are:** The University of Alabama at Birmingham (UAB) Center for Labor Education and Research (CLEAR).

**Who benefits:** Communications Workers of America (CWA), Native American tribal members and employees, and Fire and Rescue Service members, regulatory personnel, environmental managers, public emergency responders, hazardous waste workers, hazardous materials handlers and industrial workers.

**How many:** During the grant year, UAB conducted 171 courses for 2,570 individuals for a total of 24,917 contact hours of training.

**And Out on Interstate 65:** The Poarch Band of Creek Indians in south Alabama have received NIEHS grant-funded training from UAB ranging from First Responder Awareness Level to First Responder Operations Level, Hazardous Materials Technician, Incident Management Systems, Air Monitoring, and Weapons of Mass Destruction Awareness courses. The hazmat training was of special significance to them because their reservation is located along the busy I-65 corridor north of Mobile, Alabama. Based on the training provided by UAB, the Poarch Creeks were able to conduct widespread secondary training within the tribe and community. They also improved the tribal emergency response plan and upgraded their emergency response capability. The tribe quickly became recognized as a key regional player in emergency preparedness by both the county and state emergency management agencies. As a result, the tribe became the focal point of a regional preparedness initiative through which various response organizations within the region agreed to share response resources, preventing needless duplicate purchases of expensive equipment such as air monitoring and hazmat response equipment within the region. Equipment that has been purchased with federal funding includes an EMS trailer, a Hazmat trailer, decontamination equipment, and air monitoring equipment, all of which will be stationed at the Poarch Creek Fire Department but available for use as needed throughout the region. The emergency preparedness coordinator of the Poarch Band of Creek Indians states that the grant-funded training provided by UAB “acted as a catalyst” for these improvements in the regional response capability.

*Photograph: A UAB trainee posing as a victim is lowered to the ground in a Stokes litter to complete a rescue exercise during a Confined Space Rescue course.*



# NIEHS Hazardous Waste Worker Training Program

## Service Employees International Union, AFL-CIO (SEIU)

**Who they are:** SEIU represents approximately 285,000 workers in acute care hospitals, 10,000 workers in highway maintenance and 7,500 workers in wastewater treatment.

**Who benefits:** Health care and public sector workers primarily in Maine, New Hampshire, New York, and California. This includes registered nurses, hospital housekeepers, home care workers, employees of a state department of transportation and other state workers.

**How many:** SEIU HazMat Training Project trained a total of 1,768 participants in 104 classes, for a total of 18,336 hours of training.

**Learning How To Protect Yourself:** After the anthrax inhalation death of SEIU member Kathy Nguyen in 2001, SEIU increased its commitment to provide hazardous material (hazmat) training to hospital and nursing home members. For example, at Long Island College Hospital in Brooklyn, NY, some 800 workers have taken hazmat training conducted by SEIU worker trainers using the small group activity method. The identification of hazardous materials, an employee's role in the hospital emergency response plan, and the use and correct fitting of N-95 disposable respirators are some of the topics covered during the training.



*Fitting an N-95 respirator*

# NIEHS Hazardous Waste Worker Training Program

## Paper, Allied-Industrial, Chemical and Energy Workers (PACE)

**Who they are:** The Paper, Allied-Industrial, Chemical and Energy Workers International Union (PACE) represents more than 320,000 workers who manufacture paper, refine oil, and make chemicals, nuclear materials, pharmaceuticals, automobile parts, appliances, small engines, and many other products.

**Who benefits:** Workers at industrial sites across the country owned by corporations such as 3-M, Chevron-Phillips, Criterion, Georgia Pacific, Mallinckrodt Baker, Molycopr, SCA Tissue, and Sun Oil.



**How many:** PACE conducted 492 regional and site-hosted classes this grant year as of August 31, 2004, reaching 9,422 workers, for a total of 50,263 contact hours.

**Learning Lessons through the Triangle of Prevention (TOP):** Under the PACE TOP Program, workers from the shop floor create and manage a systems-based, comprehensive safety program designed to find the true root causes of work-place incidents. Workers and managers work together to investigate these “system failures” and to find ways to eliminate or control them in the future. TOP Investigators examine near misses with the same rigor as actual incidents.

TOP is now in place in thirty-three sites throughout the country in a diverse group of industries represented by PACE. This includes a recent corporate agreement to put TOP into all ten Shell Oil USA refineries. By year’s end over 13,000 workers will be a part of the PACE TOP program.

New to the TOP Program is a growing database of Lessons Learned Training Activities from TOP sites. These are available via the Web to all PACE Locals. These are in a downloadable training activity format that sites can use for training in a variety of settings.

One work-site attempting to reap the full benefit from PACE Lessons Learned is the SUNOCO Refinery in Toledo, Ohio. Maintenance workers there participate in safety meetings featuring a Lessons Learned Activity at least once each month. Overall, the plant experienced a reduction in injuries after putting into action the Lessons Learned part of the TOP program.

*Photograph: PACE workers using their training.*

# NIEHS Hazardous Waste Worker Training Program

## George Meany Center for Labor Studies-National Labor College (GMCLS)

**Who they are:** The National Labor College (NLC) on the George Meany Campus serves the continuing and higher education needs of workingmen and women and their union representatives.

**Who benefits:** Rail workers from seven rail unions involved in the transportation of hazardous materials. This includes carmen and track workers, engineers, building and bridge department workers, conductors, laborers, signalmen, yardmasters, foremen, and Native American and Spanish-speaking production gang workers.

**How many:** A total of 966 rail workers participated in 110 training courses for a total of 8,849 contact hours.

### Remarks at the end of a class:

*“This is an eye opener. Why can’t we send the whole workforce?”*

*“I think because of this class, I will not have a story if I apply what I have learned thanks to people like you all. Thank you!”*

*“I believe this was the most complete training that I’ve ever had since I worked on the railroad.”*



*Railroad Workers in training for Emergency Response*

# NIEHS Hazardous Waste Worker Training Program

## Laborers/Associated General Contractors Education and Training Fund (Laborers-AGC)

**Who they are:** This consortium is headed by the Laborers/Associated General Contractors Education and Training Fund (Laborers-AGC) and includes the International Brotherhood of Teamsters. The Laborers-AGC Education and Training Fund, a joint labor-management training trust fund formed by a partnership of the Laborers' International Union of North America (LIUNA) and the Associated



General Contractors of America (AGC), who provides comprehensive education and training programs to individuals and organizations within the LIUNA marketplace. The International Brotherhood of Teamsters, with 1.4 million members, is one of the largest and most diverse labor unions in the world. Laborers-AGC also receives funding under the Minority Worker Training Program and the Brownfields Minority Worker Training Program reported on separately.

**Who benefits:** The consortium targets skilled Laborers, Teamsters, and other construction craft workers engaged in hazardous waste clean up. Laborers-AGC conducted their training at 19 regional centers and three mobile units. These centers are located in New York, Indiana, West Virginia, Missouri, Colorado, New Jersey, Tennessee, Pennsylvania, Michigan, Connecticut, Iowa, Kentucky, Louisiana and Hawaii. The mobile units are based in Southern California, West Virginia and Iowa. The IBT conducted their training at centers in California, Rhode Island, Nevada, Illinois, and New York.

**How Many:** The Laborers-AGC and the IBT combined programs conducted 534 courses for 6,775 trainees. This accounts for 151,838 contact hours of training.

**Job Performance and Safety:** When, after each Hazardous Waste Refresher course, trainees are asked how environmental training has affected performance and safety on the job, more than 60% of those responding reported that they used the specific content of the course at work. They also reported increased awareness of their surroundings and the hazards associated with working on environmental remediation sites. Typical worker responses included comments like, “much more aware of jobsite conditions and how to avoid potential problems” and “I know what to look for and what to do.”

Many workers reported changes in individual behavior, especially those associated with using proper personal protective equipment (PPE) and identifying and pointing out specific hazards to other workers and their supervisors. Typical comments include, “I always check my PPE and adjust it to fit the situation” and “Now I notice the wind direction.”

Several participants noted that they have acted to change job site situations or activities including inadequacies in site safety plans, PPE problems, and working conditions. Moreover, many workers acted to fix the problems themselves or were sought out by supervisors, site safety officers and other workers to help address specific work site problems.

Several noted that their expanded skills base made them more employable and resulted in “more work opportunities” and “expanded hours.” Other workers realized benefits to their self-esteem and perceived value as a skilled worker taking pride in their ability to be of service to other workers and their employers. As one worker commented: “It has allowed me to be treated with respect.”

# NIEHS Hazardous Waste Worker Training Program

## International Union of Operating Engineers (IUOE)

**Who they are:** The International Union of Operating Engineers (IUOE) represents 360,000 workers including operating engineers (heavy equipment operators, mechanics, and surveyors), stationary engineers who maintain buildings and industrial complexes, nurses and other health workers, and a variety of public employees.

**Who benefits:** From Alaska to Florida, Maine to Hawaii, IUOE conducts training for its members, its contractors, government agencies, and other organizations in every region of the country. IUOE has provided training for the NY Transport Workers Union, U.S. Department of Justice, Bureau of Prisons, West Virginia state agencies, and workers nationwide in critical infrastructures such as ports and waterways, pipelines, hospitals, hotels, refineries, petrochemical plants, stadiums and arenas, and power-generating facilities

**How many:** IUOE conducted 746 courses for 16,434 trainees resulting in 180,938 contact hours of training.

**Two Examples of Good Preparation Reducing the Odds:** In October 2003, the Tropicana Casino Resort parking garage in Atlantic City, New Jersey, collapsed. Response to the incident included New Jersey Task Force One, New Jersey's Urban Search and Rescue unit, and members of IUOE Local Union 825.

Members of Local 825 used training from the IUOE to proactively form the necessary relationships to respond to the incident, as well to perform the necessary tasks at hand. Members of Local 825 realized through training at the IUOE, and drawing on IUOE experiences at the WTC, that a disaster site is not the place to make introductions. Local 825 forged a relationship with NJ Task Force One through exercises and training so that when an incident occurred, such as the Tropicana collapse, NJ Task Force One and Local 825 would respond



as a team. With the NJ Task Force One educated on Local 825's abilities and limitations, the necessary equipment such as cranes or loaders, could be onsite in a timely manner.

In February 2004, Temple University experienced a gas line main fire which threatened main campus buildings. As the traditional first responders arrived, fire and police, they were greeted by the IUOE Stationary (Building) Engineers who, through their training at the IUOE, realized their role in emergency response and the incident command system. One building engineer briefed the incident commander on the actions already taken regarding the heating, ventilating, and air conditioning (HVAC) and electrical systems, and also what was housed in the buildings such as the infectious disease laboratory. This building engineer continued to support the incident commander throughout the response providing information and resources to ensure the safety of the first responders, as well as protecting as much of the property as possible.



# NIEHS Hazardous Waste Worker Training Program

## International Chemical Workers Union (ICWU)

**Who they are:** This consortium is based at the Center for Worker Health & Safety Education which is operated by the International Chemical Workers Union (ICWU) in cooperation with the United Steelworkers of America (USWA), the International Association of Machinists and Aerospace Workers (IAM), the American Flint Glass Workers (AFG), the Rubber Plastics Industry Conference of the USWA (R/PIC), the Aluminum, Brick and Glass Workers Division of the USWA (ABGWD), the Coalition of Black Trade Unionists (CBTU), the United Food and Commercial Workers Union (UFCW) and the American Federation of Teachers (AFT). The consortium also includes the University of Cincinnati and the Greater Cincinnati Occupational Health Center.

**Who benefits:** With training held both in Cincinnati and in various regional centers, workers throughout the country receive training.

**How many:** This consortium has delivered 51,464 contact hours of training in 231 classes to 3,407 workers.



## Protecting Healthcare Workers and Hospital First Receivers:

A crop duster has accidentally sprayed 20 field workers and they are all rushed to the nearest hospital; there has been a six car pileup on the expressway involving hazardous chemicals and while 14 injured people are being transported to the nearest hospital, no one can tell the hospital employees what the specific chemicals are. These are the stories that nurse health and safety trainers say are all too common.

