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DEPARTMENT OF THE ARMY  
U.S. Army Corps of Engineers  
Washington, D.C. 20314-1000

EM 385-1-1

Manual  
No. 385-1-1

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## Safety

### SAFETY AND HEALTH REQUIREMENTS

1. Purpose. This manual prescribes the safety and health requirements for all Corps of Engineers activities and operations.

2. Applicability. This manual applies to Headquarters, US Army Corps of Engineers (HQUSACE) elements, major subordinate commands, districts, centers, laboratories, and field operating activities (FOA), as well as USACE contracts and those administered on behalf of USACE. Applicability extends to occupational exposure for missions under the command of the Chief of Engineers, whether accomplished by military, civilian, or contractor personnel.

3. References.

a. 29 Code of Federal Regulation (CFR) 1910, Occupational Safety and Health Standards for General Industry

b. 29 CFR 1926, Occupational Safety and Health Standards for Construction

c. 29 CFR 1960, Basic Program Elements for Federal Employees, OSHA

d. Executive Order (EO) 12196, Occupational Safety and Health Programs for Federal Employees, 26 Feb, 1980

e. Federal Acquisition Regulation (FAR) Clause 52.236-13, Accident Prevention, Nov 1991

f. Department of Defense Instruction (DODI) 6055.1, DOD Safety and Occupational Health Program, 14 Oct 2014

g. Army Regulation (AR) 40-5, Preventive Medicine

h. AR 385-10, Army Safety Program

4. General.

a. The provisions of this manual implement and supplement the safety and health standards and requirements referenced above. Where more stringent safety and occupational health standards are set forth in these requirements and regulations, the more stringent standards shall apply.

b. Mission applicability introduced in paragraph 2 above shall include the following:

(1) Construction contract work under the provisions of FAR Clause 52.236-13. Contractors shall comply with the latest version of EM 385-1-1 (including interim changes) that is in effect on the date of solicitation. Prior to making an offer, bidders should check the HQUSACE Safety and Occupational Health web site (see paragraph c) for the latest changes. No separate payment will be made for compliance with this paragraph or for compliance with other safety and health requirements of this contract. Note: Existing contracts will continue to apply the provisions of the previous edition of this manual until contract completion.

(2) Service, supply, and research and development contracting actions. Compliance with this manual shall be a contract requirement for such activities unless technical representatives (in coordination with safety and health professionals) advise that special precautions are not appropriate due to extremely limited scope of services or similar. However, it is understood that this manual in its entirety may be too complex for the type of work being performed under these contracts. These contractors may reference Appendix A, for abbreviated Accident Prevention Plan (APP).

(3) Contracting actions for hazardous, toxic, and radioactive waste site investigation, design, or remediation activities. Compliance with this manual shall be a contract requirement.

c. Changes. All interim changes (changes made between publication of new editions) to this manual, and the effective date of change, will be posted on the Safety and Occupational Health Office web site:

<http://www.usace.army.mil/CESO/Pages/Home.aspx> and in USACE Electronic bid Sets. Hard copies of this manual are available from the local contracting official.

d. Interpretations. Within the Corps of Engineers, interpretations to the requirements contained within this manual shall be executed in accordance with the process contained in Appendix C. Interpretations will apply only to the specific situation in question and may not be used as a precedent to determine the meaning of a requirement as it may apply to another circumstance.

e. Variances and Waivers. Within the Corps of Engineers, variances and waivers to provisions of this manual require the approval of the Chief of Safety and Occupational Health, HQUSACE. Variances or waivers shall provide an equal or greater level of protection, shall be substantiated with a hazard analysis of the activity and shall be documented and forwarded through channels to Chief of Safety and Occupational Health, HQUSACE. The process for requesting variances or waivers is contained in Appendix D.

f. Activities performed OCONUS. Some of the technical requirements of this manual may not be applicable to overseas activities due to conflicting circumstances, practices, and laws or regulations of the locality or the unavailability of equipment. In such instances, means other than the ones specified in this manual may be used to achieve the required protection. In such instances, a hazard analysis must be developed to document that the required protection will be achieved by the alternate means.

g. Unless otherwise indicated, when publications are referenced in this manual, the most recent edition is to be used.

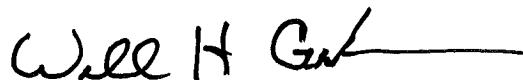
h. The use of underlining in this manual indicates new or changed text from the 2008 version.

i. Supplementation of this manual is not authorized except as published by the Safety and Occupational Health Office, HQUSACE.

