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FY 2001 Accomplishments and Highlights:
NIEHS/EPA Superfund Worker Training Program
(September 1, 2000 – August 31, 2001)

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**FY 2001 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. During the past year, WETP has continued to focus on the application of technology to training and the creation of integrated partnerships to support training delivery at the state and local levels. Also highlighted in this year's report is the response by NIEHS and its awardees to the September 11th attacks and subsequent emergency response and remediation activities.

2 FY 2000 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 fourteenth year of the Superfund WETP (FY 1987-2001), the NIEHS has successfully supported twenty primary awardees. These represent over one-hundred different institutions that have trained nearly 1 million workers across the country and presented over

50,000 classroom and hands-on training courses, which have accounted for over 14 million contact hours of actual training (See Appendix 1).

Through an Interagency Agreement, NIEHS received \$26 million from the FY 2000 EPA appropriations, which provided funding to NIEHS awardees during the past year (September 1, 2000 – August 31, 2001). Approximately, \$19 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. Three million dollars of the FY 2000 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 \$19,040,000
- 6 EPA/MWTP awardees received awards totaling \$3,000,000
- 5 BMWTP awardees received awards totaling \$3,000,000

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 4,806 courses, reaching 79,710 workers, which account for 1,030,258 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, 2000 and August 31, 2001, 53% of the training has been focused on delivering CERCLA cleanup worker training. This comprises 34,942 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. Hazardous Waste Worker Training Program (HWWTP) Accomplishments

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.

The cooperative agreements are grants made to non-profit organizations with NIEHS as partners. These consist of consortia that 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 a NIEHS-sponsored National Clearinghouse for Hazardous Waste Worker Training and its Internet home page at (<http://www.wetp.org>).

During the past year, there were three areas of training development that are particularly deserving of recognition. These are: 1) Partnerships with States, 2) Outreach to Minority Populations and 3) Improved Emergency Response Operations. In each of these areas, anecdotal highlights of this year's training activities carried out by the NIEHS and EPA Superfund Worker Training awardees include:

Partnerships with States

DePaul University

DePaul University's relationship with the Commonwealth of Kentucky started last year when an invitation was extended to teach Emergency Response Operations to firefighters in Alexandria, Kentucky. The firefighters were impressed with the quality of the class, particularly the teaching techniques. With such a positive response, the Alexandria Fire Chief highly recommended DePaul University's training to officials in Frankfort. Many divisions of state government contacted DePaul to find out more about the programs. The Hazardous Materials Training Officer for the Kentucky Division of Emergency Management was invited to the DePaul Advisory Board meeting that was held in September to learn more. After the meeting, a date was agreed upon for the first training and various other different branches within the Commonwealth have contracted with DePaul to perform training. These branches and the description of the training are below.

The Kentucky Division of Emergency Management (KyEM), specifically the Local Programs and Training Branch, serves as administrator of the Kentucky Emergency Response Commission's (KyERC) Hazardous Material Emergency Preparedness grant according to Kentucky Revised Statute (KRS) Chapter 39E.080. In addition, the director of the KyEM is also appointed as the chair of the commission. In accordance with this, KyEM negotiates and oversees contracts and agreements on behalf of KyERC.

The Kentucky Emergency Response Commission is designated by KRS Chapter 39E to develop training requirements for local governments and those who respond to a release of hazardous substances. Through this process, KyERC has established and developed curricula for use in training hazardous materials responders throughout the Commonwealth of Kentucky. This year, DePaul conducted six classes for the KyEM. Three classes were held in both Somerset (Pulaski County) and London (Laurel County), Kentucky. The personnel were trained in Emergency Response Awareness, Operations, and Technician level. There were 42 who completed the Awareness level, 41 completed both the Operations and Technician levels. The average age for the students was 32 years old, educated through high school or beyond.

The students felt that this course cleared up many questions from past safety training. One student commented that the training was “the best hazardous materials class I have taken in my sixteen year career.” KyEM is working with DePaul University to get all (numbers estimated at 22,000 to 30,000) firefighters and emergency responders trained to the technician level. DePaul returned to offer the three levels of emergency response and Met amphetamine (Met) laboratory awareness courses around the state.

The Department of Housing, Building and Construction Safety Administration is a regulatory agency that oversees code compliance, construction review and periodic inspections for new construction, renovation and existing buildings and components. Divisions of our agency include: elevators, plumbing, boilers, HVAC and fire protection systems. Over the last couple of years, there has been an escalation of clandestine Met-amphetamine laboratories in Kentucky. The Safety Administrator was concerned for his inspector’s safety because they come in contact with these types of labs. Forty-two inspectors were given the Met-amphetamine Laboratory Awareness. Out of that class, fourteen of their hazardous materials specialists received the emergency response technician refresher.

Training was provided for the Kentucky State Police Special Response Team (KSP-SRT) in October. The KSP-SRT is a multi-disciplined group of highly skilled law enforcement professionals who respond to the unconventional law enforcement situations. The KSP-SRT responds to hazardous materials incidents created by clandestine drug laboratories, barricades and booby traps. They also take care of other events involving hazardous devices. In addition, KSP-SRT plays a primary role in crisis management following Weapons of Mass Destruction event. This includes response to releases of hazardous chemicals and biological agents by terrorist.

The nine Troopers on the KSP-SRT were trained in the Emergency Response Awareness, Operations and Technician courses. The training focused on the handling of chemicals that are used in the production of the drug Met amphetamine. Included were the different types of “cooks” to make the drug and also signs, conditions and situations to look for that is dangerous depending on what phrase the “cooks” is in.

Outreach to Minority Populations

Special emphasis regarding outreach to Native American communities and other minority populations was a focal point of several programs this past year. The Native American Tribal governments and organizations, Bureau of Indian Affairs (BIA), EPA regional offices, as well as state and local governments have approached awardees with special requests for training. Each of these trainings have resulted in establishing partnerships and focused training to meet the needs of these discrete populations. The following are excerpts from the University of Alabama, the New England Consortium and the California/Arizona Consortium.

University of Alabama Birmingham (UAB)

The UAB Workplace Safety Training Program continues to provide quality worker training across a broad spectrum of topics and workplaces. During this, the first year of a new grant

period, the University of Alabama at Birmingham (UAB) Center for Labor Education and Research (CLEAR) continued training in several aspects of its ongoing grant-funded training program, and revamped the consortium with several partnership and target population changes. Two-thousand, five-hundred, fifty-four individuals were trained in a total of 28,412 hours of training directly funded by the current year's grant. The Native American Fish and Wildlife Society became a funded partner with support for increased outreach and logistical services to federally recognized tribes across the United States.

Training for Native Americans

For the first time, the Native American Fish and Wildlife Society handled all outreach and scheduling for the tribes. The reorganization of this responsibility took several months; once it was underway, a number of classes were packed into a few short months. Classes were arranged in all geographic areas of the United States. The southwestern U.S. continued to show high interest, and classes were held in regions not previously served: for example, UAB instructors traveled for the first time to tribes in North Dakota, Nebraska, Nevada and Oklahoma. UAB answered every request, and provided training at each location where UAB was invited.

Three-hundred, twenty-nine people participated in training programs, primarily in First Responder Awareness Level and Incident Management Systems courses. Ninety-six percent of trainees were tribal members. Over 100 tribes were represented in classes scheduled by individual tribes, local confederated tribes and intertribal councils, and by federal agencies such as the Bureau of Indian Affairs and the Indian Health Service. Tribal awareness and knowledge regarding emergency planning and response remain lower than in the non-Native population. At each new location UAB finds tribal representatives of natural resources, law enforcement, emergency medical, fire, highways, and other personnel whose first exposure to emergency response concepts were in these classes. Response plans are being developed on some reservations, but for the most part that process has not begun. Participants' descriptions of the reactions of themselves and others who were called to the scene of a release indicate little or no incident management coordination or appropriate actions in most cases. The tribes seem to be working at the early recognition level, as were state and municipal responders in the southeastern U.S. around 15 years ago. They are extremely appreciative of the grant training, and are motivated and instructed to begin planning and preparedness. UAB instructors wrote articles for each NAFWS newsletters this year. Titles of the publications were Hazardous Material in Indian Country; Managing the Emergency Incident; Pesticides, Wildlife and Emergency Response; and Emergency Planning Guidelines for Native American Tribes.

Special emphasis on cultural sensitivity and cultural heritage is included in the Native American classes, where tribal elders often are invited to open the class and always are consulted for input into tribal planning including planning for emergencies. In many tribes, those who "keep to the old ways" advise against thinking about bad events in the future and suggest that if one's spirit is kept in balance with Mother Earth these events can be dealt with without harm. This philosophy is inimical to emergency planning; although the tribe has worked through this decision before inviting training, it should be mentioned with respect.

The New England Consortium (TNEC)

The New England Consortium (TNEC) is based at the University of Massachusetts Lowell. Consortium members include the Departments of Work Environment and the Department of Health and Clinical Sciences at the University and five Coalitions for Occupational Safety and Health (COSH) located in New Hampshire COSH, Western Massachusetts COSH, Massachusetts COSH, Rhode Island COSH and Connecticut COSH. TNEC have run sixty-six courses for 936 workers involving 14,112 hours of instruction in the core HAZWOPER training program. TNEC has also conducted 40-hour CERCLA training for 52 students enrolled in three Massachusetts-based employment training and placement programs: Environmental J.O.B.S. in Lowell, and Jobs for Youth and STRIVE in greater Boston, and a special contract 24-hour Emergency Responder course for 11 students from the New England Tribal Nations in cooperation with the EPA Region 1.

Outreach to Native American Communities

Additionally, members of the Penobscot Indian Nation, the Houlton Band of Maliseet Indians, the Passamaquoddy Tribe (Maine), the Wampanoag Tribe of Gay Head (Aquinnah,, MA), and the Narragansett Tribe of Charlestown (RI), participated in a special 24-hour Emergency Responder (ER) contract course held in Lowell on February 13-15. This collaboration came about through a cooperative training agreement between the Tribes, EPA Region 1, and TNEC. The EPA Tribal Program's goal is to work with the tribes to assist them in developing comprehensive multimedia ecosystem protection programs. According to Deborah Brown of EPA, "EPA has a substantial trust responsibility to the federally recognized tribes. Here in New England, we see training as a key element in meeting this responsibility. Our working with UMASS Lowell's TNEC marks the first time that we have held a health and safety course for the tribes, and it is the beginning of an ongoing and expanding training program designed to meet the tribe's environmental health and safety needs" (TNEC Quarterly, June 2001). More training is scheduled and expected with these tribal nations to include trainers presenting a special 8-hour, one-day awareness course for a group of community members of the Passamaquoddy Tribe in northern Maine on health hazards, routes of exposure, health effects, and protective measures in regard to toxic exposures and commonly used chemicals on their reservation.

California/Arizona Consortium

Outreach to Minority Populations with focus on Native American and Hispanic Workers

University of California at Los Angeles (UCLA-LOSH) has continued training day laborers in hazardous awareness classes through the organization Coalition for Humane Immigrant Rights in Los Angeles. They have trained approximately 174 workers in 8 classes. The training this year has focused on "assertiveness principles" and allowed participants to engage in a helpful dialogue that highlights health and safety steps that have been taken as a result of past trainings. Trainings were conducted in both Spanish and English. LOSH also reached many minority workers through the 40-hour courses taught for the Long Beach Career Transition Center that takes community residents and trains them to work on the Alameda Corridor Transportation Project which traverses much, formerly industrial, contaminated land.

University of California at Berkeley (UCB LOHP) has a Spanish language special emphasis program. They continue to target outreach and training to Spanish-speaking workers employed in hazardous waste industries. This year they offered both 8-hour Refresher and 8-hour

Emergency Response Awareness courses in Spanish. They conducted a train the trainer class on the border with 35 members from Casa de la Mujer/Grupo Factor X in October 2000 and continue to respond to technical assistance requests from border organizations. They also conducted a 2-day train the trainers' course with the Indigenous Environmental Network staff and members of their affiliate organizations in October. They continue to work with Minority Worker Training Program grantee Cypress Mandela/Women in Skilled Trades in West Oakland, providing in-kind training to their Training Center on a quarterly basis.

University Extension at Davis (UCDX) has provided courses for minority students in Guam and the Commonwealth of Northern Mariana Islands (Saipan, Tinian, and Rota). The students were all self-identified as Asian/Asian-American/Pacific Islander.

Arizona State University (ASU) trained four classes this year for the Navajo Nation as a result of their partnership with the Bureau of Indian Affairs. ASU expects to train five more classes this year for the Navajo Nation. They also have a grant from the Southwest Center for Environmental Research and Policy that involves both research projects and seminars with maquiladoras dealing with waste solvent reduction in the border cities of Nogales, Sonora, Agua Prieta, and San Luis Rio Colorado. These partnerships established with the maquiladora associations and the professional associations in the Mexican border cities will enhance their ability to extend the HAZWOPER training in these cities in the future.

Alaska Health Project (AHP) has made a special effort to maintain and expand their contacts with Alaskan Native groups. This year they worked with the Tlingit and Haida tribes on the Prince of Wales Islands. They provided 40-hour and refresher training for the Yakutat group. Their trainings in Southeast Alaska will prepare local native workers for the cleanup of their villages. One of the villages there, Metlakatla has received Brownfields status.

Improved Emergency Response Operations

Midwest Consortium (under the direction of University of Cincinnati)

Michigan State University, in cooperation with the Michigan Professional Fire Fighters Union and the Association of Underground Contractors, received funding from the State of Michigan to conduct trench rescue training for members of fire departments throughout the state. The training was offered to assist fire departments in meeting rescue training requirements under the Michigan Occupational Safety and Health Act. During the three-day program, fire fighters learned how to approach and assess a trench rescue incident, as well as how to perform basic trench rescues. In addition, contractors learned how to prepare the site to expedite rescue efforts once the fire department arrives. Under the grant, MSU will train 96 fire fighters at the Operations Level and 48 fire fighters as instructors for the Awareness-level program.

A chemical manufacturing plant in Illinois was reorganized into two smaller units, and the smaller of the two resulting companies sold. Only the larger unit was able to maintain its Response Team. During a loading procedure at the smaller facility, a pyrophoric chemical was released. The team from the larger unit responded, donned Level A suits and managed the incident. During debriefing, it was apparent that preplanning had been inadequate; for example, many employees at the smaller unit were totally unaware of emergency response procedures.

Training time was devoted to hazard awareness and emergency response. Additional funds were made available for the team. "Continual training and regularly scheduled drills help responders to become more familiar with the site and to build a better working relationship with the facility" writes the emergency response coordinator of Wood River Refinery (where University of Illinois has conducted many hours of training) in the November 2000 issue of Fire Engineering.

University of Alabama Birmingham (UAB)

A member of a local community fire department reports being called to the scene where an untrained swimming pool operator loaded granular calcium hypochlorite into the filter compartment on a pump, instead of dissolving the chemical directly into the pool water. When turned on, the pump exploded and blew granules all over a small closed room where it reacted with moisture on the floor and in the air to generate chlorine gas. One responding fire fighter, untrained in hazmat response, wanted to wash down the room with water, which would have liberated extensive chlorine gas. The other responder, trained at UAB, was able to assess the hazard and determine they did not have the proper protective gear to handle the release. They isolated the area and called trained and equipped responders.

A worker at a bakery plant was hit with a blast of anhydrous ammonia when a pipe valve ruptured. His coworkers, trained at UAB, knew what to do for the victim as the result of anhydrous ammonia being part of scenarios that had been addressed in class. They knew how to use their Personal Protective Equipment (PPE) to safely stop the leak and how to handle evacuation of the plant. From their Incident Management System training, they were able to deal effectively with the local fire department and police personnel who wanted to take charge but were untrained. They also dealt appropriately with the press during and after the incident.

In a highway incident, a state environmental inspector assigned to emergency release response prevented a serious secondary exposure by preventing local fire fighters and emergency management personnel from spraying water on the spill of a hot, water reactive material. Tempers flared at the scene, but he held his ground and avoided the generation of a greater hazardous plume.

International Association of Firefighters (IAFF)

As part of the developing approach to meet the training needs of new fire/rescue members, the IAFF has begun a curriculum integration effort that capitalizes on the economies of integrating these programs for presentation in the new employee arena. Each program discusses areas such as risk management, pre-planning and personal protective equipment, as well as standard operating procedures. By integrating the presentations, IAFF has the opportunity to eliminate redundant material and provide key information mandated by OSHA to new employees throughout the U.S. IAFF initial investigations have determined that a number of larger fire departments are eager to use this approach in order to meet their OSHA-required educational responsibilities in the areas of hazardous materials, confined space and infectious disease prevention.

