Chapter 36
Hazardous Waste Operations and Emergency Response

36-1. References.

a. ANSI/ASSP Z490.1, Criteria for Accepted Practices in Safety, Health and Environmental Training (https://webstore.ansi.org/) (36-1.a)

b. EM 385-1-97, Explosives – Safety and Health Requirements Manual (https://www.publications.usace.army.mil/USACE-Publications/Engineer-Manuals/) (36-1.b)

c. EP 415-1-266, Construction – Resident Engineer Management Guide for Hazardous, Toxic, and Radioactive Waste Projects (https://www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/) (36-1.c)

d. ER 200-2-3, Environmental Compliance Policies (https://www.publications.usace.army.mil/USACE-Publications/Engineer-Regulations/) (36-1.d)

e. ER 385-1-40, Occupational Health Program (https://www.publications.usace.army.mil/USACE-Publications/Engineer-Regulations/) (36-1.e)

f. ER 385-1-92, Safety and Occupational Health Requirements for Environmental Cleanup Projects (https://www.publications.usace.army.mil/USACE-Publications/Engineer- Regulations/) (36-1.f)

g. 29 CFR 1910.38, Emergency Action Plans (https://www.govinfo.gov/content/pkg/CFR- 2020-title29-vol5/pdf/CFR-2020-title29-vol5-sec1910-38.pdf) (36-1.g)

h. 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response (https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol5/pdf/CFR-2020-title29-vol5-sec1910-120.pdf) (36-1.h)

i. 29 CFR 1910.1200, Hazard Communication (https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol6/pdf/CFR-2020-title29-vol6-sec1910-1200.pdf) (36-1.i)

j. 29 CFR 1926.35, Employee Emergency Action Plan (https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol8/pdf/CFR-2020-title29-vol8-sec1926-35.pdf) (36-1.j)

k. 29 CFR 1926.65, Hazardous Waste Operations and Emergency Response (https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol8/pdf/CFR-2020-title29-vol8-sec1926-65.pdf) (36-1.k)

36-2. Definitions.

a. Contamination Reduction Zone (CRZ). The CRZ is an area on the project where personnel and equipment are decontaminated when exiting the exclusion zone (EZ) in route to the support zone. There is potential for contamination to be present in this area that can potentially expose personnel to hazardous substances and health hazards. (36-2.a)

b. Emergency Response. Emergency response or responding to emergencies means a response effort by employees from outside the immediate release area or by other designated responders (that is, mutual-aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release of a hazardous substance. Responses to incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel are not considered to be emergency responses within the scope of this chapter. Responses to releases of hazardous substances where there is no potential safety or health hazard (that is, fire, explosion, or chemical exposure) are not considered to be emergency responses within the scope of this chapter. (36-2.b)

c. Environmental Cleanup and Investigation Projects. Environmental Cleanup and Investigation Projects are sites and activities specified in 29 CFR 1910.120(a)(1) or 29 CFR 1926.65(a)(1) and involve operations where hazardous substances are investigated, removed, contained, incinerated, treated, neutralized, cleaned-up, or in any other manner processed or handled with the goal of making the site safer for people or the environment. (36-2.c)

d. Exclusion Zone (EZ). The EZ is an area known or suspected to be contaminated. This is an area where site characterization activities and contamination removal activities will take place. Work conducted in this area may have the potential to expose personnel to occupational health hazards from contamination. (36-2.d)

e. General Site Workers. General site workers are engaged directly in the hazardous substance investigation and/or removal and remediation activities. General site workers conduct investigation or cleanup activities in the EZ or CRZ and have the potential to be exposed to contamination while performing work activities. (36-2.e)

f. Health Hazard. Health hazard means a chemical or a pathogen where acute or chronic health effects may occur in exposed employees. It also includes stress due to temperature extremes and other physical agents. The term health hazard includes chemicals that are classified according to 29 CFR 1910.1200, as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or

irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); aspiration toxicity; or simple asphyxiant. (36-2.f)

