



EPA

HEALTH AND SAFETY ROLES AND RESPONSIBILITIES AT REMEDIAL SITES

Office of Emergency and Remedial Response
Hazardous Site Control Division OS - 220W

Quick Reference Fact Sheet

Additional fact sheets which address health and safety at Superfund sites have been compiled by the Environmental Response Team (ERT). The ERT Fact Sheets are listed in the Bibliography on page 6.

INTRODUCTION

The complex inter-relationships between the many parties involved in remedial activities make it difficult to administer the health and safety program. To implement an effective, well coordinated program all participants must be made aware of the health and safety roles and responsibilities of all parties involved in site remediation.

The purpose of this fact sheet is to define the major components of the health and safety program and to delineate the health and safety roles and responsibilities for Remedial Project Managers (RPM), lead parties/agencies, and contractors during the remedial action phase of Superfund clean-ups. It addresses the various roles of all parties in the overall health and safety program for a site, with emphasis on Occupational Safety and Health Act/Agency (OSHA) compliance. More detailed health and safety guidance documents are available through the Environmental Protection Agency's (EPA's) Environmental Response Team (ERT), Edison, NJ, (908) 321-6740 and OSHA.

OCCUPATIONAL HEALTH & SAFETY OVERVIEW

All governmental agencies and private employers are directly responsible for the health and safety of their employees. This general rule applies to the many parties involved in the hazardous waste clean-up at Superfund sites (i.e. OSHA citations to abate unsafe or unhealthful working conditions would be written to the party whose employees are at risk).

OSHA requires that a written (site-specific) occupational safety and health program, that includes a safety and health plan, be in place for remedial activities at all Superfund sites. EPA, OSHA, and the U.S. Army Corps of Engineers (USACE) often use different terminology to describe written safety and health programs and plans. EPA uses the term Health and Safety Plan (HASP), OSHA uses Safety and Health Program and/or Plan, while USACE uses the term Site Safety and Health Plan (SSHP). In this document the term HASP is used. The objective of the HASP is to protect workers through the identification, evaluation, and control of health and safety hazards and to provide for emergency response contingency planning.

The party responsible for the HASP should be identified in the work plan. It is usually developed and implemented by the prime contractor's site coordinator, and reviewed and accepted by the construction manager for Fund-Lead projects and by the RPM and oversight official for enforcement lead projects. The construction manager is usually USACE, the U. S. Bureau of Reclamation (USBR), or an Alternative Remedial Contracting Strategy (ARCS) contractor. Accepted means the HASP has been reviewed by the construction manager/oversight official and any deficiencies have been identified and corrected prior to the start of work. OSHA requires the HASP to be developed and implemented before work begins at the site.

The HASP shall include a written statement delineating the responsibilities, authority, and accountability of the various parties involved in the remedial action. A goal of the HASP is to facilitate coordination and communication of

health and safety issues among personnel responsible for the various activities. The HASP is mandated by OSHA and/or the construction contract as the legally enforceable plan for the job site. The prime contractor is usually responsible for review and approval (after acceptance by the RPM and construction manager) of subcontractor health and safety programs. The HASP will be incorporated into each subcontractor health and safety program.

The EPA must be provided an original and a copy of all changes to the HASP prior to implementation, as they may affect public health, the environment, overall cost, scheduling, or technical quality of a project. It is an RPM's responsibility to insure that all Federal safety and health requirements are met at a site, however the construction manager, not the RPM, accepts and enforces changes to the HASP.

Specific topics/statements in the HASP include:

Training

The HASP shall specify that a training plan complying with OSHA training requirements outlined in 29 CFR 1910.120 (e) and the Hazard Communication Standard, 29 CFR 1926.59 for construction, will be implemented (it is usually the prime contractor's responsibility). OSHA requires both on-site and off-site training for workers at RA sites. Increased OSHA enforcement of the training requirements of these standards is likely at RA sites as exemplified by recent OSHA enforcement actions. For specific requirements, consult the sources of information listed at the end of this fact sheet.

The requirements for off-site training are a function of both the potential for exposure and management responsibility. Information pertaining to off-site (initial) training is available through a number of sources including courses offered by ERT, USACE (Huntsville Division) and through the National Clearinghouse on Occupational and Environmental Health (funded by a National Institute of Environmental Health Sciences Grant). Additional sources of information are listed at the end of this fact sheet.

EPA employees who have not had the 40-hours training are not permitted to enter areas where occupational exposures above established limits are likely. The use of respirators implies that exposures are likely. Exceptions are strongly discouraged, but can be made on a case-by-case basis with the approval of the site safety and health officer if respirators are NOT required, time on site is limited, and visitors are given a pre-entry site briefing and accompanied by trained personnel at all times.

