

**January 29, 2001**

***FY 2000 Accomplishments and Highlights:***  
***NIEHS/EPA Superfund Worker Training Program***  
***(Sep 1, 1999 – Aug 31, 2000)***

**Submitted by the**  
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**FY 2000 Accomplishments and Highlights:  
NIEHS/EPA Superfund Worker Training Program**

**1 Introduction**

The Superfund Amendments and Reauthorization Act of 1986 (SARA) established an assistance program for training and education of workers engaged in activities related to hazardous waste removal, containment and emergency response. Grant 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 National Institute of Environmental Health Sciences (NIEHS) was given responsibility for establishing and managing this program through Interagency Agreements with the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE).

Through competitively awarded cooperative agreements, the NIEHS Worker Education and Training Program (WETP) has supported the development of curricula and initiation of training programs throughout the country to help employers meet OSHA requirements under 29 CFR 1910.120, Hazardous Waste Operations & Emergency Response. This model program encourages innovation for training difficult-to-reach populations by addressing issues such as literacy, appropriate adult education techniques, training quality improvement, and other areas un-addressed directly by the private sector. The program enhances rather than replaces private sector training responsibility by demonstrating new and cost-effective training techniques and materials.

New support has expanded the scope of NIEHS-supported training to include workers involved in transporting hazardous materials, a Minority Worker Training Program to serve urban youth, an initiative focused on job training for Brownfields cleanup sites, and a program targeted to workers involved in the cleanup of DOE nuclear weapons facilities.

**2 FY 1999 Program Highlights**

WETP, through its EPA Superfund-supported programs, 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 thirteenth year of the Superfund WETP (FY 1987-2000), the NIEHS has successfully supported twenty primary awardees. These represent over one-hundred different institutions who have trained nearly 900,000 workers across the country and presented over 46,000 classroom and hands-on training courses, which have accounted for over 13 million contact hours of actual training (See Appendix 1).

Through an Interagency Agreement, NIEHS received \$26 million from the FY 1999 EPA appropriations, which provided funding to NIEHS awardees during the past year (Sep 1, 1999

– Aug 31, 2000). Approximately, \$19.2 million of the funds were allocated to continue support of the Hazardous Waste Worker Training Program (HWWTP) to train hazardous waste workers and emergency responders. Of the HWWTP funds, 3 supplemental awards were made, which included \$133,000 for the Superfund Jobs Training Initiative (SuperJTI), \$400,000 for Y2K Related Training, and \$390,000 Advanced Training Technology activities. Approximately, three million dollars of the FY 1999 funds were allocated to continue support for the Minority Worker Training Program (MWTP). EPA transferred \$3 million to support Brownfields Minority Worker Training Program (BMWTP). As a result of the Interagency Agreements, NIEHS made the following awards (See Appendix 2):

- 17 EPA/HWWTP awardees received awards totaling \$18,277,558
- 6 EPA/MWTP awardees received awards totaling \$2,990,000
- 4 BMWTP awardees received awards totaling \$3,010,000
- 2 SuperJTI awardees received awards totaling \$133,000
- 4 Y2K awardees received awards totaling \$400,000
- 4 ATT awardees received awards totaling \$390,000

During the past year (FY 2000), training delivery has been carried out in all regions of the country to all relevant target populations regulated under 29 CFR 1910.120 (See Appendix 3). The seventeen primary worker training awardees, in conjunction with over eighty collaborating institutions, have delivered 4,123 courses, reaching 75,149 workers, which account for 983,135 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, 1999 and August 31, 2000, 53% of the training has been focused on delivering CERCLA cleanup worker training. This comprises 32,445 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).

### **2.1. Continuation of the Peer-Reviewed Worker Training Awards for Training of Hazardous Waste Workers, Emergency Responders and Minority Workers**

After the completion of the final program year of the projected five-year long cooperative agreements to support worker training activities, 17 organizations submitted progress reports and training data on July 1, 2000. New awards were made on September 1, 2000 after the peer review process for each of the programs supported with EPA Superfund resources. A report that fully describes the review process can be found later in this report.

The cooperative agreements are grants made to non-profit organizations with NIEHS as partners. These consist of consortia which are collectively made up of over seventy 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 quality. The high quality curricula and other training-related materials developed by the program are available to the public through an NIEHS-sponsored National Clearinghouse for Hazardous Waste Worker Training and its Internet home page at (<http://www.wetp.org>).

Highlights of the training activities carried out by the NIEHS/EPA Worker Training awardees include:

### **George Meany Center for Labor Studies (GMCLS)**

The following anecdotes were collected by the GMCLS after training activities with rail workers this year:

Demonstrating an awareness of hazmat risks since participating in training, a track worker with 26 years on the railroad had this comment: *"I have experienced a number of spills both large and small in my career. Before training, I and my co-workers had no idea what to do. Since the training, we're much more aware. We know what's in the cars and what the proper course of action is."*

A locomotive engineer praised the training: *"When I came back from training, I found my co-workers essentially "clueless" about hazmat issues. Basic awareness is important for all workers in the yard. That's why I feel that the rail hazmat program is so important. The program is more grassroots and more geared to the workers than any other previous training I've had..."*

A maintenance of way safety liaison with more than 25 years of experience states: *"uses his Meany Center training in his own training courses every quarter. He regularly duplicates material he received during training. Dozens of his co-workers have received Meany Center training already. The company will send more."*

According to one trainee: *"I learned more in four days than I have in 31 years on the railroad."*

### **DePaul University (GATX Logistics, Inc.)**

GATX Logistics is one of the largest providers of contract services in the world. GATX helps businesses to manage their supply chains through a variety of integrated services and technology, 3,200 employees and a comprehensive distribution network throughout North, Central and South America. While GATX has the experience in shipping and warehousing of some hazardous chemicals, but it plans to increase the number of chemicals handled in the near future. GATX has entered into a partnership with DePaul University to assure that all employees are properly trained, even those who might have accidental exposure to these chemicals.

This year, DePaul provided two train-the-trainer courses to 29 safety managers from across the nation, as well as emergency response awareness training to over 200 other employees. Student ages varied but averaged about 40 years old. About 30% of those trained were

minorities, and an additional 30% were limited in English proficiency. In order to reach these Spanish-speaking students, a Spanish workbook was developed and a bilingual instructional approach was used. The native language is used to explain abstract safety concepts while English was also taught when it was critical for students to read, write or orally produce in English (e.g., hazardous labels, names of chemicals, reporting emergency incidents, etc.). During the training, instructors used MSDS's and shipping papers for chemicals that commonly passed through the warehouses and made sure that the workers understood the information on the MSDS thoroughly. Instructors also made sure that workers knew where the various MSDS stations were located. Safety managers have reported that the students were very impressed with the customized approach training. Many were previously unaware of the potential hazards of the products passing through the warehouse and that there were MSDS's available to them.

### **New Jersey/New York Consortium under the direction of the University of Medicine & Dentistry of New Jersey (UMDNJ)**

Following are comments from an employee of New Jersey Department of Health and Senior Services (NJDHHS), Right-to-Know Program, responsible for developing the New Jersey Department of Health and Senior Services Hazardous Substance Fact Sheets (NJHSFS). "Due to information learned in the 8-hour hazardous waste training course, the New Jersey Department of Health and Senior Services, Right-to-Know program has started to include new information on the NJHSFS. The NJHSFS have always included the DOT/UN number, however, they did not include the designation of Poison Inhalation Hazard (PIH). The information presented in the 8-hour refresher included a discussion of substances designated as PIH. After the training, the NJDHHS revised the NJHSFS to include this important piece of information. Adding this new information may prevent a serious injury from occurring. The NJHSFS describes individual hazardous chemicals; contains acute and chronic health hazards, identification, workplace exposure limits, medical tests, workplace controls and practices, personal protective equipment, handling and storage, questions and answers, definitions, and emergency response information for fires, spills and first aid. These fact sheets are widely used in industry. "

### **California-Arizona Consortium (CAC) under the direction of UCLA-Labor Occupational Health Program**

For this year, CAC trained 2,859 workers. For this five year grant round, they trained 13,513 workers, exceeding the numbers proposed at the beginning of this round in 1995, by approximately 13%. A specific program highlight is below.

Outreach to People of Color Workers. CAC has special emphasis programs with several of our participating universities: LOHP, ASU and LOSH. LOHP has, since April 1998, conducted several train-the-trainers for Spanish-speaking workers. In November 1999 they offered a one-day follow-up of training for trainers of this same cohort. They have also developed a low-literacy evaluation tool for use in Spanish-language 8-hour refresher courses with impressive results. The ASU Program has been training many groups from the Navajo Nation, altogether they will provide 3 forty-hour courses in Gallup and Farmington, New Mexico, 1 transportation Refresher in Gallup, and 4 Refreshers in Gallup, Farmington and Tuba City, Arizona. In the summer of 2000, the LOSH Program conducted a hazard awareness train the trainer for the Spanish-speaking day laborers in Los Angeles, and provided hazard awareness sessions at three-day laborer sites in LA. The University Extension at Davis has provided training in the Pacific Trust Territories and the Alaska Health project has been conducting training for Alaska natives.

### **Center to Protect Workers' Rights -Construction Consortium**

The Construction Consortium for Hazardous Waste Training under the new management of CPWR, has successfully completed 102% of the projected course training. The Construction Consortium is comprised of the Center to Protect Workers' Rights (CPWR), the Asbestos Workers, Carpenters, Ironworkers, Painters, Sheetmetal Workers, Boilermakers, and the Plasterers and Cement Masons. They have been very successful in delivering the training originally projected. For the entire year, a total of 185 courses were completed for 2,550 workers, resulting in a very impressive total of 46,280 contact hours of training. The Asbestos Workers' Union has developed a particularly successful program. Tom Haun, the Asbestos Workers' program manager, has carefully nurtured the growth of that program into a highly efficient deliverer of quality training. The Asbestos workers had completed over 150% of their projected training by May 31, 2000. Additional scheduled classes conducted during the last months of this training cycle has brought the Asbestos Workers annual performance up to nearly 250% of their initial plan. Taking advantage of our unique position as the training institute of the Building and Construction Trades Department of the AFL-CIO, CPWR has developed a strategy of providing regional, multi-craft train-the-trainer courses linked to, and immediately following 40-hour Hazardous Waste Worker courses. The first of these two-part programs, targeted at trainers working in the eastern United States, was completed in St. Louis Missouri in June. Seventeen trainers from six unions successfully completed this program. A western train-the-trainer program was also conducted in Berkeley, California in July, attracting from thirteen consortium unions and partnering organizations.

### **International Association of Firefighters (IAFF)**

Within this past year, the IAFF has begun to use the Internet and the IAFF Haz Mat Website as an instructional, distance learning and reference center as well as a means of marketing its programs. Over the past six months, the Hazardous Materials Training Department has redesigned its Website to further address the needs of its instructors and students. The Distance Learning web site is currently based on interactive case studies from the United States Chemical Safety Hazard Investigation Board (USCSHIB-CSB) with links to the CSB for further research. These case studies are followed by short, interactive quizzes that provide correct answers to the students. Student responses are then provided to the Hazardous Materials Training Department. The primary purpose of this site is to provide a resource for HazMat responders to refresh knowledge and skills obtained during IAFF-sponsored training courses.

### **Midwest Consortium under the direction of University of Cincinnati)**

University of Illinois: This past year, trainees employed as compliance officers by the Metropolitan Water Reclamation District responded to a complaint and discovered suspicious-looking seepage into a drainage ditch leading to the Calumet River and Lake Michigan. Following the trail upstream, they discovered an abandoned site where drums of industrial solvents had been buried. Using their hazardous waste training, the officers protected themselves and were able to conduct a preliminary assessment of the drums and then contacted the District's enforcement office personnel who initiated legal proceedings that led ultimately to the clean-up of the site.

University of Louisville: Trainees have been able to raise their concerns about work in confined spaces/trenches and the need for monitoring, permits and the availability of rescue equipment

to their supervisors as a result of training. The need for proper PPE and respirators has been brought to the attention of employers by trainees. This has included use of Level C garments and APRs. Participants have noted the lack of appropriate Standard Operating Procedures, especially tailored to the needs of their site. Appreciation has been expressed about learning of alternative information resources on the internet, since some employers have out-of-date or incomplete MSDS's.

### **Advanced Training Technologies (ATT) Supplements**

NIEHS has awarded competitive supplements to encourage applications that pilot the use of advanced training technologies. The pilots focus on either improvements to the overall training infrastructure or on areas of content that might be delivered using advanced technology. NIEHS awardees created pilots to target improvements in the training infrastructure. These improvements included areas such as improving the overall ATT knowledge level of training developers, involving worker trainers or course instructors in technology-based course development, baselining the status of hardware and software across the health and safety training community, as well as researching and implementing a media selection model for use across an awardee, or group of awardees' health and safety training community.

Delivery pilots of health and safety content focus on new, technology-based methods for delivering training that improve learning, reduce costs, and can be demonstrated as effective for the specific content for a defined target population. These technologies include but are not limited to web-based, computer-based, tele-video, virtual reality, and combinations of technology.

ATT supplemental awards included the following accomplishments:

- **United Auto Workers (UAW):** The UAW "Health, Safety, and Environment Advanced Training Project" is a web site termed the "H&S ATP" (Health, Safety, Environment: Advanced Training Project.) The web site serves as the linkage point for local site workers and managers to obtain information from diverse sources to evaluate the adequacy of their facility emergency response plans, risk management plans, and process safety plans. The pilot project objective was to develop a program that provides trainees with the knowledge to obtain occupational health hazard information through the Internet.
- **George Meany Center (GMC):** The GMC currently provides a Rail Workers Hazardous Materials Training Program. The purpose of the ATT pilot is to develop and use ATT to convert the existing 8-hour Awareness Level First Responder Hazardous Materials Training course to six online interactive modules and associated courseware for the purpose of gaining increased access among rail workers who otherwise cannot attend classroom-based training. The on-line course was designed and developed in-house utilizing the Instructional Systems Development (ISD) process as the framework. Partnerships with the Center to Protect Workers Rights (CPWR) and the International Chemical Workers Union (ICWUC) were formed via a steering committee for various purposes including guidance and evaluation.
- **Hazardous Materials Training and Research Institute (HMTRI):** HMTRI provides training materials and technical support to the Community College Consortium for Health and Safety Training (CCCHST), a national partnership of some 75 community colleges. The purpose of the CCCHST training is to train instructors from partner organizations who,

subsequent to certification by HMTRI, provide the training at their institutions utilizing HMTRI developed and approved materials. HMTRI has been converting the “Waste Site Worker” traditional course to a web-based delivery format. The supplemental pilot is intended to provide HMTRI the means to enhance the web-based course. The course is a 32-hour self-paced, open-entry/exit, computer-based program supplemented by 8-hour hands-on instructor-led skills training. The HMTRI Policy on the development and use of technology supported training serves as the basis for the HAZWOPER Computer Based Training (CBT) course. Adherence to the Policy is intended to assure compliance with OSHA training policies.

- **International Union Operating Engineers (IUOE)** The key focus of the IUOE ATT pilot is their peer-trainer instructional staff with efforts devoted specifically to web-based programs that address 1910.120, radiation safety, and medical surveillance. IUOE believes that web-based methods provide a valuable aid to instructors in mastering complex subjects (radiation and medical surveillance) with which, as peer instructors, they have less experience. The 29 CFR 1910.120 CBT course must be completed before taking the Train-the-Trainer course. (The 1910.120 course is currently being re-developed using the WebCT platform.) Materials are delivered on-line through an in-house server but CD-ROM versions are also available. A final effort is devoted to integrating CBT course record keeping with other course records.

### **NIEHS Superfund Job Training (SuperJTI) Initiative Supplemental Grant**

NIEHS, over the past three years, has worked with EPA to support the Superfund Job Training Initiative (SuperJTI). This collaboration has allowed EPA and NIEHS to partner and provide much needed training particularly in disadvantaged communities to priority sites across the US. Some of the previous sites include: Agricultural Street Landfill -New Orleans, LA; Taracorps Site - Granite City, IL; Dutch Boy Site, Chicago, IL; Douglas Road Site – Mishawaka, IN and East Palo Alto, CA.

To continue the NIEHS commitment to SuperJTI training in collaboration with OERR for the period of September 1, 1999 to August 31, 2000, the NIEHS encouraged the MWTP awardees to use existing funds to apply for training at SuperJTI priority sites. While under the HWWTP program, NIEHS solicited responses to administrative supplements up to \$100,000 for focused training on the priority sites.