Hospital employees are no stranger to trauma and stress. However, they are not always aware of the level of contamination they are potentially exposed to when contaminated patients arrive at their facilities. The ICWUC Hospital First Receiver's course heightens that awareness and better prepares them to protect themselves from overexposures to hazardous chemicals without having an adverse effect on patient treatment. In addition to exercises that are unique to hospital workers, this course affords the participants the opportunity to get hands on practice using the personal protective equipment for hospitals. Hospital workers vastly increase their chances of being prepared when they recognize, based on their location, what is most likely to happen. Comments of participants include:

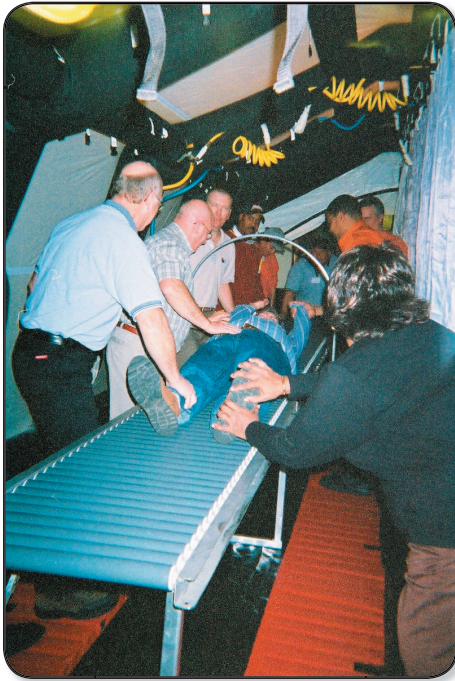
*"This program has made me aware of the hazards we are faced with.", "I learned the importance of a Hazard Vulnerability Analysis and how to review the Emergency Management Plan more thoroughly", "I plan to share the information learned and encourage others to attend this class."*

*Photograph: First Receivers in training*

# NIEHS Hazardous Waste Worker Training Program

## Midwest Consortium for Hazardous Waste Worker Training (Midwest Consortium)

**Who they are:** Headed by the University of Cincinnati, the consortium includes Southeast Michigan Coalition on Occupational Safety and Health, Greater Cincinnati Occupational Health Center, University of Illinois, University of Kentucky, Michigan State University, Indiana University, University of Tennessee, University of Minnesota, University of Louisville, Lakeshore Technical College, Detroiters Working for Environmental Justice, Citizens for Environmental Justice, Ohio Environmental Council, Fisk University - Environmental Justice Program, and the Three Affiliated Tribes.



**Who benefits:** Workers in Illinois, Indiana, Kentucky, Michigan, Minnesota, Ohio, Tennessee and Wisconsin.

**How many:** The Midwest Consortium delivered 760 courses to 15,102 persons resulting in 94,153 contact hours of training.

**A Letter From the City of Two Rivers Fire Department:** The geographical location of our department places us within only a few minutes of two nuclear energy plants. This places us not only at a significant risk for a nuclear, or radiological incident, for which Lakeshore Technical College (LTC) provides training, it also places us at a higher risk for a weapons of mass destruction incident for which LOC also provides training. The training made available through LOC not only prepares our department to respond to emergency incidents, but allows us to respond in the safest way. In a practical sense, I was the officer in charge of a chlorine leak here in the city. Incident management was simplified with my ability to place our hazmat team in charge of the leak, which allowed me to manage the overall incident. The skill

and expertise of the team was significantly appreciated and contributed to the safety of our community. Initial response to related hazardous materials incidents is made easier as our members are better prepared and more confident with the training they have received from LOC. In another more recent incident, an ammonia leak at a local industry occurred and was effectively managed by the hazmat team. The effectiveness of the response was directly related to the training that occurred on ammonia spills only one week prior to the incident.

*Photograph: Practicing on a decontamination line.*

# NIEHS Hazardous Waste Worker Training Program

## International Association of Firefighters (IAFF)

**Who they are:** The International Association of Fire Fighters (IAFF) has more than 2,700 affiliates, representing 263,000 fire fighters and paramedics in more than 3,500 communities in the U.S. and Canada.

**Who benefits:** IAFF continues to address the hazardous materials training needs of emergency responders in those geographical areas with the greatest densities of Superfund sites. The IAFF local affiliates help to determine training needs, allow access to students (i.e., emergency responders) and establish opportunities for repeat courses in their communities. Also during this period the IAFF continued to help in rebuilding the hazardous materials response capabilities of the Fire Department of New York (FDNY) and mutual aid fire departments that represent the greater New Jersey / New York metropolitan area.

**How many:** IAFF held 47 courses for 927 students resulting in 37,808 contact hours of training.

**Partnering Within the NIEHS Community:** IAFF partnered with numerous NIEHS grantees to develop, coordinate and conduct a National Trainers' Exchange. Trainers and staff from the Chemical Workers' Union (ICWUC), Service Employees International Union (SEIU), United Auto Workers (UAW) and other unions modeled a series of workshops after the successful National Trainers' Exchange delivered by the NIEHS Clearinghouse. The trainers focused on prevention and preparedness for intentional and unintentional catastrophic events. IAFF worker trainers collaborated with SEIU on a workshop entitled "We Almost Lost Detroit." This disaster-mapping workshop focused on all of the unions' collective roles in case of an imminent disaster. The IAFF and SEIU partnered to give their take on a real-life disaster-mapping scenario. The workshop was effective for participants because it gave everyone a better understanding of other workers' roles in a catastrophic emergency. Furthermore, IAFF instructors also shared their expertise in the use of disaster-mapping software. In a small-group format, the IAFF made a presentation of computer modeling software for chemical releases and discussed the many applications the software has to offer.



*Photograph: Firefighters in training.*

# NIEHS Hazardous Waste Worker Training Program

## Center to Protect Workers' Rights (CPWR)

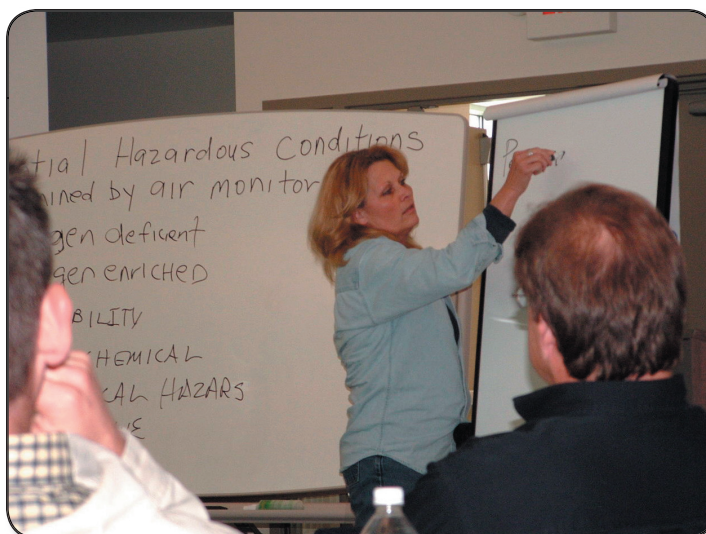
**Who they are:** The Center to Protect Workers' Rights (CPWR) and its Construction Consortium for Hazardous Waste Worker Training includes the following international-national construction unions: Insulators & Asbestos Workers, Iron Workers, Boilermakers, Painters, Bricklayers, Plasterers & Cement Masons, Carpenters, Plumbers & Pipe Fitters, Electrical Workers, Sheet Metal Workers. These unions represent over 2,000,000 workers. CPWR also receives funding under the Minority Worker Training Program and the Brownfields Minority Worker Training Program reported on separately.

**Who benefits:** Thousands of CPWR trained workers are found at Superfund sites throughout the country.

**How many:** CPWR's consortium has conducted 330 classes and trained 5,503 workers, technicians and support staff in 84,146 training contact hours



**Partnering for Success:** Building upon its highly successful DVD-based disaster site worker course, CPWR began the year with a Train the Master Trainer (TMT) held at the George Meany Center National Labor College. Approximately 45 OSHA Master Instructors attended the session to learn how to train instructors throughout the country to deliver worker training for Skilled Support Personnel. CPWR partnered with OSHA and its Office of Training and Education; with NIOSH; with the International Association of Fire Fighters and its HazMat Training and Education Department; and NIEHS. Participating with CPWR in the development of this Disaster Response Training Program were all of their NIEHS Consortium Partners, as well as all 15 Building Trades Unions, including the Laborers and the Operating Engineers. CPWR negotiated a reciprocity agreement with OSHA whereby training equivalency has been recognized by all parties. The agreement is critical to CPWR, NIEHS, and other NIEHS grantees.



*Top photograph: Learning to don SBBAs*

*Bottom photograph: Learning to teach in a Train the Trainer course*

# NIEHS Hazardous Waste Worker Training Program

## California-Arizona Consortium (CAC)

**Who they are:** The California-Arizona Consortium is led by the UCLA Labor Occupational Safety and Health (LOSH) Program and includes the University Extension, UC Davis (UCDX); UC Berkeley's Labor Occupational Health Program (LOHP); Arizona State University (ASU), and one affiliate member, the Alaska Health Project (AHP).



**Who benefits:** Public and private sector workers and supervisors throughout California and Arizona in addition to Alaskan Natives; workers in the Pacific Trust Territories and Hawaii, Spanish-speaking day laborers and janitors, and a significant cohort of Navajo workers through the Bureau of Indian Affairs. These workers are engaged in hazardous waste handling and treatment, air monitoring, hazmat transport and manifesting, site

assessment/investigation and supervision, facility inspection, regulatory compliance, firefighting, emergency response, Superfund and military base cleanup, and a number of other related tasks.

**How many:** The California-Arizona Consortium trained 2,343 workers in 144 courses for a total of 29,004 contact hours.

### Training that leads to Understanding:

*"I was involved with a gas spill at my company and I had the opportunity to review the Incident Report. Because I took your class, I was able to better understand the role of the Incident Commander and the role he had to fulfill."*

*"The section on putting on PPE and when to use a full-face mask vs. a half face was very beneficial. This is one thing I personally have changed on the job."*

*"I examine a lot of Material Safety Data Sheets at work and what I took away from the last class was the information in the toxicology section. This directly affected how I analyze the hazards associated with the chemicals we use at work."*

*"I used what we learned about workers' rights to refuse to work in a potential hazardous situation where there was an electrical hazard in the rain. Instead of going ahead with the job, I insisted that the team wait until a safe procedure could be established and did other tasks in the meantime."*



*Left Photograph: CAC training in American Samoa  
Right Photograph: CAC students in training.*

# NIEHS Hazardous Waste Worker Training Program

## American Federation of State, County, and Municipal Employees (AFSCME)

**Who they are:** The American Federation of State, County, and Municipal Employees (AFSCME) represents over 1.4 million public service and health care workers.

**Who benefits:** Road, bridge, water sewer, wastewater treatment, sanitation, public safety and security, and hospitals workers across the country.

**How many:** AFSCME delivered 85 courses to 1,497 trainees for a total of 11,839 contact hours.

**One System for Measuring Trainee Performance:** AFSCME uses several measures to assess trainees' performance. The primary measure of performance is through trainer observation of trainees' competence in performing skills specific to the course. For example, course design provides instructors with multiple opportunities to observe the trainees donning and doffing personal protective equipment (PPE), setting up and performing decontamination, using body harnesses, tripods and retrieval devices to enter confined spaces and rescue entrants, and using air monitors to detect hazardous atmospheres in confined spaces or at simulated spills. Checklists are used to help trainees learn hands-on skills and to help trainers document these skills.

Paper-and-pencil problem solving activities and discussions to assess student performance are also used, especially in the Awareness courses. For instance, in all emergency response courses, a Department of Transportation (DOT) Emergency Response Guidebook exercise, a material safety data sheet (MSDS) exercise, and a NIOSH Pocket Guide exercise are used. Each course is designed with an integrated activity near the end that requires trainees to use information from many of the course modules. These activities are useful teaching tools and help assess the trainees' understanding of the course content and their ability to apply it.

Finally, in operations and technician's courses, the class critiques video-taped spill response exercises.



*Photograph: Collapsed-building team trained by AFSCME.*

# NIEHS Hazardous Waste Worker Training Program

## Hazardous Materials Training and Research Institute (HMTRI)

**Who they are:** This consortium is lead by Kirkwood Community College's Hazardous Materials Training and Research Institute (HMTRI) and includes the Community and College Consortium for Health and Safety Training (CCCHST). There are 93 colleges and universities, five community-based organizations, eight governmental units, 12 independent training providers and one union in CCCHST, representing 32 states and one territory.

**Who benefits:** Workers, technicians, and supervisors exposed to hazardous materials encountered during hazardous waste site clean-up, Brownfields redevelopment, transportation of hazardous materials, and in response to spills and releases of hazardous materials.