On-site construction managers normally are required to have completed a 40 hour off-site course. For those con-

struction managers who have on-site supervisory responsibilities, an additional 8-hour supervisory training is required. An 8-hour annual refresher training is required for all site workers. Training requirements for entry to sites where occupational exposures above established limits are likely, or where respirators or other personal protective equipment are required are described in the ERT Fact Sheets listed at the end of this publication.

On-site training must be tailored to the conditions of individual sites. At RA sites, construction managers, RPMs, and authorized visitors must receive on-site training prior to entering restricted areas.

Logistics and Resources

The HASP should specify that the party responsible for health and safety plan implementation (i.e. the prime contractor) will provide for logistics and resources, such as qualified health and safety managers to meet plan tasks and objectives.

The Site-Specific HASP

OSHA, 29 CFR 1910.120 (b), requires that a site HASP be developed and reviewed by qualified personnel for each remedial action. Subcontractors can modify the plan to account for their own work. However, their plan or modifications shall be formally incorporated into the general site plan. Only one HASP is applicable to a particular site. It must be kept on site and shall be made available for review by employees, emergency response personnel, or, if applicable, employee representatives.

The plan should not be generic, but should be based on specific site characterizations, anticipated hazards and expected work conditions at the site. OSHA requires the plan address the following elements:

- (1) A safety and health risk or hazard analysis for each site task and operation found in the workplan.
- (2) Employee training.
- (3) Personal protective equipment for each task or operation.
- (4) Medical surveillance.
- (5) Frequency and types of air monitoring, personal monitoring, environmental sampling techniques, instrumentation, and methods to be used.
- (6) Site control measures.
- (7) Decontamination procedures.

- (8) An Emergency Response Plan.
- (9) Confined Space entry procedures
- (10) A spill containment program.

Emergency Response

Most sites are too small to warrant fully staffed on-site medical and fire fighting facilities. Where services can be provided by surrounding communities, EPA may provide limited training and support to compensate for OSHA requirements specific to hazardous waste response training and support on a case-by-case basis. The amount of training and support that local fire fighting and emergency response personnel will require for OSHA compliance (Paragraph (q) of the Worker Protection Standard if off-site responders) depends on site-specific conditions and on Response Tasks (i.e. off-site training duration can vary between 24 and 40 hours). Examples of the types of support that may be provided by EPA to local responders on a case-by-case basis include off and on-site training, no-cost personal protective equipment and specialized haz-mat equipment loans, medical surveillance, and reimbursement of response funds.

As a minimum, the emergency response plan should be a separate section of the site HASP. The designer (for design operations involving site entry) and the party responsible for the remedial action health and safety plan (usually the prime contractor) have the responsibility to arrange for emergency response support and written agreements prior to commencement of operations involving site entry. This will entail an evaluation of the capabilities of local fire departments, hospitals, police departments, etc. to provide coordinated and integrated services to the RD and RA. Selection of the provider should be based on an evaluation of current capabilities, required support levels, response time, jurisdictional authority, and cost to the Government. This information is often available from information obtained during pre-design activities. Because failure to secure agreements can result in remedial project delays or work stoppage, it is important for the RPM to address emergency response in pre-design work plans, etc. and solicit early involvement with community relations staff in the process.

The site safety officer (or equivalent position) should make a copy of the HASP (to include the emergency response plan) available, and provide on-site training for local fire fighting and emergency response personnel subject to respond to calls at Superfund RA sites.

Health and Safety Plan Improvements

Feedback or communications from safety meetings, training and inspections should be openly encouraged so that the HASP can be adjusted and improved. EPA strongly endorses an open communication policy in which all health and safety inquiries receive a prompt, professional response. The HASP should outline procedures for response to health and safety inquiries and for modifications. Consistent with the OSHA worker protection standard, on-going inspections and/or monitoring will, at times, require changes to the HASP. Modifications should be drafted by professional staff (i.e. the prime contractor's industrial hygienist) and approved by the construction manager.

INSPECTIONS

Health and safety program oversight is an RPM responsibility, however, the RPM is not required to conduct health and safety inspections. Inspections for enforcement purposes are the responsibility of OSHA. If inspections uncover conditions that may adversely affect public (or worker) health and/or the environment, the overall cost, scheduling, or technical quality of the project, then prompt lead party and RPM notification is necessary. For RA projects the construction manager or oversight official is responsible for enforcing the terms of the contract or settlement agreement to include the issuance of stop work orders in situations where the health and safety provisions of the contract are violated.