NIEHS made two new supplemental awards to HWWT awardees, DePaul University and International Chemical Workers Union (ICWU). DePaul University received a supplemental award to perform training of residents in 3 SuperJTI communities, Kerr-McGee Superfund Site, West Chicago, IL; Reilly Tar and Chemical, Indianapolis, IN; and the Washington Navy Yard, Washington, DC. ICWU received a supplemental award to provide training to residents of the Copper Hill community. Also, Laborers-AGC targeted their MWTP program in San Francisco, CA to the Bayview Hunters Point Naval Shipyard, a SuperJTI site. In total, the NIEHS awardees reached 161 trainees. See chart below with information on each program. Descriptions of each of the training programs are located in Appendix 21.

<b>Superfund Jobs Training Initiative</b>			
<b>Awardee</b>	<b>Program</b>	<b>Site Name and Location</b>	<b>Number of students trained</b>
DePaul University in collaboration with Alice Hamilton Occupational Health Center	HWWTTP	Kerr-McGee Superfund Site – West Chicago, IL Reilly Tar & Chemical, Indianapolis, IN Washington Naval Yard Site – Washington D.C.	63
Clark Atlanta University in collaboration with Xavier University	MWTP	RSR Site –West Dallas, TX	7
International Chemical Workers Union Council (ICWUC)	HWWTTP	Copper Hill, TN	58
Laborers-AGC Education & Training Fund	MWTP	Bay View Hunters Point, San Francisco, CA	33

### **NIEHS Y2K Supplemental Training Awards**

As the Nation approached the turn of the Century, increasing attention was devoted to matters associated with the “Year 2000 Computer Technology Problem,” otherwise known as the Y2K problem. Of particular concern were commercial and industrial activities involving hazardous and toxic materials. The first two Hazwoper sectors, waste site operations and RCRA/TSD facilities were among those activities of particular concern owing to the nature of these operations. Emergency response activities were of even more concern, as the emergency response personnel, whether on-site or off-site, will be required to respond to any emergency arising from Y2K induced incidents which constitute an emergency.

NIEHS supported supplemental applications to provide additional resources to awardees for the purposes of responding to near-term training requests arising as a consequence of the Y2K problem. Such training included special supplemental training involving new training objectives associated, for example, with manual process operations; focused refresher training; and Y2K problem awareness training. In addition, supplemental funds were used to meet needs directly associated with responding to Y2K training issues such as travel to local, state, or regional meetings for contingency planning. Supplemental grants were provided in order to avoid major impact on the awardees core program particularly in view of the near-term emerging need. This could include training facilities, attendance at Y2K pertinent local/State/Regional planning meetings, consultants to aid in training needs assessments, or training product development.

Y2K supplemental awards included the following accomplishments:

#### **International Chemical Workers Union Council (ICWUC)**

Starting in September 1, 1999, the ICWUC was awarded a supplemental grant to prepare workers and their facilities for the potential effects of the Y2K problem in plants handling or producing Highly Hazardous Chemicals. The key industrial area identified was possible system failures due to embedded chips (microprocessors) which are used in millions of applications throughout modern facilities. Although there had been extensive publicity and efforts before September 1, 1999 to address the potential failure of data processing systems, little attention had been given to embedded microprocessors which control operations, information sent from processes (temperature, pressure, concentration, flow, etc.) to the integrated control system and microprocessors in vehicles, monitoring equipment and other emergency response equipment. The Center's training concentrated on the means to investigate and determine the need for correction of hazards, modification of response and operation plans, possible actions that can be taken to find, correct and prevent Y2K related releases, sources of information, recommendations for changes in the Emergency Response Plans and HAZMAT team training/preparation/equipment and, initiate efforts towards greater inherent process safety. The target population of this Y2K awareness training included workers, supervisors, management, union officials, local emergency responders and others. In the first stages of this grant, we conducted research with participants and staff to develop a training module, which has subsequently been incorporated into all of our training delivery during the past year.

- **International Association of Firefighters (IAFF)**

This past year, the IAFF Y2K emergency responder program helped the site peak at nearly 127,086 hits in the month of December, 1999 (corrected data as reported by 4Web Services, Inc.). This growth of hits can be directly attributed to extensive curricula development efforts, success with new ATTs, and the NIEHS Y2K Supplemental Training project. Over the past 10 months we have averaged 80,000 hits per month. This average represents a three-fold increase over our first month in operation.

## **2.2. Minority Worker Training Program Development**

The MWTP completed its fifth year of training through six programs at the Center to Protect Workers' Rights (CPWR), Clark Atlanta University (CAU), Jackson State University (JSU), DePaul University (DePaul), Laborers-AGC Education and Training Fund (Laborers-AGC), and the University of Medicine and Dentistry of New Jersey (UMDNJ). The main goal of this program is to recruit young people of color and provide a vigorous training program that eventually leads to productive employment. Over the past five years 1,647 young minority adults have been successfully training in worker health and safety training for construction and environmental cleanup. For the five-year summary, of the 1,647 students trained, 1,072 trainees are employed representing an overall job placement rate of 65% (See Appendices 6-9).

These six programs during the period of September 1, 1999 to August 31, 2000 provided training to 364 trainees in the 15 cities. These cities are Atlanta, GA; Baltimore, MD; Chicago, IL; Indianapolis, IN; Jackson, MS; Knoxville, TN; New Haven, CT; Exton, PA; Newark, NJ; New Orleans, LA; New York City, NY; Oakland, Los Angeles, and San Francisco, CA; and Washington, DC. Of those 364 trainees trained, 246 trainees are gainfully employed. The courses provided ranged from Life Skills to Environmental Technician training with a total of 193 courses offered representing 127,023 contact hours (See Appendix 10).

## **Demographics and Placement Data**

Of the 364 trainees this program year, 308 trainees were male, 56 were female with the majority of trainees Black at 92% and Hispanic at 6%. A complete breakout of demographic data is located in Appendix 11. The progress report results over the past five years indicate that MWTP has reached significant plateaus such as increasing the number of qualified workers in environmental restoration, promoting worker empowerment, and building institutional/community capacity to offer these training programs.

Those programs that had exceptional job placement for this year were CPWR, Laborers-AGC, UMDNJ, and JSU. See Appendix for a five-year summary of job placement rates for all programs. Highlights from several of these programs are below.

### **Center to Protect Workers' Rights**

CPWR, through its MWTP Consortia, conducted 18,158 contact hours of training for 89 trainees in New Orleans, LA, Oakland, CA, Knoxville, TN and Baltimore, MD. The overall job placement rate for the Center to Protect Workers Rights was 61% with 54 trainees employed of the 69 that graduated. There were several program sites that exceeded their goals, Oakland and Baltimore for example. The Baltimore Project lead by the IBPAT (Painters) District Council #51 in conjunction with the East Baltimore Fair Chance Inc. successfully completed the MWTP by enrolling 15, having graduated 11 with 100% of the MWT program participants employed. Baltimore Fair Chance provided the recruitment, aptitude assessments, and other social services support to prepare the trainees for the world of work. The International Union of Painters and Allied Trades (IUPAT) through District Council 51 provided lead abatement, first aid/CPR, scaffold erecting and introduction to the paint trade (pre-apprenticeship). This project was considerably active with the Brownfields community to keep abreast of the development activities underway and planned for the community. As a result of this interaction, ten trainees are now working in jobs in the Empowerment Zone.

### **Laborers-AGC Education & Training Fund**

With an impressive final program year, Laborers-AGC has surpassed its targeted goal of training 65 trainees. Collectively, Laborers-AGC program trained a total of 86 participants in three urban areas: New Haven, CT (34), San Francisco, CA (33), and Exton, PA (19). Seventy-six percent or 66 of the total trainees are employed. Thirty-one graduates (or 46 % of those graduates employed) are working in environmental jobs. Twenty-five (or 37 %) of the graduates have been indentured into the Laborers Construction Craft Laborer (CCL) Apprenticeship Program, a comprehensive system that encourages lifelong learning and advancement. Specifically, these results bring the total of trainees for the MWTP over the past five years to 290 trainees. Nationally, during the past five years, Laborers-AGC has improved worker safety and health for targeted minority communities by providing job skills training to approximately 470 trainees through its own MWTP (290), Brownfields MWTP (40) and sub-grantee agreements (140). Increased training accomplishments for this program year have been due to a variety of demands for training ranging from a specified demand for training, to decommission a nuclear power plant in New Haven, and to leveraging resources with an EPA Brownfields Job Training Initiative Pilot in San Francisco. In Exton, the driving force for training continued to be the need to provide skilled workers to man a HUD demolition project.

### **Jackson State University**

JSU, under the direction of the Technology and Industrial Arts of the university, offered a combined total of 17 courses representing 12,010 contact hours of training to 42 students of which 4,930 were GED training & certification, pre-employment skills, life skills, and mentoring/career guidance. JSU worked in collaboration with the Laborer's Local 145, Laborer's AGC Training Center in Livonia, Louisiana, the West Jackson Community Development Corporation (WJCDC) and the Job Corps Center. The trainees were recruited from the area surrounding the JSU campus by WJCDC and the Job Corps Center located in Crystal Springs, Mississippi. The job placement rate was 69% with 29 of the 42 trainees obtaining jobs. Specific employment records indicate that 13 trainees entered construction-related jobs, 7 asbestos, and 4 in the hazardous waste field.

### **Clark Atlanta University**

CAU in collaboration with Xavier University (XU) and the Laborers International Union of North America (LIUNA) provided a successful year of training. XU and CAU initially enrolled a total of 47 trainees into the program (CAU – 21, XU – 19) with 7 students under the Super JTI project at the RSR Smelter Site in West Dallas, TX. The program goal was to provide construction and environmental cleanup training and job placement assistance to disadvantaged minority residents in Atlanta, GA and New Orleans, LA. The program was comprised of three phases: (1) basic skills, (2) technical skills, and (3) job development/job placement. Both CAU and XU were responsible for the basic skills and job placement components of the training program. LIUNA collaborated with their local training affiliates in Decatur, GA and Livonia, LA to provide technical training. The technical training courses included 80 hours of basic construction skills training, 80 hours of basic superfund site worker training, 40 hours of lead abatement training, and 40 hours of asbestos abatement training. In all, CAU offered 36 courses which corresponds to \$15,740 contact hours.

The overall job placement rate for CAU was 70% with 33 of the 47 trainees employed. Twenty-nine trainees successfully completed all levels of the basic skills training and 26 students completed various components of the technical training. Of the 26 students who completed technical training, 80% are working (46% environmental, 23% construction). Job placement for the 7 SuperJTI trainees are in Appendix 21.

### **Program Changes and Accomplishments**

These training programs over the past five years provided a diverse, educational and occupational training service to the communities that they targeted. By providing a trained and skilled workforce, the communities and the individual trainees have all benefited from these programs. Some of the highlights of these accomplishments are below with specific areas of emphasis. The areas of emphasis include Advanced Training/Career Opportunities, Leverage Resources, and the Development of Robust Trainee Tracking Systems.

#### **Advanced Training/Career Opportunities**

The career development path of the trainees engaged in this training has evolved since the inception of the program in 1995. The primary focus has continued to be environmental remediation training, but the avenues available for trainees to enter into these fields have greatly improved. The increased emphasis to careers instead of jobs has sharpened the training opportunities to longer-range skill development options. These improvements include entry into apprenticeship programs and collaboration with other specialized skills training such

as nuclear worker and environmental technician training. In particular, many awardees have opted to call their programs “pre-apprenticeship programs” and tailor each series of training to focus on successful entry of their trainees into certified apprenticeship schools. Several programs have worked diligently to develop relationships with apprenticeship schools. Those include Laborers-AGC, CPWR, and UMDNJ.

**University of Medicine and Dentistry of New Jersey**

UMDNJ has formed the New Jersey/New York Consortium, which has a long-standing relationship with the apprenticeship programs in their area. Union status training is designed to assist trainees' entry primarily into construction and environmental assessment and cleanup work, and secondarily into employment. Being a member of a union results in higher wages, better benefits, and contribution toward pensions, better workplace standards and improved health and safety protection. Being an apprentice member of a construction union typically obligates trainees to maintain enrollment in a multi-year apprentice program. In the case of the New York District Council of Carpenters, the apprentice program lasts four years and is free to all apprentice union members in good standing. Other members of the building trades have similar programs, including the Painters, Sheet Metal, Stationary Engineers and the Laborers. Due to this strong relationship with the unions, 25 trainees completed the program out of the 30 students enrolled, which represents an overall job placement rate of 83%. Of the 18 trainees working, 14 (78%) are members of construction unions, including seven in the Carpenters, two in the Sheetmetal Workers, four in the Laborers, and one in the Painters Unions. Wages Trainees who are currently working are earning an average of \$16.00 per hour (\$26 including benefits). The minimum wage earned is \$12.00 per hour, while the maximum is \$24.00 per hour.

TABLE 10: EMPLOYMENT STATUS FOR EPA-MWT PROGRAM GRADUATES: 1999-2000

<u>SIC Code</u>	<u>Description</u>	<u>Number of Trainees</u>
1751	Carpentry Work Contractors	7
1761	Sheetmetal Work Contractors	2
8711	Environmental Consultants	4
1799	Asbestos Removal Contractor	4
1721	Painting Contractor	1
	<b>TOTAL</b>	<b>18</b>

**Laborers-AGC Education & Training Fund**

Laborers-AGC is currently in their third year of linking their NIEHS program with the Laborers Construction Craft Laborer (CCL) Apprenticeship Program, a comprehensive system that encourages lifelong learning and advancement. According to Laborers-AGC, the U.S. Department of Labor's Bureau of Apprenticeship and Training formally recognized National Apprenticeship Standards for the Construction Craft Laborer in 1994. These standards serve as a model for affiliate funds seeking to establish their own apprenticeship programs and to further expand the quality and number of training courses available to Laborers. As a result of this linkage, 37 % of the current graduates have been indentured into the Apprenticeship Program.

The New Haven, CT program more than doubled their goal of trained participants this program year on to the prescribed Phase II, Construction and Environmental skills training. The program was expanded and modified this year to meet a demand for skilled workers in the New Haven area. The opportunity for trained Radiation Protection Workers was identified to decommission and demolish the Connecticut Yankee Power Plant in nearby Haddam, CT. The additional trainees received 120 hours of Basic Radiation Protection Worker training and an additional 24 hours of site-specific plant access training provided by their employer as well as additional life skills training determined by the results of their interviews and initial assessments. Coordination between the New Haven program and the New England Laborers CCL Apprenticeship Program has been extremely influential in the outcome of job placement efforts. Salaries range from \$22,500 to \$36,500. Ninety-two percent have been indentured into and employed through the Laborers CCL Apprenticeship Program while others obtained employment as journeymen in Local 455 in New Haven. All trainees that graduated are gainfully employed working for union contractors.

Coordination with various unions as well as extensive and early job development efforts has resulted in the San Francisco program attaining a 91 % job placement rate for its graduates. Annual salaries range from \$17,280 to \$48,000. Of the 30 employed, 27 are employed in environmental remediation. Collaboration between the San Francisco program and the Northern California Teamsters Apprenticeship Program was continued this year to train two participants in Class A Commercial Drivers License, Ready Mix and Hazardous Materials Transportation Awareness.

### **Leverage Resources**

Due to the longevity of the training programs and the need to provide supportive services to trainees, many awardees worked collaboratively with other local, state, and federal agencies to provide additional resources. The additional resources coupled with the trainees' incentives that each awardee provided to the trainees, the robust job readiness training and mentoring components, the trainees were better prepared for their entry into the world of work. The other supportive services included childcare services, transportation subsidies, and general basic necessities such as housing and food while trainees were enrolled. It has been shown without these services, trainees have a higher rate of absenteeism that eventually lead to trainees dropping or being dismissed from the training program. Programs that have been instrumental in providing these services include Laborers-AGC and DePaul.

### **Laborers-AGC Education & Training Fund**

As a result of a successful first year of the New Haven program and its obvious commitment to improving the economic independence of community residents, new partnerships have been forged in the community to facilitate the success of the program. Transportation, daycare, recruitment, placement and follow-up have all been addressed through new alliances. The Regional Growth Connection (RGC), a Regional Growth Partnership affiliate, and the Rideshare program provided committed transportation support for this training. Rideshare is a non-profit organization that supplies vanpool services to companies and programs on a monthly/mile basis at a fixed rate. This van service was used to transport classes to and from the training center in Pomfret, NELTA, and to and from Connecticut Yankee, the nuclear power plant decommission and demolition site. Currently, employees of the Connecticut Yankee Project Company are utilizing the service and will continue to use the vanpool for the duration of their employment.