2.2. Minority Worker Training Program (MWTP) Development

The MWTP completed its sixth year of training through six programs at the Center to Protect Workers' Rights (CPWR), Xavier University (Xavier), Jackson State University (JSU), DePaul University (DePaul), Laborers-AGC Education and Training Fund (L-AGC), and the University of Medicine and Dentistry of New Jersey (NJ/NY Consortium). 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. There were changes with the MWTP this year. New awards were made to Xavier University, which will continue their productive relationship with Clark Atlanta University. Jackson State University received a no-cost extension to complete their job placement and tracking activities to close out their cooperative agreement. Over the past six years 1,984 young minority adults have been successfully trained in worker health and safety training for construction and environmental cleanup. For the six-year summary, of the 1,984 students trained, 1,274 trainees are employed representing an overall job placement rate of 64% (See Appendices 6-9).

These six programs during the period of September 1, 2000 to August 31, 2001 provided training to 342 trainees in 15 cities. These cities are: Baltimore, MD; Chicago, IL; Denver, CO; East St. Louis, MO; New Haven, CT; Exton, PA; Houston, TX; Newark, NJ; New Orleans and Baton Rouge, LA; New York City, NY; Oakland, Los Angeles, and San Francisco, CA; and two programs in Washington, DC. No new training was conducted in Jackson, MS this year. Of those 342 trainees trained, 204 trainees are gainfully employed. Courses ranged from Life Skills to Environmental Technician training with a total of 209 courses offered representing 136,730 contact hours (See Appendix 10).

Demographics and Placement Data

Of the 342 trainees this program year, 299 trainees were male, 43 were female with the majority of trainees Black at 87% and Hispanic at 9%. A complete breakout of demographic data is located in Appendix 11. Several programs have demonstrated over the years their ability to outreach to diverse organizations and worker populations and recruit qualified workers throughout the country. What is remarkable is that out of those students that completed all segments of training, the majority of them obtained gainful employment.

Those programs that had exceptional job placement for this year were CPWR (78%), L-AGC (66%), NJ/NY Consortium (77%), and Xavier (68 %). See Appendix 9 for a six-year summary of job placement rates for all programs. Highlights from all of the programs are below.

Center to Protect Workers Rights – (CPWR)

During the first year of the five-year Minority Worker Training Program (MWTP), the Center to Protect Workers' Rights (CPWR) administered programs in four communities with community-based organizations. Those communities include Denver, CO with the Colorado Peoples Environmental and Economic Network (COPEEN); International Union of Painters and Allied Trades, with East Baltimore Community Corporation formerly known as Fair Chance, Inc; New Orleans, LA with the Louisiana Regional Council of Carpenters; and Oakland, CA with Cypress Mandela/WIST Training Center. CPWR proposed to train a total of 75 students for program year and as of August 31, 2001 actually trained 73 students. Of that number, 57 were placed in jobs. Fifteen students were placed in environmental jobs. It is important to note that while only 15 of

the total placements were initially placed in environmental jobs, 36 students entered different unions apprenticeships. Since these apprentices will work for a variety of contractors/employers during the course of a year, it is probable that they will encounter some environmental hazards on the various work sites. This program has prepared all of the students to identify environmental hazards and safely work in areas that may be affected.

The ethnic breakdown of the 73 are 57 Blacks, 10 Hispanics, 1 American Indian, and 5 Asians of which 66 were males and 7 females. The educational background of the students at program entry includes 46 students with high school diplomas, 8 with GED's and 19 with No GED. Fifty-eight students were unemployed at program entry and 15 students were underemployed.

With the exception of the Denver MWTP, each program provided all of the components of the CPWR pre-apprenticeship model: life skills, environmental worker training, construction skills training, job development, placement and student tracking. Denver MWTP did not offer construction skills training, however, they offered life skills, environmental worker training job development, placement and tracking. Although available for each program participant, the Life Skills components' hours of service varied depending upon the needs of the students. CPWR, through its MWTP consortia, conducted 38,836 contact hours of training for 73 students in Denver, CO, with 10 students trained; Baltimore, MD (via IUPAT) with eight students trained; New Orleans, LA, with 13 students trained; and Oakland, CA, with 42 students trained.

CPWR also sponsored a joint workshop of the BMWT and MWT programs and the Environmental Justice Advisory Committee in October 2000. For this workshop a manual was developed containing standardized program information and financial and statistical reporting forms to serve as a resource for program operations and reporting requirements. During the three-day workshop each program was required to present one of the five components of their pre-apprenticeship model. There are two areas of improvement that each program continues to address: attrition and student tracking.

Cypress Mandela Center: Of the 31 students enrolled in the first class of the MWT program, 28 students graduated. To date 27 MWTP graduates are employed. Retention efforts were excellent for this program. As previously mentioned, their contracted goal was to enroll and train 25 participants under the MWT program. They enrolled 31 MWT students. They continue to evaluate their selection process and have enhanced their interview process by adding more questions for the panel. Last fall they added a Cypress Mandela site visit so that the applicants can get an idea of where they will be training and what they will be doing. They are advised to come to the training center dressed in work clothes (including boots) and they will be at the Cypress Mandela site for approximately two hours. During this time the instructors highlight, once again, the rules and regulations and give hands on demonstrations of some of the lessons. This seems to play very well with those present and they go away with a good idea of what they can expect. Those applicants who feel this is not the career for them, usually self eliminate at this time.

Xavier University of New Orleans (Xavier)

The East Baton Rouge Parish Minority Worker Training Program targeted 25, 18-25 year old African American men and women from communities within East Baton Rouge Parish in the area encompassing Baker, Alsen, and Scotlandville, Louisiana at the northern end of the Mississippi River Chemical Corridor. The program provided six weeks of basic skills training that began March 19th and ended April 27th. The Laborers provided technical training at their facility in Livonia, LA. The technical training consisted of General Construction, Hazardous Waste Worker, and Lead/Asbestos Abatement. The technical phase of training was completed June 14th. Seventeen of the 25 program graduates have obtained employment. This results in a placement rate of 68%.

DePaul University (DePaul)

This year DePaul trained 63 young adults for its Minority Worker Training (MWT) Program and provided them with more than 400 hours of classroom and hands on training. Over 5,900 contact hours were generated. The goals of the MWT program were to train 55 students total in Chicago and Washington, DC and help them initiate careers in the environmental field and provide them with the skills to make economic improvements in their communities. A total of 89 individuals were trained for the 2000/2001 fiscal year and over 20,000 contact hours of instruction were delivered to trainees, and more than 500 hours were taught in courses such as lead abatement, Hazardous Waste Operations (HAZWOPER), asbestos abatement, underground storage tanks, life skills training and GED preparation. Of those 89 students, 23 are actively employed.

Chicago, IL Program: Because of mission and program compatibility, and to provide a more comprehensive array of skills training, services and support to like target populations, DePaul University collaborated with two local organizations to train 40 students in Chicago, IL. DePaul shared resources with the YouthBuild through the Genesis Housing Development Corporation (GHDC) program and African American Contractors Association (AACA) by integrating its respective service components into a single program design, with the following lines of responsibilities:

DePaul primarily provides intake and assessment, life-skills/Instrumental Enrichment, basic skills/GED preparation and environmental remediation training, and student allowances during classroom training. GHDC provides community outreach, recruitment, leadership development, and case-management and participant wages during actual on-the-job/work experience training phase. Lastly, AACA provides Basic construction and safety training in areas such as demolition/excavation, carpentry/dry walling, plumbing, tiling/flooring, painting, hands-on work-experience and job placement.

Washington, DC Program: The Alice Hamilton Occupational Health Center (AHOHC) in Silver Spring, Maryland coordinated this program. 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 placed special emphasis on reaching minority, low education/literacy and other underserved workers in the environmental remediation and removal field.

Under the leadership of a former MWT graduate, now an AHOHC instructor, AHOHC recruited two cycles of students, 15 individuals in the first and 21 in the second cycle for a total of 36 students. AHOHC's partnership with Bridges to Friendship continues and was again very helpful to the program. This year, recruitment efforts also involved Strive DC, Covenant House, and StepUp. Strive DC provided the initial life skills training to participants who had not had previous life skills courses. Covenant House Washington provided skills and interest assessment of participants, and StepUp was contracted to provide social work support, case management, employment placement assistance and sustainability for participants.

East St. Louis, IL SuperJTI program: The DePaul/ consortium received carryover dollars to launch its training in the East St. Louis area in July 2001. Since a part of the carryover dollars originally came from the SuperJTI program, the technical training in East St. Louis is reported in the HWWT program. The recruitment, screening, testing and life skills components are reported in the BMWT and MWT program data. A total of 27 students were trained in East St. Louis of which 13 were MWT participants.

DePaul began its program in East St. Louis in July 2001 along with its partners Neighbors United for Progress (NUP) and Southwestern Illinois Community College (SWIC). NUP is a non-profit, civic organization whose purpose is to assist low and moderate-income persons with marketable skills training, leadership seminars/workshops, and various counseling services. NUP operates from within the Calle Boyd Community Center in East St. Louis. NUP performed the outreach and recruitment in the community and over 50 individuals were screened for the program. Southwestern Illinois Community College operates its Adult Education Department on two campuses in the East St. Louis area. The East St. Louis Community College Center was the location for the life skills training. The college provided assistance with the initial selection and testing of students along with two weeks of intensive instruction.

Of the 13 MWT students trained in East St. Louis, all were African American ranging from 18 to 25 years of age. There were 11 males and two female students. Nine students had high school diplomas, two had GEDs, and two did not have a high school diploma or a GED. Upon entering the BMWT Program, 12 students were unemployed and one was underemployed. One trainee is now employed at an agency in East St. Louis, and the remaining students are seeking employment with local environmental companies.

Laborers-Associated General Contractors Education (L-AGC)

Continuing a tradition of success, the L-AGC Minority Worker Training Program (MWTP) has exceeded its training goal and positively impacted the lives of program participants in five communities across the country. In the first year of a new cooperative agreement, L-AGC has garnered best practices and lessons learned from its own experiences in the previous five years of the program as well as from other fellow grantees to produce outstanding program results. As outlined in the training plan, Laborers expanded the MWTP from three to five programs this year, making it the most comprehensive and extensive attempt at MWTP training for the Laborers.

The final total of 127 trainees surpassed the original program goal by 58 trainees or 83% and reflects 34 more trainees than last year's accomplishments. Currently 84 graduates or 69 % are

employed. Coordinated efforts have produced a total of 127 trainees in various levels of environmental and construction job skills. Young adults of color between the ages of 18-25 have been trained in environmentally impacted communities in New Haven, Connecticut (17); San Francisco, California (33); Exton, Pennsylvania (16); Houston, Texas (30); and Washington, D.C (31). For the first time since the inception of the MWTP they have trained over 100 youths in a single program year, far surpassing the set program goal of 69.

In addition to basic academic and life skills training, trainees received job skills in asbestos and lead abatement, hazardous waste, and general construction. The training was more tailored to individual employment needs in the various targeted communities. This allowed for the addition of new, more focused job training, such as Microbial Remediation in San Francisco specifically created to address cleanup at the Hunter Point Shipyard. The new focus also allowed for the deletion of traditional, yet under-demanded training in certain areas, such as the reduction of lead abatement training in Washington, D.C. where there are little or no lead abatement employment opportunities.

Currently, 84 trainees or 66 % of this year's program participants are employed. Salaries range from \$12,480 to \$39,998 with the majority of the workers in environmental and construction related jobs (see MWTP Job Placement Chart in Appendix 12). In addition, this is the first year they have graduates working on a Superfund site in San Francisco, California, an accomplishment that supports the philosophy of the program. In still another major accomplishment this year, eleven graduates have been indentured into the Construction Craft Laborer (CCL) Apprenticeship Program, with seven from the New Haven MWTP and four from the Washington, D.C. MWTP. The CCL Apprenticeship Program provides mentoring, lifelong education, and training throughout a broad career path for program graduates.

A highlight of this year's program was the development of curricula geared to health related issues of people of color. Four manuals have been developed for this purpose: Women in Construction, Fitness for Duty, Building a Positive Self Esteem and Ways to Manage Your Stress. In addition a comprehensive Lessons Learned Document was developed as an assessment and evaluation tool of all of the programs involved in the Laborers MWTP.

Houston, TX Program: The inaugural year of the Houston MWTP has proved to be an overall success. Implemented by Make Ready, Inc. (MRI), an active, community-based organization in the Houston metropolitan area, the Houston MWTP has excelled in all phases of the program. The program has quickly become established in the communities it serves and has garnered recognition from elected officials, community residents, and other social service agencies. The program is the first of its kind in the area and is unique in providing academic enhancement, life skills, job skills and viable avenues of employment. The targeted goal for this year's training was 15 trainees with an additional 10 trainees to be trained with supplemental funding from available carryover funds. Training a total of 30 trainees, MRI has doubled their goal of trained participants this program year, a remarkable accomplishment for a first year program.

A total of 30 trainees have completed all of their training, and 21 graduates (70%) are employed. Salaries range from \$16,640 to \$39,624 well over the average salary for that area of the country.

Eleven graduates (or 52% of those graduates employed) are working in environmental jobs while three of the graduates have joined the Laborers local union.

San Francisco, CA Program: As the oldest and only original Laborers' MWTP, under the direction of Young Community Developers (YCD), it continues to be a model program in its sixth year of implementation. The program has exceeded its targeted goals of participant completion for the past three years. To date, a total of 25 trainees received training during two cycles of training, and an additional eight completed skills training in hazardous waste worker and microbial remediation training for a total of 33 trainees, eight more than the targeted goal.

Job placement surpassed projected efforts for environmental jobs. Thirty (or 90%) of the 33 students trained are currently employed. Out of this percentage, 18 of the 26 graduates completing job skills offered through our affiliated training fund are employed in environmental jobs, earning between \$26,000 and \$35,000 annually. Eight of these graduates secured employment at the Hunters Point Shipyard, a local Superfund site. The employment of trained community residents at a Superfund site in their community is just one of the stellar reasons this program has become a model program.

With the success of this program, YCD was able to leverage additional support from the U.S. EPA Brownfields Job Training Initiative Program and assisted EPA in securing the national Innovations 2000 Award from the Ford Foundation and the Harvard School of Government. The SF MWTP also incorporates a community service piece, which requires participation in community activities and encourages on-going involvement in activities that directly affect the community. The goal of this mandatory activity is the successful interpretation and understanding of individual and group accountability and responsibility. The MWTP has served as a catalyst for increased local union and community involvement in the Bayview Hunters Point community of San Francisco.

Washington, DC Program: This program year, the Francis L. Greenfield Laborers Joint Training Fund of Washington D.C. and Vicinity began its first year of participation in the MWTP. The second of our affiliated training funds to have a stand alone MWTP, the DC MWTP had a very productive and successful year. The targeted goal was to recruit and train a total of 22 trainees (with 12 trainees from the original workplan and an additional 10 trainees to complete five weeks of training with supplemental funding from carryover funds.) Training accomplishments have produced 31 trainees exceeding the goal. Moreover, eight of the graduates have been indentured into the Laborers CCL Apprenticeship Program and are currently working with union contractors.

A total of 31 applicants were accepted into the MWTP program. Of the 24 graduates, 14 (or 58%) are currently employed. Eight are enrolled in the Laborers Apprentice Program and working in construction. The two-year apprentice program is operated under the rules of the U.S. Department of Labor and is jointly managed by the Laborers Union District Council and area construction contractors. It is the only government sponsored and recognized program for training laborers in the metro Washington, D.C. area. As registered apprentices, the trainees will be able to pursue both the GED and English as a Second Language (ESL) courses for as long as they remain working in construction with contractors who have agreements with the Laborers

Union. They will return to the training fund one-day per month for training over the next two years. Seven of the apprentices are members of Laborers Local #74, and one more is a member of Laborers Local #456. One graduate is working in the construction industry as a flagger, and four are employed in maintenance. Salaries range from \$7,000 to \$19,200.

Stipends for participation, transportation and childcare were distributed on a weekly basis. As trainees without transportation and with young children face logistical barriers getting to training and work, childcare stipends were available to all trainees. Fifteen trainees utilized the childcare stipends. The high percentage of female trainees made childcare stipends a crucial and advantageous component to the program. Addressing challenges associated with training minorities are essential with this program; therefore, the successful training of the large percentage of Hispanic trainees in the DC MWTP (42%) warrants special recognition. Communicating across language barriers and providing life, basic, and job skills training to such a diverse group is a specialty that the DC Training Fund is proud of. The ability to read and write in English is also important for advancement in the industry. Even entry-level jobs require that an individual recognize words in English. Life skills and literacy training were important components of the Fund's efforts to encourage its trainees to pursue a successful career in construction. Provided by staff of the Fund, the life skills training focused on transportation and childcare issues, peer models and responsible behavior, communication skills, and conflict resolution. The basic reading and writing was geared to the different levels of language proficiency in the group.