Employee Representatives

A worker representative (if applicable, the Union health and safety representative) should be given the opportunity to accompany the inspector during non-OSHA health and safety inspections or evaluations. For OSHA inspections, the worker representative has the right to accompany the inspector. In situations where more than one union represents workers at the site being inspected, the inspecting official should select a health and safety representative for each area being inspected. The selection and participation of the employee health and safety representative during inspections and evaluations should be addressed in the HASP.

Imminent Danger

Whenever, and as soon as the RPM (or any other party) is made aware of a danger which could reasonably be expected to cause death or serious physical harm, that person has the responsibility to IMMEDIATELY notify the affected employees, and parties with the responsibility and authority to remove the danger. In situations where an imminent danger exists, both the prime contractor's site coordinator and the construction manager's on-site representative (or equivalent) have the responsibility and

authority to stop all activities or withdraw employees. The RPM does NOT shut down or remove personnel from unsafe operations, but recommends action for decisions by lead agency officials. If steps are not taken to remove the danger, OSHA shall be consulted.

Other Unsafe or Unhealthful Working Conditions

For Federal-lead RA projects, health and safety inquiries should be channeled through the construction manager, who has the responsibility to notify the site coordinator verbally and in writing of the unsafe or unhealthful condition. For other than Federal-lead projects, the RPM should notify the site coordinator (or responsible party) verbally and in writing of unsafe or unhealthful working conditions. IF NOT SATISFIED WITH THE CORRECTIVE ACTION TAKEN, THE RPM SHOULD CONSULT WITH THE REGIONAL SAFETY AND HEALTH OFFICER, THE ENVIRONMENTAL RESPONSE TEAM (ERT) ((908) 321-6740) OR THE HEADQUARTERS HAZARDOUS SITE CONTROL DIVISION (HSCD) ((703) 308-8393) PRIOR TO SEEKING INTERVENTION FROM OSHA.

OSHA STANDARDS

OSHA Standards are found in Title 29 of the Code of Federal regulations (29 CFR). Two parts must be followed during remediation activities: Part 1910, General Industry Standards and Part 1926, Construction Standards. The interpretation as to which parts of Title 29 apply to a particular activity is often complex. EPA Standard Operating Safety Guides (and USACE regulations for USACE managed projects) supplement OSHA regulations. If a conflict arises, the more protective standard should be applied to a particular operation.

Worker Protection

OSHA's Worker Protection Standard for Hazardous Waste Operations and Emergency Response, 29 CFR 1910.120, will have the most applicability to remediation activities. Guidance on interpretation of the Standard can be found in ERT Fact Sheets. Compliance with the standard should be addressed in the preliminary assessment/site inspection stage, during the remedial investigation/feasibility study stage, and through the remedial design and remedial action. The delineation of a site into work zones where the worker protection standard applies should be addressed in the remedial design site HASP. In situations where competent health and safety professionals lack sufficient information to conclude that occupational exposure will be well within limits considered acceptable, a protective interpretation of the standard is recommended (However, overprotection, as well as underprotection can be hazardous and should be avoided wherever possible).

Hazard Communication

The OSHA hazard communication standard(s), 29 CFR 1926.59 for construction and 1910.1200 for general industry, require that all hazardous chemicals on a site be identified. Every potentially exposed worker must be given hazard communication training at the time of initial work assignment and each time a new hazard is introduced into a work area. Material Safety Data Sheets (MSDS) must be available for all hazardous materials brought onto the site except hazardous wastes, as defined by the Resource Conservation and Recovery Act (RCRA), which are exempt. Training centers around information contained in the MSDS. Similar requirements are contained in the worker protection standard, 29 CFR 1910.120, which requires a worker risk assessment for hazardous materials found on-site. Problem areas commonly encountered include the lack of access to and the quality of information in Material Safety Data Sheets (MSDS).

ROLES AND RESPONSIBILITIES

The basic health and safety responsibilities of the various parties involved in the RD and RA phases of work at Superfund sites follow:

Remedial Design

The remedial design contractor is responsible for the development and implementation of a HASP for all on-site RD activities; for the development of specifications for the remedial action site health and safety plan; and for the description of minimum requirements for health, safety, and emergency response. The following should be specified in the final design:

1. An estimate of increased hazards (over background).
2. The degree of existing hazard based on contamination identified in the site characterization report, on the Agency for Toxic Substances and Disease Registry (ATSDR) Health Assessment, and on the short term effects component of the feasibility study.
3. Minimal acceptable standards for:
 - Worker protection
 - The general public
 - Monitoring, reporting and interpretation (what constitutes acceptable concentration)
 - Emergency response and evacuation
 - Site control; decontamination of personnel and equipment; clean-up procedures

During the design phase, it is the responsibility of the designer to establish site boundaries where 29 CFR

1910.120 applies and to describe criteria utilized in such determinations. These boundaries should be reviewed and approved by a qualified health and safety professional such as a certified industrial hygienist, certified health physicist, etc.

