

January 10, 1996

## FY 1996 Accomplishments and Highlights: NIEHS/EPA Superfund Worker Training Program

Since the initiation of the Superfund Worker Training Grants Program in 1987, the National Institute of Environmental Health Sciences (NIEHS) has developed a strong network of non-profit organizations that are committed to protecting workers and their communities by delivering high-quality, peer-reviewed safety and health curriculum to target populations of hazardous waste workers and emergency responders.

The worker training program was originally authorized for five years (FY 87-91) by Congress with the passage of Section 126 of the Superfund Amendments and Reauthorization Act of 1986 (SARA). The program is administered by NIEHS through an interagency agreement with EPA. During October 1990, Congress reauthorized the Superfund program for an additional three years (FY 92-94), which included an authorization of \$20 million per year for the NIEHS Worker Training Program. For FY 96, Congress provided \$18.5 million for the NIEHS Worker Training Program. EPA separately transferred \$2 million to support the continuation of an initiative for pilot project to train minority youth for careers in the environmental restoration industry.

Through an Interagency Agreement, NIEHS received this \$20.5 million from the FY 96 EPA appropriations to support cooperative agreements for providing model occupational safety and health training for workers and their supervisors that perform dangerous jobs in the nation's hazardous waste management and remediation programs, as well as for emergency responders to uncontrolled hazardous materials releases. Target populations include both private and public sector workers. Public sector workers trained are primarily from state and local governments. Few federal employees have been targeted as there are other means by which they may be trained.

During the first nine years of the Superfund Worker Training Program (FY 1987-96), the NIEHS has successfully supported twenty primary awardees. These represent over ninety different institutions who have trained nearly 518,000 workers across the country and presented nearly more than 27,000 classroom and hands-on training courses, which have accounted for over 8.0 million contact hours of actual training (See Appendix 1).

Through the encouragement of multi-state, university-based consortiums and the development of national non-profit organizations which have focused on specific workforce sectors, this NIEHS program has established technically-proficient curriculum materials and quality-controlled course presentations. These courses have been delivered to hazardous waste workers and emergency responders in every region of the country and have established new national benchmarks for quality worker safety and health training. The program also has represented a major prevention education activity for NIEHS as technical scientific and basic research information is delivered to target populations with high risk toxic exposures. In an effort to make information readily available to the public, the NIEHS program developed a world wide web site. It

contains information on all training programs, special initiatives, and links to other worker training web sites. The Worker Training web site address is: <http://www.niehs.nih.gov/wetp/home.htm>.

During the past year (FY 1996), training delivery has been carried out in all regions of the country to all relevant target populations regulated under 29 CFR 1910.120. The twenty primary worker training awardees, in conjunction with over seventy collaborating institutions, have delivered 4,753 courses, reaching 73,747 workers, which account for 1,088,033 contact hours of health and safety training, which ranges from 4 hour refresher programs through more complex train-the-trainer courses lasting up to 120 hours in duration.

For FY 1996, major program accomplishments of the Superfund Worker Training Program include:

**1) Continuation of a peer-reviewed Worker Training awards for training of hazardous waste workers, emergency responders and minority workers ---** After the completion of the initial program year on the projected five year long cooperative agreements to support worker training activities, the 20 organizations submitted progress reports, training data and year two budget requests and training plans on July 1, 1996. Budget adjustments in the proposed funding plan have been based on the training needs of high risk populations, national geographic coverage in training availability and the published program priorities for training support. Because of reductions in available funds through the appropriations process, funding to support the EPA/NIEHS Worker Training awardees was reduced by an average of 8.6% for the coming year.

**2) Continued expansion of national training opportunities to underserved, low literate and non-English-speaking populations ---** Based on review criteria established by NIEHS in 1992 and the President's Executive Order on Environmental Justice, the NIEHS Worker Training Awardees continue to implement special initiatives to ensure that disadvantaged populations who are exposed to hazardous waste and toxic materials will have meaningful access to high quality safety and health training. Many of the NIEHS Awardees have responded by translating curricula into appropriate languages and dialects for non-English speaking waste cleanup workers and forming partnerships with community organizations in contaminated regions with large minority populations. Efforts by all awardees have been made to incorporate environmental justice concerns into program development, outreach to high risk target populations, curricular modifications and training evaluation.