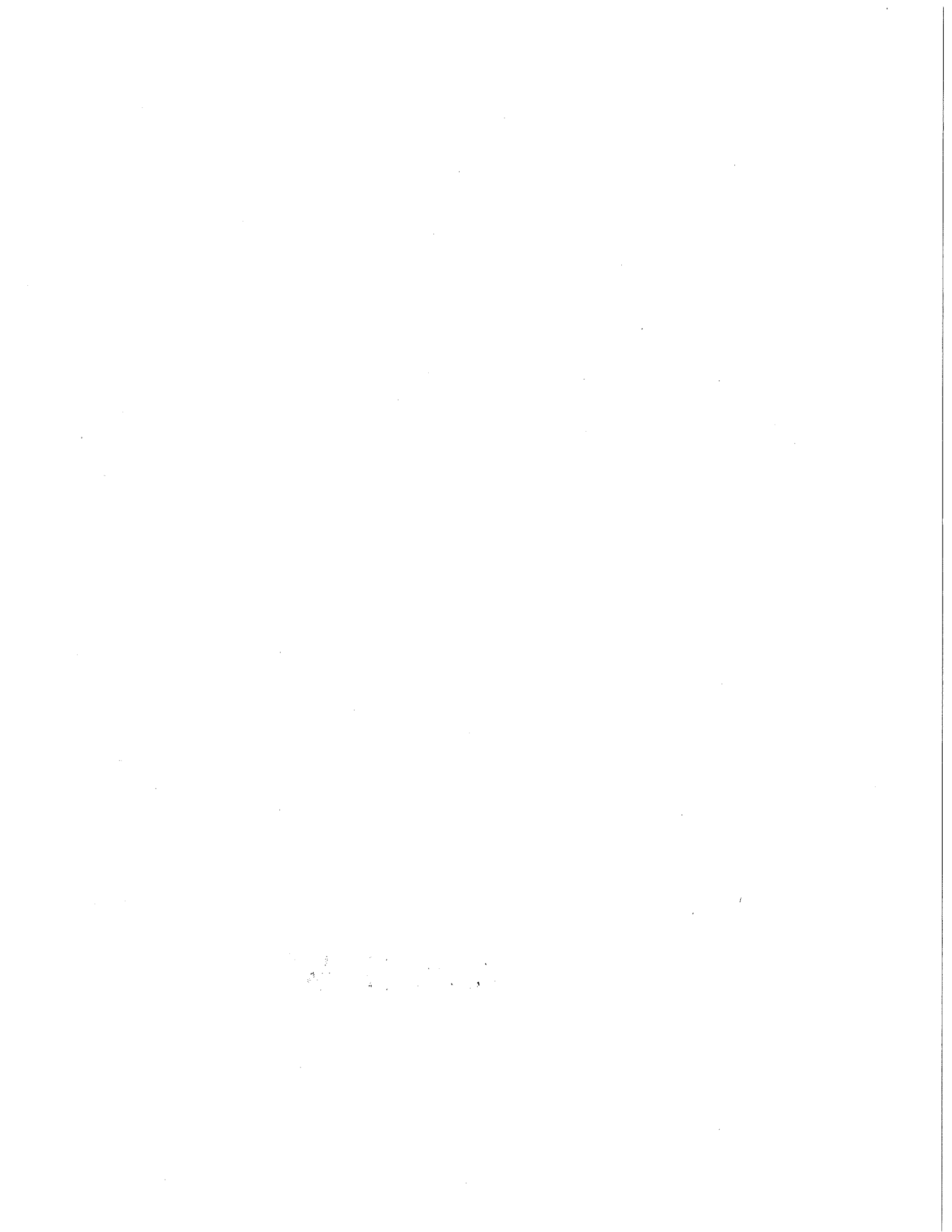
(1) Local USACE organizations may develop Standard Operating Procedures (SOPs) to implement the provisions contained within this manual, but may not implement new requirements (e.g., more stringent, differing intent, etc.) without the specific approval of HQUSACE.

(2) Locally developed Safety and Health Requirements will not be included in contract requirements without the approval of HQUSACE.

FOR THE COMMANDER:



WILLIAM H. GRAHAM  
COL, EN  
Chief of Staff



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## SECTION 1

### Program Management

01.A General. This Section provides the overall programmatic guidance for developing, managing and implementing a safety and occupational health (SOH) program.

01.A.01 No person shall be required, instructed or allowed to work in surroundings or under conditions that are unsafe or dangerous to his or her health.

01.A.02 The employer is responsible for initiating and maintaining a SOH program that complies with the US Army Corps of Engineers (USACE) SOH requirements.

➤ Note 1: Supplementation of this manual is not authorized except as published by the HQUSACE SOH Office.

➤ Note 2: Local USACE Commands may develop Standard Operating Procedures (SOPs) to implement the provisions contained within this manual, but may not implement new requirements (e.g., more stringent, differing in intent, etc.), without the specific approval of HQUSACE-SO.

01.A.03 Each employee is responsible for complying with applicable SOH requirements, wearing prescribed SOH equipment, reporting unsafe conditions or activities, preventing avoidable mishaps, and working in a safe manner.

01.A.04 Supervisors shall remove employees from exposure to work hazards, or the work site when they are observed acting in an unsafe manner, or otherwise pose a potential SOH threat to themselves or others. Employees may return to the work environment after appropriate supervisory action has occurred (i.e., re-training on proper safe procedures, etc.).

01.A.05 SOH programs, documents, signs, and tags shall be communicated to employees in a language that they understand.

01.A.06 Worksites with non-English speaking workers shall have a person(s), fluent in the language(s) spoken as well as English, on-site when work or training is being performed, to interpret and translate as needed.

01.A.07 SOH Bulletin Board. The Contractor or USACE Project shall erect and maintain a SOH bulletin board in a commonly accessed area in clear view of the on-site workers. The bulletin board shall be continually maintained and updated and placed in a location that is

protected against the elements and unauthorized removal. It shall contain, at minimum, the following SOH information:

- a. A map denoting the route to the nearest emergency care facility;
- b. Emergency phone numbers;
- c. A copy of the most current Accident Prevention Plan (APP) or Project Safety and Occupational Health (SOH) Plan, mounted on/adjacent to the bulletin board, or a notice on the bulletin board stating the location of the Plan. The location of the Plan shall be accessible on the site by all workers;
- d. The Occupational Safety and Health Administration (OSHA) Form 300A, Summary of Work Related Injuries and Illnesses, posted in accordance with OSHA requirements (from February 1 to April 30 of the year following the issuance of this form). It shall be mounted on/adjacent to the bulletin board, accessible on the site by all workers;
- e. A copy of the SOH deficiency tracking log mounted on/adjacent to the bulletin board or a notice on the bulletin board shall state the location where it may be accessed by all workers upon request; > See 01.A.13.d.
- f. SOH promotional posters;
- g. Date of last lost workday injury and date of last OSHA recordable injury;
- h. OSHA Safety and Health Poster;
- i. A copy of the hazardous material inventory, identification of use, approximate quantities and site map detailing location as required by Section 06.B.01.a.