g. Hazardous Substance. Hazardous substance means any substance designated or listed as hazardous substance or hazardous waste as defined in 29 CFR 1910.120(a)(3) or 29 CFR 1926.65(a)(3), where exposure to which results or may result in adverse effects on the health or safety of employees during the performance of their duties. (36-2.g)

h. Other Site Workers. Other site workers are those regularly onsite who work in areas which have been monitored and fully characterized indicating that exposures are under permissible exposure limits and published OELs where respirators are not necessary, and the characterization indicates that there are no health hazards or the possibility of an emergency developing. (36-2.h)

i. Post Emergency Response. The portion of an emergency response performed after the immediate threat of a release has been stabilized or eliminated and clean-up of the site has begun. If post emergency response is performed by an employer's own employees who were part of the initial emergency response, it is considered to be part of the initial response and not post emergency response. However, if a group of an employer's own employees, separate from the group providing initial response, performs the clean-up operation, then the separate group of employees would be considered to be performing post-emergency response and subject to 29 CFR 1910.120(q)(11) or 29 CFR 1926.65(q)(11). (36-2.i)

j. Supervisors. Supervisors are individuals that provide onsite management and are directly responsible for employees engaged in hazardous waste cleanup and investigation operations. (36-2.j)

k. Support Zone. The support zone is an area that is not and will not become contaminated because of investigation or cleanup activities. This is an area that borders the CRZ and where administrative and other support personnel remain to regulate and oversee the activities happening in the other work zones and the operation at large. This area is not anticipated to be contaminated and does not have the potential cause exposure to support zone personnel from contamination in the CRZ or EZ. (36-2.k)

36-3. Personnel Required Qualification/Training.

a. Training. At a minimum, train workers entering the CRZ and the EZ at an environmental cleanup and investigation project and their supervisors according to the training requirements of 29 CFR 1910.120(e)/ 29 CFR 1926.65(e). For USACE personnel performing environmental cleanup operations, document exposure to hazardous substances as part of duties on the employee's PHA. Specify safety-related

training requirements per this paragraph on the employee PHA. Supervisors and employees must review the PHA annually and when duties change. See chapter 1 for PHAs. (36-3.a)

(1) Initial Training. Initial training must meet the requirements described below:

(a) General site workers must receive a minimum of 40 hours of instruction off the project site and a minimum of three days actual field experience under the direct supervision of a trained experienced supervisor prior to being assigned to perform their duties.

(b) Other site workers must receive a minimum of 24 hours of instruction off the project site, and a minimum of one day of actual field experience under the direct supervision of a trained, experienced supervisor.

(c) Workers with 24 hours of training as described in paragraph 36-3.a(1)(b) of this chapter, and who become general site workers, must have the additional 16 hours of instructions off the project site and two days of on the job training necessary to total the training specified in paragraph 36-3.a(1)(a).

(2) Supervisors must receive training according to paragraph 36-3.a(1)(a). Supervisory training may be reduced to 24 hours and one day of supervised field experience if they are only responsible for supervising other site workers according to paragraph 36-3.a(1)(b). All supervisors must have at least eight additional hours of specialized training at the time of job assignment on such topics as, but not limited to, the employer's SOH program and the associated employee training program, PPE program, spill containment program, record keeping requirements, and health hazard monitoring procedure and techniques.

(3) Refresher Training. All site workers and supervisors participating in the training program in paragraph 36-3.a(1) must attend an annual 8-hour refresher training that meets the requirements of 29 CFR 1910.120(e)(8) or 29 CFR 1926.65(e)(8). The refresher training must cover some of the topics from the initial course in a manner relevant to organizational operations, it must address hazards that were encountered the previous year that can serve as training examples of related work, and other relevant safety and health topics.

(4) Equivalent training is allowed when it can be shown in writing that employee knowledge and experience is equivalent to 40-hour or 24-hour initial and refresher training requirements and objectives. Equivalent training must be certified in writing by the employer.