New Jersey/New York Hazardous Materials Worker Training Center (NJ/NY Consortium)

In the first year new programming was introduced as well as new formats for the self-evaluation of participants, which made a more concerted effort to find those who have been the hardest to reach and whose communities have continued to suffer high unemployment rates during a period of economic prosperity. The NJ/NY Consortium actively recruited from the penal system and the network of homeless assistance agencies that exists in the New York City (NYC) metro area. The results have been gratifying. The community based partners touched base with over 300 young people in the NYC metro area during the outreach and recruitment phases. With a class of 30 students, a total of 25 graduated from the program. Twenty-three are currently employed resulting in a 77% job placement rate. The results were a highly motivated and focused group of young people, although many had special assistance needs. The Consortium was able to assist students with housing and day care issues, passing their GEDs, and selecting from several new areas of employment, including waterfront development and ecological restoration.

At the completion of training, 23 of the graduates (96%) have work assignments. Two graduates were accepted into full time higher education programs at the City University of New York to major in Environmental Science. One student obtained a position with an affiliated community-based partner to the program as an Environmental Justice Outreach and Recruitment Coordinator for the NJ/NY Consortium in 2001-2002. The successful placement of 96% of graduates by the end of FY 2000-2001, 10% of whom are achieving their GEDs, the ability to be a part time employer, and 8% going on to higher education reflects the strength of the training program. It is also indicative of the appropriately intensive and extensive outreach/recruitment and screening program that NJ/NY Consortium initiated, and continues to fine tune as the program proceeds.

Union Status

Training is designed to assist the graduate's entry primarily into construction and environmental assessment and cleanup work, and secondarily into higher education and community service. The programs goal is for students to gain entry into local construction unions that result in jobs with a living wage. Being a member of a union results in higher wages, better benefits, contribution toward pensions, better workplace standards and improved health and safety protection. Being an apprentice member of a construction union obligates students to maintain enrollment in a multi-year Department of Labor approved 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. Of the 23 students working, 21 (95%) are members of building trade or municipal unions, including 11 as Carpenters, two as a Sheet Metal Worker, three as Laborers, one as a Painter, four as Stationary Engineers and one as a Building Maintenance Engineer. One of the graduates is a field technician, working for an environmental monitoring company. One student was hired by one of the participating Community based partners in the capacity of liaison to the MWT Program. Wages are impressive for this program with students earning an average of \$16.85 per hour (\$29 including benefits). The minimum wage earned is \$13.14 per hour, while the maximum is \$32.00 per hour.

Program Changes and Accomplishments

Each year the program adapts its training programs to institute administrative policies and procedures to address the impediments to successful program implementation. During the various program trainers exchange activities, program directors meetings, evaluation efforts, and awardee meetings and technical workshops, awardees make these structured changes to address specific impediments. Some of the highlights of these changes are in the area of Retention and Recruitment, Development or Updates to Curricula and Job Placement Efforts.

Recruitment and Retention Efforts

Each program has addressed one of the major impediments to successful programs, recruiting and keeping qualified students. By characterizing the lessons learned from each program, training has been modified to include new and innovative administrative procedures that are listed below.

Xavier University

Similar to the NJ/NY Consortium "Try Out Week", Xavier has instituted the "Week of Endurance" which involves a week of activities designed to assist program administrators and representatives of the advisory board in selecting trainees to participate in the training. The program involves physical challenges, problem solving activities, team building exercises, workplace safety, drug abuse awareness, orientation to building trades, environmental careers, a Habitat for Humanity service project, and a day of construction site tours. This comprehensive week of participatory training allowed trainees to self select out of the program if they lack interest in obtaining careers in the construction and environmental industry. It also provided staff with valuable information to assist them in the selection process.

Center to Protect Worker's Rights (CPWR)

Assessment and testing took place at the training center and gave the applicants a chance to see the Cypress Mandela program in Oakland, CA where all of the instruction took place. The Test for Adult Basic Education (TABE) was administered and applicants who completed the test were given interview appointments for a later date. The interview panel was comprised of instructors, advisory board members, union representatives and Cypress Mandela Partners such as the Oakland Private Industry Council (OPIC). During the interviews information was obtained that determined the applicants commitment to the pre-apprentice training program. Applicants must attend and successfully complete each phase of the recruitment process in order to be considered for admission. Any person who the interviewers feel is not a viable candidate for pre-apprentice construction training is referred to the OPIC for counseling, job readiness workshops or other employment opportunities through the One-Stop Career Center. Having this connection to the OPIC and One-Stop Career Center, Cypress Mandela programs appeal to a diversity of individuals and allows them to recruit from a larger population base of eligible workers.

By incorporating lessons learned from their evaluation of their recruitment and student selection process, Cypress Mandela continues to evaluate their selection process and have enhanced their interview process by adding more questions for the panel. Last fall they added a Cypress Mandela site visit so that the applicants can get an idea of where they will be training and what they will be doing. They are advised to come to the training center dressed in work clothes (including boots) and they will be at the Cypress Mandela for approximately 2 hours. During this time the instructors highlight, once again, the Rules & Regulations and give hands on demonstrations of some of the lessons. This seems to play very well with those present and they go away with a good idea of what they can expect. Those applicants who feel this is not the career for them, usually self eliminate at this time.

L-AGC

The Washington DC Training Fund received a total of 108 applications for the MWTP (63 from men and 45 from women.) The applicants were recruited through marketing and publicity efforts with the city government, churches, non-traditional employment agencies for women, community organizations and word-of-mouth. Each candidate completed an application, interviewed with a D.C. Training Fund staff member, and took a three-part evaluation test. The evaluation test is an assessment tool designed by the fund to adequately screen all new training applicants for the D.C. Apprenticeship Program. The test consists of a 14-question math test (addition, subtraction, multiplication, division, and reading measurements on a ruler); a tools and materials identification quiz; and a hands-on exercise. The hands-on exercise consists of moving concrete blocks, wheeling gravel, and moving lumber. Applicants are observed while performing these tasks and scored for attention to safety, efficiency, and attitude. In addition to determining whether an applicant is selected for the program, these scores are used to assess the level of readiness for work. For example, an individual who has difficulty reading a ruler during the evaluation test is then given extra attention during the math class.

Development of Curricula

As these programs evolve, adaptations or development of new curricula has occurred. Several programs have added new curricula during this program year. Three of these new curricula

involve the work of Laborers AGC and the NJ/NY Consortium. Courses in the area of Microbial Remediation, Health Disparities for Minority Populations and Ecological Restoration have been developed and tested during this period. A description of each of these new courses is below.

L-AGC

The only curricula addition was the Microbial Remediation training course submitted for approval to NIEHS for use in the San Francisco program. The course, developed for use in mold and mildew removal, was essential for employment opportunities at the Bayview Hunters shipyard.

The L-AGC also worked with the Laborers Health and Safety Fund of North America (LHSFNA) to institute a special emphasis program which expands the MWTP through the development of curriculum that specifically addresses health-related issues and specific needs of women and trainees of various ethnic origins. Workplace hazards and general health issues are a concern for all workers; however, there are some health-related issues that have a disproportionate impact on women and people of certain ethnicity. Additionally, research shows that many of these health issues create barriers to entering the trades and affect retention rates. The new curriculum focuses on various ailments such as stroke, hypertension, diabetes mellitus, race-specific cancers, obesity, substandard diet, musculoskeletal disorders, osteoporosis, blood borne pathogens (HIV/AIDS), and reproductive hazards. Moreover, the curriculum does include workplace culture topics such as hostile work environment, inadequate sanitary facilities, ill-fitting personal protective equipment, stress management, substance abuse awareness and prevention, physical conditioning, and health care consumer issues. All topics were presented in the context of a general Fitness for Duty Program, which will further increase the participants' employability. In this way, the curriculum focuses on health and safety issues as they relate to a prolonged career in the construction industry, as well as participants' knowledge of personal health issues.

Still in its formative stage, the curriculum was pilot tested with MWTP participants this year at the Laborers Joint Training Fund of Washington, D.C. and Vicinity. Post-program debriefing sessions will occur to assess the impact of training on the work lives of participants. Next year, it will be distributed to all other Laborers programs. The special emphasis curriculum was the focus of two articles by both L-AGC and LHSFNA in the May/June 2001 Laborers magazine distributed to all LIUNA members.

NJ/NY Consortium

An Ecological Restoration curriculum was developed. With pending environmental remediation legislation on the state level, waterfront and ecological restoration are fast becoming a hot environmental issue for the northeast, especially in the city and its surrounding area. All five of the boroughs of New York City have extensive waterfront property, with two of them having more than 50% of their borders comprised of waterfront and two being islands. While anticipating state level environmental legislation concerning those areas identified as brownfields or super fund sites, this curriculum was developed to meet the growing challenge of returning neglected and previous manufacturing water front sites to open space and green space. The course contains several components that are intended to develop the program participant's basic understanding of ecology, the historical development of restoration, and its relationship to

contaminated land reclamation. This involves a review of the roles the public, private and local community sectors have in the developmental process. The course incorporates classroom training urban ecology tours to conceptualize the fundamentals of ecological restoration and Brownfield clean up. Field training on revegetation and plant propagation is included. Participants are introduced to the principles of propagating through hands-on training in propagating native species and nursery preparation as well as care, where they learn basic Ecological Restoration technical knowledge and the skills associated with bio-remediation.

Job Placement Efforts

One of the critical areas that each of the programs work to improve each year is job placement efforts. As the labor market for environmental and construction workers change due to influx of new opportunities and worker skills sets, the programs must track these changes and work closely with contractors and other organizations to make sure that the students are trained for the appropriate jobs that are being contracted in that geographic area. Several of the job placement efforts are described below.

Xavier

Xavier and Southern University received an enormous amount of support from contractors located in the areas targeted for training. Job Developers launched an aggressive job placement campaign to ensure employment for program participants. Alliances were formed with local employment agencies, Construction and General Laborers Union Local #1177 board members, and community leaders to further impact the job development process. Twenty-one, (84%), of MWTP participants are currently employed. The Job Developers continually made weekly contacts with participants to provide them job leads and other information. To ensure successful job placement for program participants, the Job Developer implemented activities to support successful employment of program participants. These activities include:

- (1.) Referrals to potential employers - A list of 30 perspective employment agencies and employers was mailed to each participant.
- (2.) Alliances were formed with local employment agencies, Construction and General Labor Local #1177, MWT Program Board Members, and community leaders to assist in job placement activities.
- (3.) Laborers Union Local #1177 provided needed additional OSHA Training and certification for participants.
- (4.) Implementation of a bi-weekly employment status-tracking program where program participants were contacted by phone provided additional job referral resources. This activity was designed to assist with job placement for participants with short-term employment and inform others of job opportunities and vacancies.
- (5.) Scheduling a block of time for participants to report to the Minority Worker Training Program Computer Lab for job search using the internet.

(6.) One-on-one job counseling and assistance as needed.

CPWR

CPWR Oakland Program: All graduates of Cypress Mandela are tracked after placement to ensure retention and employer satisfaction. This is the responsibility of a program assistant who begins tracking the students one week after initial placement. The follow-up is then continued on a 3-month, 6-month and 1-year intervals. Ninety to ninety five percent of the students are placed by graduation. The remaining students are placed within a few months and are tracked according to the intervals above.

The Cypress Mandela staff stressed the importance of contacting the training center periodically, however, phone numbers and addresses change and it has proven to be an extremely difficult task. Those students who can be contacted, seldom return phone calls. The established relationship with the unions has aided this endeavor. The coordinators and business agents are instrumental in helping to track the students and apprentices.

The Advisory Board continues to meet on a bi-monthly basis. The board makeup consists of a labor attorney, an environmental health specialist, union representatives, community college personnel and contractors. There have been several projects initiated by board members including the adoption of the CMWTC by the Association General Contractors (AGC), who have encouraged their member contractors to hire CMWTC graduates. Several large construction companies have permanently relocated to the East Bay (Oakland, Berkeley, etc.) and advisory members have met with their representatives to advocate for the hiring of Cypress Mandela graduates. The boards ongoing concern is continued funding for the training center and they are eagerly pursuing creative ways to address this issue.

Cypress Mandela in partnership with the Peralta Community College District offers three college credits for carpentry to the trainees who attend classes and register through their program. This acts as an incentive to the students and the level of training allows them to think about expanding their abilities in this arena. It is unknown how many students actually choose to pursue advanced degrees.

L-AGC

Trainee follow up is an on-going process. It is extensive, personable and similar in scope for all programs. The dynamic nature of the industry lends well to graduates staying in contact with job developers on a continual basis as they look for other employment once a job or project is completed. All sub-grantees and affiliated training funds are responsible for individual case management of trainees to document progress in job placement, retention, and needed support services. After completion of job skills training students are contacted on a weekly basis. Once they are employed, contact is attempted on a monthly basis. In addition to the individual case management by sub-contractors, Apprenticeship Coordinators and/or Union Business Managers track trainees who are indentured into the apprenticeship program or local union. Employment is also tracked through information gathered from refresher courses. All stakeholders work together to ensure that every effort is made to assist trainees in becoming a viable part of the workforce.

Trainee follow up is often easier for those in the CCL Apprentice Program because coordinators are required to track each apprentice closely to ensure that both he or she and the employer are following all guidelines of the program. Each week CCL Apprentices are required to submit a copy of their pay stubs, union blue book page, and the apprentice hours tracking sheet for their record book. Individual success stories are a component of each program, MWTP student success stories are highlighted on the new Laborers LEARN website at www.laborerslearn.org, a web portal designed to be both an information-gathering and educational tool for all sub-contractors. Lifestyle changes in participants from the SF MWTP are highlighted on the web portal. The stories range from a mother of two on welfare becoming economically independent to an ex-offender turning his life around and improving his work ethic by becoming a foreman at a local job site. Success Stories are below:

Tiffani Reed, 23 a struggling, single mother of a four year-old boy had been working at a clothing store for \$7.50 an hour in San Francisco, CA. While on public assistance, she heard of the Minority Worker Training Program (MWTP) through her caseworker. She knew there was a real future for her in the construction industry after she went to the MWTP orientation. She endured the difficult entry requirements of the program and finished at the top of the class, achieving top scores in all training segments. As one of the class-appointed leaders, Tiffani addressed her fellow graduates and explained that the Young Community Developer's Minority Workers Training Program had given her opportunity to change her mind and change her life. Now in her sixth month of continuous employment, Tiffani assists the head environmental technician at a rate of \$33.10 an hour. Having a new sense of financial freedom, Tiffani and her son moved out of her mother's house into their own two-bedroom apartment, and Tiffani recently purchased a new truck. She explains that the journey wasn't easy but was well worth it.

Joseph Broussard, 24, a husband and father of two realized that he wanted a better life for his son and daughter. Having spent the last five years incarcerated, Joseph felt that his employment potential was substantially limited. After many discussions, his parole officer mandated that he come to the MWTP orientation. Soon after enrollment, he began to embrace the concepts of pride, work ethic and individual responsibility. No longer resisting change, Joseph applied himself, going from one of the worst students in his class to one of the best. Understanding the benefits of union membership, Joseph quickly joined and is now working at a rate of \$22.00 an hour. Joseph is a strong role model for his children and is dedicated to his family and the trade that afforded him a new life. In his remarks at graduation he commented "What you do with your life tomorrow is the only thing that matters."

See Appendix 10 for L-AGC MWTP Job Placement Statistics.

2.3. Superfund Jobs Training Initiative (SuperJTI)

The WETP is in its fourth year of working with EPA to support the 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. Awardees were allowed to apply for supplements or use existing funds to perform training at SuperJTI priority sites. Particular focus was to form partnerships with local training providers and community based organizations for recruitment, life skills, and remedial training. For this period, DePaul University and Laborers

AGC conducted targeted SuperJTI training efforts in East St. Louis, MO; Washington, DC; and San Bernardino and San Francisco, CA. The table below indicates the SuperJTI activities for each awardee. Also descriptions of each of these training activities are listed in this section. In December 2001, the Laborers –AGC was awarded the SuperJTI supplement as a streamlined MWTP program for EPA Region 9 Waste Disposal, Inc. Site in Santa Fe Springs, CA. Full description of SuperJTI training descriptions and accomplishments are in Appendix 14 .

