Introduction

The Superfund Amendments and Reauthorization Act of 1986 (SARA), Section 126(g), authorizes an assistance program for training and education of workers engaged in activities related to hazardous waste generation, removal, containment or emergency response and hazardous materials transportation and emergency response. The Congress assigned responsibility for administering this program to the NIEHS, an Institute of the National Institutes of Health (NIH) within the Public Health Service (PHS) of the US Department of Health and Human Services (DHHS).

SARA authorizes NIEHS Worker Training Program (WTP) to fund multi-state or national non-profit organizations with a demonstrated track record in developing and delivering high quality training to workers who are involved in handling hazardous waste or in responding to emergency releases of hazardous materials.

A competitive Request for Applications has been developed every five years by NIEHS Worker Education and Training Branch (WETB) staff in consultation with federal agency partners. Successful applicants are required to re-apply for a 5-year cycle and to demonstrate adequate progress each year in reaching the goals of their application. During 2015-2019, WETB cooperative agreement funding supported 17 consortia that represent over 100 training organizations.

This training program has 3 distinct program areas: Hazardous Waste Worker Training Program, Environmental Career Worker Training Program, and the Hazmat Disaster Preparedness Training Program.

- **Hazardous Waste Worker Training Program (HWWTP)** – Provides model occupational safety and health training for workers who are or may be engaged in activities related to hazardous waste removal or containment or chemical emergency response.
- **Environmental Career Worker Training Program (ECWTP)** – Focuses on delivering comprehensive pre-employment training to undeserved and disadvantaged individuals in order to prepare them for employment in the environmental restoration, brownfields and hazardous materials fields.
- **Hazmat Disaster Preparedness Training Program (HDPTP)** – This program is to enhance the safety and health training of current hazardous materials workers and chemical responders, to train skilled response personnel, to create materials and deliver training to workers responding to a disaster, and to augment prevention and preparedness efforts in a wide variety of high risk settings.

The concept received clearance by the National Advisory Environmental Health Sciences Council (NAEHSC) at its May 1994 meeting. In addition, at the February 2009 Council meeting, after a presentation by Joseph 'Chip' Hughes, Director, WETB, Council stated that sufficient progress has been made under the Superfund WETP and it has demonstrated that it has become an important resource to workers and the community in addressing worker health and safety in hazardous material and emergency response activities. Council recommended continuation of the program. Also, in February 2014, the Council recommended that the program continue for the next five years with support of all program components. Since its inception, the program has trained more than three million workers, increased the number of disadvantaged workers employed in cleanup, and responded to many natural and man-made disasters from 9/11 to Hurricane Maria in 2017.

In June 2015, NIEHS began the **Ebola Biosafety and Infectious Disease Response WTP**. It will run through May 31, 2019. NIEHS is building federal capacity for biosecurity, biopreparedness, and rapid response to emerging infectious diseases, including developing an infrastructure of trainers and organizations who can be a resource during emergencies. The Ebola Biosafety and Infectious Disease Response Worker Training Program uses a multi-sector, all-hazards approach to biosafety preparedness and the NIEHS (WTP) is implementing infectious disease response training for workers across sectors who may be exposed to infectious diseases. This addresses an important gap revealed by the 2014 Ebola outbreak.

NIEHS launched the program with the Centers for Disease Control and Prevention (CDC) U.S. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response National Institute of Occupational Safety and Health Occupational Safety and Health Administration. The program is funded through a $10 million transfer to NIEHS WTP via CDC using Ebola emergency supplemental appropriations. As of May 31, 2018, awardees delivered approximately 1,000 courses to more than 22,500 workers, with in-person trainings in 37 states across the country.
**Research Goals and Scope**

**Goal One:** Through the use of cooperative agreements, support the development of model programs for the training and education of workers engaged in activities related to hazardous materials and waste generation, removal, containment, transportation and emergency response.

**Goal Two:** To prevent work related harm by assisting in the training of workers in how best to protect themselves and their communities from exposure to hazardous materials encountered during hazardous waste operations, hazardous materials transportation, environmental restoration of contaminated facilities or chemical emergency response. A variety of sites, such as those involved with chemical waste cleanup and remedial action and transportation related chemical emergency response may pose severe health and safety concerns to workers and the surrounding communities. These sites are often characterized by the multiplicity of substances present, the presence of unknown substances, and the general uncontrolled condition of the site. The program will also incorporate infectious disease response training for workers across sectors who may be at risk of exposure to infectious pathogens.