**How many:** CCCHST institutions delivered 1,582 courses to 24,866 students, producing 233,404 contact hours of instruction. This includes five instructor development courses for 117 instructors, producing 3,872 contact hours of instruction.



### Gold Standard Facilities:

Instructor training is held at Kirkwood Community College's 12,000 square-foot Environmental Training Center. The Center was opened in 1976 as the first federally funded wastewater training center in the nation. The Center houses a general purpose classroom, with a seating capacity of 50; an analytical lab with 20 work stations; a chemical prep room; an instrument room; offices; a maintenance lab with 16 work stations; a tool room; a pilot scale 20,000 gallon per day wastewater treatment plant and a wastewater treatment plant process control lab.

Adjacent to the Training Center is the HMTRI hazardous materials training grounds. This three-acre site was developed in 1986 and provides a safe and controlled site to deliver many forms of industrial hazardous materials training. These include fire control techniques, corrosive spill response procedures, confined space entry and rescue, flammable liquid spill response, compressed gas release response, pipe and valve leak response, and loading dock spill response. The basic grounds consists of a 100 x 150 foot concrete pad, an equipment storage building, a simulations lab building, five confined space simulators, a fully instrumented burn building, a simulation for air crash rescue training, and a simulation for Coast Guard-approved maritime firefighting. Adjacent to the grounds is a field, stream, wood lot, and drum storage site used in both spill response and waste site-training programs.

The grounds are equipped with a safety shower and eyewash fountain because real chemicals are used in many training exercises. A shelter is provided from sun and rain. This rest area has chairs, water, a chalkboard for instruction, and trash receptacles.

HMTRI also maintains a mobile industrial spill and remediation lab built into a 48-foot semi-trailer. The laboratory has a tank and pipe gallery, chlorine cylinders, drum handling area, decontamination equipment, an ammonia compressor, and assorted receivers and tanks. Equipment includes HazMat response gear for 30 trainees, and equipment and instrumentation for monitoring, sampling, and response. HMTRI facilities and equipment are supported by a full-time equipment technician.

# NIEHS Hazardous Waste Worker Training Program

## 2.2 Minority Worker Training Program Update

The Minority Worker Training Program (MWTP) has successfully trained thousands of young minority adults over the past nine years through programs at the Center to Protect Workers' Rights, Xavier University, National Puerto Rican Forum, Laborers-AGC Education and Training Fund, and the University of Medicine and Dentistry of New Jersey. The main goal of this program is to provide young people of color, age 18-25, with a vigorous training program that eventually leads to productive employment. After nine years, 2,889



participants have been successfully trained in worker health and safety for construction and environmental cleanup work. The overall job placement rate increased to 66% up from 64% last year for a total of 1,905 trainees employed. (See Appendix 6).

For this period, 261 participants were trained in 9 cities: Chicago, IL; Houston, TX; New Orleans and Baton Rouge, LA; two locations in New York, Manhattan and the Bronx ; Oakland, Los Angeles, and San Francisco, CA; and

Washington, DC. Of those trained, 221 are gainfully employed, primarily in the construction and environmental fields which represents an 85% job placement rate. This is the best job placement rate for the program since its inception. A total of 50 workers are employed in environmental jobs and 171 are in construction or other jobs. Courses taken by the students ranged from Life Skills to tiered Environmental Technician training for a total of 177 courses representing 83,174 contact hours of training (See Appendices 7 and 8). Each program developed specialized training programs specific to the workforce needs in their geographic area; however, hazardous materials and waste training remained the primary core curriculum. New or modified training added this year include radiation worker, commercial driver's license, and hazmat transportation training.

As participants navigate the vigorous life skills training and successfully complete this segment, the retention and job placement rates also increase. The Life Skills training is a supportive service tailored to the individual's needs. The services might include remedial mathematics tutoring, budget counseling and cash management, life situational counseling, and job readiness skills. These help prepare the students to take apprenticeship and employment examinations, as well as pass the environmental examinations leading to certifications in lead abatement, asbestos abatement, and hazardous waste operations. A summary of the accomplishments and highlights of each of the training programs is listed below.

*Photograph: Minority Worker Trainees NY/NJ consortium*



# NIEHS Hazardous Waste Worker Training Program

## Laborers-AGC Education and Training Fund (Laborers-AGC)

**Who they are and who benefits:** Eight years of providing basic skills and environmental and construction skills training coupled with subsequent employment opportunities to minority youth between the ages of 18 and 25 living in environmentally impacted communities has given the Laborers-AGC MWTP the reputation of success in urban communities across the country. This program year, Laborers-AGC has focused its training efforts on three urban areas: San Francisco, CA led by the Young Community Developers (YCD); Houston, TX led by Make Ready, Inc.; and Washington, DC led by Laborers DC Training Fund. As a result of this strong collaborative relationship between labor and community based organizations (CBOs), 72 of the 76 trainees have completed training, with 28 trainees in the San Francisco, 25 trainees in the Houston and 11 trainees in the D.C. programs. All programs met or exceeded their training goals except the Washington, DC program. This was due in part to poor employment opportunities in the D.C. area.

**Job Placement:** Currently, 60 trainees or 79% are employed. Salaries range from \$14,974 in Houston to \$67,433 in San Francisco. Historically, the Laborers MWTP job placement has always increased to approximately 75% or higher by the end of the program year. This is a result of the timing of most programs. All of the programs finished their training cycles in the summer, and job placement of recent graduates began immediately. A major benchmark of success for Laborers-AGC is the increasing number of trainees who are indentured into the Laborers CCL Apprenticeship Program. This year 9 trainees became CCL apprentices.

Job placement for the San Francisco program has continued to show success with 92%, 26 out of 28, of their participants gaining employment. The salaries of the employed graduates range from \$27,040 to \$67,433 per year, and of the graduates who gained employment 79%, (22 out of 28), are employed within the environmental remediation industries.

From the rapport that was established through former graduates of the program and the outreach efforts of its coordinator, YCD was able to continue and improve upon already established relationships. Due to the demand for radiological work from Foster Wheeler, YCD, with help from Laborers-AGC, conducted their second Radiation Worker Training. After the training, 18 graduates were employed by Foster Wheeler in the summer of 2004. The participants have already seen the benefits of radiation worker training, with 2 trainees going to work for New World Technology (NWT) at the General Electric facility in Livermore, CA. Also, NWT selected 3 additional trainees from the next training cycle for a radiation project in Sacramento.

The United States Naval Facilities Engineering Command acknowledged the success of the program this year. YCD was recognized for its ability to provide qualified and well-trained individuals for various contractors on the Hunters Point Naval Shipyard clean up. YCD has provided this local, trained workforce to the shipyard employers for the last 9 years.

**Success Stories:** Four San Francisco program graduates, Leon Figgins, Beverly Maybon, Antoinette Coleman, and Dalton Reddic, are still employed at the Superfund site in their community, the Hunters Point Shipyard with Foster Wheeler Environmental. They have been such positive employees that Foster Wheeler is looking to continue to hire workers from the San Francisco program.

The Washington, DC program also experienced success stories of student placement and received accolades for the program from a national contractor. The Virginia Area Manager of NPL Construction Company took the time to personally inform the DC Training Fund Director of the exemplary work ethics of the 7 apprentices dispatched to

# NIEHS Hazardous Waste Worker Training Program

his company. He noted their excellent basic construction skills, safety awareness, and, most importantly, their work ethics. The contractor hired the 7 apprentices at 70% of the current Construction Craft Laborer journey person wage rate or \$11.50 per hour. This is 10% above the usual starting rate for apprentices.

From the Houston program, Quentin Dunn, a graduate of the first cycle of training, was employed part-time for United Parcel Service (UPS) when he began the program. Upon completion of the MWTP, he informed his supervisor of his certifications. He was then promoted to a full-time position handling hazardous materials at UPS and given a significant raise because of his new qualifications. Along with this exciting advancement, Quentin and his fellow classmate, Efran Ray, were chosen after an extensive search by Tetra Tech, an international environmental company, for employment at the EPA Superfund site, MDI/Tesco.

## National Puerto Rican Forum (NPRF)/OAI Consortium

**Who they are and who benefits:** The National Puerto Rican Forum (NPRF)/OAI Consortium trained a total of seventy-five (75) students through the delivery of twenty-five (25) courses generating 7,054 instructional hours. The program is offered in Chicago, Illinois and Washington, DC, with a new pilot program in the Bronx, New York. A noteworthy highlight of this program year is the consortium's ability to effectively leverage additional external and internal resources to ensure the program's viability and effectiveness. This was accomplished through collaborative relationships with the City of Chicago Department of Environment's Greencorps Program, the Latin American Youth Center's (LAYC) YouthBuild Program, and OAI's YouthBuild, Pre-Pharmacy Technician, and IKON document specialist Programs. This program year also marked a true partnership between OAI and NPRF that built NPRF's capacity to provide direct training and resulted in a small MWT pilot program in New York City.



In an effort to sustain and enhance the program by equipping students with more skills and services, OAI was successful in leveraging a two-year YouthBuild grant from the Department of Housing and Urban Development (HUD). Thus, besides receiving the customary training and services in Chicago, MWT students in the first class also received construction skills training and paid work experience in building rehabilitation funded by YouthBuild. The infusion of HUD funding allowed the program to expand from approximately eight (8) to eighteen (18) weeks.

During the pilot program in the Bronx, NY, NPRF enrolled thirteen (13) students. All thirteen (13) were Hispanic, and all were either unemployed or underemployed before starting the training program. All thirteen (13) students were male. Six (6) students are now working in various industries earning between \$6.50 and \$10 per hour.

**Job Placement:** Of all the trainees, fifty-one (51) students are currently employed in the construction and/or environmental industries and twenty-nine (29) are employed in other industries that come in contact with hazardous materials, for a total of fifty-nine (60) placements. This is a 80% job placement rate.

*Photograph: NPRF Chicago graduates*

# NIEHS Hazardous Waste Worker Training Program

## Center to Protect Worker's Rights (CPWR)

**Who they are and who benefits:** The Center to Protect Workers' Rights (CPWR) Consortium provided training for the New Orleans, LA area via the Louisiana Regional Council of Carpenters and in Oakland, CA via the Cypress Mandela/Women in Skilled Trades (WIST) Center. Two noteworthy achievements of the two MWTP were the improved and expanded applicant assessment process in New Orleans and modifying the classroom setting and extending the life skills component two additional weeks in Oakland.

**Job Placement:** A total of 52 students were enrolled: 18 students in New Orleans and 34 students in Oakland. Forty-nine (49) students graduated. A total of 25,902 contact hours of training were provided. Of the 49 graduated, 44 are employed: 16 students from New Orleans and 30 students from Oakland, resulting in an excellent job placement rate of 85%.

In New Orleans, the apprentice mentoring program design was completed. Additional funding was sought to implement the program in the last quarter of this program year. The program will provide a journeyman carpenter mentor to each MWTP graduate for a period of one year after entry into the apprenticeship. CPWR's master trainers trained and certified 46 of 49 students as of August 31, 2004: 39 received hazardous waste worker, 27 received lead-abatement training and certification, 27 received asbestos abatement training and certification, and 25 received confined space training.



Providing Construction Trades Skills' training in one or more building trades crafts was another goal. Forty nine (49) of the students received construction training as of August 31, 2004. The students were better prepared to enter the construction industry with having garnered more construction trade experience than the traditional apprentice entering a trade union. Union instructors provided the trade specific guidance to individuals who had little or no knowledge of the construction industry. The students worked on projects that demonstrated the safe use of hand and power tools of the trade, ability to read

blue prints, measure and calculate dimensions, and safely contain and abate hazardous materials.

**Success Story:** A few other noteworthy achievements were the creation of the mentoring program, strengthening of community relationships, thirty-one students receiving 2 to 4 college credits, one student receiving his GED, and the establishment of new classroom structures to improve the learning environment.