In addition, the Department of Labor (DOL) has continued approval this year for the New Haven program to serve as a DOL approved program, thereby entitling its qualifying participants to state reimbursement for childcare while they are in the program. Another new partnership was developed with the New Haven Opportunities Industrialization Center (OIC) to address long-term recruitment efforts and preliminary screening. A feeder program was developed through the OIC to address interest vs. compatibility issues, GEDs, driver's licenses, aptitude testing and alternative placements for those not currently qualifying for the MWTP. This program has also served as a reservoir to draw from, as new recruits are needed for the expanding MWTP. This long-term relationship will also address the need to work closely and consistently with a flexible organization to provide a portion of the life skills.

### **DePaul University**

The Indianapolis program represented a new training opportunity for DePaul. DePaul's partnership with Indianapolis Opportunities for Industrialization Centers (OIC), Indiana OIC State Council, Indianapolis Private Industry Council (IPIC), Reach Out and Restore (R.O.A.R.) and the John H. Boner Center was a major reason for the success of their program. Each of the partners provided valuable resources to support the development of the trainees throughout the program. For example, R.O.A.R. is a not-for-profit community development center that offers computer training, child daycare, and shelter for homeless or abused women. The John H. Boner Center offers a social service program that allows case managers to work with individuals to remove barriers such as lack of food or clothing, inability to pay rent or utilities, mediation, and advocacy. The Boner Center also houses the Career Corner, a neighborhood based employment center with case management services.

Specific roles were assigned to include the screening and recruitment processes that were headed by OIC with some assistance from R.O.A.R. and the Boner Center. The training was held in classrooms at the Metro Center Church in Indianapolis that houses R.O.A.R. and a satellite OIC office. With the training situated at the church, trainees were able to receive a hot lunch each day from the OIC Hospitality Program, and they were able to use the onsite daycare facility operated by R.O.A.R. At the conclusion of the training program, the John H. Boner Center provided the asbestos license fee for each graduate and physicals were provided by the Indiana State OIC office.

### **Development of Robust Trainee Tracking Systems**

To effectively manage the training programs, each awardee developed trainee-tracking systems. As a requirement of their award, each awardee, at a minimum must provide tracking of their graduates for a period of 6 months. Since the beginning of the program, several different systems and strategies for trainee tracking were developed with significant changes over the years to improve and make the systems more robust. Highlights from tracking systems developed from LABORERS-AGC and DePaul will be discussed.

### **Laborers-AGC Education & Training Fund**

Trainees in the LAGC MWTP generally experience a smooth transition to the workforce through the Laborers' Construction Craft Laborer (CCL) Apprenticeship Program. Due to the LABORERS-AGC collaboration with the Construction Craft Laborer Apprenticeship program, the tracking of job placement process is more seamless as it is mandatory that apprentices stay in contact with their Apprenticeship Coordinator and/or Union Business of their local union. In addition to the individual case management also provided by community based

organizations, employment is also tracked through information gathered from refresher courses.

This system developed by the Laborers-AGC of tracking students in refresher courses was first successfully implemented in their EPA- Hazardous Waste Training Program as well as their DOE Hazardous Waste Training Program. Trainees return for their annual HW Refresher course and, at that point in time, are asked to identify their job locations and the type of work they performed. This data is gathered through the HW Refresher Application and added to a database so that reports can be generated as needed. In addition, Laborers-AGC documents the hazardous waste or environmental remediation sites at which new hazardous waste workers may be expected to seek employment. This information is obtained in several ways. The training funds, with their business agents, know of the work needs in the area and try to tailor their course offerings to meet those needs. Training Funds also identify potential work sites for Laborers-AGC so that planning for courses can be done. In addition, Laborers-AGC follows all new large environmental jobs or which have already been contracted for the past five years. They also categorized these job sites as to type of work (hazardous waste, LUST, or other) and/or as to governmental jurisdiction/program (EPA Superfund, EPA Resource Conservation and Recovery Act (RCRA), Department of Defense, other Federal or State government agency).

### **DePaul University**

As an ongoing system of trainee tracking, DePaul maintains contact and follow-up with each MWT student up to one year from the date of graduation. Sub-contractors and /or community-based partners submit information such as the name of employer, salaries, and family status to DePaul. The DePaul's tracking system will house information about each student both electronically and on hard copy. The DePaul tracking system assigns each student a number according to the type of program (MWT, BMWT, etc.), the year, state, and student. The student numbers are developed before data is entered to satisfy the data entry requirements of the WETP database. In addition to what is required by the WETP database, the DePaul tracking system also includes a detailed student profile that includes information such as the student's name, social security number, employment and training history, and any notes about contact with the student.

### **2.3. Brownfields Minority Worker Training Program (BMWTP)**

Through collaboration between the NIEHS and EPA, the NIEHS has targeted current Brownfields Pilot Sites- specifically Brownfields Showcase Communities, for the development of integrated minority worker training programs. The existing model of the minority worker-training program has provided the vehicle to provide workforce development and training to urban cities around the United States. The NIEHS has partnered with the US EPA to develop and fund these Brownfields Worker Training Pilots. The EPA has transferred \$3M via Interagency Agreement to fund supplemental awards under the Minority Worker Training Program.

The number of trainees at these sites has increased due to an aggressive recruitment endeavor by several programs. The four awardees, Center to Protect Workers' Rights (CPWR), Clark Atlanta University (CAU), DePaul University (DePaul), Laborers-AGC Education and Training Fund (Laborers-AGC) provided training to 440 local residents in the 11 Brownfields communities as indicated in the chart below. This increases our number to 846

trainees receiving services for the past two years. See Appendix 12. Of the 440 trainees, 275 are employed, which results in a 63% employment rate as indicated in Appendices 13 & 14 . The demographic chart located in Appendix 15 indicates that the majority of trainees are male at 78%, and Hispanic at 23%. Also the bulk of our trainees are in the age range of 26-35.

## Brownfields Minority Worker Training Program Awardees and Target Communities

Awardee	Brownfields Showcase Communities
Center to Protect Workers' Rights	East Palo Alto, CA, Los Angeles, CA, Salt Lake City, UT, St. Paul, MN and Portland, OR
Clark Atlanta University	Eastward Ho, FL and Dallas, TX
DePaul University	Chicago, IL; Kansas City, KS/MO; and Baltimore, MD
Laborers-AGC Education and Training Fund	Lowell, MA

Each of the programs were successful in building strong collaborative relationships with the Brownfields Showcase Community and other organizations working within the Brownfields communities. A detailed description of each of the programs can be found at <http://www.niehs.nih.gov/wetp/bfield.htm>. In addition to the descriptions, specific data on program employment and contact hours are vital pieces of information to determine the effectiveness of the training programs. For the BMWTP, approximately 105,780 contact hours of training were performed with 203 courses offered as described in Appendices 16 & 17. As described last year, several of these courses were broader in scope than the MWTP with several programs offering 2 distinct tiers or tracks of training one; one in environmental technology and one in construction training. This diversity in training opportunities was powerful in assisting trainees to become more marketable in the environmental and construction community.

Several programs have made great strides during the second year of this training. Those include Laborers-AGC, and DePaul. Specific projects in Portland, OR; Lowell, MA; and Fort Lauderdale, FL will be described.

### Center to Protect Workers' Rights

CPWR proposed to train a total of 195 trainees for program year September 1, 1999 to August 31, 2000 and actually trained 250 trainees. One hundred seventy-three (173) trainees graduated and 154 trainees were placed in a variety of jobs, mostly construction apprenticeships with the carpenters' unions. CPWR, through its BMWT Consortia, conducted 66,082 contact hours of training for 250 trainees in East Palo Alto, CA; Los Angeles, CA; Portland, OR; Salt Lake City, UT; and St. Paul MN. One significant accomplishment was through the Portland project. One of this year's program graduates, Emeric Hagens, will serve as the city's assistant Brownfields coordinator. This student was initially placed in a construction job. However, Portland Community College recognized his high academic aptitude and assisted him in obtaining an internship with one of the State Congressmen's office. After completing this internship, he returned to the training program to complete his carpentry training. He received city-wide recognition for his efforts and persistence and was then offered the position as assistant coordinator.

### DePaul University

DePaul University trained a total of 126 individuals for its Brownfields Minority Worker Training (BMWT) program for the 1999/2000 fiscal year. Of those 126 trained individuals, 88 were placed into jobs with the majority being environmental jobs. Over 22,900 contact hours of instruction were delivered to trainees and more than 1400 hours were taught in courses such

as lead abatement, HAZWOPER, asbestos abatement and underground storage tanks. Training was completed Kansas City, Missouri, Chicago, Illinois and Baltimore, Maryland.

#### Kansas City, Missouri

The Kansas City BMWT Program delivered 29 graduates and 18 of those graduates were employed at the conclusion of the program. Seventeen of the graduates were employed in environmental jobs. Of the 29 trainees from Kansas City, 25 were unemployed and 4 were under-employed when they entered the BMWT Program.

#### Chicago, Illinois

Fifty-three (53) individuals received training through Chicago's BMWT Program and 39 of those individuals were employed at the time of the progress report. DePaul University offered its BMWT Program in partnership with the City of Chicago's Greencorps Program, the Local Economic and Employment Development (LEED) Council and Bethel New Life. The 53 participants included 29 from Greencorps, 10 from LEED Council and 14 from Bethel New Life. Of the 29 students from Greencorps, 14 were students who made it through the three-week probationary period of the City's Greencorps program.

#### Baltimore, Maryland

With two rounds of training, The Alice Hamilton Center delivered 44 trainees for the Baltimore BMWT Program. The first round of training produced 19 students in April and the second round produced 25 students in August forming a total of 44 trainees for the 1999/2000 year. Of those 44 graduates, 31 individuals obtained employment after the program and most are employed with environmental companies in the Baltimore/Washington, DC area.

### **Laborers-AGC**

This program administered by Laborers-AGC, in collaboration with the University of Massachusetts Lowell, has proven to be a success in the two-year implementation of the program. In the Brownfield Showcase Community of Lowell, Massachusetts, the site of the program, the Brownfields program is better known as the *Environmental J.O.B.S. Program* and consists of two tracks of skills training – Construction Skills Training and Environmental Technician Training. While overall student yield for the program is small in comparison to other NIEHS Brownfield Programs, the success of essential program components is unsurpassable. Student improvements in basic skills, GED acquisition, coordination of community support and involvement and most importantly job placement and job retention all boast success rates of 86% or higher. The current job placement rate for graduates is 87% with thirteen of the fifteen graduates currently working. Thirty-three % or five graduates are employed in the environmental remediation industry. The average yearly salary for those graduates receiving construction skills training is \$36,962. The average salary for those receiving training as environmental technicians is \$24,500. More importantly after the second year of program implementation 86% of graduates from year one of the program are currently employed. Sixty percent of those graduates are still employed in the environmental field with average annual salaries of \$34,300 and \$27,040 respectively for those trained in construction and environmental technician job skills.

Success stories involving how the program has touched the lives of graduates and improved their quality of life continue to be the indicator of program accomplishments. One graduate, a black male from Sierra Leone, who has been working through a temporary agency, was hired full-time by a private environmental company as a sample technician at the end of his contract at \$13.00/hr. A Hispanic male from Columbia, a graduate of the environmental technician

track was hired as a field technician by another environmental company. He works at brownfield and Superfund sites collecting samples and conducting Phase I Environmental Assessments. He is interested in going on to college in environmental science. He is currently taking a Computer-Aided Design course at the University of Massachusetts Lowell. Also two construction program graduates worked most of the summer removing lead paint from buildings on Boston brownfield sites.

In addition to successful student employment in the environmental and construction industry, entrepreneurial skills have also evolved as a result of matriculation in the BMWTP. Two graduates have started their own businesses, a Puerto Rican woman who graduated from the environmental technician track has opened a Caribbean restaurant in downtown Lowell. A Colombian man who graduated from the construction skills track has started a transportation van company and is providing school bus service to Lowell's charter school. The skills they gained in the program gave them the confidence and ability to start these new ventures.

Personal accomplishments of graduates exemplify the success of the program's ability to improve the quality of life for program participants. Two program graduates have bought houses through A Coalition for a Better Acre's (CBA) Home Loan Program. Two Environmental J.O.B.S. graduates are now members of the Environmental Sub-committee of CBA's Executive Board. They are involved in developing community education programs regarding environmental concerns in their community.

#### **Clark Atlanta University**

CAU, in collaboration with XU, Bass-Dillard Neighborhood Issues and Prevention, Inc. (Bass-Dillard), New Start For Economic and Environmental Justice (New Start), Laborers International Union of North America (LIUNA), Center to Protect Workers Rights (CPWR), and local union training providers (United Brotherhood of Carpenters (UBC) in Fort Lauderdale, FL and LABORERS-AGC in Livonia, LA and Grandprairie, TX), implemented its second cycle of Brownfields Job Training in Fort Lauderdale, FL and West Dallas, TX. In addition, the CAU and XU provided technical assistance to Bass-Dillard (FL) and New Start (TX) to assist them in building a capacity to provide health and safety training. Bass-Dillard and New Start worked with CAU and XU to coordinate basic skills training for trainees enrolled in the training program. Trainees enrolled in the training program in Fort Lauderdale attended six weeks of basic skills training held on the campus of Dillard High School and 6 weeks of technical training provided by the UBC at their local training facility in Fort Lauderdale. Trainees enrolled in the training program located in West Dallas attended the Laborers-AGC training facility located in basic skills training at the New Waverly Baptist Church in West Dallas.

The technical training was provided by Laborers-AGC, which was held in Grandprairie, TX and Livonia, LA. The program enrolled a total of 44 trainees (Fort Lauderdale – 27, West Dallas – 17). Of the 25 trainees who completed all training requirements, 24 are working.

#### **2.4. Continued Operation and Support for a National Clearinghouse on Hazardous Waste Worker Training**

During the past year, NIEHS re-competed the contract for WETP station support and awarded a new 5-year contract to OD Systems, a women-owned company based in Alexandria, VA with a long history of experience in administering government support contracts.

Technology continued to play a leading role in most of the work carried out by the Clearinghouse during contract year 2000, its fifth year of activity on behalf of the NIEHS awardees and the WETP. On-line registration via the Web site, as well as a centralized database of contact names, helped to streamline organization of the October awardees meeting. New links were made between the Clearinghouse Web Page and several hundred health and safety Internet sites. In addition, NIEHS documents and reports were posted on the Web -- including workshop and awardee reports, the Y2K Handbook, and data to aid trainees in tracking. The on-line version of the curricula catalogue, introduced in November 1998, facilitated inquiry management and the order fulfillment process for awardee curricula. It has been updated continuously during the year, whenever new curricula are received.

Throughout the past year, the new on-line version of the Weekly Newsbrief continued to generate time and cost efficiencies because many readers now access the publication on-line, the mailing list has been streamlined, yielding savings in photocopying, postage, and handling costs. On-line Power-Point presentations were added to the web -- for Y2K and 10 year accomplishments.

## **2.5. Trainee Environmental Job Tracking Initiative**

In our request for continuation applications, NIEHS again asked that each awardee propose a system to track trainees and collect post-training employment information. A number of the awardees have proposed approaches which build on existing trainee registrations, while others are creating innovative systems to catalogue employment experience through refresher training exercises.

Examples of successful trainee tracking protocols such as Laborers-AGC have been utilized to exchange techniques among the Worker Training Community. Laborers-AGC has been developing a new data base that will track training and trainee information for all Laborers-AGC affiliated training funds, including those that conduct courses under the NIEHS training program. The Laborers-AGC tracking database, when completed, will be provided to all Laborers-AGC training sites to track their training information. Information required by NIEHS will be provided to Laborers-AGC directly from the training funds through a network system.

Each trainee who takes the Hazardous Waste Refresher (HWR) course at a Laborers-AGC affiliated training site completes the refresher survey. Completed surveys are forwarded to Laborers-AGC for trainee tracking and for employment data analyses. From September 1, 1999 to August 31, 2000, a total of 607 HWR application forms were scanned into the database. These trainees identified 2,636 hazardous waste jobs that they have held since their initial HW Worker training. Workers who were trained under the EPA program held 958 of these jobs. An additional 3,132 workers held other environmental remediation jobs including unexploded ordnance, asbestos, lead, radiation, refinery or chemical spills, and underground storage tanks. During the past year (1999 – 2000), 308 workers held hazardous waste remediation jobs. This number does not include other types of environmental remediation work that may have been conducted at a hazardous waste site.

In addition, the Clearinghouse has been tasked with supporting this effort by providing technical assistance to awardees during this process. During the first six months of the contract year, the Clearinghouse helped coordinate and support several awardee pilots on

trainee tracking. Significant attention will continue to be dedicated to trainee tracking during the second half of the contract year. Currently, the Clearinghouse completed a technical report on trainee tracking which evaluated the data which has been compiled and submitted by the awardees, as well as made recommendations to NIEHS for the format and critical data elements for tracking site worker job occurrences in environmental remediation.