**Goal Three:** To assist organizations with development of institutional competency to provide appropriate model training and education programs to hazardous materials and waste workers by building national consortia to reach thousands of workers in all US states and provinces.

**Mechanism and Justification**

The program will use the cooperative agreement mechanism U45 entitled “Hazardous Waste Worker Health and Safety Training Cooperative Agreements (NIEHS)” and described as “To develop, implement, and evaluate programs to train workers who are or may be engaged in activities related to hazardous waste removal, containment, or emergency response.”

Authorization to convert the original grants program to a cooperative agreements program was obtained from the Associate Director for Extramural Affairs (ADEA) and the NIH Cooperative Agreement Panel (CAA) in September 1991.

As a result of the experience gained during over thirty years of operating the Worker Training Program under the statutory authority of Section 126(g) of SARA, NIEHS has determined that the cooperative agreement should continue to be the most appropriate assistance instrument for the following reasons:

- the need to assure national coordination and to avoid duplication of efforts and overlap in program development and delivery; NIEHS will promote national coordination among awardees by convening two program workshops each year and by conducting annual reviews of each awardees' program accomplishments and evaluation results for use in future training activities;

- the need to facilitate the ongoing exchange of relevant scientific and technical information between awardees and the Institute; to promote effective exchange of information, NIEHS will convene two topical technical workshops on an annual basis, as well as maintain a National Clearinghouse for Worker Safety and Health Training for Hazardous Materials, Waste Operations and Emergency Response;

- the need to ensure regulatory compliance with applicable federal worker health and safety requirements and national consistency in the delivery of training curricula; NIEHS staff will have programmatic involvement in the review of training manuals and curricula materials before their use in training activities by awardees, and conduct regular site reviews by program staff to ensure compliance with federal standards and consistent use of training materials and presentation of curricula;

- the mutual interest of awardees and the Institute in developing peer-reviewed, high quality model training programs for hazardous waste workers and emergency responders; the process for developing model programs will include awardee development of evaluations that assess trainee learning and use of training at the worksite, effective teaching techniques and pedagogical approaches, and a consensus between awardees and the Institute regarding adequate minimum criteria for effective worker training programs; and

- the need to have a timely and appropriate response to the role of the NIEHS WTP and it awardees in the National Response Framework (NRF). The Department of Health and Human Services, which includes the National Institutes of Health and the NIEHS, is a signatory to the NRF. Upon the activation of the NRF, NIEHS may be activated by the Occupational Safety and Health Administration (OSHA) under the NRF’s Worker Safety Health Annex to provide:
  - Training technical assistance such as instructional staff, curriculum development experts, subject-matter experts, and professional staff.
- Safety training to worker target populations with respect to the nature and location of the incident and the particular hazards.
- Assistance and support in the development and delivery of site-specific health and safety training through appropriately qualified WETP awardee instructional staff.
- Assistance such as respirator fit-testing and distribution of personal protective equipment.

The use of a cooperative agreement as an assistance instrument with substantial programmatic involvement by NIEHS staff is required to assure adequate national coordination of a diverse training program focused on a number of different target populations as identified by Congress in Section 126 of SARA. The role of the NIEHS will be to facilitate, not to direct, the development of a high quality national worker safety and health training resource.

The substantial programmatic involvement by NIEHS staff has been an important factor in the continuing success of the training program. A Program Official/Coordinator designated by the Director, NIEHS for the Worker Training Program provides substantial programmatic involvement and facilitate administration and coordination of the cooperative agreements under this program. The NIEHS Program Official/Coordinator manages activities of mutual interest and benefit to awardees and the Institute. The primary objective of the Worker Training Program will be to stimulate collaborative work between NIEHS and the awardees in the creation of model worker safety and health training programs.

Ongoing participation by NIEHS staff has assured a high level of quality in training development, a robust exchange of scientific and technical information, and the opportunity for solid partnerships with other participating federal agencies.

**Proposed Timeline for NIEHS WTP:**
- Council Concept Clearance: September 2018
- RFA Release Date: June/July 2019
- Application Due Dates: November 2019
- Peer Review Dates: February/March 2020
- Council Review Dates: May/June 2020
- Earliest Anticipated Start Date: August 2020