Remedial Action

OSHA, or its State counterpart, has Occupational Safety and Health Act enforcement authority at RA sites. In addition to complying with Federal standards, the prime contractor must also comply with contractual health and safety policies and guidelines from EPA. For Alternative Remedial Contract Strategy (ARCS), the U.S. Army Corps of Engineers (USACE), and the U.S. Bureau of Reclamation (BUREC) managed projects, health and safety enforcement responsibilities under the contract are delegated to the construction manager's resident inspector (or equivalent position). For State lead projects these responsibilities are delegated to the State's on-site official; and for Potentially Responsible Party (PRP) projects, health and safety enforcement is the responsibility of EPA's oversight official. The resident inspector must be certified to be on site (i.e. have a medical examination, training, experience, etc.), conduct health and safety inspections and evaluations of contractor compliance with the health and safety contract provisions, and possess a complete understanding of the contract.

Implementation of the health and safety program is the responsibility of the prime contractor. The State's on-site official or the PRP oversight official is responsible for health and safety during the implementation of the operation and maintenance phase.

HEALTH & SAFETY PROGRAM OVERSIGHT

RPM Responsibilities

As the EPA's prime contact or representative for a site, it is important for the RPM to be a strong health and safety advocate. The RPM has the responsibility to coordinate, direct, and review the work of EPA contractors responsible parties and other agencies to assure compliance with the National Contingency Plan. As such the RPM oversees compliance with occupational health and safety programs. The RPM normally does not have direct line authority over the RA prime contractor but recommends action through the lead agency or PRPs. The RPM will be informed of situations where health and safety issues impact overall project cost, scheduling, technical quality or public health/environmental protection. However, the RPM's primary responsibility is oversight, not action. Items requiring action should be referred to the appropriate individuals or agencies (Prime contractor, USACE, BUREC, ARCS, Responsible Party, the State, or OSHA).

SOURCES OF INFORMATION

For questions about OSHA regulations or EPA/OSHA relationships, how to contact Regional or Federal OSHA representatives, and/or HASP computer software package, contact:

Rod Turpin
USEPA Environmental Response Team
2890 Woodbridge Avenue
Building 18 (MS-101)
Edison, NJ 08837-3679
(908) 321-6740 or FTS 340-6740

For OSHA publications contact:

U.S. Department of Labor - OSHA
Publications Office, Room N3101
200 Constitution Avenue N.W.
Washington, D.C. 20210
(202) 523-9667

For questions pertaining to health and safety during remedial design/remedial action, contact:

Joe Cocalis
USEPA Hazardous Site Control Division
Design and Construction Management Branch
Mailstop OS-220W
401 M. Street SW
Washington, D.C. 20460
(703) 308-8356 or FTS 398-8356

SOURCES OF INFORMATION (continued)

For information pertaining to health and safety training contact ERT or the National Institute for Environmental Health Sciences Training Grant Clearinghouse:

USEPA ERT
26 West Martin Luther King
Cincinnati, OH 45268
(513) 569-7537

or

National Clearinghouse on Occupational & Environmental Health
c/o Workplace Health Fund
815 16th Street, N.W. Suite 301
Washington, D.C. 20006
(202) 842-7833

BIBLIOGRAPHY

29 CFR 1910, OSHA General Industry Standards

- (1) 1910.120 Hazardous Waste Operations and Emergency Response
- (2) 1910.134 Respiratory Protection
- (3) 1910.1200 Hazard Communication

29 CFR 1926, OSHA Construction Industry Standards

OSWER Directive 9285-01, Health and Safety Plan (HASP), June 1989.

ERT Fact Sheets

- A. Hazardous Waste Operations and Emergency Response: General Information and Comparison (#9285.2 - 09fs)
- B. Establishing Work Zones at Uncontrolled Hazardous Waste Sites (#9285.2 - 06fs)
- C. Hazardous Waste Operations and Emergency Response: Uncontrolled Hazardous Waste Sites and RCRA Corrective Action (#9285.2 - 08fs)
- D. Hazardous Waste Operations and Emergency Response: RCRA TSD and Emergency Response Without Regard to Location (#9285.2 - 07fs)
- E. Hazardous Waste Operations and Emergency Response: Available Guidance (#9285.2-10fs)