In addition to demographic and course data on trainees, Laborers-AGC will input data on work history that is obtained from the new refresher surveys. Other features will allow sites to track apprenticeship training, identify workers with various certifications, track refresher dates, create mailing lists, obtain individual trainee or class data, compare data sets, and create customized reports.

## **2.6. EPA Regional and Local Coordination**

Under the EPA Brownfields Program and the SuperJTI Program, OERR and the Regional EPA offices, especially EPA headquarters, Regions 1, 5, 6, and 9, were working with NIEHS to address specific projects. Some of those projects included the SuperJTI programs in Indianapolis, IN; Chicago, IL; Dallas, TX; and Washington, DC; as well as the 11 sites of the BMWTP. In particular, the Showcase Communities coordinators in Lowell, MA; East Palo Alto, CA; and Los Angeles, CA were substantially involved with the development and implementation of the programs.

## **2.7. Third Annual NIEHS National Trainers Exchange – April 10-11, 2000**

The third NIEHS National Trainers Exchange was held at the Maritime Institute in Baltimore, Maryland on April 10-11, 2000. The Exchange presented a great opportunity for trainers to explore new hazmat-related information and learn about participatory training methods. Over 175 people attended the Trainers Exchange from across the country. An initial session entitled ***NIEHS WORKER TRAINING PROGRAM AFTER 13 YEARS: WHERE WE'VE BEEN, WHERE WE'RE GOING, AND WHAT ROLE DO WE PLAY IN THE DEVELOPMENT OF A SUCCESSFUL FUTURE***, was presented by NIEHS staff members, set the tone for topics to be explored by the trainers.

The purpose of the Trainers Exchange was to bring together trainers from across the nation and from many different backgrounds so that they may exchange information on training techniques, new topics in hazardous waste training, and the challenges faced by trainers, among other issues. Nearly 200 trainers from across the country representing dozens of organizations participated. Response to this Trainers Exchange was so overwhelming that registration had to be closed weeks before the event. Participants attended to numerous presentations and workshops that displayed the latest developments in the delivery of training to select worker audiences. A summary of the Trainers Exchange and a compilation of the materials presented will be made available through the Clearinghouse web page in the near future.

The various workshops provided an opportunity to gain knowledge and skills in one particular aspect of developing an action-based training program. In a Forum Theater format, problems were shown in an unsolved form to a group; the group participants were invited to suggest and

act out solutions. This participatory training method gives participants an opportunity to practice and analyze a variety of strategies or tactics available for tackling relevant work related problems.

Roundtable discussions focused on the unique role that worker-trainers could play in facilitating collective action to address workplace health and safety issues. Trainers discussed the various ways that worker-trainers can facilitate action, both during and after training. Trainers also looked at the skills and institutional support that worker-trainers need in order to succeed and also at the obstacles that they face.

## **2.8. Technical Workshops on Lessons Learned in Advanced Training Technology in Safety and Health**

Worker Training and the Internet: A Resource and a Training Medium was the initial technical workshop held during April 1999 in Denver, Colorado to explore Advanced Training Technology (ATT). Both computer-based training and on-line distance learning have become invaluable resources for hazardous waste and emergency response training information. Worker access to the Internet has provided quick information on locations of hazardous waste sites, types of chemical hazards, methods of accident and exposure prevention, details about choosing and using personal protective equipment, suggestions about monitoring and surveillance, and a myriad of other topics of critical importance to worker safety and health. Many of these Internet resources are linked to the NIEHS Clearinghouse Web Page. This technical workshop and companion research paper survey resources are currently available on-line to aid in hazardous materials training and will examine efforts to evaluate the effectiveness of these training methods and resources.

### **ATT PILOTS LESSONS LEARNED WORKSHOP – MAY 2000**

The 1999 ATT Workshop Report served as the basis for the subsequent WETP competitive supplemental grants awarded to several of the grantees for the purpose of pilot applications of ATT. A “Lessons Learned Workshop on Advanced Training Technology in Health and Safety” was held on May 2, 2000 for the purpose of examining the progress, problems, issues, and lessons learned to date among the ATT supplemental awardees. Final Summary Reports from these awardees were submitted to WETP as part of the Annual Progress Reports in early July 2000.

ATT supplemental awardee organizations participating in the “Lessons Learned” workshop were: United Auto Workers (UAW), George Meany Center, Hazardous Materials Training Research Institute (HMTRI), International Union Operating Engineers (IUOE), and the International Association of Fire Fighters (IAFF) (Y2K supplemental awardee-Internet focused). The Laborers-AGC, although not an ATT supplemental awardee, also attended because they have devoted significant efforts in the ATT arena over the past few years. Representatives from the Idaho National Environmental and Engineering Laboratory (INEEL) Center for Performance Improvement, consultants to NIEHS WETP, also participated, presented, and discussed results of their recent survey of the ATT supplemental grantees. The purpose of this report is to present highlights of the progress achieved by the participating organizations, identify the lessons learned to date in the ATT pilots as expressed by the participants, provide the views of the INEEL consultants on the ATT pilot projects, and summarize the issues

discussed by the workshop participants during the open forum session that concluded the workshop.

The Lessons Learned report (<http://www.wetp.org/att/att.shtml>) is intended to provide a “mid-course” snap-shot of the WETP ATT pilot projects and to articulate individual factors of potential importance to the future advancement of ATT by the WETP. Information presented in the ATT supplemental awardees Summary Reports in early July and from the WETP INEEL consultants are a source of information as well.

### **ATT CAPACITY BUILDING WORKSHOP – OCTOBER 2000**

The culmination of the ATT Lesson Learned process was the conduct of an ATT workshop during the WETP Awardee Meeting held on October 16-18, 2000. The ATT Workshop was held on the afternoon of October 17th and the morning of October 18th.

Unlike previous WETP technical workshops, there was no “strawman” developed for this workshop. The two previously issued WETP-ATT Workshop reports and the recently issued WETP Guidance served to frame the basis for the workshop. The ATT self-assessment evaluations, conducted by the INEEL consultants, served as the basis for the breakout session organization. Another purpose of the workshop was to validate and construct the foundation for the “Support Program” activity established in the “Guidance,” this somewhat different approach was seen as an effective mechanism. Two “worksheets” “Barriers Analysis” and “Outcomes, Criteria and ATT Alternatives” further served to facilitate the breakout groups interactions and discussions.

The workshop provided a basis to focus on the following main objectives:

- Develop a more comprehensive understanding of the “self assessment survey” by each individual awardee organization.
- Provide an environment to discuss ATT in more detail with other awardees with differing levels of ATT experience and share details about the selection, application, benefits, difficulties, support requirements, barriers, and merits of ATT.
- Provide a basis upon which to both assess the appropriateness of the WETP ATT Guidance and the implementation of the “support program.”

### **2.9. Brownfields 2000 Conference: "Research & Regionalism: Revitalizing the American Community".**

Representatives from the NIEHS Worker Training Community attended the Brownfields 2000 Conference in Atlantic City, NJ on October 11, 2000. The theme of the conference was "Research & Regionalism: Revitalizing the American Community". The meeting provided an excellent setting to promote the WETP Minority Worker Training Program and Brownfields Minority Worker Training Program

The conference was presented by the Engineers' Society of Western Pennsylvania under contract with the US EPA. There were limited presentations from the job training, health & safety and public health community, however, NIEHS encouraged the BMWTP Awardees to attend various sessions of note within the worker training subject area. Those sessions were:

- \* Idle Property + Trained Workers = Job Opportunities
- \* Do No Harm: Protecting Public Health at Brownfields
- \* Environmental Justice: Communities in the Driver's Seat
- \* Hey Neighbor! Tapping All Brownfields Resources
- \* DealMakers and Risk Takers: Meet the Brownfields Developers
- \* Brownfields Showcase Communities: Models of Effective Local-Federal Collaboration
- \* Everybody Wins: The Superfund Redevelopment Initiative
- \* Marketplace of Ideas -Involving Youth (table) and Computer 3-Online Environmental Technology Training (computer)
- \* Poster Session -OSHA Requirements for Brownfields Site Operations, HUD-Diligence: Requirements and Competitive Criteria for HUD Funding and Public Health Issues in Brownfields Development

In addition to the sessions, a meeting of all of the NIEHS Brownfields MWTP recipients was held on Wednesday, October 11 from 9:00 am to 12 noon at the Atlantic City Convention Center in Room 202. NIEHS Awardees meet separately from 9:00 am to 10:30 am. During that time, the Awardees provided brief updates on past training initiatives and plans for the future. From 10:30 am to 12 noon, there was a joint session between NIEHS programs and the EPA Brownfields Job Demonstration Pilots for an opportunity to share and exchange information. Ms Beard, Mike Senew (HMTRI) and Myra Blakely (EPA) organized this session. There were approximately 30 people in attendance at this meeting.

## **2.10. Program Update for FY 2000 (Sep 1, 2000-Aug 31, 2001)**

### **2.11. Request for Applications (RFA) Development Process and New 5 Year Awards**

After substantive meetings with a number of EPA program staff during the past year and evaluation of past program accomplishments, NIEHS released the next formal program announcement for the WETP requesting applications to support training activities over the next five year period (FY 2000-2004). The EPA Request for Applications (RFA ES 99-009) included three distinct components for EPA supported programs: the Hazardous Waste Worker Training Program, the Minority Worker Training Program, and the Brownfields Minority Worker Training Program. A notice of availability was published in the NIH Guide to Grants and Contracts on Friday, August 28, 1999 announcing that NIEHS would be accepting new applications with a receipt date of November 19, 1999 and would be planning to fund 15 to 20 new cooperative agreements over the five year period, subject to the annual availability of funding. The formal program announcement describe the hazardous waste worker training program and its specific objectives, delineated grant application procedures, defined characteristics of the programs to be funded and established review criteria and procedures.

The EPA Request for Applications (RFA ES 99-009) referenced authorized funding availability in three program components including the Superfund Worker Training Program (\$20 million from EPA), a Minority Worker Training Program (\$3 million from EPA) and the Brownfields Minority Worker Training Program (\$3 million from EPA).

### **2.12. New Awards to Support Worker Training Activities**

By the November 19, 1999 deadline, the NIEHS Division of Extramural Research and Training

(DERT) had received twenty-nine (29) completed applications for worker training cooperative agreements. The total one year budget request of the 29 applicants was over \$60 million. Twenty-one (21) of the applications were for the EPA Superfund Worker Training Program requesting over \$45.7 million in initial year support. After an initial staff review, one of the applications was judged to be non-responsive to the RFA and returned to the applicant without further consideration.

The remaining 28 applications were then forwarded to members of the Special Emphasis Panels (SEP). This included twenty (20) applications for EPA-related funding and eight (8) applications for DOE-related funding. A Special Emphasis Panel for the NIEHS WETP RFA was convened on February 22-24, 2000 for EPA. Of the twenty responses to RFA ES-99-009 (EPA) which were reviewed, 4 were ranked in the outstanding range; 13 were considered in the excellent range; one was considered very good; one was considered good; and one application did not receive further consideration. Priority scores ranged from 113 through 239.

The National Environmental Health Sciences Advisory Council (NAEHSC) held a formal review of the WETP RFA process during its meeting in May 2000. The Council members found the program to be tackling important environmental health issues and voted to approve the formal peer review process.

Twenty million dollars of the FY 2000 funds were allocated to continue support for the Superfund Worker Training Program to train hazardous waste workers and emergency responders. Three million dollars of the FY 2000 funds were allocated to continue support for the MWTP and \$3 million to support BMWTP. As a result of the Interagency Agreements, NIEHS awarded:

- 17 EPA/HWWTP awardees received awards totaling \$19,040,000
- 6 EPA/MWTP awardees received awards totaling \$3,000,000
- 5 BMWTP awardees received awards totaling \$3,000,000

See Appendix 18 for detailed list of new awards. 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 generated program income for independently continuing their programs, and the carryover of unexpended funds from prior years. A description of the new programs is included as Appendix 19.

### **2.13. 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 20.

## **3 Conclusion**

The EPA/NIEHS WETP continues to play a critical role in assisting the EPA in implementing its primary objective of reducing and controlling risks to human health and the environment at

hundreds of hazardous waste sites across the nation. NIEHS has made significant contributions to the achievement of outcome measures in numerous EPA objectives, including: training of workers for RCRA Subtitle I programs in underground storage tank remediation, for hundreds of remedial action construction activities of National Priority List sites, for cleanup activities at DOE and DOD contamination sites and facilities; and for hundreds of workers and professionals for state-lead, tribal and Brownfields-related contaminated sites. New data collection requirements are being implemented to capture site-specific data on the nature of employment of trainees of the NIEHS programs. These will supplement the current rigorous data collection efforts which document specific measurable outcomes of HAZMAT training and which verify the retention of curricula learning objectives.

Since the beginning of the program, data have been collected to document the training accomplished, as well as to document the outcome and performance measures that have resulted from training delivery. The WETP has utilized "Cost per contact hour" as an important programmatic and fiscal yardstick to gauge the cost-effectiveness of awardee training delivery. Throughout the life of the program, the costs of training delivery have been driven down significantly. To assure compliance with the GPRA, the WETP will continue to supplement its program accomplishment measures with an ongoing analysis of training delivery costs.

An educational objective of virtually every NIEHS funded training program is to raise awareness, and concerns about hazardous materials, and to positively affect health and safety attitudes. Evaluators have reported a wide array of post-training enhancements in these areas for thousands of students. Perhaps the most dramatic evidence of training program success comes from specific information on post-training hazardous materials incidents. Both workers and managers who have experienced these incidents have related their perceptions of the program's impacts in improving response actions and saving lives, health and property.

Positive changes in measures of personal protective practices have been recorded by a number of evaluation programs. Evaluators have also documented systemic changes in work site programs, policies, plans and equipment that have been attributed to NIEHS training grant programs. Finally, a number of studies have looked at the ability of NIEHS funded training programs to catalyze additional site-based training. Several programs have documented that the compounded benefits of "secondary" training or sharing of information which has reached hundreds of thousands of co-workers including managers and supervisors. Evaluation of the programs will continue to be developed. It is important to conduct research in the area of evaluation to quantitatively determine the impact of the program and to determine the need for changes in the program.

The NIEHS worker training program must continue to meet the Superfund-related national environmental goals of protecting workers and communities from exposures to wastes at abandoned dumpsites and currently operating facilities and from exposures related to the storage, treatment and disposal of waste and chemical emergency response. These goals will be achieved by responding to the nation's changing needs for worker training in the area of hazardous waste operations and emergency response to hazardous materials. The NIEHS model programs will continue to encourage innovation for training difficult-to-reach populations in a cost-effective manner.