01.A.08 USACE Business Process. USACE Project Managers (PMs), in accordance with the SOH Reference Document (Ref Doc 8016G) contained in the USACE Business Manual, shall ensure that a SOH plan is developed for funded projects and incorporated into each Project Management Plan (PMP)/Program Management Plan (PrgMP).

a. The PM shall collaborate with the customer and the local SOH office (SOHO) on project safety goals and objectives and communicate these through the PMP/PrgMP SOH plan and Project Delivery Team (PDT) meetings.

b. Coordination between local SOHOs of the design district and the construction district shall occur during the development of the PMP.



01.A.09 USACE Project Management Plan. USACE PMs and the PDT shall develop the SOH program requirements to be incorporated in the PMP and are responsible for assuring that SOH requirements are properly addressed and executed throughout the life cycle of each project.

a. The PM shall ensure that identified hazards, control mechanisms, and risk acceptance are formally communicated to all project stakeholders.

b. The current Unified Facilities Guide Specification (UFGS) for Safety and Health in effect on the date of solicitation shall be used in all USACE contract work administered on behalf of the USACE under the provisions of FAR Clause 52.236-13 and on other contracts as deemed appropriate based on the risk assessment.

c. Military Construction (MILCON) Transformation contracts will include the Federal Acquisition Regulation (FAR) Clause 52.236-13 as well as the Model Request for Proposal (RFP).

d. Locally developed SOH requirements will not be included in contract requirements without the concurrence of the Contracting Officer (KO) and local SOHO.

e. When an employee is deemed to be in imminent danger, the COR or a designated representative shall immediately stop the unsafe work being performed. > See Federal Acquisition Regulation (FAR) Clause 52.236-13(d).

01.A.10 USACE Project SOH Plan. For USACE activities where USACE employees are engaged in functions other than routine office or administrative duties, a Project SOH Plan shall be developed, implemented, and updated as necessary.

a. Such activities include operations and maintenance; recreational resource management; in-house conducted environmental restoration (investigation, design, and remediation); surveying, inspection, and testing; construction management; warehousing; transportation; research and development; and other activities when the Government Designated Authority (GDA) and the command's local SOHO agree on the benefit of such a program for accident prevention.

b. The Project SOH Plan shall address applicable items listed in Appendix A, and in addition, any local SOPs or requirements identified in the USACE Command's SOH Program. > See Section 01.A.02, Notes 1 and 2.

c. For Hazardous Waste Operations and Emergency Response (HAZWOPER) sites, refer to Section 33 for Site Safety and Health Plan (SSHP) guidance.

01.A.11 Position Hazard Analyses (PHA) for USACE Employees. A PHA shall be prepared, updated as necessary, documented by the supervisor, and reviewed by the command's SOHO for each USACE position according to the hazards associated with the position's tasks. A generic PHA may be used for groups of employees performing repetitive office/administrative tasks where the primary hazards result from ergonomic challenges, lighting conditions, light lifting and carrying tasks, and indoor air quality. > See Figure 1-1 for an outline of a PHA. An electronic, fillable version of a PHA may be found on the HQUSACE Safety Office Website.

- a. The USACE Supervisor, in coordination with the SOHO, shall determine the need for analysis of each position within his or her area of responsibility.
- b. In developing the analysis for a particular position, supervisors shall draw upon the knowledge and experience of employees in that position in addition to that of the SOHO.
- c. A complete PHA document shall indicate that the hazards, medical surveillance requirements, control mechanisms, personal protective equipment (PPE) and training required for the position were discussed with the employee. The PHA shall be signed by the supervisor and employee. A PHA shall contain a copy of the employee's training certificate of completion for all required training.
- d. Supervisors shall review the PHAs with employees upon initial assignment to a position, whenever there is a significant change in hazards and during their annual performance review or at least annually.

01.A.12 Accident Prevention Plans (APP) for Contract Work. Before initiation of work at the job site, an APP shall be reviewed and found acceptable by the GDA. > See Appendix A.

a. APPs shall be developed and submitted by the Contractor. The Contractor shall address each of the elements/sub-elements in the outline contained in Appendix A in the order that they are provided in the manual. If an item is not applicable because of the nature of the work to be performed, the Contractor shall state this exception and provide a justification.

(1) The Contractor shall identify each major phase of work that will be performed on this contract. Within each major phase, all activities, tasks or Definable Features of Work (DFOWs) shall be identified that will require an Activity Hazard Analysis (AHA). > See Section 01.A.14 and Appendix A, paragraph 3.j.

(2) The APP shall also address any unusual or unique aspects of the project or activity.

FIGURE 1-1 Position Hazard Analysis (PHA)

Position Hazard Analysis (PHA) for USACE Employees		
Name: (Print - Last, First, Mi): _____		Prepared By: (Print – Last, First, MI): _____
Job Series: _____		Reviewed By (SSHO): _____ Date (Mo) _ _ (Day) _ _ (Year) _ _ _ _
Job Title: _____		
Job Number (SF52): _____		
Command Name & Organization Code: _____		
Primary Duty Location: _____		
Clearances Required		
EM OPS Team	First Aid/CPR	Respirator
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CDL Crane Operator	Diver	HTRW
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	
Position Tasks	Safety and/or Occupational Health Hazards*	Recommended Controls
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.

\*Note - Examples of potential hazards are as follows:

Safety:	Excavating; electrical; slips, trips, falls; falls from heights, motor Vehicle/equipment operation; compressed air; fire; etc.
Physical Agent:	Exposure to heat/cold; noise; stress; vibration; radiation, hot substances; radio frequency; EMF, etc.
Chemical Agent:	Exposure to solvents; cadmium; paints; welding fumes; lead; asbestos; pesticides; etc.
Biological Agent:	Exposure to bloodborne pathogens; poison ivy; insects; fungi; etc.