**3) Completion of the first national Labor Market Study of Hazardous Waste Workers and Emergency Responders ---** In conjunction with the EPA-Superfund Labor Task Force and EPA-OSWER staff, NIEHS has developed a study protocol to capture site specific, environmental restoration employment data and describe the workforce which is involved in Superfund site cleanup projects. Through a supplemental award to the George Meany Center for Labor Studies, Ruttenberg & Associates has implemented the study design to examine specific labor markets where Superfund cleanups have already been carried out.

At least three times as many workers need to be trained at hazardous waste sites as would be indicated by just the total hours of labor required. This is because of the specialization of trades on a site and the need to hire specific individuals to perform specific tasks, and sometimes tasks of relatively brief duration.

Using employment projections from the study, remediation job demand is expected to grow by 60

percent, or almost 300,000 jobs, from the 1990-1995 five year period through the five year period 1995-2000 -- from 447,000 to 740,000. Demand for jobs continues to grow by nearly another 300,000 in the 2000-2005 time interval. During this peak period nearly 2 million jobs will require hazardous waste workers. As many as 7.5 million more workers will require training -- either basic or refresher. The Final Report, which examines over 20,000,000 hours of site specific Superfund remediation work, has been completed and reviewed by EPA, NIEHS and a committee of outside peer reviewers (See Attachment #1).

**4) National Training Evaluation Project** --- During March 1996, NIEHS sponsored the first national conference on **Measuring and Evaluating the Outcomes of Hazardous Waste Worker Training** to examine the methods which have been developed by various programs to document the effectiveness of training activities. Drawing on public health experts in the evaluation field, awardee representatives spent two days exploring the methodological issues that underlie the collection of program effectiveness data. Breakout sessions examined issues from trainee comprehension of curricula to outcome results in the workplace after training had taken place. The significant resources that have been allocated for NIEHS training awards require that recipients demonstrate not only effective implementation, but also positive impacts on the health and safety of trained workers. The findings reported at the technical workshop clearly demonstrate that NIEHS grantees have responded to the challenge for program evaluation and have documented monumental changes in the health and safety of workers and communities across the United States.

After the technical workshop, an ongoing committee has been established to publish a manual on program evaluation to benefit other organizations which grapple with safety and health training evaluation issues. As a summer project, a draft manual has been completed, along with contributions from other invited authors, which will be edited into a final product during the Spring of 1997.

**5) Continued operation and support for a national clearinghouse on hazardous waste worker training** --- The Clearinghouse functions as a link between awardees of NIEHS Worker Training cooperative agreements and other members of the general public who are concerned with quality worker health and safety training. Tasks of the Clearinghouse include, but are not limited to, the distribution of curricula, research work to support the development of the NIEHS Worker Training Program, cataloguing of training materials, and other information pertaining to worker health and safety training for hazardous materials, waste operations, and emergency response, as well as other related activities. The Clearinghouse is the information exchange and dissemination mechanism for 20 worker training programs whose support from the Environmental Protection Agency (EPA) and the Department of Energy (DOE) is intended to set a high standard for health and safety training to protect workers in the burgeoning environmental technology sector. A new initiative for the Clearinghouse this past year has been the development of a World Wide Web page of hazardous waste worker materials, including a summary of all curricula produced by the program, all technical workshop reports and the monthly Newsbrief in a download-able format. The Clearinghouse web address is: <<http://www.niehs.nih.gov/clear.htm>>. A summary of Clearinghouse activities is provided in Appendix 3.

**6) Minority Worker Training Program Development** --- The EPA/NIEHS Minority Worker Training Program (MWTP) was established to provide a series of national pilot programs to test a range of strategies for the recruitment and training of young persons, who live near hazardous waste

sites or in the community at risk of exposure to contaminated properties, for work in the environmental field. This new pilot program represents a broad geographic spread and reaches several urban populations in high risk contaminated areas

These environmental career-oriented projects are developed within the context of other social and health needs of the community. The different programs provide pre-employment job training, including literacy, life skills, environmental preparation and other related courses construction skills training; environmental worker training including hazardous waste, asbestos and lead abatement training; and safety and health training. Some training also includes enrollment in apprenticeship programs for construction and environmental remediation worker training. In addition, particular focus is placed on establishing a program of mentoring. These programs will help to enhance the participants problem solving skills, their understanding of self-esteem and team work in the application of technical knowledge to environmental and related problems

This program promotes partnerships or sub-agreements with academic and other institutions, with a particular focus on historically black colleges and universities, and public schools and community-based organizations located in or nearby the impacted area to provide pre-math, science or other related education to program participants prior to or concurrent with entry into the training program. The cooperative agreements provided funding for seven programs to train minority inner city youth to enter the environmental field with approximately \$3 Million awarded for FY 96.