**Appendix 1: Thirteen-Year Summary**

<b>EPA HWWTP THIRTEEN-YEAR TRAINING SUMMARY</b>			
<b>YEAR</b>	<b>TOTAL COURSES</b>	<b>TOTAL WORKERS</b>	<b>TOTAL CONTACT HOURS</b>
1988	623	12,319	261,542
1989	1,353	29,827	551,832
1990	5,143	123,358	2,120,390
1991	2,731	58,637	878,673
1992	2,973	65,000	1,100,381
1993	2,651	56,000	789,226
1994	4,025	65,716	1,102,234
1995	4,667	81,245	1,391,440
1996	4,752	73,724	1,087,919
1997	4,212	79,976	1,041,792
1998	4,810	84,261	1,091,932
1999	3,980	74,013	954,935
2000	4,123	75,149	983,135
<b>TOTAL</b>	<b>46,043</b>	<b>879,225</b>	<b>13,355,431</b>

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**Appendix 2: FY 1999 Funding**

<b>EPA/NIEHS WORKER EDUCATION AND TRAINING AWARDS FOR BUDGET PERIOD 09/01/1999-08/31/2000 FY 1999 FUNDS</b>									
<b>EPA HWWTP</b>						<b>EPA MWTP</b>			
<b>AWARDEE</b>	<b>HWWTP 9/99 AWARD</b>	<b>Y2K 9/99 AWARD</b>	<b>ATT 9/99 AWARD</b>	<b>SJTI 9/99 AWARD</b>	<b>TOTAL 9/99 AWARD</b>	<b>MWTP 9/99 AWARD</b>	<b>Brownfields 9/99 AWARD</b>	<b>TOTAL 9/99 AWARD</b>	<b>9/99 TOTALS</b>
University of Alabama Birmingham	450,000				450,000				450,000
International Chemical Workers Union Council	1,700,000	100,000		55,000	1,855,000				1,855,000
International Association of Fire Fighters	550,000	100,000			650,000				650,000
George Meany Center for Labor Studies	440,700		100,000		540,700				540,700
University of Massachusetts, Lowell	700,000	100,000			800,000				800,000
University of California at Los Angeles	960,176				960,176				960,176
Laborers-AGC Education and Training	5,000,000				5,000,000	694,500	400,000	1,094,500	6,094,500
Paper, Allied-Industrial, Chemical and Energy Worker International Union	683,000				683,000				683,000
HMTRI Kirkwood Community College	300,000		100,000		400,000				400,000
Service Employees International Union	500,000				500,000				500,000
University of Medicine & Dentistry of New Jersey	711,682				711,682	483,916		483,916	1,195,598
International Union, United Auto Workers	625,000		100,000		725,000				725,000
International Union of Operating Engineers	1,133,000	100,000	90,000		1,323,000				1,323,000
University of Cincinnati	1,400,000				1,400,000				1,400,000
Center to Protect Workers' Rights	1,800,000				1,800,000	475,000	1,350,000	1,825,000	3,625,000
Jackson State University						300,000		300,000	300,000
AFSCME Training and Education Institute	550,000				550,000				550,000
Clark Atlanta University						525,000	590,000	1,115,000	1,115,000
DePaul University	774,000			78,000	852,000	511,584	670,000	1,181,584	2,033,584
<b>TOTAL</b>	<b>18,277,558</b>	<b>400,000</b>	<b>390,000</b>	<b>133,000</b>	<b>19,200,558</b>	<b>2,990,000</b>	<b>3,010,000</b>	<b>6,000,000</b>	<b>25,200,558</b>

**Appendix 3: Course Data by EPA Region**

<b>EPA HWWTP COURSE DATA BY EPA REGION 09/01/1999 - 08/31/2000</b>			
<b>EPA REGION</b>	<b>COURSES COMPLETED</b>	<b>WORKERS TRAINED</b>	<b>CONTACT HOURS</b>
Region 1	241	4,320	56,495
Region 2	941	16,800	176,082
Region 3	274	5,311	94,536
Region 4	434	7,850	108,446
Region 5	955	19,954	230,256
Region 6	114	1,502	23,228
Region 7	401	6,120	82,485
Region 8	136	1,676	24,606
Region 9	469	8,550	141,979
Region 10	158	3,066	45,023
<b>TOTAL</b>	<b>4,123</b>	<b>75,149</b>	<b>983,135</b>

**Appendix 4: Total Training by NIEHS Awardee**

<b>EPA/NIEHS WORKER EDUCATION AND TRAINING AWARDS TOTAL TRAINING FOR BUDGET PERIOD 09/01/1999-08/31/2000</b>			
<b>AWARDEE</b>	<b>COURSES COMPLETED</b>	<b>WORKERS TRAINED</b>	<b>CONTACT HOURS</b>
University of Alabama Birmingham	120	8,180	49,781
International Chemical Workers Union Council	206	4,381	68,919
International Association of Fire Fighters	57	1,192	31,708
George Meany Center for Labor Studies	16	345	7,560
University of Massachusetts, Lowell	65	843	13,064
University of California at Los Angeles	144	2,860	44,884
Laborers-AGC Education and Training	508	6,570	154,829
Paper, Allied-Industrial, Chemical and Energy Worker International Union	43	929	14,584
HMTRI Kirkwood Community College	800	10,879	123,922
Service Employees International	75	1,248	9,572
University of Medicine & Dentistry of New Jersey	589	11,106	111,084
International Union, United Auto Workers	62	1,344	18,536
International Union of Operating Engineers	738	15,497	199,792
University of Cincinnati	290	3,927	59,844
Center to Protect Workers' Rights	189	2,550	46,280
AFSCME Training and Education Institute	116	1,934	15,006
DePaul University	105	1,364	13,771
<b>TOTAL</b>	<b>4,123</b>	<b>75,149</b>	<b>983,135</b>

**Appendix 5: Target Populations**

<p align="center"><b>EPA HWWTP TARGET POPULATIONS FOR BUDGET PERIOD 09/01/1999-08/31/2000</b></p>						
<b>TARGET POPULATIONS</b>	<b># COURSES COMPLETED</b>	<b>% COURSES COMPLETED</b>	<b># WORKERS TRAINED</b>	<b>% WORKERS TRAINED</b>	<b># CONTACT HOURS</b>	<b>% CONTACT HOURS</b>
CERCLA Cleanup <sup>1</sup>	1,917	46%	32,445	43%	522,352	53%
Emergency Response	897	22%	16,572	22%	179,684	18%
Other Safety and Health	808	20%	17,647	23%	131,476	13%
Hazmat Transport	73	2%	1,115	1%	18,217	2%
RCRA/Industrial	367	9%	6,437	9%	115,670	12%
Asbestos Abatement	30	1%	469	1%	9,144	1%
Radiation	23	1%	356	0%	3,168	0%
Lead Abatement	8	0%	108	0%	3,424	0%
<b>FY 2000 TOTALS</b>	<b>4,123</b>	<b>100%</b>	<b>75,149</b>	<b>100%</b>	<b>983,135</b>	<b>100%</b>

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

**Appendix 6: Five-Year Summary of Training**

<b>NIEHS/EPA MINORITY WORKER TRAINING PROGRAM FIVE-YEAR SUMMARY OF TRAINING</b>			
<b>YEAR</b>	<b>STUDENTS TRAINED</b>	<b>PLACED IN JOBS</b>	<b>PERCENTAGE OF STUDENTS PLACED IN JOBS</b>
FY 1996	368	246	67%
FY 1997	310	193	62%
FY 1998	240	154	64%
FY 1999	365	233	64%
FY 2000	364	246	68%
<b>TOTAL</b>	<b>1,647</b>	<b>1,072</b>	<b>65%</b>

**Appendix 7: Total Training by MWTP Awardee**

<b>EPA/NIEHS MINORITY WORKER TRAINING PROGRAM WORKER EDUCATION AND TRAINING AWARDS TOTAL TRAINING FOR BUDGET PERIOD 09/01/1999-08/31/2000</b>			
<b>AWARDEE</b>	<b>COURSES COMPLETED</b>	<b>STUDENTS TRAINED</b>	<b>CONTACT HOURS</b>
University of Medicine & Dentistry of New Jersey	16	30	20,921
Laborers-AGC Education and Training	48	93	48,229
Center to Protect Workers' Rights	43	89	18,158
DePaul University	33	63	11,965
Jackson State University	17	42	12,010
Clark Atlanta University	36	47	15,740

<b>TOTAL</b>	<b>193</b>	<b>364</b>	<b>127,023</b>
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**Appendix 8: Five-Year Summary of Students Trained per Awardee**

<b>NIEHS/EPA MINORITY WORKER TRAINING PROGRAM: (FIVE-YEAR SUMMARY OF STUDENTS TRAINED PER AWARDEE)</b>						
<b>AWARDEE</b>	<b>FY 1996 STUDENTS TRAINED</b>	<b>FY 1997 STUDENTS TRAINED</b>	<b>FY 1998 STUDENTS TRAINED</b>	<b>FY 1999 STUDENTS TRAINED</b>	<b>FY 2000 STUDENTS TRAINED</b>	<b>TOTAL</b>
University of Medicine & Dentistry of New Jersey	26	25	25	30	30	136
Laborers-AGC Education and Training	50	41	32	96	93	312
Alice Hamilton Occupational Health Center	46	20	N/A	N/A	N/A	66
Center to Protect Workers' Rights	60	139	126	100	89	514
DePaul University	70	34	22	69	63	258
Jackson State University	86	27	N/A	25	42	180
Clark Atlanta University	30	24	35	45	47	181
<b>TOTAL</b>	<b>368</b>	<b>310</b>	<b>240</b>	<b>365</b>	<b>364</b>	<b>1,647</b>

**N/A – No training was performed during this period.**

**Appendix 9: Five-Year Summary of Employment per Awardee**

**NIEHS/EPA MINORITY WORKER TRAINING PROGRAM:  
FIVE-YEAR SUMMARY OF EMPLOYMENT PER AWARDEE**

<b>AWARDEE</b>	<b>FY 1996 TOTAL EMPLOYMENT</b>	<b>FY 1997 TOTAL EMPLOYMENT</b>	<b>FY 1998 TOTAL EMPLOYMENT</b>	<b>FY 1999 TOTAL EMPLOYMENT</b>	<b>FY 2000 TOTAL EMPLOYMENT</b>	<b>TOTAL</b>
University of Medicine & Dentistry of New Jersey	16	12	18	14	25	85
Laborers-AGC Education and Training	27	25	28	80	71	231
Alice Hamilton Occupational Health Center	38	11	N/A	N/A	N/A	49
Center to Protect Workers' Rights	54	85	63	45	54	301
DePaul University	56	26	21	48	34	185
Jackson State University	39	17	N/A	19	29	104
Clark Atlanta University	16	17	24	27	33	117
<b>TOTAL</b>	<b>246</b>	<b>193</b>	<b>154</b>	<b>233</b>	<b>246</b>	<b>1,072</b>

N/A – No training was performed during this period.

**Appendix 10: MWTP Summary of Type and Number of Courses**

<b>NIEHS/EPA MINORITY WORKER TRAINING PROGRAM SUMMARY OF TYPE AND NUMBER OF COURSES FOR BUDGET PERIOD 09/01/1999-08/31/2000</b>	
<b>COURSE NAME</b>	<b>NUMBER OF COURSES</b>
Adult CPR	4
Asbestos Abatement Worker Basic	19
Asbestos Abatement Worker Refresher	5
Basic Construction Skills	10
Basic Electrical Training	1
Basic First Aid	4
Basic Math Skills	12
Basic Reading/Writing Skills	9
Basic Superfund Site Worker	24
Confined Space	7
Environmental Justice	6
Environmental Preparation	5
Environmental Sampling	1
GED Training and Certification	3
General Construction Safety	11
General Industry Safety	1
Hazard Communication	1
Hazardous Materials Transportation Awareness	1
Lead Abatement Worker Basic	22
Lead Abatement Worker Refresher	2
Life Skills	19
Logout-Tagout	2
Mentoring/Career Guidance	10
Physical Fitness	9
Radiation Protection Worker/Basic	2
Scaffold	1
Site Worker Refresher	1
Underground Storage Tank Basic Worker	1
<b>TOTAL</b>	<b>193</b>

**Appendix 11: MWTP Demographics**

<b>NIEHS/EPA MINORITY WORKER TRAINING PROGRAM: DEMOGRAPHICS FOR BUDGET PERIOD 09/01/1999-08/31/2000</b>								
<b>STUDENTS</b>	364							
<b>AGE</b>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>
	28	46	53	50	42	38	40	67
<b>ETHNICITY</b>	<u>BLACK</u>	<u>HISPANIC</u>	<u>ASIAN</u>	<u>AMERICAN INDIAN</u>			<u>PAC. ISLANDER</u>	
	334 (92%)	23 (6%)	4 (1%)	3 (1%)			0 (0%)	
<b>GENDER</b>	<u>MALE</u>				<u>FEMALE</u>			
	308 (85%)				56 (15%)			

**Appendix 12: Two-Year Summary of Students Trained per Awardee**

<b>NIEHS/EPA BROWNFIELDS MINORITY WORKER TRAINING PROGRAM: (TWO-YEAR SUMMARY OF STUDENTS TRAINED PER AWARDEE)</b>			
<b>AWARDEE</b>	<b>FY 1999 STUDENTS TRAINED</b>	<b>FY 2000 STUDENTS TRAINED</b>	<b>TOTAL</b>
Laborers-AGC Education and Training	20	20	40
Center to Protect Workers' Rights	270	250	520
DePaul University	75	126	201
Clark Atlanta University	41	44	85
<b>TOTAL</b>	<b>406</b>	<b>440</b>	<b>846</b>

**Appendix 13: Two-Year Summary of Employment per Awardee**

<b>NIEHS/EPA BROWNFIELDS MINORITY WORKER TRAINING PROGRAM: (TWO-YEAR SUMMARY OF EMPLOYMENT PER AWARDEE)</b>			
<b>AWARDEE</b>	<b>FY 1999 TOTAL EMPLOYMENT</b>	<b>FY 2000 TOTAL EMPLOYMENT</b>	<b>TOTAL</b>
Laborers-AGC Education and Training	15	13	28
Center to Protect Workers' Rights	166	154	320
DePaul University	62	89	151
Clark Atlanta University	20	19	39
<b>TOTAL</b>	<b>263</b>	<b>275</b>	<b>538</b>

**Appendix 14: Two-Year Summary of Training**

<b>NIEHS/EPA BRONWFIELDS MINORITY WORKER TRAINING PROGRAM TWO-YEAR SUMMARY OF TRAINING</b>			
<b>YEAR</b>	<b>STUDENTS TRAINED</b>	<b>PLACED IN JOBS</b>	<b>PERCENTAGE OF STUDENTS PLACED IN JOBS</b>
FY 1999	406	263	65%
FY 2000	440	275	63%
<b>TOTAL</b>	<b>846</b>	<b>538</b>	<b>64%</b>

**Appendix 15: BMWTP Demographics**

<b>NIEHS/EPA BROWNFIELDS MINORITY WORKER TRAINING PROGRAM: DEMOGRAPHICS FOR BUDGET PERIOD 09/01/1999-08/31/2000</b>					
<b>STUDENTS</b>	440				
<b>AGE</b>	<u>18-25</u> 147	<u>26-35</u> 158	<u>36-45</u> 102	<u>46-55</u> 27	<u>56+</u> 6
<b>ETHNICITY</b>	<u>BLACK</u> 284 (65%)	<u>HISPANIC</u> 101 (23%)	<u>ASIAN</u> 12 (3%)	<u>AMERICAN INDIAN</u> 24 (5%)	<u>PAC. ISLANDER</u> 19 (4%)
<b>GENDER</b>	<u>MALE</u> 344 (78%)			<u>FEMALE</u> 96 (22%)	

**Appendix 16: Total Training by BMWTP Awardee**

<b>EPA/NIEHS BROWNFIELDS MINORITY WORKER TRAINING PROGRAM TOTAL TRAINING FOR BUDGET PERIOD 09/01/1999-08/31/2000</b>			
<b>AWARDEE</b>	<b>COURSES COMPLETED</b>	<b>STUDENTS TRAINED</b>	<b>CONTACT HOURS</b>
Laborers-AGC Education and Training	17	20	7,654
Center to Protect Workers' Rights	94	250	60,082
DePaul University	63	126	22,962
Clark Atlanta University	29	44	15,082
<b>TOTAL</b>	<b>203</b>	<b>440</b>	<b>105,780</b>

**Appendix 17: Brownfields Summary of Type and Number of Courses**

<b>NIEHS/EPA BROWNFIELDS MINORITY WORKER TRAINING PROGRAM SUMMARY OF TYPE AND NUMBER OF COURSES FOR BUDGET PERIOD 09/01/1999-08/31/2000</b>	
<b>COURSE NAME</b>	<b>NUMBER OF COURSES</b>
Adult CPR	8
Asbestos Abatement Supervisor	3
Asbestos Abatement Worker Basic	15
Asbestos Abatement Worker Refresher	2
Asbestos Inspector Certification	1
Basic Construction Skills	17
Basic Electrical Training	3
Basic First Aid	6
Basic Math Skills	13
Basic Reading/Writing Skills	6
Basic Superfund Site Worker	18
Confined Space	8
Environmental Justice	6
Environmental Preparation	5
Environmental Sampling	3
Environmental Technician	2
GED Training and Certification	3
General Construction Safety	14
Hazard Communication	3
Lead Abatement Supervisor	3
Lead Abatement Worker Basic	12
Lead Abatement Worker Refresher	1
Life Skills	24
Lockout/Tagout	4
Mentoring/Career Guidance	10
Physical Fitness	5
Radiation Protection Worker/Basic	1
Scaffold	1
Site Worker Refresher	1
Underground Storage Tank Basic Worker	5
<b>TOTAL</b>	<b>203</b>

**Appendix 18: FY 2000 Funding**

<b>EPA/NIEHS WORKER EDUCATION AND TRAINING AWARDS FOR BUDGET PERIOD 09/01/2000-08/31/2001 FY 2000 FUNDS</b>						
	<b>EPA HWWTP</b>		<b>EPA MWTP/BMWTP</b>			
<b>AWARDEE</b>	<b>HWWTP 9/00 AWARD</b>	<b>TOTAL 9/00 AWARD</b>	<b>MWTP 9/00 AWARD</b>	<b>Brownfields 9/00 AWARD</b>	<b>TOTAL 9/00 AWARD</b>	<b>9/00 TOTALS</b>
University of Alabama Birmingham	477,419	477,419				477,419
International Chemical Workers Union Council	1,778,900	1,778,900				1,778,900
International Association of Fire Fighters	648,265	648,265				648,265
George Meany Center for Labor Studies	559,492	559,492				559,492
University of Massachusetts, Lowell	924,689	924,689				924,689
University of California at Los Angeles	994,387	994,387				994,387
Laborers-AGC Education and Training	3,963,981	3,963,981	884,034	638,262	1,522,296	5,486,277
Paper, Allied-Industrial, Chemical and Energy Worker International Union	1,159,983	1,159,983				1,159,983
HMTRI Kirkwood Community College	600,384	600,384				600,384
Service Employees International Union	463,229	463,229				463,229
University of Medicine & Dentistry of New Jersey	928,857	928,857	555,486	502,084	1,057,570	1,986,427
International Union, United Auto Workers	723,861	723,861				723,861
International Union of Operating Engineers	1,469,323	1,469,323				1,469,323
University of Cincinnati	1,571,570	1,571,570				1,571,570
Center to Protect Workers' Rights	1,382,832	1,382,832	635,283	853,769	1,489,052	2,871,884
Jackson State University			46,549		46,549	46,549
Xaiver University			389,864	565,744	955,608	955,608
AFSCME Training and Education Institute	702,441	702,441				702,441
DePaul University	690,387	690,387	488,784	440,141	928,925	1,619,312
<b>TOTAL</b>	<b>19,040,000</b>	<b>19,040,000</b>	<b>3,000,000</b>	<b>3,000,000</b>	<b>6,000,000</b>	<b>25,040,000</b>

## APPENDIX 19:

### Description of the New EPA Worker Health and Safety Training Awardees

#### **AFSCME Training and Education Institute**

The American Federation of State, County, and Municipal Employees (AFSCME) Training and Education Institute (ATEI) is a non-profit organization whose purpose is to develop workers' ability to successfully and safely respond to unplanned releases of hazardous substances and to participate in efforts to improve workplace safety. AFSCME-represented occupations likely to respond to emergencies include: road, bridge, water sewer, waste water treatment, sanitation, public safety and security, and hospitals, which comprise about 40 percent of AFSCME's 1.3-million members. ATEI plans to train over 5,700 workers for the five-year project in programs mandated by Occupational Safety and Health Administration's (OSHA's) Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard and other related activities including confined space entry and trenching safety, along with annual refreshers. The California-Arizona Consortium will provide training to Spanish-speaking workers. There will be collaboration with the United Auto Workers (UAW) to deliver training where both unions represent workers.