FIGURE 1-1 (Cont'd)

Position Hazard Analysis (PHA)

Equipment, Materials & Chemicals To Be Used	Inspection Requirements	Training Requirements
List for each task [include Material Safety Data Sheets(MSDSs)]	List inspection requirements for each work task	List safety/health training requirements
1. 2. 3. 4. 5. 6.	1. 2. 3. 4. 5. 6.	1. 2. 3. 4. 5. 6.

Note: This PHA serves as the hazard assessment required by Sections 01, 05, and 06 of this Manual. The employee covered by this PHA has been instructed in the tasks to be performed, the hazards that may be encountered, potential adverse effects of the hazards and controls to be used. He/she has received adequate, specific training related to safe work practices, administrative and engineering controls and PPE to be used to ensure assigned work tasks are conducted in a safe/healthful manner. He/she has demonstrated an understanding of the safety/health equipment/PPE to be used, including its limitations, useful shelf-life, how to properly don, doff, adjust, and wear required PPE, how to properly care for, inspect, maintain, store, and dispose of same. Attached is documentation of the training received, dates of such training, and the subject matter taught.

Supervisor Signature: \_\_\_\_\_ Employee Signature: \_\_\_\_\_

Date \_\_\_/\_\_\_/\_\_\_

Date \_\_\_/\_\_\_/\_\_\_

b. The APP shall be written in English by the Prime Contractor and shall articulate the specific work, work processes, equipment to be used, and hazards pertaining to the contract. The APP shall also implement in detail the pertinent requirements of this manual.

c. The APP shall contain appropriate hazard-specific plans as needed for the work being performed (e.g., appendices that include a SSHP for hazardous waste site cleanup operations; a Lead Compliance Plan when working with lead, or an Asbestos Hazard Abatement Plan when working with asbestos).

d. All highly complex or high-hazard projects shall be coordinated with the local SOH office.

e. For limited-scope supply, service and R&D contracts, the KO and local SOHO may authorize an abbreviated APP. > See Appendix A, Paragraph 2 for details.

f. The APP shall be developed and signed by Qualified Person (QP) and then signed. The Contractor shall be responsible for documenting the QPs' credentials.

g. The Contractor's APP shall be job-specific and must include work to be performed by subcontractors.

(1) If at the time of submission of the APP, portions of the work have yet to be known or sub-contracted, that portion will be added to the APP, submitted and accepted by the GDA prior to initiation of the sub-contracted work.

(2) In addition, the APP shall include measures to be taken by the Contractor to control hazards associated with materials, services, or equipment provided by suppliers.

(3) Each sub-contractor shall be provided a copy of the APP by the prime contractor and be required to comply with it.

h. The contractor shall provide on-going evaluations of the APP throughout the life of the project. Changes, revisions and updates to the APP shall be reviewed and accepted by the GDA.

➤ Note: When USACE or other government employees are on a site that is controlled by a contractor and are affected by the contractor-managed APP (e.g., QA's on construction sites, etc.), they shall comply with the contractor's APP and associated programs (i.e., Fall Protection, Hazardous Energy Control, Diving, Blasting, etc.).

01.A.13 Inspections - Contractor and USACE Projects.

a. The APP or the USACE Project SOH Plan shall provide for frequent safety inspections/audits, conducted by a Competent Person (CP), of the work sites, material, and equipment to ensure compliance with the plan and this manual. These inspections/audits shall be documented in writing and available upon request to the GDA. They shall include the name of the inspector, date, and all findings.

b. In addition, Contractor Quality Control (QC) and USACE Quality Assurance (QA) personnel as part of their QC and QA responsibilities, shall conduct and document daily SOH inspections in their daily logs.

c. Inspection reports shall document any identified SOH issues and deficiencies, and the actions, timetable, and responsibility for correcting the deficiencies. Follow-up inspections to ensure correction of any identified deficiencies must also be conducted and documented in inspection reports.

d. The Contractor or USACE Project shall establish a SOH deficiency tracking system that lists and monitors the status of SOH deficiencies in chronological order. The tracking system provides useful information that must be used to evaluate the effectiveness of the APP. A monthly evaluation of the data should be discussed in the QC or SOH meeting with everyone on the project. The list shall be posted on the project bulletin board, be updated daily, and should provide the following information:

- (1) Date deficiency identified;
- (2) Description of deficiency;
- (3) Name of person responsible for correcting deficiency;
- (4) Projected resolution date;
- (5) Date actually resolved.

e. The Contractor shall immediately notify the GDA of any OSHA or other regulatory agency inspection and provide GDA an opportunity to accompany the Contractor on the inspection. The inspection will not be delayed due to non-availability of the GDA. The Contractor shall provide the GDA with a copy of any citations or reports issued by the inspector and any corrective action responses to the citation(s) or report(s).

f. The GDA shall notify the local SOHO of any regulatory visits.

g. The USACE Project personnel shall immediately notify the local SOHO of any OSHA or other regulatory agency inspection. The Project shall provide the local SOHO with a copy of any citations or reports issued by the inspector and any corrective action responses to the citation(s) or report(s). Local SOHO shall immediately provide this documentation to HQUSACE-SO.

01.A.14 Contractor Risk Management Process. Risk management is a business process that includes the identification, assessment, and prioritization of risks, followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events to an acceptable level. The USACE uses the Activity Hazard Analysis (AHA) as part of a total risk management process. > See Figure 1-2 for a NON-MANDATORY formatted outline of an AHA. An electronic version AHA may be found on the HQUSACE Safety Office Website.

➤ Note: Contractors and other individual employer's typically use Job Safety Analyses (JSAs), Job Hazard Analyses (JHAs), or similar Risk Management assessment tools. These documents are considered equivalent to, and acceptable substitutes for, the USACE's AHA provided the data collected is the same as that required by the AHA.

a. AHAs shall define the steps being performed within the activity, task or Defined Feature of Work (DFOW), and identify the work sequences, specific anticipated hazards, site conditions, equipment, materials, personnel and the control measures to be implemented.

b. Before beginning each work activity, task or DFOW, the Contractor performing that work activity shall prepare the initial AHA. A Risk Assessment Code (RAC) is assigned to each step, to the risk that remains after controls have been applied (residual risk).