(5) Instructor Qualifications. Training instructor qualifications must meet the requirements in 29 CFR 1910.120(e)(5) or 29 CFR 1926.65(e)(5).

(a) Personnel responsible for planning and teaching the initial and refresher training course must be thoroughly knowledgeable about the subject matter that is being presented in the training.

(b) Trainers must possess the knowledge and experience to instruct on each of the topics.

(c) Trainers must retain qualifications for teaching subject matter by regularly attending and participating in formal industrial hygiene or safety related courses, and conferences.

(d) Trainers must meet the requirements according to ANSI Z490.1 and have successfully completed a "train-the-trainer" program or must otherwise have the academic credentials and instructional experience necessary to teach the topics that directly apply to hazardous waste cleanup and investigation operations.

(6) Site-Specific Training. All site workers must receive site-specific training. Site specific training must cover the Site Safety and Health Plan (SSHP) and how the SSHP applies to the activities that are to be performed. Site specific training must be provided before onsite work begins and include training topics specific to other chapters of this manual as they apply to the work activities performed, other occupational health standards applicable to the planned site work and operations, and site-specific hazards relevant to onsite contamination. When relevant, assure that workers are made aware of contaminant-related hazards by use of a site-specific map.

(7) Computer-Based Interactive Training: Computer-based interactive training is acceptable provided it meets the following criteria:

(a) The course covers the requirements in 29 CFR 1910.120(e) or 29 CFR 1926.65(e).

(b) Students must be able to ask questions and receive answers in a timely manner from qualified instructors that meet the requirements in 36.a(5).

(c) Students must participate in 16-hours of hands-on exercises to demonstrate equipment use and procedural proficiency.

(8) Emergency Response. Facilities and projects using, storing, or handling hazardous substances and whose employees will be engaged in emergency response operations must receive the appropriate level of training according to 29 CFR 1910.120(q)(6) or 29 CFR 1926.65(q)(6). All employees who are trained according to this paragraph must receive annual refresher training according to 29 CFR 1910.120(q)(8) or 29 CFR 1926.65(q)(8).

(9) Resource Conservation and Recovery Act (RCRA) Treatment Storage and Disposal (TSD). RCRA TSD facilities and projects that meet the requirements of 29 CFR 1910.120(a)(1)(iv) or 29 CFR 1926.65(a)(1)(iv) and must provide their workers with training according to 29 CFR 1910.120(p)(7) or 29 CFR 1926.65(p)(7).

(10) Shipping Materials. All USACE employees who prepare DOT shipping papers (including hazardous waste manifests), label, package and/or mark containers for purposes of transportation must receive DOT and DoD training. Training must be documented, and employees issued an appointment letter by their commander. Training must meet the requirements of ER 200-2-3 and EP 415-1-266.

b. Medical Surveillance Program for Environmental Cleanup and Investigation Activities. Medical surveillance must be performed according to 29 CFR 1910.120(f) or 29 CFR 1926.65(f). (36-3.b)

(1) At a minimum, employees who are anticipated to enter the CRZ or EZ more than 30 times a year must be enrolled in medical surveillance. For employees that enter the CRZ or EZ less than 30 times per year or where the duration is difficult to anticipate, enrollment in medical surveillance is the discretion of the employer based on evaluation of the employee's activities at the project and the need to enter the CRZ or EZ.

(2) Medical surveillance examination must be provided at the following frequencies:

(a) Prior to being assigned to hazardous waste cleanup operations.

(b) Annually while working in the cleanup program.

(c) When signs or symptoms of exposure to contamination are experienced.

(d) At termination of employment or reassignment to work activities outside the environmental cleanup program.

(3) Retain certification of medical clearance for all personnel and make available only upon request.