The EPA/NIEHS Minority Worker Training Program has completed its first year of training. The seven programs have recruited and successfully trained 376 students in worker health and safety training programs for environmental clean-up in 12 urban cities including New York City; Newark, New Jersey; Baltimore, MD, Washington, DC; Atlanta, GA; New Orleans, LA; Memphis, TN; Minneapolis/St. Paul, MN; Chicago, IL; Los Angeles and San Francisco, CA; and Cleveland, OH. There were 178 courses given representing 155,253 contact hours. This program included over 20 different training courses/subjects (See Appendix 3). During the first 6 months of the program, site visits were performed by the NIEHS staff to observe and review development of curriculum, program oversight, classroom activities, hands-on site simulation activities, and review of fiscal management of the new awardees. The site visits guided the startup of the programs and aided to increase the awareness of grants management responsibilities and technical competency of each training program.

The progress reports indicate successful completion and job placement of graduates of the program. Overall, 235 students have been placed in environmental jobs with 131 students not placed in jobs. Those 131 students are currently completing their training and or engaged in job placement activities. The remainder 10 students represents those who are employed in non environmental jobs or are no longer in the training program. Data is currently being developed to provide the number of students who have entered into other occupational fields or continued to pursue higher education. The jobs include Superfund site worker, lead and asbestos removal, environmental sampling, and some construction jobs. With the New York/New Jersey Consortium, Carpenters Health and Safety Fund, Alice Hamilton Occupational Health Center, and DePaul University, job placement is approximately 60 percent. Students are placed in jobs on Superfund sites, such as with Clark Atlanta/Xavier University students working on the Westbank Asbestos Removal Site in Louisiana. The DePaul University program obtained employment for the majority of their students in a significant effort of the

Chicago Public Schools system to abate lead and asbestos in 114 schools over the next year. The Carpenters Health and Safety Fund has been able to place 90 percent of their students in lead abatement and construction jobs on sites where significant health and safety training is required.

A major success was the building of community partnerships in developing the job training programs. The inclusion of community based organizations in administering recruitment and providing mentoring increased the retention rate of students dramatically. The demographics for this training populations can be found in Appendix 4. There were 89 percent African American; 8 percent Hispanic; 1 percent Asian American and 1 percent Native American students. There were approximately 69 percent males and 31 percent females making up the first year the training program. Other areas of necessity and high importance was the emphasis on literacy training and life skills. Of the students enrolled in the program, about 53 percent of the students have no GED or high school diploma. To address the needs of these students, 20 courses were given on reading/writing and GED training contributing to approximately 47,000 contact hours. The life skills and mentoring/career guidance preparation was essential in preparing the graduates for their jobs in the environmental field. Many programs reported that without these support courses, student retention would be drastically lower. There are several programs that are working on job placement of the graduates and therefore the placement data is not complete. The seven programs descriptions for the MWTP are detailed in Appendix 5.

**7 ) Completion of External Program Review --** In May 1995, NIEHS established a special External Panel of outside peer reviewers with a specific charge: 1) to review and evaluate the overall NIEHS Superfund Worker Training Program taking into consideration program quality, output, productivity and impact, and 2) to make any recommendations considered appropriate by the Panel with regard to future directions for the NIEHS program. The Panel has met twice at NIEHS, in June and October 1995. During this process, the Panel reviewed extensive materials on the worker training program, analyzed the program in depth, and developed its findings, recommendations and conclusions. This evaluation was conducted by an external expert panel at the request of Dr. Olden, Director, NIEHS.

The final report contains the Panel's detailed program review, conclusions and recommendations. The Panel concluded that the NIEHS program fulfills the legislative mandate and is providing much needed high quality training for workers managing hazardous wastes, doing hazardous waste clean-up and responding to spills of hazardous materials. The NIEHS training grant program is impacting worker health and safety through primary prevention and serves as a model for effective worker health and safety training. The Panel recommends that the NIEHS program receive continued funding and support. Several additional recommendations concerning further development of the program are contained in the report. A final report from the External Review Committee was completed in December 1995. A copy of this report is attached as Attachment 2.