The successful peer trainer program will be expanded to reach more workers and target the train-the-trainer programs in locations with large groups of minority or underserved workers. There will be collaborations with other grantees in three trainer and evaluator development workshops each year. A Evaluation Team has been formed and at work, and includes peer trainers, training staff, (AFSCME) and evaluators (University of Massachusetts at Lowell). To be formed is a Curriculum Task Force composed of peer trainers, evaluation staff, ATEI staff, and others to fully integrate peer trainers into the program.

There will be coordination with the consortium member, the Coalition of Black Trade Unionists, (CBTU), to provide training on hazardous materials and community right to know at CBTU's annual convention and community meetings, and ATEI will provide technical assistance to community groups. ATEI will utilize advanced training technologies. Workshops will be designed and delivered on accessing health and safety resources on the Internet. The Hazardous Materials Training and Research Institute/Community College Consortium will assist in: expanding and evaluating the use of AFSCME's web page for health and safety and in conducting several teleconferences on health and safety issues related to hazardous materials exposure.

#### **Hazardous Materials Training and Research Institute (HMTRI)**

The Community and College Consortium for Health and Safety Training (CCCHST) membership, sponsored by the Hazardous Materials and Research Institute (HMTRI) has a training components for the EPA Hazardous Waste Worker Training Program (HWWTP). The CCCHST HWWTP consists of 100 partners offering hazardous materials instruction (HAZWOPER and related Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120 training) in most states of the nation through a train-the-trainer model program. CCCHST instructors, prepared by HMTRI, will annually train 10,000 workers, technicians, and

supervisors to protect themselves and their communities from exposure to hazardous materials encountered during waste site clean-up, Brownfields redevelopment, in the transportation of hazardous materials, and in the response to spills and releases of hazardous materials. CCHST membership consists of community colleges partnered with business and industry, universities, and community-based organizations offering a response to the national training need for hazardous waste workers, emergency response personnel.

### **Service Employees International Union (SEIU) Education and Support Fund**

The SEIU Education and Support Fund (SEIU ESF) EPA Hazardous Waste Worker Training program provides hazardous materials awareness and operational response training. The SEIU ESF also works with the New York Committee for Occupational Safety and Health (NYCOSH) as a subcontractor to assist in the program in the Eastern U.S. Through the unique access provided to the project by the national network of local unions in the Service Employees International Union, the project prevents acute and chronic injury and illness among workers who are exposed to hazardous materials and wastes in emergency situations. The project will accomplish this by training workers in eight-hour awareness-level emergency response, in four-hour awareness-level refreshers, and in 24-hour operations-level emergency response. The project will also train workers in a new Internet-based four-hour general industry safety course on researching hazardous materials and improving systems of safety. The target population is employed in a wide range of jobs in acute-care hospitals, road maintenance, and waste water treatment. SEIU represents approximately 285,000 workers in acute care hospitals, 10,000 workers in highway maintenance and 7,500 workers in wastewater treatment. The target population is employed in 40 states but concentrated in California, New York, Maine, and New Hampshire. Training is conducted by an existing team of specially-trained SEIU-provided rank-and-file worker-trainers.

### **University of California at Los Angeles**

The California-Arizona Consortium, consisting of four full-member universities and the Alaska Health Project in collaboration with organizations provides hazardous waste health and safety training for workers in Environmental Protection Agency (EPA) Region IX (California, Arizona, Nevada and the Pacific Islands) and Alaska.

A full range of Hazardous Waste Operations and Emergency Response (HAZWOPER) courses includes: hazardous waste cleanup and investigation, supervisor and refresher courses; treatment, storage and disposal (TSD) facility and refresher courses; first responder operations, incident commander, refresher, awareness course; Department of Transportation (DOT) transportation and refresher courses; confined space courses; and hazard awareness courses. The Consortium provides two train-the-trainer courses for Maquiladora workers, train-the-trainer courses for NIEHS trainers of hazardous waste workers, and two national trainers' exchanges.

Some of the major objectives of the grant, beyond the specific direct training objectives includes: (1) increase access to hazardous waste training for workers and supervisors who are non-English speaking and/or who have limited literacy skills, through innovative outreach, multilingual and limited literacy materials, and targeted training; (2) train community-based environmental organizations so that they can go on hazardous waste sites and monitor

hazardous waste assessments and cleanups in their neighborhoods; (3) expand outreach and training to reach, through community based and tribal organizations, workers of color who handle hazardous waste/materials at various hazardous waste/industrial sites throughout the Southwest, in the Pacific Trust Territories, Alaska, and along the Mexican border.

### **University of Medicine & Dentistry of New Jersey -- School of Public Health**

The New Jersey/New York Hazardous Materials Worker Training Center (NJ/NY HMWTC) provides training under the EPA Hazardous Waste Worker Training Program (HWWTP), the DOE Worker Training Program, the EPA Minority Worker Training Program (MWTP) and the Brownfields Minority Worker Training Program (BMWTP). For each program area, the NJ/NY HMWTC has established relationships with the target populations and represent unions, academia, labor, private and public sectors. A major objective of the center is to prevent and reduce disability, morbidity and mortality due to potential risks during hazardous waste operations and emergency response through effective health and safety training. Additionally, this center aims to improve the systematic collection, analysis and dissemination of data to increase the understanding of health status among various populations, especially minorities, in Federal Region II. The thousands of Federal and State Superfund sites in Region II, where cleanup is either planned or in progress, clearly demonstrate a large population in need of health and safety training. Center members for the EPA-HWWT program include: the University of Medicine and Dentistry of New Jersey (UMDNJ), Hunter College, New Jersey State Police (NJSP), New York Committee for Occupational Safety and Health (NYCOSH), New York Carpenters Labor Technical College, and the University at Buffalo.

Program objectives for the MWTP and BMWTP are similar, to prepare and place people of color in the expanding area of environmental cleanup, assessment and construction. Center members for these programs are the UMDNJ, New York City Environmental Justice Alliance, New York Carpenters Labor Technical College, and various community based organizations (CBOs). These two programs differ specifically in their target populations. The MWTP program trains young people of color from the New York City area and the BMWTP trains people of color from two Brownfields sites (i.e., Glen Cove, NY; Newark, NJ) in a comprehensive 20-week "pre apprentice" training program, certifying them to conduct a range of environmental work.

### **University of Alabama Birmingham**

University of Alabama Birmingham (UAB) provides training under the EPA Hazardous Waste Worker Training Program (HWWTP). UAB provides courses to three populations of workers who share the need for general and specialized training in topics related to Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response. The overall goal is to improve the health and safety of members of the Communications Workers of America (CWA), Native Americans, and fire fighters, by helping them reduce exposures to hazardous chemicals. Classes include Hazardous Materials Awareness, Operations, and Technician, adapted for the three different training populations; SCBA Fit Testing for Hazardous Atmospheres; Air Surveillance in Chemical Emergency Incidents; Health Effects of Chemical Exposure; Confined Space Entry and Basic Rescue; Advanced Confined Space Rescue; Hazardous Materials Waste Handling; and Worker

Training Methods. Classes are taught in train-the-trainer mode, and materials provided for workplace training by the participants and for outreach to their respective communities.

### **International Association of Fire Fighters**

The International Association of Fire Fighters (IAFF) provides training under the EPA Hazardous Waste Worker Training Program (HWWTP). Under the EPA Program, the IAFF executes a training plan that strongly and forcefully emphasizes occupational safety and health and OSHA defined responder training as a cornerstone of professional and effective emergency response. This plan relies heavily on an efficient train-the-trainer approach; uses a combination of the Internet, advanced training technologies and regional programs; and provides the estimated 475 annual attendees with the knowledge and the tools to implement this program in local fire/rescue departments in and around EPA National Priority List (NPL) sites and in other identified areas.

The IAFF is the only national organization serving professional fire fighters and enjoys longstanding training partnerships and access with fire/rescue departments across the US. The training curricula are current, focused, and ready to be delivered. In addition, there is a highly regarded 100-member professional fire fighter/paramedic instructor team trained in using facilitation techniques and problem-based learning to reinforce responder safety and health. It is a state-of-the-art program with a focused safety and health message provided by experienced, committed instructors.

### **International Chemical Workers Union Council**

International Chemical Workers Union Council (ICWUC) in cooperation with a multi-union consortium, provides training under the EPA Hazardous Waste Worker Training Program (HWWTP). The long-term organizational goal of the ICWUC Consortium is to institutionalize its model program within the member unions, Councils, and through their companies' support. The immediate educational goal is to continue delivering chemical emergency response training (Occupational Safety and Health Administration 1910.120, paragraph q) to thousands of industrial workers with collateral duty who respond to a variety of emergencies and thousands of DOE workers who are daily exposed to a wide variety of hazardous substances. The long-term educational goal of the consortium is to provide students with the confidence, tools and problem solving skills to identify inadequacies in their facilities' hazardous materials programs and chemical emergency response programs.

### **International Union, UAW**

The International Union, United Auto Workers (UAW) provides training under the EPA Hazardous Waste Worker Training Program (HWWTP). The UAW in conjunction with the University of Michigan trains employees in job assignments requiring response to chemical emergencies or handling of hazardous wastes, and to evaluate the impact of that training on improving worker safety and health. UAW's primary target sector is 3,000 smaller UAW-represented establishments with about 375,000 members, emphasizing the automobile, metalworking, and transportation equipment. This high-risk industrial sector reports production of about 180,000 tons of toxic waste per year, and has been further implicated by recent studies showing occupational cancer and respiratory disease in many of the main production processes. The project also targets public sector UAW members in wastewater treatment and transportation assignments, and minority and underserved community residents who work in or

live near hazardous waste sites or industrial facilities. The ultimate goal of the project is to reduce adverse health effects and injuries among the target populations by promoting hazard recognition, improved facility emergency response programs and work practices, prevention of uncontrolled chemical releases, and community and worker input into emergency response planning. A second goal is to develop and deliver emergency response curricula using innovative training methods, peer trainers, and participatory techniques, and demonstrate the impact of these on safety and health so as to promote the implementation of such model programs beyond the target trainee population.

### **DePaul University**

The DePaul University provides training under the EPA Hazardous Waste Worker Training Program (HWWTP), the EPA Minority Worker Training Program (MWTP) and the Brownfields Minority Worker Training Program (BMWTP). The long-term objective of the DePaul Consortium is to prevent work-related harm by training workers in how to best protect themselves and their communities. For its EPA Program, DePaul has new initiatives, which include Hazardous Waste Operations and Emergency Response (HAZWOPER)/Instrumental Enrichment integrated curriculum, and the Train-the-Trainer Program.

Under the MWTP, DePaul strives to imbue at-risk minority youths with an awareness of environmental health issues while training them to be gainfully employed in high-growth and high-paying jobs, to work safely, and to educate members of their communities. DePaul expands its successful curriculum design in Chicago and Washington, D.C. DePaul BMWTP continues its successful curriculum design in Chicago, Washington, D.C. and Kansas City. These cities are targeted because there are significant minority youth populations who face multiple barriers to employment and who live in or near environmentally blighted communities; real opportunities for gainful employment in the area; and qualified local collaborative partners who can ensure effective service delivery. The new initiatives by DePaul for the MWTP and BMWTP include the comprehensive integration of traditional technical training with the educational theories and practices of Instrumental Enrichment (IE) and Mediated Learning Experience (MLE); and the development of advanced training technologies.

### **University of Cincinnati**

Under the EPA The Midwest Consortium provides training under the EPA Hazardous Waste Worker Training Program (HWWTP) workers who may be exposed to hazardous materials while performing jobs covered by the Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) standard in eight states of the Midwest (Illinois, Indiana, Kentucky, Michigan, Minnesota, Ohio, Tennessee and Wisconsin). The consortium specific aims are to serve the needs of the region through interactive, hands-on training developed to meet the needs of adult learners employed in jobs covered by HAZWOPER; to document the change in and retention of knowledge and skills as a result of training; to evaluate the impact of training and residents after return to the workplace; to expand the Partnership Program to train trainers in communities where hazardous materials exposures may occur; and to fully integrate advanced training technologies into program content and delivery.

## **George Meany Center for Labor Studies**

The George Meany Center for Labor Studies (GMCLS), in cooperation with eight rail unions, the AFL-CIO Department of Occupational Safety and Health, and the AFL-CIO Transportation Trades Department, has a training component for the EPA-HWWT program. The GMCLS' long-term aims are to facilitate the safe transport of hazardous materials throughout the United States by educating rail workers to the dangers posed by hazardous materials (hazmats) and the proper safety techniques for responding to emergency situations; encourage workplace and community safety and environmental protection, generally by raising the level of worker awareness and involving employees directly in health and safety implementation; expand training efforts to underserved populations by special efforts to reach out to Native Americans and those of limited English-speaking skills; and enhance access to information about hazardous materials through expanded use of advanced technologies. These efforts will be embodied in the training program, which is designed to meet fully both Department of Transportation (DOT), and Occupational Safety and Health Administration (OSHA) standards for worker health and safety.

The program is national in scope and is to be available to all types and categories of railroad workers throughout the country. Specific geographic targets will be established in California, Arizona, Texas, and Illinois to coincide with high concentrations of underserved Native American workers and employees with limited English-speaking skills. New initiatives that are part of this program are expanded use of advanced technology and provision of computer access to make hazardous materials-safety information available online and to make possible distance learning of training course work; and enhancement of train-the-trainer efforts by establishment of a certificate trainer program through the National Labor College; and development of multi-grantee efforts through increased coordination and expansion of joint efforts.

## **University of Massachusetts, Lowell**

The New England Consortium (TNEC) provides training under the EPA Hazardous Waste Worker Training Program. TNEC is a unique hazardous waste training coalition based at the University of Massachusetts Lowell which includes five grassroots labor-based Committees on Occupational Safety and Health groups: ConnectiCOSH, MassCOSH, NHCOSH, RICOSH, and Western MassCOSH. Training is provided in five New England states: Connecticut, Massachusetts, New Hampshire, Rhode Island and Vermont. The Consortium focuses on these private and public sector job categories: environmental consultants and engineers, hazardous waste site workers and supervisors, industrial and public emergency responders, inspectors, and site investigators. Included in this student base are annual 40-hour training courses for three Brownfields Minority Worker Training Programs targeting young adults from underserved urban communities.