*Photograph: CPWR trainee*

# NIEHS Hazardous Waste Worker Training Program

## The New Jersey/New York Hazardous Materials worker Training Center (NJ/NY Consortium)

**Who they are and who benefits:** The primary training provider is the New York City District Council of Carpenters Labor Technical College (LTC). MWT is housed and administered by the LTC, a subcontractor to the University of Medicine and Dentistry of New Jersey-School of Public Health. They also work with other CBO's such as Magnolia Tree and 5<sup>th</sup> Avenue Committee in New York City. The program continues to rely on these partners to recruit willing and qualified candidates as well as to provide ongoing individual support of students via social service provision, referral, and counseling. CBO partners



provided state-approved GED classes, and workshops to address family, health, drug awareness, parenting issues, and economic self-sufficiency. For the first time, the program piloted training and licensing in commercial driver's license (CDL) with HAZMAT transport. Four students were trained in the CDL course, three of which have now received their commercial license with the HAZMAT transport endorsement. Another component is a flexible initiative for additional training in environmental remediation. These courses are available on an as-desired basis for those students interested in further environmental remediation coursework and includes courses such as asbestos abatement supervisor, lead abatement for public housing. Over 20 courses were conducted for 13,626 contact hours of training.

**Job Placement:** Of the 30 students enrolled, 28 graduated, which is the highest percentage for graduations since the Labor Technical College began participating in the program. The 28 MWT graduates have worked for various union programs including the painters, sheet metal workers, operating engineers, and the majority, with the NYC carpenters. The first-year apprentice wage is \$15.51 per hour, as well as approximately \$18 per hour in fringe benefits. The remaining two trainees were successful in completing some technical training and because of this, they are also employed.

Trainee follow-up data indicate that 72 percent of 2002 graduates are still employed and of the 2003 graduates, 69 percent are still employed. Past graduates seeking employment assistance are always aided by staff.

**Success Stories:** Clearly job placement is the program's greatest success. With 28 of 30 students working as first-year apprentices, they have the potential to obtain highly paid jobs throughout the New York area. In addition to shop instruction such as the carpentry, students are required to participate in a hands-on community service-learning module that both utilizes their new skills and also gives back to the community. This program year, students worked along side other volunteers with Habitat for Humanity on a complete renovation of an abandoned brownstone building, converting it into several low-income apartments. Lastly, four female students enrolled and completed the training program this year.

EMPLOYMENT STATUS		
SIC Code	Description	Number of Students
1751	Carpentry Work Contractors	25
1761	Sheet Metal Work Contractors	1
1711	Operating Engineers	1
1721	Painting Contractor	2
	Other	1
<b>Total</b>		<b>30</b>

# NIEHS Hazardous Waste Worker Training Program

## Xavier University (XU)

**Who they are and who benefits:** Xavier University's (XU) Deep South Center for Environmental Justice (DSCEJ) in collaboration with Southern University in Baton Rouge (SUBR), the Laborers-AGC, and the North Baton Rouge Environmental Association implemented year four of the East Baton Rouge Parish Program enrolling 28 individuals from communities within East Baton Rouge Parish, all of which are situated at the northern end of the Mississippi River Chemical Corridor.

The program was implemented on the campus of SUBR as two four-week cycles of basic skills training that included Study Skills, Mathematics, Introduction to Hazardous Materials, Introduction to Computer Basics, Physical Fitness, Life Skills, Job Readiness, Individual Counseling, Group Counseling, and Environmental Justice. 28 trainees completed basic skills training and became eligible for technical training. The Laborers-AGC training facility in Livonia, LA provided an 80 hour-Specialized Construction course (General Construction with concrete technology), an 80 hour-Hazardous Waste Worker course, and 40-hour Lead and Asbestos Abatement courses. Every segment of technical training included a hands-on work simulation with an emphasis on safety.

**Job Placement:** Active job placement efforts in May produced employment for twenty-five (25) of the twenty-eight (28) trainees, for an 89% placement rate. The jobs ranged from laborer at \$6.00/hour to asbestos abatement worker at \$13.00/hour. The Brother-to-Brother mentoring program among board members and past and recent graduates continues to foster collaboration and build self-esteem. These connections have proven effective through the years in empowering graduates to seek employment opportunities independently.

**Success Stories:** Korey Louis is a prime example of what this program can accomplish if students apply themselves. Korey's mission was to be successful in this program. He was always on time for class, participated in all activities, and interacted well with his classmates. Korey received numerous awards at graduation for Basic Skills Training as well as the Supervisor's Award for Technical Training and was successful in obtaining all of his technical certifications. Korey was one of the first graduates to obtain work. On May 6, 2004, he was hired by minority-owned Oden Environmental Services in New Orleans as a Lead Abatement Worker. This company was awarded a contract to do work by the City Housing Office. Oden Environmental Services reported that Korey was being groomed for a supervisory position within a few months. His starting pay is \$12.00 per hour.

A new relationship has been forged with LVI Environmental Services Inc. located in San Antonio, Texas. This environmental company was awarded a multimillion dollar contract with Louisiana State University for asbestos abatement. The General Superintendent for LVI hired seven recent program graduates. He was impressed with the detailed training participants received. He saw himself in the trainees and he indicated that with good work ethics, dependability, and working safely, they would be able to move up in the organization.

# NIEHS Hazardous Waste Worker Training Program

## 2.3 The Brownfields Minority Worker Training Program

The NIEHS Brownfields Minority Worker Training Program (BMWTP), which began in 1998, broadens the MWT program to provide comprehensive training to disadvantaged residents and to foster economic and environmental restoration to communities impacted by brownfields. The funding for this program is provided by interagency agreement with the US EPA. This amounted to \$2,200,000 for this period.



The BMWTP has reached approximately 2,140 trainees since it began with a 67% job placement rate and continues outreach to other communities to provide this much needed training opportunity. Trainees prior to entering this program were all un-employed or chronically under employed. Now they are employed and giving back to their communities in taxes and community service.

Last year, the five BMWTP awardees provided in depth life skills and environmental training to 280 local residents in 14 Brownfields communities. For this period 218 participants are now employed, a 78% employment rate.

As these programs continue, the impact of these training programs to the individual and their communities are evident. Consider these not uncommon examples:

- The CPWR/East Palo Alto Project Build Brownfields Program, administered by Opportunities Industrialized Center West, Inc (OICW), was awarded the 2004 San Mateo County Sustainable Award presented at the Annual Sustainability Awards ceremony. San Mateo County celebrated individuals or groups who demonstrated a dedication to the long-term health and well being of San Mateo County. Recipients' actions support the three key elements of sustainability: a healthy ecosystem, social well being and economic vitality. Project Build was selected as an outstanding provider in services. San Mateo Times writes, "Project Build Brownfield's Job Training Program is a program of OICW..... It trains unemployed residents of East Palo Alto in basic construction, hazardous waste handling, and lead and asbestos abatement. Many trainees are former inmates and substance abusers. This program helps restore contaminated wetlands, build a trained workforce and revitalize the community."
- At the NPRF program in Kansas City, MO, one student after completing his training went to work for Maxium Tech. Working mostly lead jobs, he was able to support his family and move from a shelter into an apartment. He participated in a specialized Geo-probe training offered to trainees that were high achievers. Because of this specialized training, he was transferred to the Atlanta branch of Maxim where he worked as a supervisor. He is currently enrolled in school studying to be a geologist.

The five BMWTP awardees are the Center to Protect Workers' Rights, Laborers-AGC Education and Training Fund, National Puerto Rican Forum, University of Medicine and Dentistry of New Jersey, and Xavier University. Appendix 9 summarizes their training activity. (Note: a separate report on the BMWTP program will be issued in the near future. It will be posted on the NIEHS WETP website at <http://www.niehs.nih.gov/wetp> and the NIEHS National Clearinghouse for Worker Safety and Health website at: <http://www.wetp.org>.

The following article from the National Clearinghouse weekly E-Newsbrief summarizes some of the NIEHS activities at the EPA 2004 National Brownfields Conference:

During the 9<sup>th</sup> Annual Brownfields Conference in St. Louis, Missouri, the National Institute of Environmental Health Sciences (NIEHS) set the stage for six dynamic sessions pertaining to job training and worker safety

## NIEHS Hazardous Waste Worker Training Program

and health at Brownfields sites. As a co-sponsor for the second consecutive year, NIEHS reached out to brownfield stakeholders, practitioners, and decision makers during this premier forum to highlight its Brownfields Minority Worker Training Program (BMWTP) and related success stories.

In the month preceding the Conference, NIEHS invited the moderators who would be hosting sessions at the Conference to submit a training success story related to their Brownfields activities supported by NIEHS. As a result, much enthusiasm was created during those weeks in which four success stories, under the theme “Protecting our Workers – Involving our Communities,” were posted in the Worker and Education Training Program (WETP) electronic newsbrief. Please visit the WETP newsbrief archives for the weeks of August 20 – September 10, 2004 to view these postings.



The first NIEHS sponsored session, *Connecting the Dots: Job Training for Community Residents*, supported Administrator Leavitt’s comments. Moderated by Kizetta Vaughn of the Center to Protect Workers’ Rights, this kickoff session consisted of a panel of local elected or city officials who led discussions about ways in which cities could connect job training to local jobs for community residents. Noemi Emeric began the panel by enthusiastically discussing of how the City of Los Angeles makes this connection. She focused on the success of the Los Angeles Conservation Corps – including the Center to Protect Workers’ Rights – to demonstrate how a high job placement rate can be bolstered through tracking students for the first year; offering supportive services such as union initiation fees, starter tools, and guidance on writing resumes; negotiating first source hire agreements with developers; and advocating redevelopment incentives such as employer wage credit and brownfields tax deduction.

The second day of the Conference greeted the NIEHS community with a packed schedule. The morning began at 9:00 am with the *NIEHS Brownfields Job Training Meeting*, moderated by Sharon Beard and Ted Outwater of NIEHS. Ms. Beard noted that as of August 31, 2003, 1,860 students have been trained. She emphasized however, that while the Program has sustained an overall sixty-six percent job placement rate, new data, dated on May 31, 2004, demonstrates an even higher placement rate as an additional 262 students were trained, with 179 employed.

Next, Don Elisburg updated the audience on information and ideas he learned while attending the Brownfields Transaction Forum earlier in the Conference. Mr. Elisburg expressed that stakeholders are beginning to see that future issues related to brownfields worker safety and health training are bigger than just local hire concerns. Strategies that are implemented must be able to place workers in permanent employment, which will support the desired community enhancement and economic benefits.

Then, in the second half of the meeting, participants were divided into breakout groups during which they discussed lessons learned and best practices in recruitment, job placement, and emerging environmental training fields. In the words of Mollie Dowling, Program Manager, Environmental Health & Safety with OAI, Inc., “The Brownfields Job Training Meeting was an exceptional opportunity for awardees and NIEHS staff to share innovative thoughts and ideas as well as help one another collect and discuss our best practices from all of the nationwide programs. Our staff came away with some truly useful insights and sincerely enjoyed the exciting dialogue about ways for all of us to improve our program design and delivery.”

# NIEHS Hazardous Waste Worker Training Program

## 2.4

### WETP SBIR E-learning Awards

During FY 2001, funding for the HWWTP began to be directly appropriated to the NIEHS, allowing the NIEHS to take a percentage of the funding to establish a Small Business Innovative Research (SBIR)/ Small Business Technology Transfer Research (STTR) program.

Based on its program experience, the WETP identified a need to create new e-learning products that would support high quality health and safety training for hazardous waste workers and emergency responders. The NIEHS has therefore issued several Requests for Applications (RFA); the most recent entitled “E-learning for HAZMAT and Emergency Response” (RFA-ES-04-004). This RFA expanded upon the lessons learned from the previous awards and included a component that utilizes e-learning to assist skilled support personnel, such as crane operators, in preparing to address events caused by weapons of mass destruction.

Since September, 2002, the WETP has made nine SBIR/STTR awards totaling \$1,355,644 for the development of innovative “e-learning” products for worker safety and health training in hazardous waste and chemical emergency response. At this writing, NIEHS WETP is in the process of making five additional awards totaling \$792,401.

A brief description of each recent or current awardee and their project is provided below:

Founded 25 years ago, **MetaMedia Training International, Inc.** has developed customized training programs for organizations, corporations, and government agencies. The company follows proven instructional design principles to produce blended learning solutions using DVD, CD-ROM, the Internet, and print media. Recent collaborations with the Center to Protect Workers’ Rights (CPWR) on NIEHS projects have resulted in the Disaster Response DVD, Emergency Response DVD, Decontamination DVD, and Confined Spaces DVD. The specific aim of the NIEHS SBIR project is to design and develop an interactive DVD training program for use by First Responders on the roles that Skilled Support Personnel can play in disasters. If First Responders better understood the jobs that the various construction trades perform, and the skills offered by each trade, the First Responders could better utilize this important resource.