**8 ) Publication of Final Document on Safety and Health Concerns of Emerging Environmental Restoration Technology --** Two technical workshops were held during the last two years to develop approaches to anticipating occupational hazards associated with emerging cleanup technologies. The goal of the workshops was to develop guidance for developers of cleanup technologies to identify potential workplace hazards. The DOE Technology Development Office, the

DOE Environmental Health and Safety Office and the EPA Technology Innovation Office actively participated with NIEHS awardees in this process. The results of the technical workshop included recommendations for Technology Safety Data Sheets to catalog workplace hazards as a technology develops and is implemented. In addition, a protocol for development of Emergency Response Plans was included which would prepare developers and users of emerging technologies for emergencies that might occur at each stage of its development.

In November 1995, a second workshop on innovative technology was held during which participants reviewed the draft and provided comments to produce the final guidance on the integration of safety and health into the design of technologies. This guidance document, which is entitled "Anticipating Occupational Hazards of Cleanup Technology: Remembering the Worker," has been jointly published during October 1996 with the Assistant Secretary for Environment, Safety and Health of the U.S. Department of Energy and distributed to remediation technology developers throughout the country. A copy of this report is attached as Attachment 3.

## **Summary**

In administering the Superfund Worker Training Program through an Interagency Agreement with the Environmental Protection Agency (EPA), the NIEHS ensures that the traditional peer review process of the National Institutes of Health (NIH) provides the essential framework for the oversight of grant application reviews, and guidance of the program with grants management activities and ongoing program administration. Technical experts in toxicology, industrial hygiene, labor education and hazardous waste management from both the public and private sectors have played an ongoing role in assuring that NIEHS supported programs demonstrate high technical merit and adhere to stringent standards for quality control through periodic site reviews and an ongoing peer review process.

The NIEHS/EPA Superfund Worker Training Program must continue to meet the Superfund-related national environmental goals of protecting: communities from exposures to wastes at abandoned dumpsites and currently operating facilities and from exposures related to the storage, treatment and disposal of waste; those that live and work in communities affected by EPA Brownfields and environmental justice initiatives; and everyone who works from disease-causing hazardous materials. 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. Issues such as literacy, appropriate adult education techniques, training quality improvement and other areas unaddressed directly by the market place are being addressed by this program. The program enhances rather than replaces private sector training by demonstrating new and cost-effective training techniques and materials.

Based on our program experience over the past nine years, the NIEHS will continue to use cooperative agreements as the appropriate mechanism for making awards to non-profit training organizations for fiscal years 1995-99. Because of the substantial programmatic involvement by NIEHS staff to ensure the consistency, appropriateness and technical reliability of funded training programs, the use of cooperative agreements appear to be a more suitable instrument for supporting extramural training of hazardous waste workers and emergency responders and assuring the delivery of high quality safety

and health programs to high-risk populations.

List of Appendices and Attachments: Superfund Worker Training Program  
FY 1996 Progress Report

Appendices:

#1: Nine Year Training Summary

#2: Summary of Clearinghouse Activities

#3: Minority Worker Training Program Summary of Courses

#4: Minority Worker Training Program Summary of Demographics

#5: Summary of Minority Worker Training Program Awards

Attachments:

#1: Labor Market Study of Hazardous Waste Workers and Emergency Responders, September, 1996

#2: External Review Panel Report on the Superfund Worker Training Program, December 1995

#3: Workshop Report: Anticipating Occupational Hazards of Cleanup Technology: Remembering the Worker

Appendix 1: Nine Year Summary

EPA/NIEHS WORKER TRAINING PROGRAM: NINE YEAR SUMMARY			
YEAR	COURSES	WORKERS	CONTACT HOURS
1988	623	12,319	261,542
1989	1,353	29,429	520,752
1990	3,267	76,489	995,534
1991	2,725	58,575	874,736
1992	2,973	64,985	1,099,895
1993	2,652	55,624	781,446
1994	4,025	65,564	1,096,931
1995	4,664	81,227	1,390,323
1996	4,753	73,747	1,088,033
TOTAL	27,035	517,959	8,109,192

**Appendix 2:**  
**National Clearinghouse for Worker Safety and Health Training for Hazardous Materials,  
Waste Operation, and Emergency Response**

The National Clearinghouse for Worker Safety and Health Training for Hazardous Materials, Waste Operations, and Emergency Response provides the George Meany Center with a resource center of the latest information on training workers who are exposed to hazardous materials, emergency response and environmental cleanup. Additionally, two technical workshops on campus each year bring national leaders in hazardous waste training from labor, government, academia and industry to the Center.