(1) Once this process has occurred, a RAC will be assigned to the activity as a whole (cannot be lower than the highest step RAC).

(2) Acceptance of risk. This residual risk must then be communicated to the proper authority for acceptance in order to proceed with the activity.

(3) The names of the Competent Person(s) (CP) and Qualified Person(s) (QP) required for a particular activity (e.g., excavation, scaffolding, fall protection, or other activities as specified by OSHA and this manual) shall be identified and included in the AHA, as well as proof of their competency/qualification.

(4) If more than one CP/QP is used on the AHA activity, a list of names and appropriate qualifications shall be submitted as an attachment to the AHA. Those listed must be CPs/QPs for the type of work involved in the AHA and familiar with current site safety issues.

c. Work shall not begin until the AHA with RAC for the work activity has been accepted by the GDA and discussed with all engaged in the activity, including the Contractor, subcontractor(s), and Government on-site representatives at preparatory and initial control phase meetings.

d. AHA's are intended to be developed and used by the field crews/workers performing the work, with the assistance of others (SSHO, QC, Superintendent, etc) as needed. The initial, accepted AHA shall be provided to and used by the field crews/workers that are performing that activity. AHAs are to be considered living documents and are intended to be created in the field and updated by the workers as needed.

e. The AHA shall be reviewed and modified as necessary to address changing site conditions, operations, or change of CP(s)/QP(s).

(1) If a new CP/QP (not on the original list) is added, the list shall be updated (an administrative action not requiring an updated AHA). The new CP/QP shall acknowledge in writing that they have reviewed the AHA and is familiar with current site safety issues.

(2) If the initial RAC increases due to a change made to the AHA by the workers, the AHA shall be resubmitted to GDA for acceptance prior to work proceeding.

(3) Changes to or updates to an AHA that do not increase the RAC are not required to be resubmitted for acceptance by the GDA.

(4) Workers/crews shall have in their possession the current AHA that reflects current site conditions, personnel, equipment, control measures, etc while the work is being performed.

f. The AHA shall be used by the contractor and USACE personnel to assure work is being performed consistent with the AHA. In the event that the work is not being conducted in a safe manner, the contractor and/or the USACE (COR or designated representative) shall immediately stop the unsafe work being conducted until it is in compliance with this manual, APP and the AHA or the APP/ AHA is revised and accepted by the GDA, if necessary.

g. AHAs for completed work for the same contract or project work shall be readily available on site (e.g., office, trailer, etc.) and accessible on site by all workers, for a period of 12 months or, for contract work, the length of the contract;

01.A.15 USACE Risk Management Process. Risk management is a business process that includes the identification, assessment, and prioritization of risks, followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events to an acceptable level. The USACE uses the Activity



Hazard Analysis (AHA) as part of a total risk management process. > See Figure 1-2 for a NON-MANDATORY formatted outline of an AHA and an electronic version of this AHA may be found on the HQUSACE Safety Office Website. Work crews may use other forms/formats as long as the information contained within is the same.

a. An AHA shall be prepared and documented for each USACE activity as warranted by the hazards associated with the activity. Typically, an AHA shall be prepared for all field, laboratory, industrial and maintenance activities.

b. The supervisor, utilizing the recommendations of the SOHO, should determine the need for an AHA for each activity within his/her area of responsibility. AHAs shall define the steps being performed within the activity or task, identify the work sequences, specific anticipated hazards, site conditions, equipment, materials, personnel and the control measures to be implemented.

c. Before beginning each work activity, the workers performing that work activity shall prepare the initial AHA. A Risk Assessment Code (RAC) is assigned to each step, to the risk that remains after controls have been applied (residual risk). In developing the AHA for a particular activity, the involved workers should draw upon the expertise (knowledge, skill and experience) of the USACE supervisor for that activity as well as the SOH Office.

(1) Once this process has occurred, a RAC will be assigned to the activity as a whole (cannot be lower than the highest step RAC).

(2) Acceptance of risk. This residual risk must then be communicated to the proper authority for acceptance in order to proceed with the activity.

(3) The names of the Competent Person(s) (CP) and Qualified Person(s) (QP) required for a particular activity (e.g., confined space entry, scaffolding, fall protection or other activities as specified by OSHA/this manual) shall be identified and included in the AHA, as well as proof of their competency/qualification.

(4) If more than one CP/QP is used on the AHA activity, a list of names and appropriate qualifications shall be noted on the AHA. Those listed must be CPs/QPs for the type of work involved in the AHA and familiar with current site safety issues.

d. Work shall not begin until the AHA with RAC for the work activity has been discussed with all engaged in the activity in a job pre-brief (to include Supervisor and/or local SOHO if applicable).

FIGURE 1-2

Activity Hazard Analysis (AHA)

Activity/Work Task:	Overall Risk Assessment Code (RAC) (Use highest code)					
Project Location:	Risk Assessment Code (RAC) Matrix					
Contract Number:	Severity	Probability				
Date Prepared: _/ _/ _		Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title):	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
Reviewed by (Name/Title):	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L
Notes: (Field Notes, Review Comments, etc.)	Step 1: Review each "Hazard" with identified safety "Controls". Determine RAC (See above)					
	Probability: likelihood the activity will cause a Mishap (near miss, incident or accident). Identify as Frequent, Likely, Occasional, Seldom or Unlikely.				RAC Chart	
	Severity: the outcome if a mishap occurred. Identify as Catastrophic, Critical, Marginal, or Negligible				E = Extremely High Risk	
					H = High Risk	
	Step 2: Identify the RAC (probability vs. severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.				M = Moderate Risk	
				L = Low Risk		
Job Steps	Hazards	Controls				RAC
1. 2.	1. 2.	1. 2.				1. 2.
Equipment to be Used	Training Requirements & Competent or Qualified Personnel name(s)	Inspection Requirements				

e. AHA's are intended to be developed and used by the field crews/workers performing the work, with the assistance of others (CDSO, Superintendent, etc.) as needed. The initial AHA shall be provided to and used by the field crews/workers that are performing that activity. AHAs are to be considered living documents and are intended to be created in the field and updated by the workers as needed.

f. The AHA shall be reviewed and modified as necessary to address changing site conditions, operations, or change of CP(s)/QP(s).