(4) USACE personnel must also comply with the medical surveillance requirements according to ER 385-1-40. An evaluation must be performed by the employee's supervisor with support from their SOHO and documented in the employee's PHA. See chapter 1 for PHAs.

c. USACE Project Safety and Health Manager (PSHM). Depending on the primary contaminant of concern involved in the investigation/ cleanup activities, the PSHM must belong to the occupational series specified in ER 385-1-92. The PSHM

must possess at least three years of experience implementing occupational health and safety protection requirements on hazardous waste investigation and cleanup projects. (36-3.c)

d. Contractor Safety and Health Manager (SHM). Depending on the contamination to be impacted by investigation and cleanup activities, the SHM must possess professional certification as a CIH, Certified Health Physicist or Certified Safety Professional and have at least three years of experience implementing occupational health and safety protection requirements at environmental cleanup projects. The SHM must have in-depth knowledge of the employer's health and safety program and have access to senior leaders within their organization structure. (36-3.d)

e. Site Safety and Health Officer (SSHO). The SSHO must meet the initial, refresher, and supervisor training according to paragraph 36-3.a of this manual. The SSHO must also possess the training and experience outlined for a SSHO according to chapter 2 of this manual. SSHOs experience required by chapter 2 must include at least one year of experience with implementing SOH requirements on hazardous waste investigation and cleanup projects. The SSHO must have the training and experience to conduct exposure monitoring, sampling, and selecting/adjusting controls. (36-3.e)

36-4. Roles and Responsibilities.

a. USACE PSHM. A USACE PSHM must be assigned to environmental cleanup and investigation projects where development, review, and implementation of a SSHP is required (see para 36-7.a). The PSHM must enlist the support of the local SOHO with appropriate education and experience when working on sites with multiple hazards (for example, construction safety, life safety, chemical, explosives, ionizing radiation). For environmental cleanup and investigation activities solely performed by USACE personnel, the PSHM responsibilities are consistent with the requirements of the SHM in paragraph 36-4.b(1). (36-4.a)

b. Contractor SHM. Contractors must assign a SHM to all environmental cleanup and investigation projects. The SHM must enlist the support of SOH professionals with appropriate training and experience when working on sites with contamination hazards outside their area of expertise. The SHM is responsible for the following: (36-4.b)

(1) Developing, reviewing, and overseeing implementation of the SSHP for their organization.

(2) Providing technical and management support to the SSHO.

(3) Evaluating occupational exposure monitoring/air sampling data and adjusting SSHP requirements as necessary.

(4) Certifying that all personnel comply with training and medical surveillance qualification requirements defined in paragraph 36-3 of this manual.

(5) Visiting projects to audit the effectiveness of the SSHP.

(6) Remaining available for project emergencies.

(7) Developing modification to the SSHP as needed.

(8) Serving as a QC staff member.

(9) Approving the SSHP by signature.

c. Site Safety and Health Officer (SSHO). An SSHO must be assigned to all environmental cleanup and investigation projects. The SSHO is responsible for the following: (36-4.c)

(1) Being present anytime investigation or cleanup operations are actively being performed to implement the SSHP.

(2) Inspecting site activities to identify SOH deficiencies and correct them.

(3) Coordinating changes/modifications to the SSHP with the SHM and site superintendent, PM, and KO or COR.

(4) Conducting exposure monitoring and sampling and adjusting protective equipment with the concurrence of the SHM.

(5) Conducting project-specific training.

(6) Participating in the preparation of the SSHP.

(7) Ensuring that site-specific emergency procedures are developed and rehearsed with site workers and local emergency response organizations.

(8) Should any unforeseen hazard become evident during the performance of work, the SSHO will bring such hazard information to the attention of the SHM and the KO or COR (both verbally and in writing) for resolution as soon as possible. In the interim, necessary action must be taken to reestablish and maintain safe working conditions.

d. Emergency Response Teams. The Emergency Response Team at facilities or projects that store, use, and handle hazardous substances must, at a minimum, respond in a defensive manner to hazardous substance releases at the facility or construction project. The team must use the equipment and procedures specified in the emergency response plan for a defensive response. The Emergency Response Team will only provide response services beyond defensive if qualified and only according to the procedures specified in the facility or construction project-specific Emergency Response Plan. (36-4.d)