A five year renewable contract for the Clearinghouse was awarded on May 1, 1995 to Ruth Ruttenberg & Associates, Inc., with the George Meany Center for Labor Studies as a major subcontractor. The Director, an Assistant Director, and three research associates are employed by Ruth Ruttenberg & Associates, Inc. The other Assistant Director, Industrial Hygiene support, and two full time Clearinghouse staff members are employed by the Meany Center.

The Clearinghouse is the information exchange and dissemination mechanism for 20 worker training programs whose support of \$30 million from the Environmental Protection Agency (EPA) and the Department of Energy (DOE) funds is intended to set a high standard for health and safety training to protect workers in the burgeoning environmental technology sector. Eleven of the prime awardees (including the Meany Center's Railway Workers Hazardous Materials Project) and 12 of the sub-awardees are AFL-CIO affiliates. Administration of the program by one of the National Institutes of Health--the National Institute of Environmental Health Sciences (NIEHS) --- enhances the program's stature and credibility. Close to 500,000 workers have received hazardous materials training in the past eight years through the NIEHS-funded programs (refresher training is also required on an annual basis).

The Clearinghouse serves as a resource center housing numerous sets of model curricula produced under the award and which training providers use as reference in developing new courses or improving existing ones. The Clearinghouse is the only authorized distributor of these curricula. In addition to the curricula, the resource center also houses hundreds of basic reference texts, key periodicals, books, regulatory information, and other documents of relevance to occupational and environmental health and safety. The resource center is open to everyone. A technical information specialist is available to answer questions and is located in the office next to the resource center.

A March 1995 technical workshop, organized by the Clearinghouse, was the first of two Innovative Technology workshops dealing with the integration of health and safety into the design of new environmental remediation technologies. At the end of that conference a working guidance document was developed. In November 1995, a second workshop on innovative technology will be held and participants will mark-up the draft guidance document to produce final guidance on the integration of safety and health into the design of technologies. A technical workshop scheduled for March 1996 will be titled, "Measuring and Evaluating the Outcomes of Training." Workshops are held on the George Meany Center campus and proceedings are expected to be published in refereed journals. A monthly Newsbrief is written and produced by Clearinghouse Staff, and is distributed to approximately 200 training program staff members and interested parties. The Newsbrief provides information on HAZMAT matters pertinent to awardees, including monthly columns on hazardous waste news,

government agencies, environmental justice, and industrial hygiene. Also included monthly is an Awardee resource exchange to promote the sharing of relevant resources. Upcoming events are also noted, as well as summaries of events which have been attended by either the Clearinghouse or awardees. In August 1995 the Newsbrief became available electronically, via the Internet. Subscriptions to those not associated with the NIEHS program are available at \$25 per year.

The Clearinghouse is also responsible for outreach on the training program and response to public inquiries from those seeking information on health and safety training for hazardous waste operations and emergency response. The Clearinghouse distributes thousands of brochures on the program and individual training providers throughout the year at trade shows and conferences. The 1995 exhibit schedule has included attendance at one of five National Environmental Justice Advisory Council meetings, the National Association of Environmental Professionals Annual Conference, the Mid-Atlantic Industrial and Hazardous Waste Conference, and the Ground Breaking of the Hazardous Materials Management and Emergency Response Training Facility in Hanford, Washington.

Another component to the Clearinghouse is its ongoing research program--focusing this year on measuring the outcomes of training, on profiling the labor market for hazardous waste workers and emergency responders, and on environmental justice and the new NIEHS Minority Worker Training Program.

The Clearinghouse is now on-line via CompuServe, which widens its capabilities to disseminate information, to receive inquiries, to access the latest information. While awardees are on campus for the next technical workshop, special sessions will be scheduled, at their request, to aid them in the use of the CD-ROM capacity now available in the Meany Center library, as well as in the use of the Internet.