(1) If a new CP/QP (not on the original list) is added, the list shall be updated (an administrative action not requiring an updated AHA). The new CP/QP shall acknowledge in writing that he/she has reviewed the AHA and is familiar with current site safety issues.

(2) If the initial RAC increases due to a change made to the AHA by the workers, the AHA shall be re-reviewed by the supervisor and local SOHO for acceptance prior to work proceeding.

(3) Changes to or updates to an AHA that do not increase the RAC are not required to be re-reviewed.

(4) Workers/crews shall have in their possession the current AHA that reflects current site conditions, personnel, equipment, control measures, etc while the work is being performed.

g. The AHA shall be used to assure work is being performed consistent with the AHA. In the event that the work is not being performed/conducted in a safe manner, work shall stop until it is in compliance with this manual, and the AHA.

h. Once the activity has been completed, the AHA shall be available and kept on file on site for 6 months minimum.

01.A.16 To ensure compliance with this manual, the Contractor may be required to prepare for review specific SOH submittal items. These submittal items may be specifically required by this manual or may be identified in the contract or by the Contracting Officer's Representative (COR). All SOH submittal items shall be written in English and provided by the Contractor to the GDA.

01.A.17 Contractor Site Safety and Health Officer (SSHO). The Contractor shall employ a minimum of one CP at each project site to function as the SSHO (primary), depending on job complexity, size and any other pertinent factors.

a. The SSHO shall:

(1) Be a full-time responsibility. The SSHO shall be present at the project site, located so they have full mobility and reasonable access to all major work operations during the shift.

(2) Be an employee other than the supervisor, unless specified differently in the contract and coordinated with the local SOH Office, and

(3) Report to a senior project (or corporate) official.

b. The SSHO, as a minimum, must produce a copy of their instructor-signed OSHA 30-

hour training card (or course completion if within 90 days of having completed the training and card has not yet been issued). They will have completed:

(1) The 30-hour OSHA General Industry safety class (may be web-based training if the student is able to directly ask questions of the instructor by chat or phone) or

(2) The 30-hour OSHA Construction Industry safety class (may be web-based training if the student is able to directly ask questions of the instructor by chat/phone), or

(3) As an equivalent, formal construction or industry safety and health training covering the subjects of the OSHA 30-hour course and the EM 385-1-1 [see Appendix A, Paragraph 3.d.(3)] applicable to the work to be performed and given by qualified instructors - may be web-base training if the student is able to directly ask questions of the instructor by chat/phone).

➤ Note: The local SOHO having jurisdiction over the work shall evaluate the proposed equivalent training for applicability to the contract work to be performed.

c. In addition, the SSHO is also required to have proof of employment for:

(1) Five (5) years of continuous construction industry safety experience in supervising/managing general construction (managing safety programs or processes or conducting hazard analyses and developing controls), or

(2) Five (5) years of continuous general industry safety experience in supervising/managing general industry (managing safety programs or processes or conducting hazard analyses and developing controls), or

(3) If the SSHO has a Third-Party, Nationally Accredited (ANSI or National Commission for Certifying Agencies - NCCA) SOH-related certification, only 4 years of experience is needed. > See Appendix Q for list of certifications.

d. SSHOs shall maintain competency through having taken 8 hours of documented formal, on-line, or self-study safety and health related coursework every year. Examples of continuing education activities that meet this requirement are: writing an article, teaching a class, reading/writing professional articles, attendance/participation in professional societies/meetings, etc.

e. For projects with multiple shifts, an Alternate SSHO as identified in the AHA will be assigned to insure SSHO coverage for the project at all times work activities are conducted.

➤ Note: The Alternate SSHO must meet the same requirements and assume the responsibilities of the project SSHO. > See Appendix Q for “Alternate SSHO” and “SSHO” definitions.

f. If the SSHO is off-site for a period longer than 24 hours, an Alternate SSHO shall be provided and shall fulfill the same roles and responsibilities as the primary SSHO.

g. When the SSHO is temporarily (up to 24 hours) off-site, a Designated Representative (DR), as identified in the AHA may be used in lieu of an Alternate SSHO, and shall be on the project site at all times when work is being performed.

➤ Note: DRs are collateral duty safety personnel, with safety duties in addition to their full-time occupation.

h. If an activity, task or DFOW contains multiple sites and has been assessed and given an activity RAC of low or medium, a DR shall be appointed for each site where remote work locations are more than 45 minutes travel time from the SSHO’s duty location.

(1) DRs shall perform safety program tasks as designated by the SSHO and report safety findings to the SSHO.

(2) A DR may NOT be assigned to projects that have a RAC level of high or extremely high.

i. The Contractor’s project management team, with the assistance of the SSHO, is responsible for managing, communicating, implementing and enforcing compliance with the Contractor’s APP and other accepted safety and health submittals.

➤ Exception 1: For dredging contracts, the SSHO requirements established in the standardized contract clause for dredging project site safety personnel shall be used as it is included in the current UFGS for Governmental Safety Requirements.

➤ Exception 2: For limited service contracts, for example, mowing only, park attendants, rest room cleaning, etc., the KO and SOH Office may modify SSHO requirements and waive the more stringent elements of this Section. > See Appendix A, Paragraphs 2 and 3.i.