**CogniTech Corporation** develops, markets, and sells customized software solutions for data collection, content management, decision support, simulation, and training. These technologies are applied to a variety of domains, including emergency response, homeland security, risk assessment, healthcare information systems, clinical trials, and scientific research. Their project will focus on the development of e-product technologies to enable Hazardous Waste Operations and Emergency Response (HAZWOPER) training. It will also enable content reuse for delivery of short incident-specific awareness training prior to entry into a response action. The delivery platforms will include Computer-Based Training (CBT), Web-based training (WBT), handheld computer training and reference materials. The e-product technologies will be capable of supporting multiple languages.

**DCM Associates (DCMA)** is a start-up with a proven team that brings together 75 years of e-Learning, HazMat, and IT experience with Dow, Dow Corning, and IBM. The principals created Dow Chemical’s Dangerous Goods Handling course which has been translated into six languages. DCMA is also supported by the Michigan Technology Tri-Corridor matching grant program. This project addresses the need corporations have to meet their hazardous material training responsibilities. A curriculum of transportation-mode specific courses is proposed. Each course is viable as a standalone for familiarization or training, or incorporated into



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a classroom curriculum. Industry experts will distill regulations to create focused training with sophisticated interactivity. Updates will disseminate immediately via the Internet.

**Northwest Training and Assessment**, based in Portland, Oregon, is producing an innovative computer-based instruction (CBI) program will supplement peer teaching of HAZMAT (hazardous waste) classes. The CBI software that will supplement the HAZMAT training will ensure consistent teaching and documented learning by each student. Selected content of UCLA's proven Hazard Communication class will be presented in cTRAIN, a CBI program for creating and presenting content. Integral to the technology is inclusion of pictures and movies, text in optional computer-generated or natural voice English and Spanish, and a 9BUTTON response unit to overcome rejection by the computer-naive. The key target of this program is immigrant workers with limited formal education because they present the greatest challenges to training.

**Y-Stress, Inc.** is a small business located in Tobyhanna, Pennsylvania, in the heart of the Pocono mountains. Their Training Technologies Division's goal is to make online learning accessible, affordable, engaging and enjoyable. Y-Stress, working with the George Meany Center for Labor Studies - National Labor College (GMC-NLC) and the University of Massachusetts - Lowell (UMASS - LOWELL), will create an online Hazardous Waste Refresher Course and develop an open source e-learning portal and content library on [www.safetywired.com](http://www.safetywired.com) to promote knowledge sharing and collaboration among safety professionals. It will utilize streaming technology to incorporate text, audio, graphics, video, 3D animation, simulations and virtual reality to optimally deliver effective knowledge and skills based training scenarios to trainees on demand. Streaming technologies are the new standard for delivering high quality, highly interactive, low bandwidth web content across all browsers and platforms to engage users with a rich learning experience. All web based content will meet SCORM specifications so it can be shared across multiple environments and products. In addition, storing course content as small learning objects will allow content to stream over low bandwidth connections and reduce development time and resources needed for future courses using similar content.

**FOF Communications (FOF)** is an informational design company with more than 20 years of experience in research, print, video, CD, and web-based programs for government, non-profit, labor, and corporate clients. The company's NIEHS SBIR project involves the development and evaluation of e-HazTools™ an interactive, commercially viable software product to teach or learn the fundamentals of practical chemistry for hazardous materials. e-HazTools,™ will hook into public chemical databases to drive e-outcomes in questioning-method scenarios and problem-solving exercises.

**Advanced Technologies and Laboratories International, Inc. (ATL)** is a consulting company specializing in health and safety, environmental protection and information systems. ATL is a woman-owned, 8(a) certified small business based in Germantown, Maryland, with field offices in Oak Ridge, Tennessee, Richland, Washington, and Albuquerque, New Mexico. ATL will develop and test a Web-Based Training Center that integrates a set of web-based functions into a coherent technology-assisted learning tool. This unique product will enable training techniques such as virtual "small group activities" that draw upon the work experiences and skills of the training participants in collaborative, "team" settings. It will retain the focus on "peer" worker-trainers that is at the heart of most WETP-sponsored training.

**New Leaf Interactive Media** has specialized in creating interactive media content for education and business. They are creating an immersive experience – using digital video, actors, and sets – that will place hazardous waste worker trainees at the scene of an accident, encouraging them to observe the various clues and formulate

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a plan of action. Each choice on the part of the trainee results in immediate feedback. A choice that results in negative consequences gives feedback about that consequence then returns the user to the menu screen to make a choice that works better. A series of correct choices leads the worker to finish the exercise in about twenty minutes, with video footage of procedures to reinforce correct methods. Incorrect choices might lead the user to spend over an hour with the training disc.

NIEHS is confident that these awards are resulting in new products that will help provide high-quality health and safety training for hazardous waste workers and emergency responders. During 2005, the WETP will again issue an e-learning for HAZMAT and Emergency Response SBIR/STTR RFA.

## 2.5 Final Update on WMD Supplements

On September 1, 2003, NIEHS WETP awarded nearly \$5 million to 15 organizations to support the creation, delivery, enhancement, and promotion of education and training materials and activities intended to protect the immediate and long-term health and safety of worker populations who are called upon to respond to significant disasters and terrorist attacks using weapons of mass destruction (WMD). The 15 awards included:

- \$4,421,937 for 11 training supplements to support direct safety and health training to workers who may be involved in disaster response to weapons of mass destruction incidents;
- \$309,966 for 3 Small Business Innovative Research Program (SBIR) supplemental awards to support the development of E-Learning Products in Disaster Response Training; and
- \$200,000 for a supplemental award to the National Clearinghouse for Worker Safety and Health Training to promote the cause of worker protection during disaster response to terrorist actions.

These funds were appropriated by Congress to “undertake and continue worker training programs related to the September 11, 2001 terrorist attacks on the United States, including training for a nation-wide cadre of environmental response workers to respond to future terrorist attacks.” The funds went to current awardees of the WETP who are actively involved in delivering high-quality training to workers whose jobs require hazardous waste handling or response to emergency releases of hazardous materials. Many of these awardees were also called upon to assist in the World Trade Center response and cleanup, providing information, equipment and training resources to high-risk worker populations on the site.

Since 9/11, WETP and its awardees have collaborated with federal, state and local-level stakeholders to identify needs and promote the improvement and delivery of training programs for workers who will be expected to respond to WMD attacks. This was the second round of supplemental awards provided by the NIEHS WETP in support of WMD-related training for at-risk worker populations. A total of \$6 million in grants were awarded in 2001 to six non-profit organizations who used the grants to support the training of new and current hazardous material teams for the New York City Fire Department; develop and deliver a three-hour WTC site safety and health orientation and a train-the-trainer program; conduct anthrax remediation training for environmental laborers in New York City and New Jersey.

### Results of 2003 NIEHS WMD Training Supplemental Awards and Activities:

**Center to Protect Workers’ Rights (CPWR)** - CPWR has successfully built upon its DVD-based Disaster Response Worker Training Program. Of the 50 courses projected, 70 were actually completed. This included training 45 OSHA Master Instructors and 1,219 outreach instructors. CPWR has developed a national registry of Outreach Instructors who are ready to train workers throughout the country.

**Paper, Allied, Chemical and Energy Workers Union (PACE)** -PACE focused on high-risk chemical processing facilities and began an expansion of internal capacity to integrate new WMD training activities and courses into all of its programs, including the Integrated Training Sites. PACE has also increased the capacity of its worker trainers to deliver WMD-related modules. PACE delivered 134 classes reaching 2,508 workers, managers and other stakeholders with 10,360 contact hours of training

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**SEIU Education and Support Fund (SEIU)** - SEIU developed and presented Operations and Awareness level training with its award, including refresher training, for healthcare workers and Emergency Medical Technicians. Train-the-trainer (TTT) courses accounted for the bulk of the training. There were a total of 303 participants in 12 classes, for a total of 5044 hours of training. SEIU trained twice as many health care workers as planned at the Operations level.

**University of Cincinnati (Midwest Consortium)** – The Midwest Consortium developed five WMD modules into ongoing site worker and emergency responder refresher training. These include : Unified Command, Hazard Recognition, Field Decon, Maintaining Crime Scene Integrity, Stress Management Awareness. 94 trainees participated in the pilot programs; 29 instructors are trained in all of the modules.

**International Chemical Workers Union Council (ICWUC)** - International Chemical Workers Union Council (ICWUC) - ICWUC trained in-plant emergency responders, fire brigades, and hospital/medical personnel - a total of 11 classes for 155 trainees and 2,102 contact-hours. The consortium delivered Hospital First Receiver, ICS, and Train-the-Trainer courses and collected workplace evaluation data.

**International Union of Operating Engineers (IUOE)** - IUOE has enhanced existing WMD training modules for use in the basic HAZWOPER courses, conducted courses for stationary engineers who manage large vulnerable buildings and facilities. IUOE's focus has been emergency response, Hazmat transport, HAZWOPER awareness training, stress management, and ICS. They have trained 2,599 workers under the Homeland Security Awareness Course alone.

**University of Massachusetts – Lowell (New England Consortium)** - NEC has developed curriculum for regional emergency preparedness training of emergency medical, clinical, and public health personnel in Massachusetts, Connecticut, New Hampshire, and Vermont. They have focused on awareness training and identification of new roles in emergency response that these communities now have since 9/11.

**National Puerto Rican Forum (NPRF Consortium)** - NPRF consortium member, OAI, Inc., implemented a WMD Awareness/Operations Training Program to upgrade the skills of current trainers and increase the number of qualified emergency responders. Using OAI, Inc.'s existing Train-the-Trainer Program in the Commonwealth of Kentucky, OAI identified 23 trainers to be trained to the WMD Awareness/Operations level in a series of Train-the-Trainer sessions totaling five days. These trainers then had the needed credentials to train emergency responders in the WMD Awareness/Operations course. The Consortium provided a total of 4,984 contact hours to 316 students for the WMD supplemental.

**NJ/NY Hazardous Materials Worker Training Center (University of Medicine and Dentistry of New Jersey)** - The consortium trained 264 workers in 20 courses totaling 2,784 contact hours. In addition, the University of Buffalo is developing nine computer-based training modules on chemical, biological, radiological, nuclear, and explosive (CBRNE) incidents, WMD detection and monitoring, personal protective equipment (PPE), decontamination, and health and safety recovery operations.

**Kirkwood Community College (Hazardous Materials Training and Research Institute, HMTRI)** - HMTRI developed supplemental WMD curriculum and provided instructor training for Terrorist Agent Response Technology (TART) Curriculum. They offered a total of four Train the Trainer (TTT) courses, 140 course hours for 88 participants and a total 3,254 contact hours of instruction. The instructors completing the WMD TTT have offered 70 courses and 1,921 course hours in their local communities, enrolling 1,058 students, for a total 4,256 contact hours of instruction.

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**United Auto Workers Union (UAW)** - UAW conducted a Train-the-Trainer course for existing UAW worker trainers and delivered the WMD/T awareness modules at ongoing UAW health and safety training programs. The UAW conducted 15 WMD workshops, with 406 trainees, and yielding 1,117 contact hours

**The National Clearinghouse for Worker Safety and Health Training (CH)** - Operated by MDB, Inc., the CH has been instrumental in promoting the cause of worker protection during responses to terrorist actions, including dispatching a construction safety expert to Ground Zero and producing three influential reports on the importance of preparedness through training. Under the supplemental award, the CH assisted in building understanding of the importance of OSHA HAZWOPER training and the WMD work of WETP and its awardees among key federal, state, and local agencies and organizations. The Clearinghouse developed an emergency activation plan for WETP to quickly provide health and safety experts in the time of a disaster. The Clearinghouse was also instrumental in coordinating efforts by master instructors among the NIEHS awardees and the OSHA Training Institute to develop a new training program for skilled support personnel, primarily construction workers who respond to disasters. The course, along with a train-the-trainer course, has been developed and is being offered by OSHA Educational Resource Centers and NIEHS awardees across the country.

### **SBIR Supplemental Awards:**

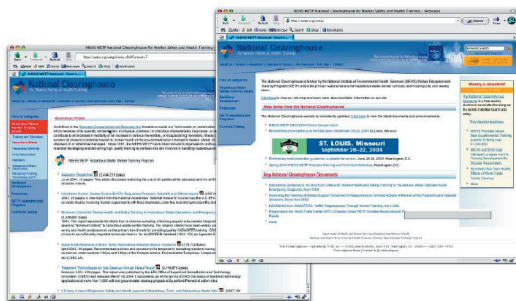
**Advanced Technologies & Laboratories Int. (ATL)** - ATL developed two new training modules for skilled support personnel (SSP) WMD training that are compatible with the Web-based Training Center being developed under its primary SBIR grant awarded by the NIEHS in 2002. The modules are on the North American Emergency Response Guidebook and the Incident Command System, respectively. The need for these two training modules was identified by both the NIEHS and the Department of Homeland Security.