TNEC has incorporated an ATT component into its current Refresher training program that allows students to research relevant health and safety information through a series of web-based links. Each student receives a floppy disk with the same set of links and some basic instructional information on how to utilize them. Trainers walk the students through an exercise in navigating these links using a lap top computer and an in-focus (LCD) projector. This exercise can also be adapted for use in other courses. TNEC, in cooperation with the

Computer Sciences Department at UML, is expanding on that exercise. The Consortium is in the process of developing a new web-based advanced training technology (ATT) program to incorporate into its current training multi-day course as an ongoing set of reinforcing exercises. The ATT program will feature a web-based simulation activity allowing users to interact with each other as they address computer-generated hazardous waste and/or emergency response situations. This ATT program will also include communication and training access to TNEC, and an improved evaluation and feedback mechanism for tracking training effectiveness.

Working with the COSH organizations, TNEC also will hold 8-hour blocks of community-based environmental literacy and awareness training courses in the New England states for workers, residents, and public health officials as a means of promoting new environmental justice linkages and additional Hazardous Waste Operations and Emergency Response (HAZWOPER) training throughout the region.

### **Center to Protect Workers' Rights**

The Center to Protect Workers' Rights (CPWR) has training components for the EPA Hazardous Waste Worker Training Program (HWWTP), the EPA Minority Worker Training Program (MWTP), and Brownfields Minority Worker Training Program (BMWTP). Under the EPA Program, the Construction Consortium long-term objective is to ensure that craft workers who are called upon to work in EPA Superfund environments, have the skills, knowledge and confidence they need to protect their health and safety, and that of their co-workers, their families, their communities, and the environment. With CPWR as the lead and coordinating organization, the consortium, which has recently grown to include ten international/national union members with the addition of the Electrical Workers, Plumbers and Pipefitters, and Bricklayers, provides effective training for its members who may work at EPA sites. The consortium, with its nationwide network of over 1,700 spacious and well-equipped training centers, highly skilled national and local peer-trainers, containerized, craft-specific, and up-to-date training equipment, and centralized training support organization, responds rapidly and effectively to requests for training from anywhere in the country.

The CPWR MWTP, in cooperation with four community-based organizations located in New Orleans, LA; Oakland, CA; Denver, CO; and Baltimore, MD through International Union of Painters and Allied Trades (IUPAT) prepares community residents to become involved in the cleanup and restoration of the communities in which they live and to attain self-sufficiency by providing long-term career-oriented construction trades training and employment opportunities. The MWTP goals are to (1) provide pre-apprenticeship construction skills training to ethnic minorities, ages 18-25; (2) provide six to nine weeks of life skills and job readiness training for program participants to be prepared to enter the six weeks of construction and three weeks of environmental training courses; build upon community coalitions which have been created with community based organizations, unions, city government officials, regional EPA offices and others to ensure involvement of MWTP operations in Brownfields cleanup and development activities and at Superfund sites; (3) provide on an annual basis environmental worker courses for trainees: three hazardous waste worker courses, four lead abatement worker courses, two asbestos abatement worker courses; and two confined space courses; (4) provide on an on-going basis to MWTP cities technical assistance to enhance program operations and identify other community resources to supplement program implementation; and (5) monitor and evaluate each MWTP's progress to ensure goals are attained.

The CPWR BMWTP, in cooperation with four community-based organizations located East Palo Alto, CA; Los Angeles, CA; Salt Lake City, UT and St. Paul, MN prepares community residents to become involved in the cleanup and restoration of the communities in which they live and to attain self-sufficiency by providing long-term career-oriented construction trades training and employment opportunities. The BMWTP goals are to (1) provide pre-apprenticeship construction skills training to ethnic minorities; (2) provide six to nine weeks of life skills and job readiness training for program participants to be prepared to enter the six weeks of construction and three weeks of environmental training courses; (3) build upon community coalitions which have been created with community based organizations, unions, city government officials, regional EPA offices and others to ensure involvement of BMWTP operations in Brownfields cleanup and development activities; (4) provide on an annual basis environmental worker courses that include four hazardous waste worker courses, three lead abatement worker courses, four asbestos abatement worker courses; and one confined space courses; (5) provide on an on-going basis to BMWTP cities technical assistance to enhance program operations and identify other community resources to supplement program implementation; and (6) monitor and evaluate each BMWTP's progress to ensure goals are attained.

### **International Union of Operating Engineers**

The International Union of Operating Engineers (IUOE) provides training under the EPA Hazardous Waste Worker Training Program (HWWTP). IUOE has developed a training plan to provide hazardous materials health and safety training to its membership, in particular heavy equipment operators and stationary engineers. Under the EPA program, the overall aim is to: annually refresh master instructors and train new instructors to maintain a viable cadre of peer instructors nationwide; annually refresh operating engineers and train new students in the full site worker course so as to maintain a certified population of heavy equipment operators and stationary engineers to work at hazardous waste sites across the country; continue to use a train-the-trainer approach to produce qualified peer-trainers; use refresher training as the primary vehicle for alerting operating engineers working on hazardous waste sites to the most recent developments; and expand the use of advanced training technologies to instructors and students.

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

The Paper, Allied-Industrial, Chemical and Energy Worker International Union (PACE) provides training under the EPA Hazardous Waste Worker Training Program (HWWTP). PACE's specific goals for EPA are to provide courses meeting the requirements of OSHA 29 CFR 1910.120 consisting of 8-hour, 16-hour, 24-hour, and 40-hour courses; courses addressing environmental justice and health disparities consisting of 15 eight-hour community-labor workshops per year; and trainer development courses including the training of trainers, trainer development and trainer evaluation workshops. PACE has new four new initiatives to increase the program's impact. They are advanced training technology initiative to use web-radio and a web site for worker-trainer development and evaluation; community-labor initiatives to conduct workshops that bring together environmental justice communities living near toxic facilities and PACE members working in those facilities; integrated training sites initiative to provide

1910.120 training that integrates into facility-wide systems of safety programs; and multi-grantee trainer, curriculum, and evaluation initiative that brings together five union Worker Education and Training Program (WETP) grantees shared curricula, training and evaluation innovations.

### **Laborers-AGC Education and Training**

The Laborers-AGC Education and Training Fund (Laborers-AGC) and the International Brotherhood of Teamsters (IBT) for the EPA Hazardous Waste Worker Training Program (HWWTP); Young Community Developers, Greater Dwight Development Corp., Make Ready, Inc., and six affiliated training funds for the the EPA Minority Worker Training Program (MWTP); and the University of Massachusetts Lowell, Detroit Works Partnership, and two affiliated training funds for the EPA Brownfields Minority Worker Training Program (BMWTP) are in partnership to train workers.

The HWWTP train workers who are employed or have the potential to work at hazardous waste sites or who are at risk of exposure to hazardous waste on the job. The program includes hazardous waste worker training that meets Occupational Safety and Health Administration (OSHA) requirements as well as other health and safety and skills training needed to conduct environmental remediation jobs safely. Training incorporates hands-on simulated exercises, classroom instruction, and advanced training technologies. This nationwide program targets Laborers, Teamsters, and other construction craft workers.

The MWTP and BMWTP provides comprehensive training to improve academic and life skills, safety, health, environmental justice awareness, and construction and environmental job skills training. The MWTP recruits and trains young adults of color (between the ages of 18 and 25) in five urban areas for work in the construction and environmental remediation industry. BMWTP provides training to disadvantage residents of color surrounding Brownfields Assessment Pilots in three urban areas. The goal for both programs is sustainable employment in the environmental industry.

### **Xavier University of Louisiana**

Deep South Center for Environmental Justice (DSCEJ) at Xavier University of Louisiana provides training under the Minority Worker Training Program (MWTP) and the Brownfields Minority Worker Training Program (BMWTP). The MWTP project develops comprehensive educational and job training programs designed to improve general academic skills and provide job training in the areas of basic construction and hazardous materials abatement that should lead to employment in these areas. The DSCEJ at Xavier University of Louisiana in collaboration with the Laborers-AGC, Southern University at Baton Rouge, and the North Baton Rouge Environmental Association trains eighteen to twenty-five year old minority youth living near hazardous waste sites. The target communities are East Baton Rouge Parish and Scotlandville. The BMWT Program develops comprehensive educational and job training programs designed to improve general academic skills and provide job training in the areas of basic construction and hazardous materials abatement that should lead to employment in these areas. DSCEJ at Xavier University of Louisiana in collaboration with the Laborers-AGC, Clark Atlanta University, Southern University at Shreveport-Bossier City, Center to Protect

Workers' Rights, and North Georgia Building Trades provides training to students in the New Orleans, LA; Shreveport, LA; Atlanta, GA; and Ft. Lauderdale, FL area.

## **Appendix 20: WETP Staff Activities**

### **Joseph Hughes**

- Participated in, and presented at, the U.S. National Response Team Training Subcommittee.
- Chaired a session entitled "Internet Resources and the Digital Divide in Occupational Health: Health Disparities in Training and Protecting Workers" which highlighted the accomplishments of the NIEHS Advanced Training Technology Initiative at the 128<sup>th</sup> American Public Health Association Annual Meeting in Boston.
- Participated at the National Advisory Committee on Occupational Safety and Health Meeting and presented an update on the WETP Advanced Training Technology (ATT) Initiative.
- Participated at the Cross-Federal Agency Committee on Occupational Safety and Environmental Health Training and presented an update on the WETP ATT.

### **Sharon Beard**

- Participated in the EPA 2000 National Community Involvement Conference. She conducted a session entitled "The 4 P=s: How to Protect the Environment, Produce Jobs, Provide Environmental Training, and Promote Economic Development. This conference brought together representatives from EPA and its partners to discuss the practice of community involvement and public participation.
- Presented at the EPA Brownfields Project Directors Workshop. The meeting provided an excellent setting to promote the WETP Minority Worker Training Program and the Brownfields Minority Worker Training Program.
- Participated at the National Advisory Committee on Occupational Safety and Health Meeting and presented an update on the WETP Advanced Training Technology Initiative.
- Participated at the Brownfields 2000 Conference. The theme of the conference was "Research & Regionalism: Revitalizing the American Community." The meeting provided an excellent setting to promote the WETP Minority Worker Training Program and Brownfields Minority Worker Training Program.
- Presented at the 128<sup>th</sup> American Public Health Association Annual Meeting. Her presentation was entitled "Hazardous Materials Job Training for People of Color: A Collaborative Approach."

### **Patricia Thompson**

- Participated in the American Public Health Association 128<sup>th</sup> Annual Meeting and Exposition

## All Staff

- NIEHS/Worker Education and Training Program hosted its semi-annual grantee meeting in Research Triangle Park, NC on October 16-18. The theme of the meeting was “The WETP Lessons Learned for Future Vision -- The Next 5 Years.”
- The staff from the WETP received the NIH Merit Award for exemplary performance in support of the NIEHS/EPA Hazardous Waste Worker Health and Safety Training Initiative at a ceremony in Research Triangle Park, NC.

## **Appendix 21: Superfund Job Training Initiative (SuperJTI) Accomplishments**

### **International Chemical Workers Union Council (ICWUC) -Copper Hill Site, TN**

Starting in September 1, 1999, the International Chemical Workers Union Council (ICWUC) was also awarded a supplemental grant to train potential clean up workers at the 10,000 acre Copper Hill site, located in an economically depressed area on the Tennessee/Georgia border. This is a large complex mining and chemical production facility, which has been operational for over 150 years. The site has been the subject of numerous air, ground and water investigations and reports. It is divided into several operable units and will take years to remediate. Potential jobs include remediation, EPA, contractors, PRP contractors or the Tennessee Department of Environment.

The aim of this project was to provide workers, supervisors, and others in the Copper Hill community 40 hour Hazardous Waste training with the skills to conduct work as determined by the EPA site evaluation and cleanup plan. Specific goals included enabling workers and the community to prevent injuries and illnesses due to chemical releases during remediation activities, teaching workers and community members the skills to conduct remediation activities safely for themselves and for the community, and providing members in an economically disadvantaged community with the qualifications to obtain hazardous material work. To date there have been three 40 hour hazardous waste worker training programs delivered in the Tennessee Copper Basin area to a total of 58 workers. Geographically located at a point where Tennessee, North Carolina and Georgia's boundaries meet, all three states were represented in each class. These classes took place at Local 401's union hall in the city of Copper Hill, Tennessee, which is a central point between the three states. These classes were open to anyone living in the Copper basin area. Recruitment for the classes originally was done by word of mouth. Plans are being developed to implement a series of eight hour refreshers in the next calendar year.

### **Clark Atlanta University, RSR Smelter Site, West Dallas, TX**

XU, in partnership with New Start for a Better Environment, and the Laborers-AGC, received supplemental funds from the NIEHS and EPA-Region 6, to conduct the West Dallas Superfund Jobs Training Program (RSR) during the 1998-99 training period. The training plan that was approved by NIEHS was not adhered to; therefore NIEHS requested that CAU/XU submit a training plan to train an additional seven trainees.

During the 1999-2000 training period, XU recruited and trained seven residents residing within the RSR community. Basic skills training began on February 4, 2000. The training was held at New Waverly Baptist Church in West Dallas, TX. Technical training to include 40 Hazwoper training, began on February 17, 2000 and ended February 24, 2000. The asbestos and lead abatement training began on February 28, 2000 and ended March 6, 2000. All environmental training was conducted at the LABORERS-AGC training facility located in Livonia, LA. Seven trainees completed the basic academic skills training and the environmental training (80-hr hazardous waste, 40-hr asbestos abatement, 40-hr lead abatement. XU has contracted with a job developer to assist with placement.

With the completion of the basic contraction skills training, coordinated by Xavier University and the New Start community, CAU is has completed their requirement for training at the RSR

Smelter Site. The last of the pre-apprenticeship training for the RSR project began on June 21, 2000-Basic Construction Skills Training. All seven trainees completed the construction skills training. Of the 7 trainees, 5 are currently working. Of the 5 working, 3 are working in the environmental/construction industry.

- Completion Rate: 7/7 = 100% and Employment Rate: 5/7 = 71%.

### **DePaul University**

The Super JTI funding greatly enhanced the MWT training in Indianapolis and Washington, DC. The use of Super JTI dollars allowed the students to receive stipends, childcare and lunches on a regular basis. In some cases, the additional funded also covered the cost of drug testing, physicals and work equipment. The inclusion of community-based organizations was the most valuable addition to the trainings because organizations such as OIC and Covenant House provided valuable services such as computer training and resume preparation. The goal of the DePaul Minority Worker Training Program was to utilize the all of the resources to target education and environmental technical training for the following three SuperJTI sites:

- Kerr-McGee Superfund Site – West Chicago, IL
- Reilly Tar & Chemical, Indianapolis, IN
- Washington Naval Yard Site – Washington D.C.

#### **1. DePaul-SuperJTI project in West Chicago, Illinois for the Kerr-McGee Superfund Site**

West Chicago, Illinois is the location of the Kerr-McGee Superfund site in USEPA Region 5. In an effort to launch an MWT Program while using additional Super JTI funds, DePaul communicated with a number of community based organizations and employers. While preparing for training in the West Chicago area, DePaul garnered a great deal of support for launching a training program in the area. After several phone calls and meetings in June and July, DePaul discovered The Outreach Community Center in Carol Stream, a neighboring community. The center is a nonprofit organization located in a cluster of low-income residential housing that mostly includes African Americans and Latinos.

In addition to the Chicago BMWT Program with the City of Chicago, DePaul also trained ten additional MWT students in a collaborative program with Local Economic and Employment Development (LEED) Council. LEED Council is operated at the New City YMCA on Chicago's northwest side and provides industrial retention and development, customized skills training and job placement, and entrepreneurship training. This additional training was made possible through the Office of Applied Innovations' (OAI) Bright Future program. Bright Future is a welfare-to-work collaborative funded by the U.S. Department of Labor through the end of the year 2000. This initiative connects OAI's resources and programs with those of the Chicago Housing Authority,

The Chicago Lighthouse, New City YMCA LEED Council, and numerous support service resources and agencies. The program is designed to meet the specific workforce development and training needs of targeted employers in construction, manufacturing, healthcare, and other service industries. LEED Council conducted outreach and recruitment with the use of fliers, public television ads and word of mouth. The last week of March was used to do screening and assessments on those who showed interest in the program. A mentor/counselor from DePaul was present at the screening sessions to assist with recruitment. The five-week training

provided job readiness and life skills from LEED Council, lead abatement from DePaul and asbestos abatement from the Alice Hamilton Occupational Health Center (AHOHC). Other partners in this collaboration included Mattie Belle, Inc., and the Laborers Local 225. Mattie Belle is an environmental consulting firm in the Chicagoland area that assisted the students with job placement. The Local 225 financed one-half of the license fees costs for each graduate.