➤ Exception 3: For field walk-over, surface soil sampling, or long term water sampling, in which there is no exposure to mechanical or explosive hazards, the SSHO may be collateral duty and shall have a minimum of 8 hours of training annually and specific knowledge of the potential hazards of the tasks being completed.

01.A.18 USACE SOH Professional and Collateral Duty Safety Officer (CDSO). > See Appendix Q. Organizations shall assign a safety point of contact (POC) for all construction

and/or maintenance activities, dredging, field sampling, drilling and any other potentially hazardous tasks. A safety POC is a worker that has knowledge of the work being performed and the associated hazards and controls associated with it.

a. For all activities with a high potential for injury or illness and/or a RAC on the AHA of high or extremely high, a SOH Professional shall be on site full time. The SOH Professional shall have reviewed the hazards and appropriate controls with the local SOHO.

b. If a project or task has been assessed with a RAC of low:

(1) A Safety POC or CDSO as identified in the AHA, shall be on the project site at all times when work is being performed.

(2) And it contains multiple sites, a Safety POC shall be appointed for each site where remote work locations are more than 45-minutes travel time from the CDSO's main duty location. POCs shall perform safety program tasks as designated by the SOH Professional, Project Safety Officer or CDSO and report safety findings to the appropriate level.

➤ Note: CDSOs are formerly identified personnel with safety duties in addition to their full-time occupation.

c. If a project or task has been assessed with a RAC for the project of medium:

(1) A CDSO, as identified in the AHA, shall be on the project site at all times when work is being performed.

(2) And it contains multiple sites, a Safety POC shall be appointed for each site where remote work locations are more than 45-minutes travel time from the CDSO's main duty location. POCs shall perform safety program tasks as designated by the SOH Professional, Project Safety Officer or CDSO and report safety findings to the appropriate level.

d. A CDSO may NOT be assigned to projects that have a RAC level of high or extremely high.

e. The responsibilities of the government Safety POC/CDSO are:

(1) To ensure the hazards identified in the AHA are appropriately addressed;

(2) Provide training on the hazards of the activity and PPE or controls to be utilized;

(3) Provide feedback on the work activities as to how to improve the safety of the activity, and

(4) Document the safety and health controls being used and implemented.

f. Project SO, CDSO and Safety POC shall seek support and information from the local SOHO if there is a verbalized concern or someone becomes injured or ill.

01.A.19 USACE Collateral Duty Safety Officers (CDSOs). USACE organizations shall designate CDSOs as recommended by the SOH Office. CDSOs shall:

a. Be selected, then trained per Section 01.A.19.b, then appointed through written orders;

b. On appointment of an employee to CDSO, SOH training commensurate with the scope of their assigned responsibilities shall be provided. > See 29 CFR 1960.58. Training shall include:

(1) USACE EM 385-1-1;

(2) Section 19 of the OSH Act, Executive Order 12196 and 29 CFR 1960.58;

(3) USACE procedures for the reporting, evaluation and abatement of hazards;

(4) Hazard recognition and Risk Management Processes;

(5) USACE procedures for mishap reporting and investigation and use of lessons learned;

(6) Any local SOH SOPs, to include other appropriate rules and regulations; or

(7) A USACE-instructed or provided (e.g., Prospect classes) 30-hour OSHA General Industry safety class or 30-hour Construction Industry safety class can be taken and will successfully satisfy all training material above except for local SOPs and information.

c. Maintain their competency through taking a minimum of 24-hours of documented formal or online safety and health related coursework, training and webinars over a period of 4-years. The training must be applicable to the work being performed. Teaching is not considered the equivalent of attending training.

d. Give their safety duties proper priority;

e. Report directly to their unit manager concerning safety-related matters;

- f. Coordinate activities with their supporting SOHO.

01.A.20 Fatigue Management Plan (FMP).

a. A FMP shall be completed as part of the APP/Project SOH Plan whenever work hours:

- (1) Exceed 10-hours a day for more than 4 consecutive days;
- (2) Exceed 50-hours in a 7-day work week;
- (3) Exceed 12-hours a day for more than 3 consecutive days, or (4) Exceed 58-hours a week for sedentary (to include office) work.

b. The FMP shall address the following conditions for operator work hour limitations:

(1) Equipment Operators. Operators of equipment, such as hoisting equipment and draglines, mobile construction equipment, electrical power systems, hydropower plants, industrial manufacturing systems, hydraulically operated equipment, powered vessels, and boats, shall not be permitted to exceed 12-hours of duty time in any 24-hour period, including time worked at another occupation. A minimum of 8 consecutive hours of rest between shifts in a 24-hour period is required.

➤ Note: See "Rest", in Appendix Q.

(2) Motor Vehicle Operators. Operators of motor vehicles, while on duty, shall not operate vehicles for a continuous period of more than ten 10-hours in any 24-hour period; moreover, no employee, while on duty, may operate a motor vehicle after being in a duty status for more than 12-hours during any 24-hour period. A minimum of 8 consecutive hours shall be provided for rest in each 24-hour period.

(3) Floating Plant. All floating plant personnel shall be scheduled to receive a minimum of 8-hours rest in any 24-hour period, except:

(a) When quarters are provided immediately adjacent to, or aboard the work site, these hours of rest may be divided into no more than 2 periods, one of which must be at least 6 continuous hours in length.

(b) Rest periods may be interrupted in case of emergency, drill, or other overriding operational necessity.

c. FMP shall identify affected workers, management responsibility, training, and the controls established at the worksite.



(1) Training shall include symptoms of fatigue, habits and actions the worker may take to avoid fatigue, actions workers should take if they observe fatigue in a co-worker, and controls in place to prevent fatigue.

(2) Controls for fatigue shall include a discussion of driving to and from work and any possible mitigation of driving as a factor of fatigue. > See Appendix Q, "Rest".