Superfund Jobs Training Initiative			
Awardee	Program	Site Name and Location	Number of students trained
DePaul University in collaboration with Alice Hamilton Occupational Health Center	HWTP	East St. Louis, MO	27
	MWTP	Washington Naval Yard Site – Washington D.C.	36
	Sub-Total:		63
Laborers-AGC Education & Training Fund	MWTP	Bay View Hunters Point, San Francisco, CA	33
		Newmark Groundwater Contamination Project, San Bernardino, California	18
		Sub-Total:	51
		Total	114

DePaul

DePaul received approval to use a portion of its carryover funds to provide training in the East St. Louis, Illinois area. Approximately 20-25 minority students who live in and around the East St. Louis area were targeted for training. DePaul University and USEPA Region 5 identified Neighbors United for Progress (Neighbors), a community-based organization, to provide outreach and recruitment, screening, supportive services, job placement/development, and logistical support. Neighbors is a non-profit organization for whose purpose is to assist low and moderate-income individuals with housing needs, marketable skills training, leadership seminars and workshops, and homeownership counseling services in St. Clair County, Illinois. A memorandum of agreement was executed by DePaul University and NUP. Training began in July 2001 at the Callie Boyd Community Center in East St. Louis. A local community college will provide the life skills training.

L-AGC

Bay View Hunters Point in San Francisco, CA

The San Francisco Program trained a total of 33 students in their general program. It is also important to reiterate that the San Francisco Program was able to secure placement of four trainees on the cleanup of the Hunters Point Shipyard, a Superfund site in San Francisco. Among various job tasks, students received training in microbial remediation (mold and mildew removal) to accommodate job-training requests at the site.

Newmark Groundwater Contamination Project San Bernardino, California

At the request of the EPA's Office of Solid Waste and Emergency Response/Superfund Community Involvement and Outreach Center, carryover funds were designated to assist EPA Region 9 in environmental remediation training for the Newmark Groundwater Contamination Project Superfund site in San Bernardino, California. This training under the Super Job Training Initiative was accomplished with much success through our affiliated training fund in Southern California. Since L-AGC had no prior experience with the community based organization recruiting the trainees for training, an instructor from our SF MWTP (Derek Gaskins) also was involved in both pre-job skills training and actual job skills training in San Bernardino to alleviate any perceived discipline or literacy challenges with prospective students.

Hazardous Waste Worker Training was completed June 22, 2001. Eighteen students ranging in age from 18-22 participated. Four of the trainees were female and 14 were male. A total of 15 completed the 80-hour course with the lowest score being 71 %. Again, all four females completed training. No staff members participated in this training. Two students have already begun the process of joining the local Laborers Union with the intent of employment on lead based paint projects in San Bernardino. Most of the others students are finishing their secondary education (high school diploma or GED) before they leave Youthbuild to pursue employment. It is NHSIE's intent to work with the local unions and contractors to explore career placement for the students who received this training.

New Supplemental Training Efforts:

Laborers -AGC Education and Training Fund is currently implementing a Superfund Jobs Training Initiative for the Region 9 Waste Disposal, Inc. Site (WDI) in Sante Fe Springs, CA. This proposal will help L-AGC train individuals in the city of Sante Fe Springs, CA who live near the WDI Superfund site, as well as those in the surrounding counties of Ventura, Santa Barbara, San Luis Obispo, Los Angeles and Sacramento. The training will prepare these community residents, who are at risk of exposure to contaminated properties, for work in the construction and environmental remediation industry. The purpose of this project is to implement a comprehensive, integrated training program designed to improve basic academic and life skills, safety and health awareness, and provide job skills training in construction and hazardous materials abatement.

2.4. WETP Small Business Innovative Research Request for Applications –(SBIR)

On December 12, 2001, the Worker Education & Training Program announced the release of the Worker Education and Training Program Small Business Innovative Research Proposal entitled "Development of Innovative E-Learning Products for Worker Safety and Training in Hazardous Waste and Chemical Emergency Response."

The WETP Advanced Training Technologies (ATT) initiative has launched new territory regarding the use of technology and products to support these technologies for online learning. NIEHS intends to build on its program experience in environmental safety and health training by stimulating creative SBIR proposals to create products that will support high quality health and safety training for hazardous waste workers and emergency responders. To further enhance our ability to move toward commercialization of on-line learning technologies relevant to model safety and health training for hazardous waste workers and emergency responders, this initiative

focuses on the development of technology driven commercial products using the Small Business Innovative Research (SBIR)/Small Business Technology Transfer Research (STTR) program. This RFA provides a flexible system within the SBIR program to cover the extensive needs and complex development processes needed to develop products to support and integrate technology-supported training for workers at Superfund sites.

The NIEHS Worker Education and Training Program (WETP), in considering the development and application of advanced training technology (ATT) to worker safety and health training, has realized that there is a substantial challenge in translating this new technology to our awardee organizations. This challenge is associated with the fact that each of the WETP awardee organizations is different with regard to its training target audience, the computer literacy and access to such technology among its target audience, the work its training target population performs, and training delivery methods and means, among other factors. In many ways, these challenges reflect the current reality of delivering job-related training content to any adult population in the United States. The "digital divide" in its various manifestations is a reality for anyone who attempts to use ATT approaches to effectively reach target populations with low levels of computer experience and knowledge. This concern for hazardous waste workers and chemical emergency responders has been particularly acute for a high-risk target population, which is characterized by ethnic and cultural diversity, low levels of formal education, and minimal prior computer fluency.

The following four areas describe the type of electronic learning products that will be supported under this SBIR RFA. Examples include but are not limited to:

1) Products to support electronic collaboration in safety and health training: "E-collaboration in safety and health training" involves enabling collaborative development of course materials by personnel widely separated geographically within the same organization and between collaborators working for different organizations. In addition to traditional face-to-face meetings and phone calls, a number of electronic tools and online approaches can be used to facilitate distributed teams in their creating or updating of instructional products. These capabilities include e-mail, mail list groups, bulletin boards, chat rooms, threaded discussion groups, FTP, and Web-enabled database-oriented development tools.

2) Products to support electronic certification in safety and health training: "E-certification in safety and health training" involves preparing and maintaining instructor competence as a critical issue in creating and maintaining the quality of health and safety training delivery and assuring adequate worker protection. This ATT option entails the use of online resources to improve instructor competence. The role of the instructor is highly valued in the WETP. Many grantee programs have systematic approaches to train, certify, and maintain instructor competence in both the content matter and in teaching skills.

3) Products to support electronic teaching in safety and health training: "E-teaching in safety and health training" encompasses live or virtual classroom training as a significant part of effective safety and health training delivery. A key WETP core value relative to ATT is to preserve the role of the trainer/instructor in classroom-like environments in the modeling, teaching, and verification of skills and knowledge. This ATT option for safety and health training delivery

looks directly at ways technology can be used appropriately in live instructor-led, face-to-face, and virtual classrooms.

4) Products to support electronic learning in safety and health training: "E-learning in safety and health training" involves technology deployment to provide individualized or small group-based training in learning centers, in a technology-enabled "smart classroom," or to learner's desktop is a core part of the technology-supported learning process. As an ATT option, electronic learning is used to enable individualized learning at the learners' convenience and own pace prior to, as part of, after, or in place of classroom training. Electronic learning capability is now available to learners at their workplace (desktop, shared computer/kiosk, or learning center) and optionally at home or at the union hall. While multimedia computers connected to the Internet are much more widely available each year, care must be taken to ensure that a targeted set of learners will in fact have the needed access to work stations or learning centers.

Projects may be presented for SBIR/STTR support at all stages of learning technology development. Projects will be evaluated on overall innovation and success potential. Future support will be contingent upon NIEHS programmatic evaluation to ensure that the investigators are accomplishing milestones and time lines presented in the original application.

2.5. WETP ATT Initiative Highlights

Each awardee has developed some type of ATT approach to their training plan. In particular, here are highlights of several awardees accomplishments regarding ATT initiatives that were started in previous years.

George Meany Center for Labor Studies (GMCLS)

Awareness level training delivered as a blend of the online course and face-to-face training has been conducted regionally by a peer trainer for five rail workers of a railroad production gang, with another five workers scheduled to be trained during the current budget year. Training is currently being conducted by a Native American peer instructor, Darryl Begaye, who has been a peer trainer with the Rail Program for the past year, and is a respected member of the Navajo Nation and the Union Pacific production gang on which he works. He has been videotaping four-day training course modules and is editing the videotape in his native language for presentation to trainees. Production gangs, which are highly mechanized mobile work crews, traditionally work over a large geographic area and spend weeks or months away from home. The gangs employ large concentrations of the railroads' Native American population and a growing percentage of non-English speaking workers. The difficulties in finding an effective contact within the Native American community has hindered the process of providing training opportunities for this population. Also, because of the mobile nature of production gangs, it is sometimes difficult to schedule face- to- face courses. It has proven equally difficult to gain access to the online course in many of the remote locations that are the work sites for the production gangs. A training delivery method has evolved to include a blended format of online (when available) and face- to- face training.

GMCLS: Railway Workers Hazardous Materials Training Program: Evaluation of the On-line Awareness Level Training Program, October, 2001: An excerpt:

“Trainees gained a lot of valuable information on Hazmat. They learned it from the course modules. They learned it from their web-based research and the links that were in the on-line modules. And, they learned from each other and their informal interactions with peer trainers. The enthusiasm of bulletin board postings portrayed rail workers who, many after decades as railroaders, were having a whole new world opened before them. Nearly instantaneous access to DOT, OSHA and FRA regulations, material safety data sheets, the NIOSH pocket guide, toxicology pages, and each other was almost startling to some. Trainees were getting their colleagues to take the course and they were downloading modules and sharing them with their co-workers. They were excited about having continued access to the on-line course, to the bulletin board, and to each other generally.”

Hazardous Materials Training Research Institute (HMTRI)

HMTRI continues to refine its Hazwoper-on-the-Web for Internet delivery. One-hundred and sixty-nine workers have enrolled. Approximately 133 students have successfully completed the course. The current Hazwoper-on-the-Web provides 24 hours of computer based instruction supplemented with 16 hours of hands-on and classroom instruction. Twenty-four CCCHST member institutions have utilized the program. Spanish language audio and text have been added to the course this year. A new waste site worker refresher course is set for completion this summer. The new refresher will consist of a minimum of six hours of computer-aided instruction supplemented with two hours of hands-on/classroom instruction. Spanish language audio and text will be added to this course also.

L-AGC Computer Assisted Training and Distance Learning

The LaborersLEARN web portal had developed a user library and links to relevant web sites that contain information on worker health and safety and environmental remediation issues. However, L-AGC felt that there was a need to dynamically inform users of important developments within LaborersLEARN and within the environmental remediation/construction craft industry (e.g., new courses, system status, important new regulations, breaking news). During the summer of 2001, a new facility was added to the menu for L-AGC staff whereby information could be posted, articles and news authored outside of L-AGC referenced and relevant documents made available.

Prior to June 2001, the LaborersLEARN library required coding catalogs and abstracts in HTML, then manually moving documents to the proper locations on the development server. This required considerable technical knowledge and presented significant opportunity for error.

During the summer, several software programs were introduced to LaborersLEARN to collect information about the documents, capture the documents and automatically catalog and display catalogs without requiring HTML expertise, knowledge of the LaborersLEARN system, or technical knowledge needed to manually move the documents. Document information is no longer housed in HTML pages. Instead it is in a database that is not directly accessible through a web-browser. The results are a significant reduction in errors, increased integrity and increased security of library contents.

Other initiatives involving WETP this year include working on the ANSI Z490.1-2001 standard, Brownfields activities, NIEHS/OSHA Best Practices Work, and the WETP Strategic Planning Initiative. Descriptions of each of these activities is below.

2.6. Release of ANSI Z490.1-2001 Accepted Practices in Safety, Health, and Environmental Training

On November 14, 2001, the American Society of Safety Engineers (ASSE) and the American National Standards Institute (ANSI) published the American National Standard, Z490.1 Criteria for Accepted Practices in Safety, Health and Environmental Training, approved by the American National Standards Institute on July 2, 2001. For the past four years, many NIEHS WETP staff, awardees and colleagues have worked on the subcommittee that developed this voluntary standard for training providers for safety, health, and environmental training. The standard provides important guidance to private and public sector organizations regarding the key elements of high quality safety and health training programs.

This Standard establishes criteria for safety, health, and environmental training programs, including development, delivery, evaluation and program management. This Standard is recommended for voluntary application by training providers of safety, health, and environmental training, and it is intended to apply to a broad range of training programs. To obtain additional copies of the standard, contact ASSE's Customer Service, (847) 699-2929, or order it online from the association's World Wide Web site, <http://www.asse.org>.

2.7. Brownfields Activities

As of September 1, 2000, the EPA and NIEHS entered into a separate Interagency Agreement for the Brownfields Minority Worker Training Program; therefore the Brownfields program accomplishments report will be submitted as a separate report. Additional information regarding NIEHS brownfields activities is located in Appendix 14.

2.8. OSHA/NIEHS Best Practices Workshop

The first joint gathering of the OSHA-OTE and NIEHS Training Grants staff and their training grantees was held on April 17-19, 2001 in Chicago, IL. The meeting was in the format of a workshop focused upon the "best practices" in worker training that have been developed and evaluated over the life of the respective training grant programs. The foundation for the workshop was a recent NIEHS "best practices" document, as the NIEHS program has been more narrowly focused on a specific workplace category, HAZWOPER, unlike the diverse training provided by the OSHA grantees.

Four NIEHS best practices categories were identified:

"Core Concerns"

"Partnerships"

"Skills Enhancement"

"Advanced Training Technologies."

Individual concurrent “Mini-Symposia” addressed each of the four categories. In each Mini-Symposia, five best practices topics specific to each of the categories were presented, explored, and discussed. The “best practices” were refined, expanded, and extended based upon the input from the participants in each session. These additional dimensions were presented to all of the workshop participants for information, comment, and discussion in a closing plenary session facilitated by presentations by the Mini-Symposia co-chair persons.

A concluding session explored the potential interest in and opportunities for future collaboration, coordination, mentoring, and the like between the OSHA and NIEHS grantees. Major interest centered on the sharing of information and decisions with specific regard to advanced training technology applications. It was further agreed that a second joint meeting among the OSHA and NIEHS grantees in two years had merit as a means to continue and extend the dialogue developed during this first joint workshop.

For NIEHS WETP awardees, it was an opportunity to review the Best Practice approach with its core group of awardees and to obtain a fresh approach by testing the Best Practices on awardees of different safety and health training grant activities, not exclusively HAZWOPER. For OSHA OTE it was an opportunity to provide the OSHA Educational Centers and Harwood Grantees with the experiences of the NIEHS grantees.

The Workshop Report includes perspectives on each of the best practices mini-symposia categories, perspectives on each of the five best practices presented in each mini-symposia, and summaries of each such presentation. In addition, summaries of the closing plenary sessions that provided reports from the mini-symposia co-chairs and discussions of the next steps in advancing collaboration and dialogue among the grantees are included. Further, a serious effort was made to include presentation materials, key documents and reports, which serve as the basis for the best practices and the workshop, and links to related resource materials and sources. These are included in the extensive appendix that accompanies the Report.

2.9. WETP Strategic Planning Process

Development of the NIEHS WETP Strategic Plan began in April 2001 with the design of a strategic planning process that was based on three key principles: (1) Stakeholder Inclusion—the idea that inputs from all stakeholder groups involved with and impacting the program (Awardees, Other Federal Agencies, Champions of the Program) should be strongly represented in the formulation of the plan; (2) Realistic Goals—the plan should be realistic and address a significant number of operational items that impact the month to month running of the program, and; (3) Peer Review Process—the plan needs to contain a review process that keeps the plan current and that helps WETP “realize that we are moving forward” and staying on track with the latest developments in the field of worker training.

Beginning with “process and content” meetings for WETP and Clearinghouse staff, the strategic planning process involved the inclusion of a wide variety of participants both in face-to-face and on-line meetings. The decision to include a wide range of stakeholders in the WETP planning process led to the scheduling of three additional meetings that took place in the Fall of 2001. The

first meeting, called the “Champions Meeting”, took place September 5th at NIEHS in Raleigh, NC and brought together individuals who have been and remain strong supporters of WETP. The second meeting, called the “Federal Meeting”, took place in Crystal City, VA and included a broad spectrum of federal agency representatives who have been served by the WETP program over the past 15 years. Finally, a program-wide Strategic Planning Workshop took place Nov. 1 & 2 in Chapel Hill to provide an opportunity for key awardee staff to discuss in detail the components of the plan.

The current working strategic plan is comprised of five areas considered essential to the continuing growth and sustainability of WETP:

1. Partnerships Between WETP and Other Organizations
-This includes the need, ability and mechanisms for building partnerships.
2. Organizational Alignment of WETP Within a Larger Sphere of Influence
-Understanding how WETP’s goals and mission statement align with those of NIEHS, Awardees, Workers and other participants in the worker safety area of influence.
3. Leadership and Training, Maintaining the Human Capital
-How to support and increase trainers in the field of worker safety.
4. Sharing Information
-Ability to share information among stakeholder groups.
5. Operational Components of WETP
– Improving, updating, and streamlining those operational features already part of WETP.