36-5. Inspection Requirements.
Inspection must be performed by the SSHO and include qualitative and/or quantitative assessments to ensure the following:

a. The support zone, CRZ and EZ are defined and effective. (36-5.a)

b. Exposure controls to include PPE are effective. (36-5.b)

c. Decontamination procedures are being implemented and effective. (36-5.c)

d. Occupational exposure sampling and monitoring equipment is being used properly and monitoring results documented. (36-5.d)

e. Emergency response services have been arranged and rehearsed with local emergency response service providers. (36-5.e)

36-6. Activity Hazard Analysis (AHA) Requirements.
Develop AHAs according to paragraphs 1-6 or 2-6, as applicable. AHAs for environmental cleanup and investigation projects must be developed in consultation with the SSHO and include the following:

a. Identify the likely hazards and contamination exposure routes for the work activities being performed during each job step. (36-6.a)

b. Provide the exposure controls that will eliminate or minimize worker exposure to contamination as they relate to each of the job steps within the activity. (36-6.b)

36-7. Minimum Plan Requirements.

a. Site Safety and Health Plan (SSHP). A SSHP must be developed for all environmental cleanup and investigation projects. The SSHP must address the SOH hazards of each phase of site operation and include the requirements and procedures for employee protection. The SSHP must specifically address the requirements to protect workers from the health hazards associated with site contamination and the specific processes that may disturb, release, and/or transport these contaminants during the planned investigation or remedial action activities. See chapter 6 of this manual for radiation safety requirements to be included in the SSHP for cleanup of radioactive isotopes. Changes and modification to the SSHP are permitted and must be made in writing with the concurrence of the SHM and approved by the USACE supervisor or accepted by the KO or COR. The SSHP must be developed according to 29 CFR 1910.120(b)(4)/ 29 CFR 1926.65(b)(4) and as described below. The SSHP must include the following: (36-7.a)

(1) Site Description and Contamination Characterization. A description of the site, location and approximate size, description of activities to be performed, duration of the planned activity, site topography and accessibility (air and road), pathways of hazardous

substance dispersion. A description of the contamination based on the information or data obtained from site characterization and analysis activities performed according to 29 CFR 1910.120(c)/ 29 CFR 1926.65(c).

(2) Staff organization, qualifications, and responsibilities (see para 36-4).

(3) Type and frequency of required training, both general and project specific (see para 36-3).

(4) Hazard Evaluation. Detailed evaluation of the hazards related to the contamination expected to be encountered, OEL, exposure route, exposure symptoms, health effects, odor and if available odor threshold, and target organs. Provide the determination of the potential exposure levels and routes based on sampling data and/or the composition of the substance, work process, exposure controls, type of media, and routes of exposure.

(5) Occupational Exposure Controls. Detail the controls that will be implemented to protect workers from exposure to contamination. Detail any hazard elimination/substitution steps, engineering and administrative controls, and PPE that will be utilized, see chapter 5 for PPE requirements. Identify the frequency of inspections for controls and the personnel responsible for conducting inspections and sampling/monitoring.

(6) Risk Analysis. The risk analysis must evaluate the overall risk for the planned environmental cleanup or investigation project and how planned exposure controls, and the work process will eliminate or reduce the likelihood for exposure to contaminates during each site task and activity.

(7) Occupational Exposure Sampling and Monitoring Procedures. Detail the occupational exposure sampling and monitoring to be implemented to ensure measures to protect workers from overexposure to site contaminates are adequate and effective. This must include frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring and sampling equipment to be used. Include project specific action levels and exposure mitigation measures to be taken if action levels are exceeded. Detail how these records will be maintained and managed.

(8) Medical Surveillance. Summarize the medical surveillance provided to employees on this project and how these records will be maintained and managed (see para 36-3.b).

Note. Do not include medical clearance certificates or medical documents containing PII, PHI or other protected information in the SSHP. Provide a summary of personnel with date of last medical clearance and the applicable standard.