Appendix 3:

NIEHS/EPA Minority Worker Training Program: One Year Summary of Type and Number of Courses	
Superfund Site Worker	8
Underground Storage Tank	2
Lead Abatement	15
Asbestos Abatement	10
Confined Space Training	2
Construction Skills	9
Welding	1
Electrical Training	1
Math	7
Reading/Writing	7
Science	1
Environmental Preparation	1
Emergency Resp. Technician	2
Emergency Resp. Awareness	1
First Aid	2
Adult CPR	4
Mentoring/Career Guidance	9
GED Training & Certification	5
Life Skills	12
Environmental Sampling	2
Environmental Justice	3
Physical Fitness	4

Appendix 4:

<b>NIEHS/EPA Minority Worker Training Program: DEMOGRAPHICS</b>								
<b>STUDENTS</b>	376							
<b>AGE</b>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>
	53	51	57	45	41	45	36	48
<b>ETHNICITY</b>	<u>BLACK</u>	<u>HISPANIC</u>	<u>ASIAN</u>	<u>NATIVE AMERICAN</u>		<u>PAC. ISL.</u>		
	334 (89%)	31 (8%)	5 (1%)	5 (1%)		1		
<b>GENDER</b>	<u>MALE</u>			<u>FEMALE</u>				
	260 (69%)			116 (31%)				

**Appendix 5 :**  
**Summary of EPA/NIEHS Minority Worker Training Program Awards for FY 1996**

**Jackson State University**

Other Participating Organizations:

University of Alabama at Birmingham  
Laborers International Union of North America (Local #145) -LIUNA

Target Training Populations:

Minority youth in disadvantaged communities in Mississippi

Program:

The goals of the program from Jackson State University (JSU) includes the identification and recruitment of the target population and training in basic areas such as literacy and problem solving. JSU will assist in the employment placement of the trainees who complete the program. The program will focus on specific communities where there is a need for environmental clean-up and for employment opportunities with assistance from LIUNA Program evaluation and job placement and hazardous waste worker training provided by University of Alabama at Birmingham (UAB). UAB is a recognized NIEHS trainer which successfully trained 13,439 workers under a five-year NIEHS Workers Training Grant. In addition, the LIUNA Union will partner with JSU to conduct apprenticeship training. The union will also, if necessary, train participants in basic trade skills.

Jackson State University (JSU) has been conducting literacy and pre-employment training since 1987. Since that time they have successfully trained 1,450 Jackson-area adults in the area of basic and intermediate literacy skills, GED preparation, pre-employment and job-specific training. Further, they have successfully conducted OSHA training in 1990-1991; training 342 Mississippi workers as site and task specific chemical safety trainers. Their ability to conduct successful recruitment is further enhanced by its affiliation with local community groups/agencies as well as designated staff who will be hired for this purpose.

## **Clark Atlanta University**

### Other Participating Organizations:

Laborers-AGC Training Fund  
Xavier University

### Target Training Populations:

The program will develop an intake/recruitment plan to identify youth (18-25 years of age) from environmentally impacted neighborhoods in Atlanta, Georgia and New Orleans, LA.

### Program:

Clark Atlanta University, a Historically Black University in Atlanta, Georgia proposes the development of a comprehensive educational and job training program. Through a partnership effort, which includes academic institutions, community groups, business/industry and organized labor, including Clark Atlanta University, Xavier University and the Laborers-AGC Training Fund. This project represents a unique opportunities to link HBCUs with the community and labor organizations in ways that improve the inner-city environmental and empower youth through employment. It is designed to improve general educational skills and provide job training in basic construction and hazardous material abatement. This program is strengthened by the proximity of the applicant organization to a number of Empowerment Zones, federally funded project to improve the urban neighborhood. These Empowerment Zones are communities of low socioeconomic populations exposed to a broad array of social, economic and environmental stressors. The program fits perfectly the stated priorities of the Empowerment Zone strategic plan in that it will: 1) Increase the number of meaningful jobs that could be support of community based businesses; 2) Increase control of financial resources at the grassroots level; and 3) Provide job training for zone residents.

There will be two job training cycles for the identified target population. This population will be drawn from four urban neighborhoods in Atlanta and New Orleans. The New Orleans component will be conducted by Xavier University. The training objectives will be accomplished through seven operational components: 1) integrated learning component; 2) team teaching component; 3) recruitment - counseling component; 4) community outreach component; 5) professional/technical component; 6) site-specific community advisory board; and 7) program advisory board. Participants will then complete an environmental job training program through the Laborers-AGC Training Fund in which the youth will receive (240 hours) of concentrated training in basic construction and environmental abatement skill. After completion of the concentrated training, the participants will become enrolled in the Laborer=s Training Fund Apprenticeship Program.