Threaded among these five strategic areas are four considerations that apply to the overall plan:

1. Technology Development – the importance of technology to WETP and to trainers.
2. Resources – how to leverage and continue existing sources, create new sources.
3. Program Integration – the integration of WETP with other existing federal education & training programs.
4. Compliance and Accountability – how to make “compliance” with programmatic deadlines a non-issue for WETP Awardees.

A final version of the WETP Strategic Plan will be presented at the WETP Awardees Meeting in April 2002.

2.10. WETP Clearing House Update

The National Clearinghouse continued to operate as the information dissemination arm of the WETP, disseminating program information between and among the grantees, to other

government agencies, and to the worker safety community. The September 11 attack on the U.S. underscores the added importance in coming years of WETP's expanded role in the education and training of workers involved in "emergency response situations", and in its expanded responsibility to keep the worker safety community informed of new safety and health precautions as the war on terrorism unfolds.

The National Clearinghouse for Worker Safety and Health Training acts as a centralized distribution and information point through which members of the worker education and training community can access technical documents, safety and health update information, technical workshop reports and curricula produced by the WETP awardees. In addition to the day-to-day education and training responsibilities of WETP, there is the additional responsibility of leadership that comes from the NIEHS WETP being viewed as the federal government's primary worker education training program. Accordingly, part of the WETP mission is seen as the exploration of new training technologies and methods for the evaluation of training effectiveness.

The role of the National Clearinghouse is to support WETP's exploration of new ideas, to help maintain WETP's leadership, and to advance the knowledge of worker education and training. We carry out this role by being proactive in introducing new Internet-based communication technologies by and planning and managing technical workshops each fiscal year, and by assimilating quantitative program evaluation methodologies and results into the National Clearinghouse.

The four primary task areas of the contract for 2001/2002 are as follows:

- Task One: Establish, manage and operate an information clearinghouse for the distribution of technical information produced by the WETP of the NIEHS.
- Task Two: Arrange and manage two technical workshops annually related to scientific, administrative, and regulatory issues associated with training for hazardous waste workers and emergency responders.
- Task Three: Facilitate the transmission of technical information related to the development of safety and health training programs for hazardous waste workers and emergency responders.
- Task Four: Develop, analyze and compile program research products to support new training initiatives and the continuation of program efficacy measures.

2.11. World Trade Center (WTC) Response Update

Several thousand workers continue to be involved in demolition and cleanup work at Ground Zero; work that will continue for as long as a year. Besides the routine dangers involved in cutting and removing construction debris, workers may also be exposed to a host of toxicologic hazards. Specialized training is required to safely work under these conditions.

Hundreds of these workers, including members of the International Union of Operating Engineers, the International Association of Fire Fighters (IAFF), the International Association of Heat and Frost Insulators and Asbestos Workers, the International Association of Bridge, Structural, Ornamental, and Reinforcing Iron Workers, the Laborers International Union of North America, and the International Brotherhood of Teamsters, have received training through the NIEHS WETP.

However, Bechtel Corporation, which was hired by New York City to develop a health and safety plan for the World Trade Center site, estimates that all of the workers who will be engaged in demolition and cleanup over the long haul will need additional training in areas such as handling of hazardous waste, lead, and asbestos, and working in confined spaces.

A specific training priority is to reestablish training capacity for the New York City Fire Department hazardous materials (HazMat) teams--many trainers were killed in the building collapse. Other priorities include health and safety training for site cleanup workers, health care and personnel training to support ongoing cleanup and remediation, training and certification in the use of personal protective equipment (such as respirators and suits) in the cleanup effort, weapons of mass destruction training for the HazMat workforce, and cross-training in craft skills, safety, and health for demolition and remediation workers.

Because of the WTC disaster, the NIEHS-supported HazMat operations of IAFF and the Fire Department of New York (FDNY) suffered a staggering loss of key personnel. Through their loss, our nation's hazardous materials training community has also been dealt a tremendous blow. One of our country's most veteran Hazmat Master Trainers - Chief Jack Fanning - is among the 'unaccounted.' Chief Fanning was the Chief of HazMat Operations for FDNY for the past decade and a vital resource to NIEHS and IAFF Training efforts. NIEHS is fully committed to assisting IAFF and FDNY in rebuilding their hazmat response capacity.

2.12. Program Update for FY 2001 (September 1, 2001-August 31, 2002)

On July 1, 2001, all the current NIEHS Awardees submitted reapplications for continued funding for the period beginning September 1, 2001. This is the second annual segment of a five year funding cycle. Each of the reapplications detailed program accomplishments and proposed training plans for the current year.

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

Twenty-three million dollars of the FY 2001 funds were allocated to continue support of the Superfund Worker Training Program to train hazardous waste workers and emergency responders. Of the \$23 million, 3 supplemental awards were made, which included \$371,968 for Advanced Training Technologies (ATT), \$99,758 for Superfund Jobs Training Initiative

(SuperJTI), and \$444,046 for World Trade Center (WTC) training response. Three million dollars of the FY 2001 funds were allocated to continue support for the MWTP. As a result of the FY 2001 funding, NIEHS awarded:

- 17 HWWTP awardees received awards totaling \$19,010,715
- 5 MWTP awardees received awards totaling \$3,000,000
- 6 ATT awardees received awards totaling \$371,968
- 1 SuperJTI awardee received an award totaling \$99,758
- 5 WTC awardees received awards totaling \$444,046

See appendix 15 for awardee breakout of FY 2001 funds for the period of September 1, 2001 to August 31, 2002. Budget adjustments in the proposed funding plan are based on the training needs of high risk populations, national geographic coverage in training availability and the published program priorities for training support. Consideration has also been given to previous funding patterns, awardees' efforts to generate program income for independently continuing their programs, and the carryover of unexpended funds from prior years.

New Awards to Support Worker Training Activities

MWTP

DePaul University transferred their cooperative agreement to the National Puerto Rican Forum, Inc. in New York City. Tipawan Reed remains the Principal Investigator and provides programmatic oversight, while NPRF is the awardee organization responsible for the fiscal management of the cooperative agreement. All consortium members remained the same.

New Initiatives for the Current Year:

Chemical/Biological Training Initiative

Emergency responders and industrial workers, whether they are first responders (the local police and fire departments), skilled emergency responders, or post emergency workers, typically have not received training in biological or chemical weapon response procedures. Training these professionals is a pressing national need. NIEHS has provided supplemental funds for HAZMAT training for biological weapons response through a number of existing training programs, and is ideally positioned to respond to this burgeoning training need. The program is now actively scaling up training programs in this area with the intent of providing the nation's emergency response workers with health and safety training in this field.

CSB Partnership on Learning from Disasters

The WETP is engaged in a partnership activity with the President's Chemical Safety and Hazard Investigation Board (CSB), an independent federal agency. The purpose of this partnership is to establish a collaborative process for developing resource materials that will examine lessons learned from the investigation of catastrophic chemical accidents. A workshop will be held in Nashville, TN during April 2002 and involve major participation by the chemical industry and other primary stakeholders who are involved in chemical disaster response. In collaboration with OSHA, WETP grantees held a workshop focused on "best practices" in worker training that have been developed and evaluated over the life of the program. Major interest centered on sharing

information and decisions with regard to advanced training technologies designed to assist the private sector for assuring OSHA compliance.

2.13. WETP 2001 Supplemental Awards

NIEHS offered three opportunities for awardees to receive supplemental funding in the areas of Advanced Training Technologies (ATT), Superfund Jobs Training Initiative (SuperJTI) and Brownfields Job Training under the Hazardous Waste Worker Training Program. Awards were made in the ATT and the SuperJTI categories. For information regarding the SuperJTI awards, please refer to the Superfund Jobs Training Initiative (SuperJTI) section and Appendix .

Advanced Training Technologies

Based on the Technical Workshop Report “Hazwoper Training: Utilizing Advanced Training Technologies”, supplemental requests were considered for the modification of curricula and delivery of training to specific target populations using computer-based or Internet-based learning methods. Primary consideration was given to evaluating the effectiveness of technology-supported learning methods while considering OSHA’s interpretations for the deployment on advanced training technology in the safety and health realm.

Pilot efforts may examine how participatory training approaches can be utilized in the deployment of ATT or how the role of training instructors may be enhanced through using distance-learning methods for training delivery. Evaluation efforts should develop lessons learned and illuminate the strengths and weaknesses of ATT approaches versus traditional classroom-based training and education. Applications should target improvements in the overall ATT knowledge level of trainers, students and training developers; promote involvement of worker trainers or course instructors in the development technology-based course development, as well as implementation of a media selection model for use across an awardee, or group of awardees’, health and safety training community.

The following five awards were made to support ATT activities with a description of each program below:

- GMCLS in building onto the Railroad workers training program to revise and increase web presence to reach more workers;
- UAW in building on training trainers on occupational and environmental information on the web and to increase the web presence of program;
- UMDNJ in developing a Web Based Training module for their 8 hour Hazwoper refresher with two modules (4 hr CBT and 4 hours hands on);
- UAB in addressing emergency response training needs using participatory worker lead decision trees via computer-based methods;
- IAFF in creating a CD-Rom /web based training for Fire Fighters and emergency responders;

George Meany Center for Labor Studies (GMCLS)

Building on the 1999, GMCLS supplemental funding from NIEHS for using Advanced Training Technologies (ATT) to pilot a project converting classroom-based, awareness level hazardous materials training to an online format, GMCLS proposes to create a rail community web site that

incorporates lessons learned from the experience as well as recommendations from participants, instructors, and developers of the pilot project. The web-based learning community for rail workers will be guided by a steering committee of peer trainers, instructors, and program developers. It will advance program goals by increasing access to training for the targeted population of rail workers (including under served populations of Native Americans and non-English speaking rail workers) and providing an opportunity for students, peer trainers, instructors, and program developers to increase overall knowledge of ATT. The community web site will include basic elements of a Rail Workers Hazardous Materials Online Clearinghouse, such as industry news and resource and regulatory links, and will expand on the clearinghouse effort to include more interacted elements, such as moderated chat rooms and bulletin board forums, refresher drills for instructors, and an alumni page. The web page would also serve as the entry point for the existing online awareness course, as well as review courses for 8-hour and 4-day training courses that will be developed.

The specific aims will address the following threefold objectives:

- To develop resources dedicated to rail hazmat issues across craft, union, geographic and corporate lines. Each of the seven rail unions associated with the NIEHS worker training grant have a web site dedicated to their members. The web sites are union and craft-specific. The Rail Community website would offer rail workers, regardless of union or rail carrier, the opportunity to learn from and about each other.
- To create an online community that will foster the best practices paradigms of the NIEHS WETP program among those involved with rail transportation of hazardous materials across the United States.
- To act as a focal point for the development of additional programmatic elements and as a tool for continuing the growth and development of the program, students and instructors, and as well as to allow for the evolution of the rail hazmat community.

It is anticipated that members of the web-based rail community will have achieved reasonable proficiency in computer and Internet literacy. Instructors and program developers will have achieved reasonable proficiency in the design and delivery of web-based technology for web design and course delivery.

United Auto Workers (UAW)

The UAW proposes to develop, pilot, and evaluate a computer based training program to complement and enhance ongoing UAW chemical emergency response training programs building on their efforts stated in 1999 from the first ATT supplemental pilot. This proposal includes a large number of tasks pointed at taking the safe worker web site and ATT Local Union Discussion Leader (LUDL) training created over the last two years and refining it and making it more available. The new proposed training program will seek to train UAW-represented employees and managers to access, interpret and utilize computer databases and programs as a means of critically assessing industrial emergency response activities at their facilities. This proposal will focus on workers at high risk of exposure to hazardous chemicals, especially in smaller employers and facilities, which have fewer resources and devote to health and safety. The specific aims of the ATT project are to:

- Develop a targeted website that provides access to a variety of environmental, occupational, and health databases, and guides users to appropriate websites.
- Develop computer-based training curricula to train workers and managers at UAW-represented facilities on how to use environmental and occupational safety and health data.
- Develop a training module on using computer software, such as Aerial Location of Hazardous Atmospheres (ALOHA), to develop facility-specific spill hazard and worse-case scenarios to be used in emergency response planning and training.
- Train LUDLs on new computer-based modules and provide opportunities for them to deliver training in a variety of venues.
- Provide workers and managers with tools to critically evaluate the adequacy of their facility emergency response plans, risk management plans, and process safety plans.
- Evaluate the effectiveness of computer-based training techniques, in particular how participatory training approaches can be utilized in the deployment of ATT
- Evaluate the strengths and weakness of ATT.

The New Jersey/New York Consortium

NJ/NY Consortium will convert our 8-hour Hazardous Waste Site Worker Refresher Course to an Internet (or CD-ROM) based course that will be available to workers in two parts. Part One would be a web-based course that would cover the basic knowledge needed by workers and culminate in a virtual exercise requiring the student to analyze a site for hazards and prepare response actions. Part Two will be practical exercises conducted either at consortium member facilities or by consortium members at company locations. These will involve actual work with personal protective equipment, monitoring equipment and other tools of the trade. The web-based format is not intended to, nor will it replace, the traditional classes. Specifics to adapting this training is to take the first module and create computer-based instruction that can be downloaded from a server and run on the local machines using Metacard which is a cross-platform virtual machine course delivery program developed at SUNY Buffalo. Current instructors of the 8-hour hazwoper refresher will be used to convert the existing knowledge-based module for online use. The instruction will culminate in a virtual exercise relating to identification of hazards at a virtual waste site. The Consortium will continue to conduct regular training, but web-based classes will be offered as an alternative to the traditional type of training.

The effectiveness of the instruction will be measured by comparing the performance of those attending the regular class with those receiving the instruction via their computer. This evaluation will be done during the first portion of module two (hands-on) which will be conducted onsite. Email and chat capabilities will be added to enable learners to get answers to their questions within 24 hours. While the content will be built into this new format, existing courses such as HMTRI's will be evaluated and lessons learned gleaned.

The NJ/NY Consortium currently conducts 8-hour Hazardous Waste Site Worker Refresher

Courses across New Jersey and New York and the course is ideally suited for conversion to web-based training of this type. The refresher course is comprised of discrete modules and a scenario-based exercise for about 4 hours of the training and practical exercises for the remainder. The modules and scenario can be readily adapted to a web-based format.

University of Alabama at Birmingham (UAB)

UAB will develop, pilot, and share with other grantee organizations an interactive exercise utilizing computer-based technology that can be delivered in group workshops or instructor-mediated settings to enhance users' abilities to make appropriate decisions at emergency scenes that involve, or have the potential to involve, hazardous materials. The project will target public and industrial hazmat responders and be adaptable to the needs of each training population by the substitution of appropriate hazard assessment data. It will be comfortable for users to access and navigate. The product will be based on a Windows PC platform with Pentium processor and will be compatible with most current computer workstations. It will be delivered on CD-ROM. UAB trainers will write a trainer's manual for the exercise, and travel to Technical Workshops and other grantee locations to share the exercise and teach other trainers how to use it. Two fire departments and one manufacturing company will review and advise.

UAB has experience and expertise in using ATT methods and materials in curricula used in a variety of courses, while still remaining committed to hands-participatory learning. The proposed ATT pilot will build on one of the things UAB instructors do best: the development and delivery of decision-making scenario workshops. The exercise will direct users through a series of decisions structured on the DECIDE process used by hazmat trainers, overcoming the restricted parameters of paper-based workshops by the use of CBT to more accurately simulate the multidimensional of the workplace. A hazardous materials response scenario will be designed by three experienced hazmat instructors, following the decision process from notification through stabilization of the incident, practicing the skills of hazard assessment, setting response objectives, resource management, communications, and ongoing evaluation and critique of results. Digital photographs and video will be included. A CD-ROM will serve as the delivery medium.

Following the opening visual presentation of the incident scene, a "responder's console" will offer action buttons for making choices. The console will light up when a decision is required, imparting a sense of urgency to simulate reality. Participants will be provided with information through links to resources. Each pathway will lead to additional decisions related to the previous ones. A review function will be available in the form of a loop that takes users back to a decision point where they can review materials prior to that decision and choose another path. The exercise will be completed, piloted and polished, and made available to all grantees beginning in May 2002. Development will take place at the University of Alabama at Birmingham, in Birmingham Alabama. Pilot courses will be held on campus. Train-the-trainer sessions will be held at one NIEHS Technical Workshop and at three locations requested by individual grantee programs and their consortium members.