(9) Thermal Stress Management Plan. Detail the procedures and practices that will be implemented to protect and monitor workers from heat and cold stress during the performance of the environmental cleanup and investigation project. See chapter 6 for Thermal Stress Management Plan requirements.

(10) SOPs, engineering controls, and work practices to include the following:

(a) Site rules/prohibitions (for example, buddy system, eating/drinking/ smoking restrictions.).

(b) Work permit requirements (for example, radioactive work, excavation, hot work, confined space).

(c) Material handling procedures (for example, soil, liquid, radioactive materials, spill contingency).

(d) Drum/container/tank handling (for example, opening, sampling, overpacking, draining, pumping, purging, inerting, cleaning, excavating and removal, disassembly and disposal, spill contingency).

(11) Site Control Measures. Describe how the site will be set up so that access into and out of the EZ through the CRZ will be controlled. Define how work activities inside the EZ will be conducted to prevent spread contamination to uncontaminated areas of the project.

(12) Personal Hygiene and Decontamination Procedures. Describe equipment to be used and step-by-step procedures to be followed that will assure personnel and equipment are decontaminated properly when exiting the EZ through the CRZ and into the support zone.

(13) Emergency Response and Contingency Procedures. Document a plan for responding to emergencies at the project the meets the requirements in 29 CFR 1910.120(l) or 29 CFR 1926.65(l). Emergency response and contingency procedures must address the following:

(a) Describes the agreement that will be established between the contractor (or USACE for in-house activities), local emergency responders, and the servicing emergency medical facility. Identify the Emergency Response Team that would dispatch to the cleanup and investigation site at the time of an emergency, their contact information and capabilities. Specify the responsibilities of onsite personnel, the site configuration, specific details about site activities with emergency response personnel and the emergency medical facility in the event of an on-site emergency.

(b) Personnel and lines of authority for emergency situations.

(c) Criteria and procedures for emergency recognition and site evacuation (for example, emergency alarm systems, evacuation routes and reporting locations, site security).

(d) Decontamination and medical treatment procedures of injured personnel.

(e) A route map to emergency medical facilities and phone numbers for emergency responders.

(f) Criteria for alerting the local community responders.

(14) Confined Spaces. If confined spaces must be entered to perform cleanup work, then detail the site-specific confined space entry procedures according to chapter 34.

(15) Spill Containment. Describe equipment to be used and procedures to be followed to store contaminated media and investigative derived waste generated by cleanup activities. Identify drum and container handling procedures when applicable to the work. Include spill containment procedures to contain spills of contaminated media stored onsite.

b. Comprehensive Work Plan. A Comprehensive Work Plan is required for all environmental cleanup and investigation projects. The plan must be developed according to 29 CFR 1910.120(b)(3) or 29 CFR 19126.65(b)(3). (36-7.b)

c. Emergency Response Plan. An Emergency Response Plan is required for facilities or construction projects using, storing, or handling hazardous substances where a hazardous substance release may result in exposure causing adverse effects to the health or safety of employees. The plan must be developed according to 29 CFR 1910.120(q) or 29 CFR 1926.65(q). The Emergency Response Plan for hazardous spill Response must include the following: (36-7.c)

Note. Projects that will evacuate their employees from the danger area when an emergency occurs, and do not permit any of their employees to assist in handling the emergency or providing spill mitigation steps must instead of an Emergency Response Plan, provide an Emergency Action Plan according to 29 CFR 1910.38 or 29 CFR 1926.35.

(1) Operations. Identify operations requiring use of hazardous substances.

(2) Pre-Emergency Planning with Local Emergency Responders. Describe emergency response agreements, including roles and responsibilities, made with local emergency responders for hazardous material response, fire, rescue, emergency medical care, and security and law enforcement.

(3) Personnel Roles, Lines of Authority, Training, and Communication. Describe key personnel roles, command structure/lines of authority, and communications requirements for responding to site-specific hazardous substance releases.

(4) Emergency Recognition and Prevention. Identify the likely emergency scenarios for the project and how employees can expect to identify and recognize emergency scenarios.