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

### Other Participating Organizations:

Laborers-AGC Health & Safety Fund  
Building & Construction Trades Department (AFL-CIO)  
Cuyahoga Community College  
San Francisco State University

### Target Training Populations:

Minority Youth from the San Francisco Bay area and Cleveland, Ohio

### Program:

The L-AGC, San Francisco State University, and Cuyahoga Community College will form a consortium to implement a comprehensive, integrated minority worker training program. The consortium will recruit, train, employ and bring into union membership minority workers in the San Francisco area and the Cleveland, Ohio. The initial recruitment goal is 40 minority youth between the ages of 18 and 25 from both Cleveland and the San Francisco area.

The training program will take place in two stages. Stage 1 will be devoted to "pre employment" training. In this stage the trainee will be exposed to job readiness classes, physical fitness training and any necessary remedial education. Stage 1 will be conducted by the staff and project officers at both San Francisco State University and Cuyahoga Community College in collaboration with many community-based organizations. The participating organizations have linkages to major racial and ethnic minorities which should enhance efforts to identify and access the eligible target worker population. They also have experience in dealing with the multi-factorial problems of racial/ethnic minority communities, including unemployment, and weakness in academic background. The direct involvement of San Francisco State University and Cuyahoga Community College - multi purposed, co-educational public institutions of higher education - provides some grounds for optimism that trainees may be encouraged to pursue academic programs leading to a college degree. Stage 2 training, conducted by the Laborers-AGC, will be concentrated training in basic construction and environmental abatement skills. Laborers-AGC has a relatively long record of experience in training hazardous waste workers. A number of incentives are built into the program - stipends, child care, transportation, etc. - increasing the probability of maximum participation by the target worker population. Upon completion of Stages 1 and 2, the trainee will move into a mentoring program, in which he or she will be paired with an experienced craftsman.

**University of Medicine & Dentistry of New Jersey (UMDNJ)**  
**New Jersey/New York Consortium**

Other Participating Organizations:

Hunter College, School of Health Sciences

New York Carpenters Labor Technical College including White Lung Association of NJ

New York City Environmental Justice Alliance, including El Puente de Williamsburg, Magnolia Tree Earth Center, South Bronx Clean Air Coalition, and West Harlem Environmental Action

Target Training Populations:

Minority Youth in New Jersey and New York.

Program:

This program is from the New Jersey/New York Hazardous Materials Worker Training Center forming an alliance, the Minority Workers Environmental Training Alliance, which will include eight organizations and institutions. The goal of the Alliance is to employ young people of color in the environmental clean up field. The training and counseling program will focus on literacy, math, job and personal skills, as well as environmental and safety awareness. Courses will be taught by experts from various disciplines and will include instructors from each of the Alliance organizations. The training methods will emphasize adult teaching techniques, including small group activity methods. Small group methods encourage the formation of learning alliances and model group problem - solving skills which are essential at construction and environmental remediation work. In addition, the Alliance foresees opportunities to encourage trainees who complete this program to continue their education to a college degree. The Alliance clearly recognizes the problems it faces in the implementation of this program (eg. high drop out rate experienced by apprenticeship programs, and the social and economic stressors on the potential trainees), and has developed strategies on how to deal with such obstacles.

At the completion of the program "graduates" of the program will be qualified to perform a range of environmental work and the graduates of the program will be linked to local employers, contractors and schools. The training program will recruit individuals from disadvantaged communities into a pre-Apprentice Training Program conducted by the New York Carpenters Labor Technical College. Trainees will be trained to conduct four types of environmental work: 1) hazardous material handling and remediation; 2) asbestos abatement; 3) lead paint abatement; and 4) confined space entry.

## **Carpenters Health & Safety Fund**

### Other Participating Organizations:

Ironworkers National Training Fund  
Painters and Allied Trades Labor-Management Fund (PAT)  
Sheet Metal Workers Training Fund (SW)  
Operative Plasterers and Cement Masons Union (OPC)  
Delgado Community College  
LeMoyne Owen College  
National Association of Minority Contractors (NAMC)

### Target Training Populations:

Minority youth from New Orleans, Memphis, Los Angeles, and Minneapolis.

### Program:

This program is from the Environmental Justice Construction Consortium, a national partnership of the Carpenters, Painters, Operating Engineers, Plasterers, Ironworkers, Sheet Metal Workers, Roofers unions (representing 1,000,000 members), the NAMC (4000 members nationally), Delgado Community College, and LeMoyne Owen College. The Consortium is led by the Carpenters Health & Safety Fund based in Washington, D.C. with training facilities and staffs to be used across the country. They have demonstrated a record of recruitment, training and placement of students from a central worker population doing Superfund clean up work.