International Association of Firefighters (IAFF)

Since 1987, in cooperation with NIEHS and several other agencies concerned with worker health and safety, the IAFF has provided top-quality hazardous materials (HazMat) training for fire

fighters and other emergency responders. Through a previous supplemental project (re: Y2K Training for Emergency Responders), the IAFF was able to quickly design, develop, deliver and evaluate a customized course for emergency responders. The response by the emergency response community was extremely positive. For this new supplement, IAFF will address the following three areas of Advanced Training. Technology (ATT) since they have the greatest potential for enhancing all IAFF hazardous materials training projects:

- (1) The use of web-based technology to support both initial and refresher training, disseminate information on emerging issues in hazmat response, increase communications between IAFF and its "customers" and increase product availability while minimizing production and distribution costs;
- (2) To improve the effectiveness of the training programs using a computer-based multimedia instructional approach: and
- (3) To improve the cost-efficiency of delivering and disseminating existing training curricula using new media such as CD ROM and DVD.

As the focal point for their Web-Based Technology section, the IAFF will use their current presence on the world wide web (www) and focus their web-based initiative on revising the web site and Internet activities to maximize their effectiveness. Some specific components of this initiative include:

- Re-format the web site to simplify the users ability to quickly access information. Whether it is a course update, online learning module or online request for training, the IAFF is striving to design a site that enables users to reach their information "within three clicks."
- Develop a system to enable students and those utilizing IAFF courses to ask IAFF instructors questions related to our curricula and approach to course delivery. IAFF instructors would field the questions and reply to the students within 24-hours.

Create online learning modules that both prepare students for IAFF training and refresh the knowledge gained during past IAFF courses. With the assistance of web and instructional designers, the IAFF is seeking to create Computer-Based Training (CBT) modules that students can access online. The IAFF does not want to replace the instructor or eliminate the benefits of team-based classroom training. Conversely, the IAFF seeks to use web technologies to better prepare students, ensure minimum levels of pre-course knowledge and provide easy-to complete modules that update students on the latest developments in a given curriculum.

2.14. 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 16.

3 Future Program Implementation and Conclusion:

The Worker Education and Training Program 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. 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 Education and 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. This program is addressing issues such as literacy, appropriate adult education techniques, training quality improvement, and other areas not addressed directly by the market place. The program enhances rather than replaces private sector training by demonstrating innovative worker training techniques and materials.

Appendix 1: Fourteen-Year Summary

EPA HWWTP FOURTEEN-YEAR TRAINING SUMMARY FOR BUDGET PERIOD 09/01/1988-08/31/2001			
Year	Total Courses	Total Workers	Total Contact Hours
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	4,124	75,155	983,183
2001	4,806	79,710	1,030,257
TOTAL	50,850	958,941	14,385,736

Appendix 2: FY 2000 Funding

**EPA/NIEHS WORKER EDUCATION AND TRAINING AWARDS
FOR BUDGET PERIOD 09/01/2000-08/31/2001
FY 2000 FUNDS**

AWARDEE	EPA HWWTP		EPA MWTP/BMWTP			9/00 TOTALS
	HWWTP 9/00 AWARD	TOTAL 9/00 AWARD	MWTP 9/00 AWARD	Brownfields 9/00 AWARD	TOTAL 9/00 AWARD	
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
Xavier 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
TOTAL	19,040,000	19,040,000	3,000,000	3,000,000	6,000,000	25,040,000

Appendix 3: Course Data by EPA Region

EPA HWWTP COURSE DATA BY EPA REGION 09/01/2000 - 08/31/2001			
EPA REGION	COURSES COMPLETED	WORKERS TRAINED	CONTACT HOURS
Region 1	221	3,766	50,106
Region 2	907	16,557	169,755
Region 3	260	3,951	73,300
Region 4	659	12,192	140,871
Region 5	1,159	19,435	232,940
Region 6	223	3,366	46,114
Region 7	342	4,733	75,487
Region 8	108	1,505	26,942
Region 9	512	8,691	135,411
Region 10	415	5,514	79,332
TOTAL	4,806	79,710	1,030,257¹

¹ Numbers do not add exactly to 1,030,257 due to rounding.

Appendix 4: Total Training by NIEHS Awardee

EPA/NIEHS WORKER EDUCATION AND TRAINING AWARDS TOTAL TRAINING FOR BUDGET PERIOD 09/01/2000-08/31/2001			
AWARDEE	COURSES COMPLETED	WORKERS TRAINED	CONTACT HOURS
University of Alabama Birmingham	134	2,554	28,412
International Chemical Workers Union Council	252	5,026	52,953
International Association of Fire Fighters	61	1,324	43,320
George Meany Center for Labor Studies	192	2,098	20,932
University of Massachusetts, Lowell	66	936	14,112
University of California at Los Angeles	127	2,357	33,770
Laborers-AGC Education and Training	504	6,187	148,079
Paper, Allied-Industrial, Chemical and Energy Worker International Union	350	7,063	62,437
HMTRI Kirkwood Community College	922	12,775	156,243
Service Employees International	80	1,328	11,920
University of Medicine & Dentistry of New Jersey	573	10,859	101,440
International Union, United Auto Workers	38	782	16,781
International Union of Operating Engineers	683	14,454	190,256
University of Cincinnati	384	5,770	62,445
Center to Protect Workers' Rights	250	3,478	60,870
AFSCME Training and Education Institute	111	1,483	9,569
DePaul University	79	1,236	13,719
TOTAL	4,806	79,710	1,030,257¹

¹Numbers do not add exactly to 1,030,257 due to rounding.

Appendix 5: Target Populations

EPA HWWTP TARGET POPULATIONS FOR BUDGET PERIOD 09/01/2000-08/31/2001						
TARGET POPULATIONS	# COURSES COMPLETED	% COURSES COMPLETED	# WORKERS TRAINED	% WORKERS TRAINED	# CONTACT HOURS	% CONTACT HOURS
CERCLA Cleanup ¹	2,138	44%	34,942	44%	543,081	53%
Emergency Response	857	18%	16,095	20%	197,188	19%
Other Safety and Health	1,037	22%	18,502	23%	145,417	14%
Hazmat Transport	274	6%	3,061	4%	26,740	3%
RCRA/Industrial	413	9%	5,829	7%	98,535	10%
Asbestos Abatement	62	1%	940	1%	14,088	1%
Radiation	15	0%	234	0%	2,152	0%
Lead Abatement	10	0%	107	0%	3,056	0%
TOTALS	4,806	100%	79,710	100%	1,030,257	100%

¹The overall majority of training remains in the CERCLA Cleanup training.

Appendix 6: Six-Year Summary of Training

NIEHS/EPA MINORITY WORKER TRAINING PROGRAM SIX-YEAR SUMMARY OF TRAINING FOR BUDGET PERIOD 09/01/1996-08/31/2001			
YEAR	STUDENTS TRAINED	PLACED IN JOBS	PERCENTAGE OF STUDENTS PLACED IN JOBS
1996	368	246	67%
1997	310	193	62%
1998	240	154	64%
1999	360	233	65%
2000	364	244	67%
2001	342	204	60%
TOTAL	1,984	1,274	64%

Appendix 7: Total Training by MWTP Awardee

EPA/NIEHS MINORITY WORKER TRAINING PROGRAM WORKER EDUCATION AND TRAINING AWARDS TOTAL TRAINING FOR BUDGET PERIOD 09/01/2000-08/31/2001			
AWARDEE	COURSES COMPLETED	STUDENTS TRAINED	CONTACT HOURS
University of Medicine & Dentistry of New Jersey	18	30	21,338
Laborers-AGC Education and Training	74	127	48,433
Center to Protect Workers' Rights	72	73	38,836
DePaul University	34	89	20,883
Xavier University	11	23	7,240
TOTAL	209	342	136,730

Appendix 8: Six-Year Summary of Students Trained per Awardee

NIEHS/EPA MINORITY WORKER TRAINING PROGRAM: (SIX-YEAR SUMMARY OF STUDENTS TRAINED PER AWARDEE) FOR BUDGET PERIOD 09/01/1996-08/31/2001							
AWARDEE	1996 STUDENTS TRAINED	1997 STUDENTS TRAINED	1998 STUDENTS TRAINED	1999 STUDENTS TRAINED	2000 STUDENTS TRAINED	2001 STUDENTS TRAINED	TOTA L
University of Medicine & Dentistry of New Jersey	26	25	25	30	30	30	166
Laborers-AGC Education and Training	50	41	32	96	93	127	439
Alice Hamilton Occupational Health Center	46	20	N/A	N/A	N/A	N/A	66
Center to Protect Workers' Rights	60	139	126	100	89	73	587
DePaul University	70	34	22	69	63	89	347
Jackson State University	86	27	N/A	25	42	N/A	175
Clark Atlanta University	30	24	35	45	47	N/A	181
Xavier University ¹						23	23
TOTAL	368	310	240	360	364	342	1,984

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

¹ First year in the MWTP.

Appendix 9: Six-Year Summary of Employment per Awardee

NIEHS/EPA MINORITY WORKER TRAINING PROGRAM: SIX-YEAR SUMMARY OF EMPLOYMENT PER AWARDEE FOR BUDGET PERIOD 09/01/1996-08/31/2001							
AWARDEE	1996 TOTAL EMPLOYMENT	1997 TOTAL EMPLOYMENT	1998 TOTAL EMPLOYMENT	1999 TOTAL EMPLOYMENT	2000 TOTAL EMPLOYMENT	2001 TOTAL EMPLOYMENT	TOTAL
University of Medicine & Dentistry of New Jersey	16	12	18	14	24	23	107
Laborers-AGC Education and Training	27	25	28	80	71	84	315
Alice Hamilton Occupational Health Center	38	11	N/A	N/A	N/A	N/A	49
Center to Protect Workers' Rights	54	85	63	45	54	57	358
DePaul University	56	26	21	48	34	23	208
Jackson State University	39	17	N/A	19	29	N/A	104
Clark Atlanta University	16	17	24	27	32	N/A	116
Xavier University ¹	0	0	0	0	0	17	17
TOTAL	246	193	154	233	244	204	1,274

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

¹ First year in the MWTP.

Appendix 10: MWTP Summary of Type and Number of Courses

NIEHS/EPA MINORITY WORKER TRAINING PROGRAM SUMMARY OF TYPE AND NUMBER OF COURSES FOR BUDGET PERIOD 09/01/2000-08/31/2001	
COURSE NAME	NUMBER OF COURSES
Adult CPR	5
Asbestos Abatement Worker Basic	1
Asbestos Abatement Supervisor	15
Basic Construction Skills	9
Basic First Aid	7
Basic Math Skills	15
Basic Reading/Writing Skills	10
Basic Superfund Site Worker	20
Confined Space	7
Environmental Justice	4
Environmental Preparation	3
Environmental Sampling	1
Environmental Technician	2
GED Training and Certification	2
General Construction Safety	22
Hazard communication	4
Lead Abatement Worker Basic	17
Life Skills	27
Logout-Tagout	4
Mentoring/Career Guidance	17
Microbial Remediation: Mold and Mildew	3
Physical Fitness	7
Scaffold	6
Site Worker Refresher	1
TOTAL	209

Appendix 11: MWTP Demographics_

NIEHS/EPA MINORITY WORKER TRAINING PROGRAM: DEMOGRAPHICS FOR BUDGET PERIOD 09/01/2000-08/31/2001								
STUDENTS	342							
AGE	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>
	25	42	45	36	51	41	45	57
ETHNICITY	<u>BLACK</u>	<u>HISPANIC</u>	<u>ASIAN</u>	<u>AMERICAN INDIAN</u>			<u>PAC. ISLANDER</u>	
	297 (87%)	31 (9%)	6 (2%)	2 (1%)			6 (2%)	
GENDER	<u>MALE</u>			<u>FEMALE</u>				
	299 (87%)			43 (13%)				

Appendix 12: L-AGC MWTP Job Placement Chart

Laborers-AGC MINORITY WORKER TRAINING PROGRAM JOB PLACEMENT CHART					
MWTP Student	Student State	Company Name	Annual Salary	Job Title	Field/ Type of Work
		BAYVIEW			
001	CA	ENVIRO	\$26,880.00	ENVIRO TECH	CONSTRUCTION
002	CA	ITSI	\$27,560.00	ENVIRO TECH	HAZ WASTE
		BAYVIEW			
003	CA	ENVIRO	\$26,880.00	ENVIRO LABORER	CONSTRUCTION
		BAYVIEW			
004	CA	ENVIRO	\$26,880.00	ENVIRO LABORER	CONSTRUCTION
005	CA	HERC	\$31,200.00	ABATEMENT WORKER	MOLD/MILDEW
006	CA	N/A	\$0.00	N/A	NONE
007	CA	MUNI	\$32,640.00	OUTREACH COORD.	TRANSPORTATION
		BAYVIEW			
008	CA	ENVIRO	\$26,880.00	ENVIRO LABORER	CONSTRUCTION
009	CA	FOOTLOCKER	\$19,968.00	SALES ASSOC.	MERCHANDISE
		BAYVIEW			
010	CA	ENVIRO	\$26,880.00	ENVIRO LABORER	CONSTRUCTION
011	CA	ITSI	\$27,560.00	ENVIRO TECH	ABESTOS
012	CA	ON SITE	\$35,360.00	ENVIRO TECH	HAZ WASTE
013	CA	N/A	\$0.00	N/A	NONE
014	CA	HERC	\$31,200.00	ABATEMENT WORKER	MOLD/MILDEW
015	CA	MARINSHIP	\$24,960.00	GEN LABORER	CONSTRUCTION
016	CA	ON SITE	\$35,560.00	ENVIRO TECH	HAZ WASTE
017	CA	HERC	\$31,200.00	ABATEMENT WORKER	MOLD/MILDEW
018	CA	ON SITE	\$35,560.00	ENVIRO TECH	HAZ WASTE
019	CA	HERC	\$31,200.00	ABATEMENT WORKER	MOLD/MILDEW
		HOME DEPOT			HOME
020	CA	HOME DEPOT	\$21,120.00	STOCK PERSON	IMPROVEMENT
021	CA	ITSI	\$27,560.00	ENVIRO TECH	HAZ WASTE
022	CA	TETRA TECH	\$24,960.00	SURVEYER	LEAD SAMPLING
023	CA	N/A	\$0.00	N/A	NONE
		BAYVIEW			
024	CA	ENVIRO	\$26,880.00	ENVIRO LABORER	CONSTRUCTION
025	CA	HERC	\$31,200.00	ABATEMENT WORKER	MOLD/MILDEW
		GENERAL			CONSTRUCTION
026	CT	A.A.I.S	\$24,960.00	LABORER	CONSTRUCTION
		UNIVERSAL			ENTERTAINMENT
027	CT	STUDIOS	\$33,800.00	SECURITY GUARD	SECURITY
		ABCON			
		ENVIRONMENTA		REMEDIATION	ASBESTOS
028	CT	L	\$24,960.00	WORKER	ABATEMENT
		STANDARD			
029	CT	DEMOLITION	\$31,200.00	LABORER	DEMOLITION
		ABCON			
		ENVIRONMENTA		REMEDIATION	ASBESTOS
030	CT	L	\$24,960.00	WORKER	ABATEMENT

MWTP Student	Student State	Company Name	Annual Salary	Job Title	Field/ Type of Work
031	CT	A.A.I.S	\$24,960.00	LABORER	GENERAL CONSTRUCTION
032	CT	ZERRELLI DEMOLITION ABCON	\$39,000.00	LABORER	GENERAL CONSTRUCTION
033	CT	ENVIRONMENTA L BROOKS	\$24,960.00	REMEDIA TION WORKER	ASBESTOS ABATEMENT GENERAL
034	CT	CONSTRUCTION STANDARD	\$31,200.00	LABORER	CONSTRUCTION GENERAL
035	CT	DEMOLITION MURDOCK	\$31,200.00	LABORER REMEDIA TION	CONSTRUCTION ASBESTOS
036	CT	ASBESTOS	\$29,120.00	WORKER	ABATEMENT
037	MD		\$7,000.00	Janitor	Janitorial
038	MD	CHERRY HILL WHITING	\$15,360.00	Flagger	Construction
039	MD	TURNER	\$18,432.00	Laborer Apprentice	Construction
040	DC		\$19,200.00	Janitor	Janitorial
041	MD	WHITING TURNER	\$18,432.00	Laborer Apprentice	Construction
042	VA	CLARK	\$18,432.00	Laborer Apprentice	Construction
043	MD		\$15,360.00	Janitor	Janitorial
044	MD	RESCOM WHITING	\$16,416.00	Janitor	Janitorial
045	MD	TURNER DIAMOND	\$18,432.00	Janitor	Janitorial
046	PA	HUNTBACK HAKE	\$22,880.00	Asbestos Worker Construction Craft	Asbestos Removal
047	PA	CONSTRUCTION PRIVATE REAL	\$39,998.00	Laborer	General Construction
048	PA	ESTATE	\$24,960.00	Helper	Drywall/Painting
049	PA	TACO BELL	\$12,480.00	Crew Member	Fast Food Service
050	PA	HENKIES/MCCOY AUSTIN	\$31,200.00	Flagger	Pipeline
051	TX	INDUSTRIAL ONSITE ENVIRONMENTA	\$18,720.00	Laborer	Construction
052	TX	L	\$18,720.00	Laborer	Environmental
053	TX	DOW CHEMICAL FOLEY'S	\$28,620.00	Laborer	Environmental
054	TX	WAREHOUSE	\$16,640.00	Forklift Operator	Warehouse
055	TX	Phillips Chemical ONSITE ENVIRONMENTA	\$18,720.00	Laborer	Environmental
056	TX	L	\$22,880.00	Laborer	Environmental
057	TX	CCC GROUP ONSITE ENVIRONMENTA	\$22,880.00	Fire Watcher	Environmental
058	TX	L POWER	\$18,720.00	Laborer	Environmental
059	TX	ELECTRICAL	\$18,720.00	Laborer	Construction
060	TX	Phillips Chemical	\$27,040.00	Laborer	Environmental