**FOF Communications, Inc.** - FOF Communications developed two CD-based and Internet-based e-teaching products as part of its e-HazTools product being developed under its primary SBIR grant awarded by the NIEHS in 2002. These products, intended for SSP involved in WMD incidents, are titled “Weapons of Mass Destruction Awareness” and “Heat Stress,” with a special emphasis on the post-WMD incident environment.

**Y-Stress, Inc.** - Y-Stress created a scenario-based online version of the Department of Transportation’s HazMat Transportation Security Awareness Training Module. This enhances the work Y-Stress has already undertaken under their primary SBIR grant awarded by the NIEHS in 2002. Based upon principles of hazardous material access and handling, this module meets the training needs required by regulation for railroad SSP in the area of security, including specific security procedures, employee responsibilities, and actions to take in the event of security breaches.

## 2.6 NIEHS National Clearinghouse for Worker Safety and Health Training Update

The NIEHS National Clearinghouse for Worker Safety and Health Training (Clearinghouse), operated by MDB, Inc., is a national resource for members of the worker education and training community. It targets workers and trainers who are involved in the handling of hazardous waste or in responding to emergency releases of hazardous materials and terrorist actions.



Funded by the NIEHS WETP, the National Clearinghouse is the primary communications channel through which the WETP distributes technical reports, news updates, and training information to its awardees, interested members of the hazardous waste worker-training community, and the public.

During this past year, the paper and web-based versions of the reports generated by the Clearinghouse were substantive, peer reviewed, and attractive. The Clearinghouse

website ([www.wetp.org](http://www.wetp.org)) became fully operational, handling over 18,000 successful requests in August 2004 alone. This represented 1.60 gigabytes of information transferred, hopefully making a difference in the health and safety of American workers.

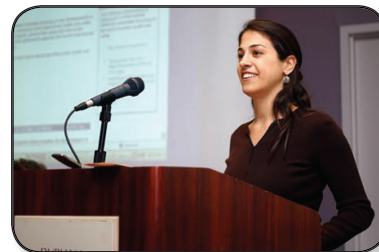
FY 2004 represented a year of consistently strong and stable support by MDB, Inc. The Director of the Clearinghouse, Dr. Bruce Lippy, with over a year's experience managing the contract, was able to ensure much more consistent project management, client communications, and deliverable provisions.

The Clearinghouse staff grew during this year, adding Maria Polis and Dr. Rachel Gross. Ms. Polis came to MDB with a master's degree in Public Policy from George Washington University with an academic focus on environmental policy.

Dr. Gross received her doctorate from Johns Hopkins University Bloomberg School of Public Health, with a focus on risk communication and health education. She is a Certified Health Education Specialist, which will prove quite valuable to the Clearinghouse function.

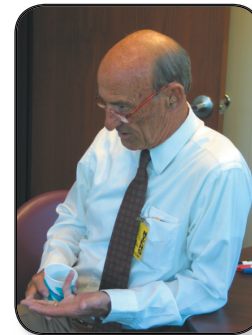
The Clearinghouse achieved a major success this year in the continuing effort to provide sufficient training to workers who must respond to terrorist actions. Facilitating the coordination of resources from OSHA and NIEHS, the Clearinghouse was instrumental in the development of the 16-hour OSHA Disaster Site Worker Course (OTI 7600) and the 32-hour instructor course (OTI-5600).

Clearinghouse senior technical advisors, John Moran, pictured, and Don Elisburg, were the first to nationally sound the alarm about the inadequacies of worker protection at the cleanup of the World Trade Center, in particular the inherent weakness in OSHA's training requirements for skilled support personnel, i.e. construction trade workers. Three separate reports generated by the Clearinghouse pointing out the critical need for improv-



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ing this training, which led to OSHA moving forward on the development of the course. The Clearinghouse established a special web page for instructors that allowed WETP-awardees and OSHA staff to post course modules under development and access images and existing curricula for improving the course. Dr. Lippy helped to finish the course, working for days with OSHA training experts at the Training Institute in Chicago. This work has resulted in a strong interest in the course nationally with dozens of offerings occurring at OSHA Education Centers and NIEHS Awardee training facilities.



MDB public education activities strongly supported WETP efforts this year. A new brochure was produced describing the achievements of the entire network of awardees, as well as the services offered. An insert with contact information about all of the programs was included in the brochure and awardees will be provided a template for creating their own specialized insert. The Brownfields Minority Worker Training Program (BMWTP) brochure created last fiscal year is still being distributed by all of those awardees in this program. Additionally, the Clearinghouse handled the logistics for the successful participation by WETP and its award-ees in the Brownfields 2004 Conference and Exposition in Portland, Oregon. The weekly electronic Newsbrief continued to highlight Awardee success stories and program achievements. All of these highlights - in addition to all technical reports, media stories, and Clearinghouse reports produced and disseminated during FY2004 - were summarized in an electronic Compendium and placed on the wetp.org website for all visitors to peruse and use.

This year, the Clearinghouse website achieved a new level of quality and comprehensiveness. The Health and Safety Library has grown significantly during the last year in both volume and usefulness: the hundreds of health and safety articles have been provided a short written description by staff and assigned to folders within the database. All important articles highlighted in the Newsbrief have been moved to the permanent database of the library.

MDB, through Don Elisberg, pictured, and John Moran, provided critical support for OSHA's Congressionally mandated audit of ten Department of Energy non-weapons laboratories for compliance with OSHA standards. These audits of major facilities like Oak Ridge, Argonne, and Pacific Northwest Laboratories are enabling OSHA to better understand what it will take for the agency to enforce compliance with safety and health requirements at DOE facilities.



## 2.7 Training Partnerships for Prevention, Protection and Preparedness

The Worker Education and Training Branch of the National Institute of Environmental Health Sciences (NIEHS) conducted a major national technical workshop in the spring of 2004 in Washington, D.C at the Loews L'Enfant Plaza. **The conference was titled “Training Partnerships for Prevention, Protection and Preparedness” and was held on April 22nd and 23rd.**

NIEHS, in conjunction with the Office of Domestic Preparedness within the Department of Homeland Security (ODP/DHS) and the Occupational Safety and Health Administration (OSHA), sponsored the workshop to focus on building stronger relationships for the training of disaster responder populations most at risk of illness and injury, particularly fire fighters, health care workers, and the construction trades needed at disaster responses. NIEHS is one of 27 Institutes and Centers of the National Institutes of Health (NIH), which is a component of the Department of Health and Human Services (DHHS). The Director of the NIEHS is Dr. Kenneth Olden. NIEHS has been a leading force for training workers to safely respond to terrorist actions. A detailed workshop report is posted on the NIEHS National Clearinghouse website at <http://www.wetp.org/wetp/1/04meeting/index.html>.

The goal of this workshop was to strengthen the partnerships that NIEHS has created with other federal agencies to better protect workers and coordinate resources. Representatives from DHS, OSHA, EPA, and the National Response Team spoke at several plenary sessions. Each agency reviewed its respective role in homeland security and its relation to response training and preparedness. In addition, to provide an opportunity for interaction

between speakers and participants, several breakout sessions focused on the lessons learned by current awardee partners and their potential contributions to WETP's emergency activation plan. Finally, keynote speakers highlighted policy, training, and preparedness issues for the chemical industry and for public health in response to terrorism.

The Technical Workshop began on Thursday with a Department of Homeland Security Plenary. The DHS plenary addressed two issues: 1) how the new National Response Plan, National Incident Management System and Incident Command System will deal with response training; and 2) how the Office for Domestic Preparedness views the relationship between homeland security and HAZMAT training and preparedness.

Speakers pointed out that response training is being addressed by incorporating FEMA into the new DHS. The Agency is tasked with preventing, responding to, and planning for disasters. In addition, the DHS developed a National Response Plan (NRP) and a National Incident Management System (NIMS). The need for a standard approach and common terminology across all disaster incidents, regardless of size and location was emphasized. The NRP is the Federal Government's “recipe book” for emergency planning and the NIMS is the structure of the command and control system. The DHS speakers addressed the importance of a credentialing system for responders, but noted that the strategy had not been worked out yet.





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In addition, the Office for State and Local Government and Preparedness (OSLG), formerly the ODP, has been expanded and transitioned to the DHS from the Department of Justice. Its Training and Technical Assistance Division (TTAD) funds comprehensive training to prevent, deter, respond to and recover from threats and incidences of terrorism. Individual states and localities have also coordinated emergency services and skilled trades so they can work together in case of an event. Seattle's First Response and the Skilled Trade (FIRST) program is one of the most active groups, as A.D. Vickery and Charles Soros, the group leaders, explained. FIRST has established a strong working relationship among all the key groups that will be needed in Seattle if there is a terrorist action or a natural disaster. Their focus has been on the first 24-36 hours of an event.



Keynote speaker, Dr. James Carafano, a Senior Fellow at the Heritage Foundation, then addressed some of the challenges of establishing national preparedness. One challenge is that neither DHS nor OSLG have the capacity to directly conduct training, so they must rely on other organizations, through contracts and agreements. Consequently, the integration of training is a problem. In addition, there are no systems in place to identify the needs of individual communities or the effectiveness of programs. Carafano feared that federal money may be going towards building a national system that is not meeting the needs of communities.

Another panel addressed the successful development of the Disaster Site Worker course, a joint effort of OSHA and NIEHS and its grantees. Materials developed by NIEHS awardees were provided to OSHA, along with expertise from master instructors, to create a 16-hour course for the construction trades that addresses the key problems discovered at Ground Zero: misunderstandings of the Incident Command System and insufficient hands-on training with respirators. The joint effort also created a 24-hour Train-the-Trainer program. OSHA and NIEHS officials are hopeful that the cards issued by the OSHA Training Institute under these courses will be recognized by DHS as part of the national credentialing program. OSHA has aggressively begun training teams of specialists in every region across the country to deal with the safety and health aspects of responses to terrorist actions. OSHA, NIEHS, and its grantees pledged to continue to work together protecting those who protect our homeland security.

Erich "Pete" Stafford, the Director of the Center to Protect Worker's Rights (CPWR), noted that his organization, which is the safety and health research arm of the Building and Construction Trades Department of the AFL-CIO, has developed an interactive DVD training program for skilled support personnel. As an OSHA Education Center, CPWR and its 4000 instructors in affiliated building trade unions will train thousands of their members and prepare them to support first responders; however, not enough skilled support personnel are currently receiving training.



The need for these training programs was highlighted in the EPA Keynote Speech given by Marianne Horinko, who at the time of her presentation was the Assistant Administrator for the EPA Office of Solid Waste and Emergency Response. She explained how, given the nature of terrorism, it is nearly impossible to fully prepare for the repercussions of an attack. The best ways to deal with these uncertainties is to prepare for many possible scenarios and to promote coordination among agencies.

# NIEHS Hazardous Waste Worker Training Program

Breakout sessions concluded Thursday's activities. The common theme that bridged these breakout sessions was "partnerships."

Breakout session 1 focused on Federal and Tribal Partnerships and was highlighted by the success of the partnership between University of Alabama and the Poarch Band of Creek Indians. They have created a mutual aid agreement between their responders. John Kovach from the Operating Engineers National HAZMAT Program discussed the partnerships the program has been pursuing with other organizations concerned with preventing or mitigating biological or chemical attacks released inside buildings.

Speakers from breakout session 2 shared insights into current training at hospitals and other first receiver/emergency response organizations, focusing on WMD modules about working with contaminated patients and strengthening the ER capabilities of fire and other emergency response entities. In particular, the breakout examined the characteristics of four successful partnerships around hospital, WMD and emergency response training. These partnerships include:

1. Brookdale University Hospital and the Service Employees International Union, Local 1199 NY;
2. Lutheran Hospital (NY), the Federation of Nurses/United Federation of Teachers and the International Chemical Workers Union;
3. The Commonwealth of Kentucky and Office of Applied Innovation; and
4. The Chicago Fire Department, International Association of Fire Fighters, and the OAI.