The Carpenters Health & Safety Fund has also developed an excellent and perhaps leading program of professional development of its trainers who have been recruited from the ranks of labor educators, occupational health educators, and apprenticeship instructors. They are given solid initial training, trainer refreshers, and periodic substantive occupational health upgrade classes. The Carpenters Health & Safety Fund has made additional efforts to work with the National Association of Minority Contractors and has an environmental justice coordinator on staff to help reach under-served students in this training effort. Major efforts will be to work with the historically black colleges, through Delgado Community College and LeMoyne Owen College to build outreach to people of color communities. The plan is to identify the students from each city, put them into a pre-apprenticeship skills building program which will incorporate remedial education, GED programs, and individual skills and career counseling. A pathway to full apprentice status is planned as part of the overall objective. There will be diversity training for instructors. In addition, there will be work with employers for placement of students as part of the plan.

## **DePaul University**

### Other Participating Organizations:

People for Community Recovery, (PCR) Inc.  
Center for Workforce Education, Laubach Literacy International

### Target Training Populations:

Minority Youth in Southeast Chicago, IL

### Program:

This program represents a consortium whose members include: DePaul University, Office of Applied Innovations (OIA); People for Community Recovery, (PCR) Inc.; the Center for Workplace Education, Laubach Literacy International (CWE); and , in an advisory and supporting role, the National Association of Minority Contractors (NAMC); and the Construction Education Fund of the Associated Builders and Contractors (CEF). PCR is responsible for the provision of: outreach, recruitment, intake assessment, counseling and support services, and job development and placement. OAI is responsible for the provision of: technical training and education program design and delivery, curriculum development, staff-development, management support and capacity-building. CWE is responsible for the implementation of: the advisory committee, linkages and coordination with educational and employer resources, information dissemination, and program evaluation. These consortium members have a successful history of recruitment and placement of the target population in hazardous waste and/or toxic material containment or abatement training and employment programs.

The specific objectives of the project are: 1) Conduct outreach, recruitment and assessment of prospective applicants who reside in Altgeld Gardens, a Chicago Housing Project, the surrounding area, and those living in the Empowerment Zone. 2) Enroll 48 youth that successful complete the initial assessment phrase in the following component of hazardous waste operation and emergency response, lead abatement, asbestos abatement, and underground storage tank cleaning. 3) Provide educational enhancement to prepare students to enter an apprenticeship program in the construction trade. 4) Provide at least 36 graduates of the program with jobs in the environmental industry. 5) Provide on-going counseling and follow-up support. 6) Develop a Protege Mentoring and work-base education component to enhance the trainees employment opportunities.

## **Alice Hamilton Occupational Health Center**

### Other Participating Organizations:

University of Maryland  
Howard University

### Target Training Populations:

The project focuses on low income minority youth in the Washington, DC and Baltimore, MD area.

### Program:

The Alice Hamilton Consortium is proposing to conduct an innovative pilot program to provide health and safety training to urban minority youth in the Washington, D.C. and Baltimore, MD areas. The Alice Hamilton Occupational Health Center (AHOHC) will provide the worker health and safety training for this application. Howard University School of Social Work will provide recruitment, life skills training, mentoring programs, arrange for supplemental training in literacy, communication skills, and math, and serve to facilitate the successful completion of the environmental training. The AHOHC has devised a methodology to successfully recruit workers from the target population. They have established a partnership with the Howard University School of Social Work's Family Research and Resource Center (FRRC). FRRC has a relationship with a network of non-profit agencies. Many of these agencies have trained inner city youth in job readiness. In addition, the University of Maryland School of Health Education and Human Performance will provide the evaluation components. The identified target population consists of four groups of youth in the Washington, D.C. area and one group in Baltimore, MD.

The training will provide the youth with essential life skills such as communication, conflict management, stress management and elements of self esteem and teamwork. The remainder of the course includes curriculum for lead abatement, asbestos abatement, and hazardous waste worker training. These training courses have been lengthen to increase the hands-on training time and to address literacy and language skills. With the outreach experience of AHOHC in training minority and Hispanic populations in other training programs, AHOHC brings to this new pilot program a history of reaching under-served populations