061	TX	ONSITE ENVIRONMENTA L	\$22,880.00	Laborer	Environmental
062	TX	GES Co. ONSITE ENVIRONMENTA L	\$39,624.00	Group Leader	Construction
063	TX	BAYOU ENVIROMENTAL	\$18,720.00	Laborer	Environmental
064	TX	ENVIROMENTAL	\$18,720.00	Laborer	Construction
MWTP Student	Student State	Company Name	Annual Salary	Job Title	Field/ Type of Work
065	TX	BFI WASTE MNGMT ONSITE ENVIRONMENTA L	\$16,900.00	Waste Recycle	Environmental
066	TX	L	\$18,720.00	Laborer	Construction

Appendix 13: Superfund Job Training Initiative (SuperJTI) Accomplishments

From September 1, 2000 to October 31, 2001

Laborers-AGC

Bayview Hunters Point
San Francisco, CA

As the oldest and only original Laborers MWTP, the San Francisco MWTP continues to be a model program in its sixth year of implementation. The program has exceeded its targeted goals of participant completion each year for the past three years. This year, the targeted goal for the program was 15 trainees with an additional 10 to be trained in 80-hour hazardous waste worker training with carryover funds. To date, a total of 25 trainees received training during two cohorts of training, and an additional 8 completed skills training in hazardous waste worker and microbial remediation training as part of the SuperJTI for a total of 33 trainees 8 more than the targeted goal.

For the SuperJTI, a third group of students were recruited and completed hazardous waste worker and microbial remediation training. These students were specifically trained for employment at the Bayview Hunters Point Shipyard a Superfund site. In particular the students were enrolled later in the program in an effort to capitalize on immediate long-term job opportunities in the area of microbial remediation that is needed specifically at this site. The students completed all phases of training including life skills, physical fitness, basic math, basic reading/writing skills, Mentoring/career guidance, preparation for GED training, and all four areas of construction and environmental job skills training.

Program implementation mirrored the efforts of past years by providing participants with three phases of training. However, lessons learned from the previous year allowed for expansion of training, services, projects, speakers and field trips. The classes took trips to Meyer Island, BVHP Naval Shipyard, the Presidio, and several large community job sites. These trips helped them gain visual perspectives of job sites, ideas of the kinds of sites they will work on before shipyard cleanup begins, and of the kinds of job tasks required on-site. Tour guides who were on-site supervisors of the respective projects facilitated tours. Some attended community events while others took part in legislative activities (public hearings, etc.) concerning cleanup of Superfund sites. A major training accomplishment and highlight for this program year was the students' post-graduation formation of a micro-enterprise remediation company named YCD/Enviro Innovations. The enterprise specializes in the abatement of mold/mildew in sick buildings that is a major issue in the Bayview Hunters Point community. Laborers-AGC board member John Gibbons has taken an active advisory role in the formation of the company, assisting with possible links to local contractors. In addition, he also assists with local field trip plans.

Job placement exceeded projected efforts for placing graduates in environmental jobs. Thirty (or 90%) of the 33 students trained are currently employed. Out of this percentage, 18 of the 26 graduates completing job skills offered through our affiliated training fund are employed in

environmental jobs, earning between \$26,000 and \$35,000 annually. Eight of these graduates secured employment at the Hunters Point Shipyard, a local Superfund site. The employment of trained community residents at a Superfund site in their community is just one of the stellar reasons the SF MWTP has become a model program.

A physical fitness component served as a screening mechanism. It tested participant's level of commitment, stamina, and their ability to follow directions. Trainees participated in calisthenics and other exercise regimes to build their physical strength and capacity. A typical day began at six a.m. with physical fitness and endurance. Next came basic skills classroom training at nearby Southeast Community College (SECC). One hour of math and one hour of reading were taught by an instructor from the school. This arrangement helped those with remedial math and reading deficiencies to increase their skills and helped prepare the nine trainees interested in GED preparation classes. Guest speakers from U.C. Berkeley and other collaborating organizations worked with trainees in the mid-morning until early afternoon. Trainees returned to the training site for work with instructors from Laborers-AGC. After a short lunch break they resumed job skills training. The day ended for trainees at approximately 4 p.m. Some of the trainees made use of YCD's job placement services and found employment for the hours following training; others entered GED preparation courses offered at the Community College facility.

Based on lessons learned in the past, it was important to get true commitment from the participants. Thus, the life skills component was an integral part of the training program. The intensive, "in-your-face" nature of this course prepares participants for the rigors of employment. It also provides them with information and skill sets necessary to make successful transitions into the world of work. The first class required much more intensive assistance in this area than did the second. They also required intensive long-term group and individual life skills training.

This year's success leveraged additional support for the U.S. EPA Brownfields Job Training Initiative Program and assisted EPA in securing the national Innovations 2000 Award from the Ford Foundation and the Harvard School of Government. The SF MWTP also incorporates a community service piece, which requires participation in community activities and encourages on-going involvement in activities that directly affect the community. The goal of this mandatory activity is the successful interpretation and understanding of individual and group accountability and responsibility. The MWTP has served as a catalyst for increased local union and community involvement in the Bayview Hunters Point community of San Francisco.

Newmark Groundwater Contamination Project San Bernardino, California

At the request of the EPA's Office of Solid Waste and Emergency Response/Superfund Community Involvement and Outreach Center, carryover funds also were designated to assist EPA Region 9 in environmental remediation training for the Newmark Groundwater Contamination Project Superfund site in San Bernardino, California. This training under the Super Job Training Initiative was accomplished with much success through our affiliated training fund in Southern California. Since Laborers-AGC had no prior experience with the community based organization recruiting the trainees for training, an instructor from our SF MWTP (Derek Gaskins) also was involved in both pre-job skills training and actual job skills

training in San Bernardino to alleviate any perceived discipline or literacy challenges with prospective students.

Laborers-AGC established relationships with EPA Regional Coordinator Jackie Lane and the Dianne Jaquith, the Executive Director of the community based organization in San Bernardino, Neighborhood Housing Services of the Inland Empire (NHSIE). NHSIE is a non-profit 501(c)(3) housing and neighborhood development corporation established in 1982. The corporation's mission is to revitalize neighborhoods through housing rehabilitation, down payment assistance, homebuyer education, and neighborhood fix-up/clean-up programs. NHSIE is a NeighborWorks organization chartered by the congressionally established Neighborhood Reinvestment Corporation (NR). The organization's prime target area is comprised of a number of communities in the Inland Empire of Southern California, which includes communities in both San Bernardino and Riverside Counties.

Among several other community empowerment programs, NHSIE also administers Youthbuild, a comprehensive job training, education, and leadership development initiative for low-income young people who have not completed high school. At-risk 17 to 24 year-olds refine their scholastic skills while studying for their high school diploma or General Equivalency Diploma (GED), and learn valuable employment skills while constructing new homes for low-income citizens. Youthbuild rebuilds communities while rebuilding lives, creating new homes for low-income residents of distressed communities and giving new opportunities to alienated young people. The SuperJTI training targeted these students and environmental remediation job skills training in both lead abatement and Hazardous Waste Worker were given. Twenty students began the training for lead abatement. Students ranged in age from 18-22, 4 females and 16 males. In addition, two NHSIE staff members, one male, one female, also participated. Thirteen students and the two staff members actually completed the 40-hour course. It is important to note that all four female students completed the training. It also was impressive that the lowest score on the test for lead certification was 86 percent.

Hazardous Waste Worker Training was completed June 22, 2001. Eighteen students ranging in age from 18-22 participated. Four of the trainees were female and 14 were male. A total of fifteen completed the 80-hour course with the lowest score being 71 percent. Again, all four females completed training. No staff members participated in this training. Two students have already begun the process of joining the local Laborers Union with the intent of employment on lead based paint projects in San Bernardino. Most of the others students are finishing their secondary education (high school diploma or GED) before they leave Youthbuild to pursue employment. Over the next two months it is NHSIE's intent to work with the local unions and contractors to explore career placement for the students who received this training.

DePaul University (DePaul) East St. Louis, IL

The DePaul consortium received carryover dollars to launch its training in the East St. Louis area in July 2001. Since a part of the carryover dollars originally came from the SuperJTI program, the technical training in East St. Louis is reported in the HWWT program. The recruitment,

screening, testing and life skills components are reported in the BMWT and MWT program data. A total of 27 students were trained in East St. Louis of which 13 were MWT participants.

DePaul began its program in East St. Louis in July along with its partners Neighbors United for Progress (NUP) and Southwestern Illinois Community College (SWIC). In early July, DePaul met with NUP and SWIC to discuss training locations and schedules. This initial visit proved to be quite helpful in the planning process

Neighbors United for Progress is a non-profit, civic organization whose purpose is to assist low and moderate income persons with marketable skills training, leadership seminars/workshops, and various counseling services. NUP operates from within the Calle Boyd Community Center in East St. Louis and has been in the community since 1995. NUP performed the outreach and recruitment in the community and over 50 individuals were screened for the program.

Southwestern Illinois Community College operates its Adult Education Department on two campuses in the East St. Louis area. The East St. Louis Community College Center was the location for the BMWT/MWT life skills training. The college provided assistance with the initial selection and testing of students along with two weeks of intensive instruction. Lunches and snacks were also provided by the college for the first three weeks of the program.

The first week of training began with screening, interviews and administering the TABE test to assess the academic skills of each student. For the 14 students who were chosen, the interview component included completing a questionnaire about their academic history and personal interests. The questionnaire proved to be valuable in deciding how to communicate with each student, and in helping them receive the technical training throughout the program. The average reading score for the TABE test was 11.1 and the average math score was 8.4. In the second and third weeks of training SWIC provided the students with life skills training. The life skills training included classes at SWIC such as Introduction to Computers, The Internet, GED Review of Math, Computer Keyboarding and Job Skills/Job Readiness. Starting with the fourth week, training was held at Neighbors United for Progress and began DePaul Instrumental Enrichment (IE) training. The weeks following IE included the Lead Abatement, HAZWOPER, and Underground Storage Tank courses.

Of the 13 MWT students trained in East St. Louis, all were African American ranging from 18 to 25 years of age. There were 11 males and 2 female students. Nine (9) students had high school diplomas, 2 had GEDs, and 2 did not have a high school diploma or a GED. Upon entering the BMWT Program, 12 students were unemployed and 1 was underemployed. One trainee is now employed at an agency in East St. Louis, and the remaining students are seeking employment with local environmental companies.

Washington Navy Yard, Washington, DC

DePaul, through its subcontract with the Alice Hamilton Occupational Health Center (AHOHC) through the Hazardous Waste Worker Training Program, is conducting training for workers associated with the cleanup of the NPL site at the Washington Navy Yard. The principal contaminants at the site are Polycyclic Aromatic Hydrocarbons (PAHs), a combination of heavy metals such as lead, polychlorinated biphenyls (PCBs), and dioxins. Forty-two workers were

given the site worker refresher training through three rounds. In addition, fifteen were trained as lead abatement supervisors.

In addition to the directed training for Washington Navy Yard listed above, the AHOHC DC MWTP targets the communities surrounding the Washington Navy Yard through the Bridges to Friendship. Because of this relationship, the results of the MWTP training are reported under the SuperJTI initiative. A report on the DC program is below.

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.

Under the leadership of a former MWT graduate, now an AHOHC instructor, AHOHC recruited 33 individuals and enrolled 15 in the Washington, DC MWT Program. The program began on January 3, 2001 and was completed on March 9, 2001. AHOHC's partnership with Bridges to Friendship continues and was again very helpful to the program. Initiated by the Naval District in Washington, 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. AHOHC initiated the first group of the Bridges to Friendship/MWT trainees in October of 1998. This year, recruitment efforts also involved presenting the MWT Program to two community groups and three church congregations in the District of Columbia. Partners who participated were Strive DC, Covenant House, and StepUp. Strive DC provided the initial life skills training to participants who had not had previous life skills courses. Covenant House Washington provided skills and interest assessment of participants, and StepUp was contracted to provide social work support, case management, employment placement assistance and sustainability for participants.

The first few weeks of the program concentrated on training related life skills, environmental preparation, mentoring and career guidance, and environmental justice. In the latter weeks, the students received technical training in lead abatement, HAZWOPER, confined space, asbestos abatement, and basic first aid and adult CPR. The asbestos class was extended because two students were struggling with fourth grade reading skills and the material had to be presented in a manner to enhance the comprehension of each student. Each week on Friday, a one-half day session was dedicated to group support and life skills. Throughout the entire training period, students were able to hear from several guest speakers including: Norman Neverson, formerly of the DC Mayor's Office and a motivational speaker; David Ouderkirk from Bridges to Friendship/Washington Navy Yard; Christine Hart-Wright from Strive DC; Rafeal Mora from Environmental Resources and a long-standing member of the AHOHS Advisory Board; Hector Rodriguez, President of Las Americas Development Corporation; and Georgia Dickens from the StepUp Foundation. Over 4,100 contact hours of instruction were used to deliver the training to the students.

Bridges to Friendship

AHOHC trained an additional 21 students under its partnership with Bridges to Friendship. The training began in July, and mirrored the first round by concentrating on related life skills, environmental preparation, mentoring and career guidance, and environmental justice in the first few weeks. In the latter weeks, the students received technical training in lead abatement, HAZWOPER, confined space, asbestos abatement, and basic first aid and adult CPR.

Eighteen trainees were African American and three (3) were Hispanic and all ranged from 18-25 years of age. Twenty (20) trainees were male and 1 was female. Ten (10) students had a high school diploma, 4 had a GED while 7 did not have a high school diploma or GED. Although 10 students are now employed in environmental and/or construction jobs, 16 students were unemployed at the start of the program and 5 were underemployed. Four of those students who are now employed work at the Pentagon on an asbestos removal project.

SuperJTI Supplemental Awards for September 1, 2001 to October 31, 2002

Supplemental Applications for the SuperJTI programs were requested for the September 1, 2001 to October 31, 2002 program year. The Laborers AGC received this supplement for training at the EPA Region 9 Waste Disposal, Inc. Site in Santa Fe Springs, CA. A full description for this new training program is below.

Region 9 Waste Disposal, Inc. Site
Sante Fe Springs, California

SPECIFIC AIMS

Laborers-AGC Education and Training Fund is currently implementing a Super Job Training Initiative for the Region 9 Waste Disposal, Inc. Site (WDI) in Sante Fe Springs, California. The Laborers-AGC will train individuals in the city of Sante Fe Springs, California who live near the WDI Superfund site as well as those in the surrounding counties of Ventura, Santa Barbara, San Luis Obispo, Los Angeles and Sacramento. The training will help prepare these community residents who are at risk of exposure to contaminated properties for work in the construction and environmental remediation industry. The purpose of this project is to implement a comprehensive, integrated training program designed to improve basic academic and life skills, safety and health awareness, and provide job skills training in construction and hazardous materials abatement. The program will form partnerships with our local training fund in Southern California, and a local community-based organization, Tri-County Labor Foundation, to target community residents who are under or unemployed because they lack the skills and knowledge Required for many of the available career opportunities in environmental restoration occurring in their communities. These individuals are often unable to break traditional barriers to employment such as transportation, child care, and legal issues, therefore the comprehensive, environmental career-oriented training program will be developed and implemented with the context of other social and health needs of the targeted community.

The demographics of the area lends to the probability of a large Hispanic population of participants. The Tri County Labor Foundation and the Southern California Training Fund both have extensive experience in relating to and training individuals of Hispanic decent. The program will give participants an opportunity to participate in lifelong learning through union affiliation,

mentoring and apprenticeship programs. A major objective and end result of the multi-faceted training program is to foster both economic improvement and environmental awareness in individual participants as well as the community as a whole by providing sustainable employment. Environmental awareness training will concentrate on identifying possible exposures pathways to community residents as well as promote community strategies for prevention and intervention activities related to work injuries.