The training took place at the New City YMCA Work-Based Learning Center on Chicago's northwest side. A total of twenty individuals enrolled in the program, but only ten qualified as MWT students. The remaining ten students were counted as BMWT students in Chicago. The first two weeks of training supplied by LEED Council included orientation, measurements, communications, job preparedness, resume writing, physical fitness, and TABE testing. Twenty individuals were given the TABE test and all scored at the sixth grade reading level or higher. Each of the students received a complimentary family pass to visit the New City YMCA while enrolled in the program and at least one hour per day of physical fitness was required of each trainee. The third week brought the students lead abatement training and all ten students received their certification. The fourth week of training was reserved for additional life skills training from LEED Council and included discussions on topics such as personal finance, nutrition, and drug relapse prevention. The fifth and final week of the training gave all ten students their asbestos certification. Graduation for the students was held on May 5, 2000 at the New City YMCA Work-Based Learning Center. The keynote speaker was Joe Zappa from Illinois EPA and other speakers included Susan Bigham of Mattie Belle, Inc, and Steve Hessler from LEED Council. Also present was Sheila Pressley from DePaul and Dan Duomo from the Local 225. The graduation class included nine African Americans and one Hispanic of which there were eight males and two females. Five students had a high school diploma, four had a GED and one had no GED. Eight of the ten students were unemployed upon entering the program. To date, five of the ten MWT graduates are employed in either the construction or environmental industry. One student is working for ABCO in Chicago. DePaul valued the supplemental training with LEED Council because it was a chance to develop a new partnership in Chicago and because it provided additional MWT students a chance for employment.

Although local support was gained, the job climate in the West Chicago area was not right for an environmental job training program. Unemployment was relatively low and environmental remediation work was not readily available at the time DePaul was willing to offer its MWT Program. The issue of communicating with residents who spoke little or no English was also a barrier for starting a program. The residents who spoke no English would have needed many weeks of English as a second language training before entering an environmental technical training and entering the environmental workforce. An MWT Program may be coordinated with The Outreach Community Center at a later time depending on the availability of trainees and jobs in the West Chicago area

## ***2. DePaul -Reilly Tar & Chemical SuperJTI site in Indianapolis, Indiana***

Because of the thriving economy in Indianapolis, asbestos abatement is a large market and there is a shortage of abatement workers. With this in mind, DePaul saw an opportunity to establish a successful MWT Program in Indianapolis. Since the Opportunities for Industrialization Centers (OIC) in South Bend, Indiana was an integral part of DePaul's

MWT/Super JTI training in 1999, DePaul chose to work with the Indian State OIC Council to launch its MWT Program in Indianapolis. OIC is a decentralized network of employment and training programs bound together to serve the poor and the unemployed. Founded by Reverend Leon H. Sullivan, OIC began in an abandoned Philadelphia jailhouse in 1964 and has grown into an organization that has served over two million disadvantaged and under-skilled Americans of all races.

### **Training Accomplishments**

The seventh and final week of the training ended in June and prepared the students to become asbestos abatement workers. The training was provided by the Environmental Safety Assurance Institute, Inc., located in Indianapolis. The company provides training in English and Spanish in lead and asbestos and is owned and operated by Sharon Reyes. When DePaul inquired about a local company to provide the training, the Indianapolis Private Industry Council recommended Ms. Reyes' company. Involving a local company to fulfill the asbestos training requirements gave the MWT Program exposure to potential employers in the Indianapolis area. Ms. Reyes visited the MWT class during week three of the training to talk with the students and answer their questions about her training. Typically, her company only provides training at their facility, but because she was moved by the eagerness of the students and knew of their challenges with transportation, she agreed to relocate the training to the R.O.A.R. facility. Twelve of the thirteen students received their asbestos certification along with a list of asbestos abatement contractors to which the Environmental Safety Assurance Institute regularly provides training.

Since its partnership with DePaul, the Indiana OIC State Council has conducted two additional rounds of life skills and asbestos training. The first OIC class had 14 students, and the second class had 12 students. They all have asbestos licenses and the majority are working the Indianapolis area with asbestos abatement companies and earning living wages.

### **Training Effectiveness**

Graduation was held on Thursday, June 8, 2000 at R.O.A.R. and thirteen graduates were presented awards and certificates from OIC, DePaul and the State of Indiana. Two graduates gave reflections on the program, one sang a solo, and another gave the welcome to all guests and program participants. The keynote speaker was William Crawford, Indiana State Representative, who was introduced by Joe Matthews, President of the Indiana State OIC. Also present at graduation were Rudy Hightower, OIC Hospitality Program Director, Tawaya McCrary, OIC Computer Instructor, Cleo Washington, Indiana State Representative, Bernice Freeman, OIC Consultant, Jake Webster, OIC Consultant, Keenan Gavin, DePaul Instructor, and Sheila Pressley DePaul MWT Program Manager.

Of the 13 trainees who graduated, 11 were African American, one was Asian, and one was American Indian. There were five females and six males. Five students had high school diplomas, five had GEDs and three had no GED. At the entry of the program, six students were under employed, and seven were unemployed.

Several weeks prior to graduation, letters and phone calls to over 20 potential employers were made by the staff at DePaul to ensure that students were considered for employment. As a result of this effort, each graduate was given the opportunity to interview with Tom Green from

Star Environmental and submit his or her resume and application on graduation day. Star Environmental was founded in 1990 and its primary goal is to provide honest and safe asbestos abatement services to the state of Indiana. Star offers the City of Indianapolis, General Motors and the Indiana Public Schools as a list of previous clients. Three students were hired by Star Environmental several weeks after graduation. One student still remains with Star while the other two recently acquired higher paying jobs.

The additional hours of IE training greatly assisted the students who were able to take advantage of it. The difference was in their ability to comprehend and grasp the concepts of the technical training. The higher scores on the technical exams were received by those students who had the most IE training, and two of the first graduates that were hired had over 30 hours of IE training.

### **Trainee Follow Up**

OIC will maintain contact and follow-up with each MWT student up to one year from the date of graduation. Information such as the name of employer, salaries, and family status will be submitted to DePaul by OIC in its reports. DePaul's tracking system will house information about each student both electronically and on hard copy. The information for the DePaul tracking system is entered after its entry in the NIEHS Worker Education and Training Program (WETP) database. The DePaul tracking system assigns each student a number according to the type of program (MWT, BMWT, etc.), the year, state, and student. The student numbers are developed before data is entered to satisfy the data entry requirements of the WETP database. In addition to what is required by the WETP database, the DePaul tracking system also includes information such as the student's name, social security number, and any notes about contact with the student.

Of the thirteen graduates in Indianapolis five are currently employed with Teltest, a local asbestos abatement company. Teltest employs these graduates at a rate of \$15.80 per hour. One is still employed with Star Environmental and earns \$10 per hour.

### **3. Alice Hamilton Occupational Health Center, Super JTI Project for Washington Navy Yard, Washington DC**

The Washington, DC MWT Program was coordinated by the Alice Hamilton Occupational Health Center (AHOHC) in Silver Spring, Maryland. AHOHC, a non-profit organization incorporated in the District of Columbia, has existed for over fifteen years and has played a significant role in occupational and environmental health issues, both locally and nationally. The AHOHC has been particularly active regarding asbestos, lead paint abatement and hazardous materials training and in the development and implementation of adult education methodologies in safety and health training. The AHOHC has placed special emphasis on reaching minority, low education/literacy and other underserved workers in the environmental remediation and removal field.

The Washington DC training program under the direction of the AHOHC was very successful primarily due to their collaboration with the Bridges to Friendship Alliance. Bridges to Friendship is an intricate collaboration of governmental and non-governmental agencies working together to assure community input and residential employment in the renewal of the Greater Southeast Washington, DC area. Initiated by the Naval District in Washington, the

Bridges to Friendship partnership includes the following organizations: U.S. Environmental Protection Agency, U.S. Department of Labor, Housing and Urban Development, General Services Administration, DC Department of Employment Services, Friendship House, Alice Hamilton Occupational Health Center, Covenant House in DC, and Ellen Wilson Redevelopment Corporation. Bridges to Friendship combines the support services of the community-based partners, Friendship House and Covenant House in Washington, DC with the extensive Bridges to Friendship network and environmental training of AHOHC. Recruitment efforts also involved presenting the MWT Program to two community groups and three church congregations in the District of Columbia. The Covenant House in Washington, DC provided TABE assessment to all participants. The program staff found this to be very helpful in individual participant goal setting and achievement expectations.

In the first three weeks of training students learned about environmental justice and environmental preparation. The students then received 56 hours of life skills training from Focus Point International (FPI). The "survival" or life skills training was spread throughout the program and was carried out by Focus Point International (FPI). FPI is based in Washington, DC and offers competency-based survival skills training for women, men and youth. The educational content of the training sessions focused on self-contained units, which taught primary behaviors. First, self-esteem and a positive mental attitude were established. As the training sessions progressed, the participants learned techniques for regaining control of their lives. The trainees practiced taking charge of their surroundings, health, emotional well-being, employment matters and family relationships. Each participant was issued a workbook that prescribed individual and group activities. The use of Super JTI funding greatly enhanced the MWT Program for each trainee. Additional funding from Super JTI allowed a number of students to receive stipends, childcare, and lunches during the training through our partnerships with various community-based organizations in each city.

The weeks following the life skills training included the 40 hour HAZWOPER, lead and asbestos abatement, general construction safety, First Aid/CPR, confined space and mentoring/career guidance.

### **Training Effectiveness**

The Washington, DC MWT Program began with 35 individuals who were at the second stage of the application process. Following individual interviews, there were 24 participants who began the MWT Program on June 12, 2000. Of the 24 students who started the program, 18 were African American males and six were African American females. Fifteen had no GED, five had a GED, and four had a high school diploma.

Eventually, the number of participants decreased to 17 who continued and received environmental certifications. Because of the attrition experienced early in program, the Alice Hamilton Center is looking closely at the life skills component and the curriculum design for the 2000/2001 MWT classes.

Graduation was held for 17 graduates on July 28, 2000 at the Alice Hamilton Occupational Health Center in Silver Spring, Maryland. Family members and friends attended the graduation, including previous MWT graduates. Speakers included Rafeal Mora, an MWT

advisory board member since 1996, David Ouderkirk, from USEPA Headquarters (Super JTI and Bridges to Friendship), and Dianne Moore from Focus Point National.

### **Trainee Follow-up**

Verification of employment forms and participant consent forms were developed by AHOHC to enhance the tracking effort. Scheduled trainee follow-up is provided on a quarterly basis by AHOHC information on each student is provided to DePaul. A log of contact names, dates of employment, rate of pay and comments has been established and is maintained at the AHOHC main office in Silver Spring, Maryland.

The majority of the 17 July graduates were unemployed and the others were under-employed upon entering the MWT Program. Currently, eight are employed in the asbestos or lead abatement industry. A former MWT graduate who attended graduation was able to refer some students to his employer to assist them in getting jobs.

From the March MWT graduating class, one participant is employed by Webb Environmental to provide environmental monitoring and ten are employed by Keystone Environmental and working in asbestos and lead abatement at a housing complex in Southeast DC. Other employers include WACO, Laborer's Local 76, and Heat and Frost Insulators Local 24. One participant has been out of touch and non-responsive to phone messages, and three participants remain unemployed.

Frequently, former MWT graduates return to AHOHC with friends and neighbors who are also interested in the program, request copies of their certifications and resumes, or check the job board. Additionally, AHOHC contacts former students when an employer is seeking workers in communities where they reside.

The Super JTI funding greatly enhanced the MWT training in Indianapolis and Washington, DC. The use of Super JTI dollars allowed the students to receive stipends, childcare and lunches on a regular basis. In some cases, the additional funding also covered the cost of drug testing, physicals and work equipment. The inclusion of community-based organizations was the most valuable addition to the training because organizations such as OIC and Covenant House provided valuable services such as computer training and resume preparation.

### **Laborers-AGC Education and Training Fund**

While Laborers-AGC was not awarded any supplemental funding, it is important to note that YCD was formally confirmed a designated part of Super JTI. After reviewing the funding opportunities for Super JTI sites, YCD actively pursued the official designation through EPA Headquarters in Washington, D.C. and ultimately EPA Region IX in San Francisco. Located in Bayview Hunters Point, a Superfund community, YCD saw the opportunity for future funding and direct links to partner with the Navy, master developers and Lennar communities on the Hunters Point Shipyard redevelopment project. This link will allow YCD to become an integral part of the project's success and contribute to the development of their community. Highlights from the San Francisco, CA training program is below.

San Francisco Young Community Developers, Inc. (YCD) implemented the fifth year of the MWTP in the Bayview Hunters Point community of San Francisco. Serving as the lead agency for the past two program years, YCD has again accomplished an outstanding job of managing the program to produce exemplary results. The targeted goal for this year's program was two cycles of 15 students for a total of 30 trainees. YCD was able to maximize training efforts by training a total of 33 trainees. In the first cycle, 22 participants were trained and received four weeks of additional skills training specific to Brownfields redevelopment. In the second cycle, 11 participants received the prescribed 240 hours of skills training in Phase II. Due to the additional training, the first cycle was 12 weeks with the second cycle lasting a total of 8 weeks. The San Francisco MWTP began with 33 participants and 90 % of them received all four certifications.

Training accomplishments in the first cycle of 22 participants were broadened to due to an EPA Job Training Initiative Demonstration Pilot that leveraged resources with the MWTP. Four weeks of additional job skills training included Scaffolding, Fork Lift, Pipeline Safety, Trenching and Shoring, Confined Space, Concrete Technician, Finishing, Compaction, Work Zone Safety, Underground Storage Tank Removal, and Transit and Level. Outreach and recruitment brought a pool of 85 applicants for the program. Out of these applicants both cycles of students were chosen to participate in the program. The Comprehensive Adult Student Assessment System Diagnostic Test (CASAS) was used to screen potential program participants in reading and math as well as provide a gauge of employment interest and ability. The Barksdale Self-Esteem Test, a standardized tool developed by the Barksdale Institute to determine self-esteem levels was also used. Based on lessons learned in the past, YCD found it important to get true commitment from participants. Academic enrichment services were provided by Southeast Community College. Last year students were enrolled at the college. However, this year YCD secured two instructors from the college to come on site for GED testing and preparation as well as to tutor all students in basic skills. Nine of the 33 trainees participated in preparation for GED testing. All components of the Life Skills stressed job readiness, reliability, promptness, and safety. The hours for Life Skills were close to or over 300 hours per cycle. Coordination with various Unions as well as extensive and early job development efforts has resulted in YCD attaining a high percentage of job placements for its graduates.

In addition to traditional screening, this commitment was tested through intense physical fitness and life skills training. Physical fitness was an additional yet integral component of Phase I of the program. Serving as a screening mechanism, students were directed to report to the fitness training at 5:30 a.m. sharp five days a week for 1 1/2 hours of intense calisthenics and other exercise regimes to build their physical strength and capacity. This training tested the participants' ability to follow directions, their level of commitment, and their stamina. The program also focused heavily on life skills with training those prepared participants for the rigors of employment. Many of the participants had sporadic work histories and obstacles to employment that could only be addressed by intensive long-term group and individual life skills training.

Of the 33 participants completing the program, 30 or (91 %) are currently working. Annual salaries range from \$17,280 to \$48,000 a year. Of the 30 employed, 27 % are employed in environmental remediation. Job descriptions for the 30 employed overlap with 2 in hazardous waste cleanup, 5 in asbestos abatement, 3 in lead abatement, 16 in construction, 2 truck drivers, and 4 in other non-industry related employment. Collaboration between YCD and the Northern California Teamsters Apprenticeship Program was continued this year to train two

participants in Class A Commercial Drivers License, Ready Mix and Hazardous Materials Transportation Awareness. Forty-two % of those employed are working union, 11 in Laborers Local 261, 2 as apprentices in Teamsters Local 853, and 1 in the Glaziers local. The remaining three graduates are currently seeking employment. As in previous years, field trips were an important part of the training that allowed participants the opportunity to observe work in the industry and get oriented to site practices. Students visited various local work sites and the nearby Bayview Hunters Point Shipyard, which has been the focal point of cleanup efforts during the duration of the program.

A highlight of this year's field trip excursions was one to Mare Island, California coordinated by John Gibbons of the Laborers HWWTP Advisory Board. Mr. Gibbons accompanied the participants on the field trip to the site where they gleaned information on the history and environmental remediation being accomplished at the military site. An Environmental Protection Specialist and Environmental Engineer both representatives from Roy F. Weston, Inc., conducted the day long tour and expressed interest in volunteering time to work closer with the MWTP in the future. Training this year was moved from the Presidio to a demolition site leased by YCD located directly in the community. The convenient location made logistics for the program participants easier. In addition, they experienced the pride of being trained directly in their community. Visibility of training being held directly in the community not only benefited the trainees but the community as a whole as well. The close proximity of the training center to YCD offices also allowed for closer monitoring of participants. Both the Program Manager and Assistant were on the training site daily. This alleviated any discipline or coordination problems.