(5) Safe Distances and Places of Refuge. Select safe places of refuge to be used in emergency situations, identify these locations in the Emergency Response Plan, and require employees to report to selected places of refuge during emergencies.

(6) Site Security and Control. Describe how the facility will be secured and describe access to the site controlled during emergencies.

(7) Evacuation Routes and Procedures. Describe and map out evacuation routes to safe places of refuge and any special safety and health procedures employees must follow while evacuating the facility.

(8) Decontamination. Describe site procedures for decontaminating personnel and equipment that may have come into contact with hazardous substances.

(9) Emergency Medical Treatment and First Aid. Explain how emergency medical treatment and first aid will be provided in the event of a hazardous substance spill.

(10) Emergency Alerting and Response Procedures. Describe how personnel will be alerted in the event of a hazardous substance spill, and how facility personnel must respond after emergency alerting procedures are initiated.

(11) PPE and Emergency equipment. Describe the PPE and emergency response equipment that will be available for use by response personnel at the facility.

(12) Emergency Response Team. Designate a facility-specific Emergency Response Team. Describe the team's emergency responsibilities for interacting with local emergency response providers (that is, where the facility team's responsibilities end, and the local response providers begin).

(13) Critique of Response and Follow-up. Describe how lessons learned from emergency response will be documented and used to improve future emergency response actions.

36-8. General Requirements.

a. Clean-up operations, investigations, corrective actions, voluntary clean-up operations involving employee exposure or reasonable possibility of employee exposure to safety and health hazards are required to comply with all sections of

29 CFR 1910.120 or 29 CFR 1926.65 except for sections (p) and (q) and all of parts of this chapter except for paragraph 36-7.c. (36-8.a)

b. RCRA TSD Facility Operation. Organizations operating RCRA TSD facilities are required to comply with 29 CFR 1910.120(p) or 29 CFR1926.65(p). (36-8.b)

c. Hazardous Materials (HAZMAT) Spill Emergency Response Operations. Organizations responsible for performing HAZMAT spill emergency response operations must plan and perform responses according to their written HazCom Program (see chapter 6), site specific Emergency Action Plan in 29 CFR 1910.38, and meet the applicable requirements of 29 CFR 1910.120(q) or 29 CFR 1926.65(q). (36-8.c)

d. When employees will be engaged in emergency response operations, they must do so according to 29 CFR 1910.120 (q) or 29 CFR 1926.65(q) when a hazardous substance release and response activities may result in exposure causing adverse effects to the health or safety of employees. (36-8.d)

e. Munitions and Explosives of Concern (MEC). MECs can be UXOs, discarded military munitions or munitions constituents. Treat all MEC encountered or suspected MEC as extremely dangerous. Implement the 3R's when encountering MEC: Recognize, Retreat, Report. If MEC is suspected or encountered follow the requirements according to EM 385-1-97. (36-8.e)

36-9. Figures and Tables.
Not Applicable.

36-10. Checklists and Forms.
Compliance Checklist.

Note. This checklist is optional and is intended to guide QC representatives in determining compliance with the most significant elements of this chapter.

Yes/No	Compliance Item
	SSHP is developed, has been reviewed, and approved by a PSHM or SHM, and is applicable to project specific cleanup or investigation activities.
	Site and contamination specific exposure control procedures are included in the AHA.
	PSHM/SHM verified training and medical surveillance certification of workers in the CRZ and EZ.
	Verify SHM and SSHO participation with SSHP development and implementation.
	Verify trained and experienced SSHO is onsite during cleanup or investigation activities
	Assure occupational exposure sampling and monitoring is conducted according to the SSHP.
	Assure occupational exposure controls are implemented according to the SSHP.
	Assure personal protective equipment is being used properly and is appropriate for site specific contamination.
	Verify that non-disposable personal protective equipment is cleaned and stored properly.
	Verify decontamination procedures are effectively removing contamination from equipment and personnel.
	Verify that emergency response is planned, coordinated, and rehearsed with local emergency responders.