Breakout session 3 focused on the partnerships between Industry and Trade Associations that have increased the number and quality of courses available for responding to WMD incidents and other emergencies. NIEHS awardees such as the Midwestern Consortium and the International Chemical Workers Union have built strong relationships with various organizations.

Breakout session 4 concentrated on state, local and bi-national partnerships and closely examined the Massachusetts approach to preparing communities for a public health emergency as well as the Arizona effort to partner with several Mexican states to train emergency responders along their long border.

Friday began with the second OSHA plenary, which reviewed OSHA's newly emerging role in disaster response and homeland security and the actions the agency has taken to prepare for its new challenges. The focal point of the agency's efforts is the development of a National Emergency Management Plan (NEMP) and Regional Emergency Management Plans

(REMPs). Part of these plans involve Specialized Response Teams (SRTs) which are made up of teams of toxic chemical, biological agent, ionizing radiation and structural collapse specialists. In addition, OSHA has drafted a Safety and Health annex to the National Response Plan that is currently being reviewed by the other federal partners.

Next, the EPA plenary panelists reviewed the role of the National Response Team (NRT), EPA's participation on the team and the changes anticipated under the NIMS. First, it was explained that response planning and coordination is accomplished at the federal level through the NRT, which is comprised of the Response, Preparedness and Science committees.

## NIEHS Hazardous Waste Worker Training Program



John Ferris, Special Assistant for Homeland Security to John Henshaw, the head of OSHA, highlighted the importance of linking training exercises to the National Contingency Plan (NCP). The NCPs contains regulations developed to ensure that federal resources and expertise are available immediately for hazardous material releases that are beyond the capabilities of local or state responders. John Ferris also noted that all emergency response programs should be consistent with each other and the EPA's Response Operations Center (OEPPR) has developed criteria to measure consistencies among programs.

Other successful programs include The NRT's Hazardous Materials Emergency Preparedness (HMEP) grant program and the collaboration between the EPA and inter-agency personnel. The HMEP provides financial and technical assistance as well as national direction and guidance to enhance State, Territorial, Tribal and Local hazardous materials emergency planning and training.

Friday concluded with more breakout sessions. For these sessions, participants were broken up into groups reflecting their sector of industry. These groups included: transportation, hospital and public health, chemical facilities and construction trades. The purpose of these sessions was to provide the WETP with enough information to develop an Emergency Support Activation Plan that will allow NIEHS to support OSHA with trainers, facilities, and specialists during an event of national significance. Information was gathered by questionnaire from all participants. The surveyed revealed that the WETP community has numerous professionals, including health physicists, industrial hygienists, and occupational physicians who could be activated for an emergency. There are thousands of instructors who could also train responders during an event in hundreds of facilities located throughout the country. All awardees offered HAZWOPER training, but also many specialty courses.

The consensus of respondents also believed that not only should each WETP-funded organization have one special person to contact in case of an incident (with a back-up person), but there needs to be one person that coordinates communication between organizations and agencies.

## 2.8 Program Update for September 1, 2004 – August 31, 2005

On July 1, 2004, all the current NIEHS Awardees submitted reapplications for continued funding for the period beginning September 1, 2004. This is the fifth annual segment of a five-year funding cycle. Each of the reapplications detailed program accomplishments and proposed training plans for the current year.

For each component of each awardee's non-competing reapplication, an analysis and review was carried out to evaluate the program progress during the current year, compliance with existing terms and conditions, measures of program effectiveness, and other quality assurance factors. For each awardee, individual progress report forms were developed, along with budget worksheets, in which targeted reductions were made in specific line item categories.

Approximately twenty-Seven million dollars of the September 1, 2004 to August 31, 2005 funds were allocated to continue support to the NIEHS Awardees. Of the 27 million, \$22,575,621 supported the HWWTP to train hazardous waste workers and emergency responders. Over three million dollars of the funds were allocated to continue support for the MWTP. The WETP allocated \$750,000 to support the Small Business Innovation Research (SBIR) Program.

- 17 HWWTP awardees received awards totaling \$22,575,621
- 5 MWTP awardees received awards totaling \$3,300,000
- 6 SBIR awardees received awards totaling \$750,000

See Appendix 10 for awardee breakout of funds for the budget period of September 1, 2004 to August 31, 2005. Budget adjustments in the proposed funding plan are based on the training needs of high-risk populations, national geographic coverage in training availability and the published program priorities for training support. Consideration has also been given to previous funding patterns, awardees' efforts to generate program income for independently continuing their programs, and the carryover of unexpended funds from prior years.

## 2.9 WETP Staff Activities

The WETP staff is very active in exploring new areas of workplace safety and health training related to the mission of the program. The staff has been involved in a number of activities to stimulate interest in, and knowledge about, the NIEHS and the WETP. The staff has continued to make presentations at various conferences and meetings on the success of the program and have participated in outreach activities with EPA regional offices and other federal agencies. For a complete list of activities please see Appendix 11.



## 3

### Older and Wiser, the Worker Education and Training Program Approaches Two Decades

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As this report is being written, the NIEHS WETP program is in the final year of its five year funding cycle and is in the process of reviewing numerous applications received in response to the Request for Applications issued in July, 2004.

This marks the end of an important and successful period for the worker safety and health movement. In December, 2004, NIEHS WETP and its Awardees met in Durham, North Carolina, to reflect on this success and this “older and wiser program”.

During the next day and a half, invited speakers gave presentations on a range of topics including the new policy on fair use of materials created with NIH funds, improvements to the WETP curricula catalog, advances in training technologies for worker safety and health, the results of a Clearinghouse study of market trends in labor needs on hazardous waste sites, and updates to the minimum criteria for the training of hazardous materials workers and emergency responders.

It became clear during this conference that the NIEHS awardees had much of which to be proud: their leadership in building model worker training programs; their commitment to the development of worker-trainers; their insistence on the use of small group and case study based methods including hands-on, realistic training scenarios, and performance-based evaluation. Their effort has resulted in safer workplaces, safer communities, and a cleaner environment.

March, 2005

## Appendices

### Appendix 1: Seventeen-Year Summary

Hazardous Waste Worker Training Program Seventeen-Year Training Summary for Budget Period 09/01/1987-08/31/2004			
Year	Total Courses	Total Workers	Total Contact Hours
1988	623	12,319	261,542
1989	1,353	29,827	551,832
1990	5,175	123,358	2,120,390
1991	2,794	58,637	878,673
1992	3,173	65,000	1,100,381
1993	2,751	56,000	789,226
1994	4,083	65,716	1,102,234
1995	4,682	81,245	1,391,440
1996	4,778	73,724	1,087,919
1997	4,231	79,976	1,041,792
1998	4,840	84,261	1,091,932
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
<b>TOTAL</b>	<b>69,332</b>	<b>1,272,329</b>	<b>17,842,874</b>

# NIEHS Hazardous Waste Worker Training Program

## Appendix 2: 2003 – 2004 Funding

### NIEHS Worker Education and Training Awards for Budget Period 09/01/2003-08/31/2004

Awardee	HWWTP 9/03 Award	SBIR 9/03 Award	WMD 9/03 Award	MWTP 9/03 Award	9/03 Totals
University of Alabama Birmingham	512,615				512,615
International Chemical Workers Union Council	1,910,935		382,325		2,293,260
International Association of Fire Fighters	864,404				864,404
George Meany Center for Labor Studies	606,016				606,016
University of Massachusetts, Lowell	979,615		191,123		1,170,738
University of California at Los Angeles	1,076,389				1,076,389
Laborers-AGC Education and Training Fund	4,307,915		115,026	843,175	5,266,116
Paper, Allied-Industrial, Chemical and Energy Worker International Union	1,246,851		514,968		1,761,819
HMTRI Kirkwood Community College	632,870		484,092		1,116,962
Service Employees International Union	580,122		358,266		938,388
University of Medicine & Dentistry of New Jersey	1,093,748		551,633	602,624	2,248,005
International Union, United Auto Workers	775,918		155,000		930,918
International Union of Operating Engineers	1,462,403		496,993		1,959,396
University of Cincinnati	1,702,833		308,336		2,011,169
Center to Protect Workers' Rights	1,705,047		539,201	694,023	2,938,271
Xavier University	631,799				631,799
AFSCME Training and Education Institute	761,017				761,017
National Puerto Rican Forum	844,500		240,312	528,379	1,613,191
Y-Stress, Inc.		150,000			150,000
FOF Communications, Inc		206,680			206,680
New Leaf Interactive Media		199,730			199,730
Advanced Technologies & Laboratories International		302,117			302,117
<b>TOTAL</b>	<b>21,063,198</b>	<b>858,527</b>	<b>4,337,275</b>	<b>3,300,000</b>	<b>29,559,000</b>

FY 2004 ACCOMPLISHMENTS AND HIGHLIGHTS



# NIEHS Hazardous Waste Worker Training Program

## Appendix 3: Course Data by EPA Region

HWWTP Course Data by EPA Region for Budget Period 09/01/2003 - 08/31/2004			
EPA Region	Courses Completed	Workers Trained	Contact Hours
Region 1	282	4,841	74,767
Region 2	1,875	34,453	269,367
Region 3	428	6,926	93,609
Region 4	914	15,462	157,013
Region 5	1,913	37,409	285,668
Region 6	226	3,973	46,253
Region 7	492	6,981	104,600
Region 8	156	2,140	32,295
Region 9	557	9,364	122,504
Region 10	211	2,578	36,257
<b>TOTAL</b>	<b>7,054</b>	<b>124,127</b>	<b>1,222,333</b>

# NIEHS Hazardous Waste Worker Training Program

## Appendix 4: Total Training by NIEHS Awardee

NIEHS Worker Education and Training Awards Total Training for Budget Period 09/01/2003-08/31/2004			
Awardee	Courses Completed	Workers Trained	Contact Hours
University of California at Los Angeles	144	2,343	29,004
International Association of Fire Fighters	47	927	37,808
University of Medicine & Dentistry of New Jersey	1,238	23,999	172,952
International Union of Operating Engineers	746	16,434	180,938
Paper, Allied-Industrial, Chemical and Energy Worker International Union	492	9,422	50,263
University of Massachusetts, Lowell	69	1,043	16,830
International Chemical Workers Union Council	231	3,407	51,464
University of Cincinnati	760	15,102	94,153
University of Alabama Birmingham	171	2,570	24,917
Laborers-AGC Education and Training Fund	534	6,775	151,838
George Meany Center for Labor Studies	110	966	8,849
Service Employees International	104	1,768	18,336
International Union, United Auto Workers	285	5,615	17,380
Center to Protect Workers' Rights	330	5,503	84,146
HMTRI Kirkwood Community College	1,582	24,866	233,404
National Puerto Rican Forum	126	1,890	38,212
AFSCME Training and Education Institute	85	1,497	11,839
<b>TOTAL</b>	<b>7,054</b>	<b>124,127</b>	<b>1,222,333</b>

# NIEHS Hazardous Waste Worker Training Program

## Appendix 5: Target Populations

HWWTP Target Populations For Budget Period 09/01/2003-08/31/2004						
Target Populations	# Courses Completed	% Courses Completed	# Workers Trained	% Workers Trained	# Contact Hours	% Contact Hours
CERCLA Cleanup <sup>1</sup>	2,260	32%	40,474	33%	493,356	40%
Emergency Response	2,223	32%	40,017	32%	392,519	32%
Other Safety and Health	1,743	25%	31,058	25%	219,232	18%
RCRA/Industrial	548	8%	9,229	7%	78,413	6%
Hazmat Transport	170	2%	1,419	1%	9,077	1%
Asbestos Abatement	78	1%	1,435	1%	21,120	2%
Radiation	20	0%	300	0%	3,120	0%
Lead Abatement	12	0%	195	0%	5,496	0%
<b>TOTALS</b>	<b>7,054</b>	<b>100%</b>	<b>124,127</b>	<b>100%</b>	<b>1,222,333</b>	<b>100%</b>

<sup>1</sup>The overall majority of training remains in the CERCLA Cleanup training.