The program is based on building collaborations and partnerships to accomplish program goals and objectives. Laborers-AGC will exercise general oversight and fiscal control over the Grant, monitoring the performance of the sub-grantees in implementing the programs. The proposed SuperJTI will build on existing established partnerships and will expand Laborers-AGC 's current efforts to represent an even broader geographic area to engage in community involvement and outreach training. Laborers-AGC has already established a relationship with the Office of Community Involvement for the EPA Superfund Program as well EPA Region 9 in providing training for a SuperJTI in San Bernardino, CA in the 2000-2001 program year.

Under the program, a maximum total of 15 community residents who reside in or around the WDI Superfund site are expected to complete-various stages of training and be referred to employment. Job skills course offerings include 80 hr Hazardous Waste Worker; 40 hr Asbestos Abatement Worker; and 40 hr Lead Abatement Worker.

Funding for job skills training through the Southern California Training Fund will be through Supplemental Funding (carryover) from Laborers-AGC MWTP. Using existing Laborers-AGC EWTEP, MWIP and BMWTPs as successful models to train and recruit community residents for environmental job training opportunities, the program will be similar in scope while addressing the specific needs of the SuperJTI for the WDI Super-fund site. The training will leverage resources with existing programs at the Tri-County Labor Foundation.

The long-term objectives of the proposed program are to:

- Provide comprehensive hazardous waste training to create pathways for lifelong careers for residents to enable them to contribute to cleaning up their communities.
- Build capacity for community empowerment by strengthening alliances between community groups, local building trades, environmental contractors, universities, and local governmental agencies.
- Improve basic academic skill levels; develop greater awareness and knowledge around issues of environmental justice, environmental sustainability and personal health and safety.
- Develop Basic Awareness Skills necessary for long-term employment opportunities for program participants. Skills gleaned will help program participants determine and improve their health and safety conditions on the job or at home in their community.
- Provide ongoing mentoring/case management and tracking for program participants for 12months after completion of training.
- Create job opportunities for participants through ongoing networking and formal arrangements with environmental contractors with a 65%job placement rate.
- Create a seamless system for lifelong learning and advancement through the Laborers

- Construction Craft Laborer (CCL) Apprenticeship Program (where applicable).
- Contribute to the revitalization of environmentally impacted communities surrounding the WDI site through the creation of a pool of educated workers able to use skills learned in positive ways.
- Promote-Environmental Justice in environmentally impacted communities

BACKGROUND AND SIGNIFICANCE

Problems of environmental degradation and contamination often hinder the revitalization of urban communities and more important cause a disparate high incident of negative health effects in community residents. The WDI Superfund site has pockets of liquid and buried waste that is hazardous to surrounding communities. Laborers-AGC has been tracking environmental restoration work for several years, using Commerce Business Daily and the Dodge Data Line as primary sources. It is estimated that for every \$1 Million of environmental remediation work, 10 workers will be needed. Field remediation on many Superfund sites as well as minor contamination on construction sites requires a demand for skilled labor trained in hazard recognition and response who are capable of working in a safe and productive manner. While environmental remediation is a growing industry, the economic benefits of cleanup activity through job opportunities have not been extended to minority and low-income communities. Therefore, they have not been allowed the economic benefits of hazard waste cleanup efforts. The predominate Latino communities that surround the site have not been successful in finding organizations interested in providing workforce development and environmental awareness training. There are also high percentages of minorities, under or un-employment, school dropout rates and health disparities, all characteristics of communities that can benefit from a SuperJTI.

The SuperJTI represents the coming together of many factors: health, economic, community empowerment, and environmental justice. The training offered by the Laborers and the Tri-Counties Labor Federation will address all factors by offering benefits to the community, residents, and businesses. The community will benefit by increased community involvement and participation in cleanup activities. The residents will benefit from increased marketable skills and the potential to obtain good paying jobs with contractors that will last a long time. The contractors and businesses will benefit, from tax incentives and other programs, by hiring local residents to work on cleanup and redevelopment projects. In addition new research sponsored by the National Center for Construction Education and Research shows that the return on investment (ROD for training may be quicker than most people thought. "Based on previous research into learning-curve effects on construction productivity, it is anticipated that the ROI points for first-year trainees may actually be realized faster than the ROI for those further along," says researchers. " Job placement staff will work with local, state and federal agencies, contractors, and local businesses in establishing language that will require them to use qualified local residents to work on redevelopment projects in their community.

Past Successes

The Laborers-AGC has 13 years experience planning, implementing and operating a NIEHS-funded Hazardous Waste Worker Training Program (HWWTP) where it has trained over 50,000 workers and provided more than 2 million contact hours. More specifically, originally a

supplement to HWWTP, Laborers-AGC has successfully managed a MWTP for the last six years and a BMWTP for the past three years. Last year it provided training for SuperJTI in Region 9 in San Bernardino, California for the Newmark Groundwater Contamination Project Superfund site.

Appendix 14: Brownfields Activities

As of September 1, 2000, the EPA and NIEHS entered into a separate Interagency Agreement for the Brownfields Minority Worker Training Program; therefore the Brownfields program accomplishments report will be submitted as a separate report. The following is the information on the current awardees for this program and information on the Brownfields 2001 conference.

For the current period of September 1, 2000 to August 31, 2005, the NIEHS made 5 new awards for the EPA Brownfields Minority Worker Training Program. The awardees for the Brownfields program are listed below.

- Center to Protect Workers Rights
- DePaul University
- Laborers-Associated General Contractors Education and Training Fund
- New Jersey/New York Hazardous Materials Worker Training Center
- Xavier University of Louisiana

Brownfields 2001—Restoring the Environment, Revitalizing Communities

Representatives from the NIEHS Worker Training Community attended Brownfields 2001—Restoring the Environment, Revitalizing Communities that was held in Chicago, IL on September 24-26, 2001 at the McCormick Place Convention Center. Each recipient of a new Brownfields Minority Worker Training (BMWTP) Award was required to attend this meeting. There were approximately 25 representatives from the various BMWTPs attending.

The meeting of all of the NIEHS Brownfields MWTP recipients was held on Monday, September 24 from 8:00 a.m. to 10:00 a.m. All awardees and other guests, including EPA headquarters and regional staff, were invited to attend. The meeting was an opportunity for each BMWTP awardee to give brief updates on past training initiatives and plans for the future. As with last year's conference the Engineers' Society of Western Pennsylvania under contract with the US EPA organized presentations. WETP pointed out the sessions that were of most interest and related to job training, health and safety, and the public health community. Those sessions were:

- Brownfields Basics Track – Public Health & Brownfields: They're Closer Than You Thought
- Brownfields Basics Track - Heard on the Hill: Federal Legislative Initiatives & What They Mean for Brownfields Efforts
- Brownfields Basics Track – Tech Tools: Innovative Tools for Brownfields Projects
- Brownfields Basics Track – Now Showing: Effective Community Presentations
- Leveraging Resources Through Partnerships – UST Site Reuse Matters: Lessons from the Initial UST Field Pilots
- Leveraging Resources Through Partnerships – A Study in Creative Leveraging and Partnerships: The Chicago Brownfields Initiative

- Leveraging Resources Through Partnerships – The Community is the Expert: Utilizing the Community Impact Statement
- Leveraging Resources Through Partnerships – Communication, Cooperation, and Collaboration: The Environmental Justice Interagency Demonstration Project
- Leveraging Resources Through Partnerships – Brownfields Showcase Communities: Models of Effective Local-Federal Collaboration
- Making It Happen – “Portfields” as Brownfields: Revitalizing Civil and Military Ports, Marinas, and Shipyards
- Making It Happen – Indian Country & Brownfields: New Partnerships for Success
- Creating Value & Sustainability – Culturally and Community-Sensitive Redevelopment
- Creating Value & Sustainability – Let’s Get to Work: Training Community Residents for Environmental Careers **Note: NIEHS awardees presenting in this panel.*
- Marketplace of Ideas – ATSDR Roundtable
- Marketplace of Ideas – Brownfields Redevelopment/Environmental Justice – What Does This Mean to the Host Community?
- Poster Presentations – Creating Urban Villages from Brownfields
- Poster Presentations – Owner-Funded, Community-Driven Reuse Planning: A New Model to Get Things Moving
- Poster Presentations – The Select Steel Analytic Shortcut: Is There Justice for Environmental Racism?
- Poster Presentations – Community Involvement in Environmental Justice Communities: Lessons from the Field
- Poster Presentations – Securing Government Funding for Brownfields Redevelopment Under BEDI
- Poster Presentations – The Role of Urban and Community Forestry in Brownfields Remediation and Redevelopment
- Poster Presentations – Development and Implementation of a Strategic Framework and Specific Procedures to Incorporate Environmental Justice Principles and Practices into State Environmental Programs
- Special Sessions – Proposed Changes to the Minority Business Enterprise/Womens Business Enterprise Rule: USEPA’s Office of Small and Disadvantaged Business Utilization (OSDBU)

Appendix 15: FY 2001 Funding

EPA/NIEHS WORKER EDUCATION AND TRAINING AWARDS FOR BUDGET PERIOD 09/01/2001-08/31/2002 FY 2001 FUNDS						
AWARDEE	HWWT 9/01 AWARD	ATT 9/01 AWARD	SJTI 9/01 AWARD	WTC 9/01 AWARD	MWTP 9/01 AWARD	9/01 TOTALS
University of Alabama Birmingham	483,151	71,969				555,120
International Chemical Workers Union Council	1,801,239					1,801,239
International Association of Fire Fighters	767,339	100,000		100,000		967,339
George Meany Center for Labor Studies	571,229	50,000				621,229
University of Massachusetts, Lowell	924,681					924,681
University of California at Los Angeles	1,024,536					1,024,536
Laborers-AGC Education and Training	3,422,123		99,758	80,000	891,928	4,493,809
Paper, Allied-Industrial, Chemical and Energy Worker International Union	1,175,279					1,175,279
HMTRI Kirkwood Community College	595,404					595,404
Service Employees International Union	546,823					546,823
University of Medicine & Dentistry of New Jersey	972,399	99,999		80,000	557,825	1,710,223
International Union, United Auto Workers	731,376	50,000				781,376
International Union of Operating Engineers	1,469,769			100,000		1,569,769
University of Cincinnati	1,602,129					1,602,129
Center to Protect Workers' Rights	1,502,588			84,046	654,343	2,240,977
Xaiver University					397,855	397,855
AFSCME Training and Education Institute	717,336					717,336
National Puerto Rican Forum	703,314				498,049	1,201,363
TOTAL	19,010,715	371,968	99,758	444,046	3,000,000	22,926,487

Appendix 16: WETP Staff Activities

Joseph Hughes

- Mr. Hughes participated in the Protecting Emergency Responders: Lessons Learned from Terrorist Attacks Personal Protective Technology Conference in Manhattan, New York on December 10-11 which was sponsored by CDC, NIOSH and the RAND Corporation. Mr. Hughes served as a member of the panel on local, state and federal responses to the terrorist attacks in New York and Washington.
- Mr. Hughes participated in the National Summit on the Mental Health Responses to Terrorismist Attacks in Manhattan, New York on November 13-14. Mr. Hughes served as a presenter on a panel dealing with the mental health impacts on rescue workers and emergency responders in the aftermath of the WTC terrorist attack on September 11, 2001.
- Mr. Hughes made a number of presentations in conjunction with grantees of the NIEHS Worker Education and Training Program that covered recent accomplishments and developments in the NIEHS Advanced Training Technology Initiative to promote environmental health applications in distance learning and web-based training: Public Health Infomatics and Distance Learning Conference, Association of Schools of Public Health in Columbus, OH on August 5-6; Government Learning Technology Symposium in Baltimore, MD on July 16-18; Dissemination of Occupational Safety and Health Information, NIOSH Education and Information Division in Cincinnati, OH on July 25-26; and The Environmental Management and Technology Conference & Exhibition in Atlantic City, NJ on June 12-14.
- Mr. Hughes chaired a session at the National Conference, "Training 2001," in Atlanta, GA on March 5, 2001 entitled "Lessons Learned in Advanced Training Technology in Health and Safety" which examined the progress, problems and lessons learned to date among NIEHS grant recipients in e-learning deployment.
- Mr. Hughes participated in a Congressional Superfund Testimony in Washington, DC on May 1, 2001.

Sharon Beard

- Ms. Beard presented the efforts of the NIEHS Worker Education & Training Program regarding worker training activities at the World Trade Center at the National Response Team Training Subcommittee Meeting at the National Emergency Training Center in Emmitsburg, MD on December 13.
- Ms. Beard attended the U.S. EPA National Environmental Justice Advisory Committee (NEJAC) Meeting and presented on the Accomplishments of the NIEHS Worker Training Activities especially the Minority Worker Training and Brownfields Minority Worker Training Program to the Waste and Facility Siting Subcommittee in Seattle, Washington on December 4-6.
- Ms. Beard attended the Brownfields 2001 Conference in Chicago, Illinois on September 24-26. This national conference showcased brownfields cleanup, redevelopment and policy issues. During this meeting, Ms. Beard conducted a meeting of the grantees of the Brownfields Minority Worker Training Program to discuss progress in this new training

program and promote the model of community based environmental job training program. The meeting also provided an excellent setting to promote the WETP Minority Worker Training Program and Brownfields Minority Worker Training Program.

- Ms. Beard attended the Community Involvement Conference in San Antonio, TX on June 18. She participated in several training sessions where various Federal agencies shared and exchanged information regarding lessons learned and best practices in administration of grants and training programs. In particular community outreach strategies and specific models utilized by various Federal programs were discussed and shared. In these sessions Federal government representatives, community based organizations and other state and local government as well as non-profit environmental organizations participated.
- Ms. Beard presented at the 2001 American Industrial Hygiene Conference and Exposition, in New Orleans, LA the first week in June 2001 at two presentations. The first presentation was a forum entitled "Perspectives on Using Advanced Training Technologies (ATT) in Environmental Health & Safety Training." This forum reviewed the issues surrounding the use of ATT (such as multimedia, computer and web-based training, teleconferencing, and DVD-facilitated live training) in environmental health & safety training. Ms. Beard discussed lessons learned from the NIEHS Worker Education & Training Program ATT pilot programs for training workers. The second presentation was part of a panel discussion "Embracing Change - How Environmental Health & Safety Impact Minorities in a Changing World." Ms. Beard gave a presentation entitled "The NIEHS Approach to Addressing Health Disparities."
- Ms. Beard attended the U.S. EPA Review of Brownfields Policy in Washington, DC on July 26 where all of the Federal government agencies involved in Brownfields program reviewed national brownfields policies shared their perspective on the direction of the brownfields initiative.

All Staff

- NIEHS and university programs funded by the NIEHS co-sponsored the Town Hall Meeting: Voices for Healthy Environments, Healthy Communities, Healthy Jobs in Inglewood, California on December 7-8. Joseph Hughes and Sharon Beard both served as government representatives on workshop panels.
- Joseph Hughes and staff hosted the NIEHS/Worker Education and Training Program semi-annual grantee meeting and technical workshop in Chapel Hill, North Carolina on November 1-2. The focus of the meeting was on the WETP Strategic Plan for the next five years. The staff undertook a six month long strategic planning process to examine long-term programmatic directions in the environmental health education and training field which involved a series of meetings with Principal Investigators, experts in the fields of training and education and other participating federal agencies.
- NIEHS (through the Worker Education and Training Program) and the Occupational Safety and Health Administration co-sponsored a Technical Workshop on "Best Practices in Occupational Safety and Health Training" on April 17-19 in Chicago, IL. Staff attending the workshop and participating in various activities included Joseph Hughes, Sharon Beard, and Patricia Thompson. The morning of April 17, the semi-annual WETP Awardee Meeting was held.

Staff Honors and Awards

- Joseph Hughes received the DHHS Secretary's Recognition Award for Heroism, Exceptional/Volunteer Service on November 14 in New York City, New York. He was the only representative of NIH to receive the honor. The award cites Mr. Hughes dedicated support of the health and safety of emergency responders and remediation workers at the site of the World Trade Center disaster.
- Joseph Hughes received the NIH Merit Award on December 14 in recognition of his dedicated support of the health and safety of emergency responders and remediation workers at the site of the World Trade Center disaster.
- Joseph Hughes, Sharon Beard, Patricia Thompson, and Pamela Chaney received a NIH Employee Recognition Award for the preparation of the 2002 Congressional Testimony for the NIEHS Superfund Programs: Worker Education Training Program.