# NIEHS Hazardous Waste Worker Training Program

## Appendix 6: Nine-Year Summary of Training

NIEHS Minority Worker Training Program Nine-Year Summary of Training for Budget Period 09/01/1995-08/31/2004			
Year	Students Trained	Placed In Jobs	Percentage Of Students Placed In Jobs
1996	368	246	67%
1997	310	193	62%
1998	240	154	64%
1999	360	233	65%
2000	364	244	67%
2001	342	204	60%
2002	334	222	66%
2003	310	190	61%
2004	261	219	84%
<b>TOTAL</b>	<b>2,889</b>	<b>1,905</b>	<b>66%</b>

# NIEHS Hazardous Waste Worker Training Program

## Appendix 7: Total Training by MWTP Awardee

<b>NIEHS MWTP Worker Education and Training Awards Total Training for Budget Period 09/01/2003-08/31/2004</b>			
<b>Awardee</b>	<b>Courses Completed</b>	<b>Students Trained</b>	<b>Contact Hours</b>
University of Medicine & Dentistry of New Jersey	20	30	13,626
Laborers-AGC Education and Training Fund	60	76	27,536
Center to Protect Workers' Rights	46	52	25,902
National Puerto Rican Forum	25	75	7,054
Xavier University	26	28	9,056
<b>TOTAL</b>	<b>177</b>	<b>261</b>	<b>83,174</b>

# NIEHS Hazardous Waste Worker Training Program

## Appendix 8: MWTP Summary of Type and Number of Courses

NIEHS MWTP Summary of Type and Number of Courses for Budget Period 09/01/2003-08/31/2004	
Course Name	Number Of Courses
Adult CPR	4
Asbestos Abatement Supervisor	1
Asbestos Abatement Worker Basic	14
Basic Construction Skills	10
Basic First Aid	4
Basic Math Skills	12
Basic Reading/Writing Skills	7
Basic Superfund Site Worker	15
Computer Skills	3
Concrete Practices and Procedures	5
Confined Space	8
Cutting & Burning	1
Emerg. Resp. Awareness	1
Environmental Justice	3
Environmental Preparation	2
Environmental Sampling	1
Gen. Industry Safety	5
General Construction Safety	13
Haz. Waste Operations	2
HazMat Transporter/Basic	1
Hazard Communication	2
Lead Abatement Worker Basic	14
Life Skills	16
Lockout/Tagout	1
Mason Tending	3
Mentoring/Career Guidance	12
Microbial Remediation: Mold and Mildew	3
Physical Fitness	8
Radiation Worker II Training	2
Scaffold	3
Training Methods/Trainer Development	1
<b>TOTAL</b>	<b>177</b>

## NIEHS Hazardous Waste Worker Training Program

### Appendix 9: Brownfields Minority Worker Training Program Awardees and Target Communities

<b>Brownfields Minority Worker Training Program Awardees and Target Communities for Budget Period 09/01/2003-08/31/2004</b>				
<b>Awardee</b>	<b>Number of Communities</b>	<b>Number of Trainees</b>	<b>Brownfields Communities</b>	<b>Job Placement Rates</b>
Center to Protect Workers' Rights	5	86	East Palo Alto, CA and Los Angeles, CA; Salt Lake City, UT; Boston, MA; and St. Paul, MN	87%
Laborers-AGC Education and Training Fund	2	90	Ventura (Southern California, CA) and Detroit, MI	68%
National Puerto Rican Forum, Inc.	1	22	Kansas City, KS/MO	73%
University of Medicine & Dentistry of New Jersey	3	37	New York City and Glen Cove, NY; and Newark, NJ	76%
Xavier University	3	45	New Orleans and Shreveport, LA & Atlanta, GA	84%
<b>TOTALS</b>	<b>14</b>	<b>280</b>		<b>78%</b>

# NIEHS Hazardous Waste Worker Training Program

## Appendix 10: 2004 – 2005 Funding

<b>NIEHS Worker Education and Training Awards for Budget Period 09/01/2003-08/31/2004</b>				
<b>Awardee</b>	<b>HWWTP 9/04 Award</b>	<b>MWTP 9/04 Award</b>	<b>SBIR 9/04 Award</b>	<b>9/04 Totals</b>
University of Alabama Birmingham	527,995			527,995
International Chemical Workers Union Council	1,968,263			1,968,263
International Association of Fire Fighters	728,060			728,060
George Meany Center for Labor Studies	624,197			624,197
University of Massachusetts, Lowell	1,009,006			1,009,006
University of California at Los Angeles	1,109,679			1,109,679
Laborers-AGC Education and Training Fund	4,484,817	843,175		5,327,992
Paper, Allied-Industrial, Chemical and Energy Worker International Union	1,374,258			1,374,258
HMTRI Kirkwood Community College	859,856			859,856
Service Employees International Union	687,531			687,531
University of Medicine & Dentistry of New Jersey	1,285,285	602,624		1,887,909
International Union, United Auto Workers	799,195			799,195
International Union of Operating Engineers	1,722,273			1,722,273
University of Cincinnati	1,753,916			1,753,916
Center to Protect Workers' Rights	1,982,843	694,023		2,676,866
Xavier University		631,799		631,799
AFSCME Training and Education Institute	624,820			624,820
National Puerto Rican Forum	1,033,627	528,379		1,562,006
Y-Stress, Inc.			200,000	200,000
FOF Communications, Inc			75,703	75,703
Metamedia Training International, Inc.			99,297	99,297
DCM Associates			100,000	100,000
Cognitech Corporation			175,000	175,000
Northwest Training and Assessment			100,000	100,000
<b>TOTAL</b>	<b>22,575,621</b>	<b>3,300,000</b>	<b>750,000</b>	<b>26,625,621</b>

FY 2004 ACCOMPLISHMENTS AND HIGHLIGHTS



## Appendix 11: The WETP Staff Activities for Budget Period 09/01/2003-08/31/2004

### Joseph Hughes

- Mr. Hughes, OD/WETB, addressed a study tour group from South Africa on the NIEHS Worker Education and Training Program in Washington, DC on September 20, 2003. This was in support of the U.S. Agency for International Development 's effort to provide technical services to the South African Department of Labour (DOL) and supporting government institutions.
- Mr. Hughes, OD/WETB, presented at the EPA Emergency Support Function #10 Coordination for National Hazmat Disasters Committee in Washington, DC on September 24, 2003.
- Mr. Hughes, OD/WETB, and staff hosted the NIEHS/Worker Education and Training Program (WETP) semi-annual awardee meeting and technical workshop in Research Triangle Park, NC on December 3, 2003. The focus of the meeting took an inward look at the training, administrative core, and future directions of the WETP. Staff attending and participating in the meeting/workshop in various activities included Ms. Beard, Mr. Outwater, Ms. Thompson, OD/WETP, and Ms. Mason, GMB.
- Mr. Hughes, OD/WETB, presented at the Annual Briefing of the EPA/Labor Superfund Task Force in Washington, DC on January 21, 2004 focusing on disaster response training issues and interagency coordination.
- Mr. Hughes, OD/WETB, will be presenting as part of an Occupational Health Panel at the CDC-sponsored Workshop – “Scientific communications needs during a chemical disaster event” in Atlanta, Ga. on February 3-4, 2004.
- Mr. Hughes, WETB, presented at the 5TH Biennial Freshwater Spills Symposium on April 6-8, 2004 in New Orleans, LA on a session concerning Emergency Response and Counter-Terrorism Issues.
- Mr. Hughes, WETB, presented an update on the Worker Education and Training Program at the HAMMER Steering Committee Meeting in Washington, DC on April 2, 2004.
- Mr. Hughes, WETB, presented at the DHHS Secretary’s Council on Public Health Preparedness Meeting in Washington, DC on May 4, 2004.

### Sharon Beard

- Ms. Beard, OD/WETB, participated as a technical observer at the TOP-EX 2003 (Total Operational Preparedness Exercise) for approximately 500 + disaster responders representing over 70 different departments or organizations in Oakland County, MI on September 25, 2003. This event conducted at the Combined Regional Emergency Services Training (CREST) Center at the Oakland Community College was a County, local community and private section partnership with a focus on emergency response to terrorism or major hazardous material incidents.
- Ms. Beard and Mr. Outwater, OD/WETB, attended the Brownfields 2003: Growing a Greener America Conference in Portland, OR on October 26, 2003. This national conference was built upon past successes and continues to offer up-to-date and stimulating information for brownfields practitioners

# NIEHS Hazardous Waste Worker Training Program

from throughout the United States and overseas. The NIEHS WETP co-sponsored this conference and organized and/or conducted four sessions on brownfields job training, public health, health and safety, and environmental justice efforts of our grantee community. During this meeting, Ms. Beard and Mr. Outwater conducted a grantee meeting of the Brownfields Minority Worker Training Program and a caucus meeting of those attendees interested in environmental job training programs. This caucus meeting was a collaborative effort between the WETP and Lenny Siegel of the Center for Public Environmental Oversight, who has conducted these very successful caucuses since 1996 at each Brownfield National Conference.

- Ms. Beard, OD/WETB, presented at the 131st American Public Health Association Annual Meeting - Behavior, Lifestyle, and Social Determinants of Health in San Francisco, CA on November 15, 2003. Her presentation was entitled “Training Young Minority Workers: A Comprehensive Approach to Providing Workforce, Health and Safety Skills to a Highly Vulnerable Worker Population.” This panel presentation reported the results and strategies utilized to develop a national job-training program for minority workers especially those younger adults from the ages of 18-25. In particular, the panel described why strong connections to apprenticeship programs influence the success of the training and why training programs are successful when they improve basic academic and life skills; enhances safety, health, and environmental justice awareness while providing specific job skills training for employment in the construction, environmental remediation and hazardous materials industries.
- Ms. Beard, OD/WETP, participated in the review of the U.S. EPA Brownfields Job Training Program on February 3-6, 2004 in Charleston, SC.
- Ms. Beard, WETB, participated in the development and evaluation of the OSHA/NIEHS Disaster Site Worker Response Training on February 29, 2004 in Washington, DC.
- Ms. Beard, WETB, presented at the American Industrial Hygiene Conference & Expo 2003 (AIHCE 2004) in Atlanta, GA on May 8-9, 2004. Ms. Beard presentation was on NIEHS Lessons Learned from Advanced Training Technologies.

## Ted Outwater

- Mr. Outwater, OD/WETB, presented at the 131st American Public Health Association Annual Meeting -- Behavior, Lifestyle, and Social Determinants of Health in San Francisco, CA on November 15, 2003 during the Oral Session Environmental Toxics - Indoor Air Quality in the Home and Workplace on the topic “Public housing and safer pest control: Results from a pilot program in New York City.”
- Mr. Outwater, OD/WETB, presented on the WETB program at the Paper, Allied-Industrial, Chemical and Energy Worker International Union (PACE) National Health and Safety School in Orlando, FL on November 21, 2003.
- Mr. Outwater, OD/WETB, presented at the 17th Annual NIOSH Education and Research Centers Meeting in Naples, FL on February 2, 2004. Mr. Outwater presentation focused on a review of training activities and an update on the role skilled support personnel play during WMD incidents.

# NIEHS Hazardous Waste Worker Training Program

## All Staff

- NIEHS (through the Worker Education and Training Program), represented by Ted Outwater, OD/WETB, co-sponsored a workshop on January 27-28, 2004 to develop national guidance for protecting and training workers who are exposed to mold during remediation efforts. Other sponsors were the Society for Occupational and Environmental Health, Association of Occupational and Environmental Clinics, Urban Public Health Program of Hunter College CUNY, New York City Department of Health and Mental Hygiene, University of Medicine and Dentistry of New Jersey School of Public Health, and the John Hopkins Bloomberg School of Public Health. Representatives from HUD, FEMA, OSHA, NIOSH, EPA participated along with labor, academic, and private sector experts. This was one of three planned meetings. A meeting of physicians at Johns Hopkins on December 11-12, 2003 addressed the diagnosis, treatment and management of mold-related health problems. A larger, third meeting, to be held in the summer of 2004, will review the findings of the two earlier meetings with a broader audience. The National Clearinghouse for Worker Safety and Health Training, a NIEHS WETB contractor directed by Dr. Bruce Lippy, has provided significant support to this effort.
- Mr. Hughes, WETB, and staff sponsored a Technical Workshop on Training Partnerships for Prevention, Protection, and Preparedness. This workshop focused on building stronger relationships with Department of Homeland Security (DHS), the Department of Labor (DOL/OSHA), and the Environmental Protection Agency (EPA/OSWER) for the training of responder populations most at risk, particularly fire fighters, health care workers, and the construction trades needed at disaster response. The workshop was held in Washington, DC on April 22-23, 2004. Other staff attending the workshop and participating in various activities included Ms. Beard, Mr. Outwater, and Ms. Thompson, WETB. On April 21, 2004, the semi-annual WETP Awardee Meeting was held. Ms. Mason, GMB, also participated in the meeting.