(3) Controls for fatigue may include work scheduling (limit number of consecutive night shifts), rotating jobs to prevent repetitive work, breaks at critical times in the work cycle, control of environmental factors (heat, cold, use of personal protective equipment), buddy check-in for individuals working alone, and alternate transportation for long commutes.

#### 01.B Indoctrination and Training.

01.B.01 A Competent Person (CP), qualified in the material presented, shall conduct all training required by this manual. All training shall correspond to American National Standards Institute (ANSI) regulation Z490.1.

01.B.02 Employees shall be provided an SOH indoctrination prior to the start of work as well as continuous SOH training to enable them to perform their work in a safe manner. All training, meetings and indoctrinations shall be documented in writing by date, name, content and trainer.

01.B.03 Indoctrination and training should be based upon the existing SOH program of the Contractor or Government agency, as applicable, and shall include but not be limited to:

- a. Requirements and responsibilities for accident prevention and the maintenance of safe and healthful work environments;
- b. General SOH policies and procedures and pertinent provisions of this manual;
- c. Employee and supervisor responsibilities for reporting all mishaps;
- d. Provisions for medical facilities and emergency response and procedures for obtaining medical treatment or emergency assistance;
- e. Procedures for reporting and correcting unsafe conditions or practices;
- f. Job hazards and the means to control/eliminate those hazards, including applicable PHAs and/or AHAs;
- g. Specific training as required by this manual.

#### 01.B.04 Visitors and Authorized Entrants.

a. A visitor is anyone coming to the site for short-term action (e.g., inspection, meetings, deliveries, etc.). An authorized entrant is anyone entering the site that is assigned to the site but is not a site worker (e.g., security forces, other military forces, etc.). Signs shall be posted at all site entrances requiring anyone entering the site to report to the project office for a safety briefing.

b. All visitors and authorized entrants to USACE Government- or Contractor-controlled sites presenting hazardous conditions shall be briefed by a CP on the hazards to be expected on the site and the safety and health controls required (e.g., hard hat, foot protection).

c. All personnel who escort visitors are responsible for their visitors and shall ensure that all visitors entering the site are properly protected and are wearing or provided the appropriate PPE.

➤ Note: If visitors can be escorted along a designated safe path through the site where they are not exposed to the hazards, the use of PPE is not necessary.

d. Contractor and/or Project site personnel shall maintain a stock of common PPE, such as hard hats, eye protection, ear plugs, and reflective vests, for use by visitors

e. All visitors shall be escorted by appropriate site personnel.

f. A visitor sign-in/out log shall be maintained on site. The site manager shall maintain a roster of all authorized entrants that enter the site.

01.B.05 Safety meetings shall be conducted to review past activities, plan for new or changed operations, review pertinent aspects of appropriate AHA (by trade), establish safe working procedures for anticipated hazards, and provide pertinent SOH training and motivation.

a. Meetings shall be conducted at least once a month for all supervisors on the project location and at least once a week for all workers by SSHO, supervisors, foremen or CDSO's.

b. Meetings shall be documented, including the date, persons in attendance, subjects discussed, and names of individual(s) who conducted the meeting. Documentation shall be maintained and copies furnished to the GDA on request.

c. The GDA shall be informed of all scheduled meetings in advance and be invited to attend.

01.B.06 Emergency situations.

a. The employer shall provide training in handling emergency situations that may arise from project activities or equipment operation.

b. All persons who may have occasion to use emergency and rescue or lifesaving equipment shall be familiarized with the equipment location, trained in its proper use, be instructed in its capabilities and limitations, and medically qualified for its use.

#### 01.C Physical Qualifications of Employees.

01.C.01 All persons shall be physically and medically qualified for performing the duties to which they are assigned. Some factors to be considered in making work assignments are strength, endurance, agility, coordination, and visual and hearing acuity.

a. At a minimum, employees shall meet the physical requirements for specific job tasks and hazards as required by this document, the position, the job description, OSHA guidelines, applicable Department of Transportation (DOT) regulations or applicable U.S. Coast Guard (USCG) requirements.

b. Medical documentation shall be recorded using applicable medical screening and/or medical history and examination forms and shall be maintained in accordance with 5 CFR 293 and Privacy Act requirements.

01.C.02 While on duty, employees shall not use or be under the influence of alcohol, narcotics, intoxicants, or similar performance or mind-altering substances.

a. Contractors shall enforce the drug-free workplace requirements. Employees found to be under the influence of or consuming such substances will be immediately removed from the job site.

b. Any employee under a physician's treatment and taking prescribed narcotics or any medication that may prevent one being ready, willing and able to safely perform position duties shall provide a medical clearance statement to his supervisor.

01.C.03 Operators of any equipment or vehicle shall be able to read and understand the signs, signals, and operating instructions in use.

#### 01.D Mishap Reporting and Investigation.

01.D.01 A mishap is any unplanned, undesired event that occurs during the course of work being performed. The term "mishap" includes accidents, incidents and near misses. > See Appendix Q and reporting thresholds and criteria in Section 01.D.03.

01.D.02 All mishaps occurring incidentally to an operation, project, or facility for which this manual is applicable shall be reported, investigated and analyzed as prescribed below and in accordance with ER 385-1-99.

a. Employees are responsible for reporting ALL mishaps immediately to their employer or supervisor.

b. Employers and supervisors are responsible for reporting all recordable mishaps to the GDA within 24-hours after notification from the affected employee. > See also immediate notification requirements in Sections 01.D.04 and 01.D.05.

c. No supervisor may decline to accept a report of an mishap from a subordinate.

01.D.03 In addition to the reporting requirements identified above, the employer is required to report:

a. Property damage (exceeding \$5,000 is recordable);

b. Days Away Injuries;

c. Days Away Illnesses;

d. Restricted/Transfer Injuries.

01.D.04 Boards of Investigation. Any accident that has, or appears to have, any of the consequences listed below shall be immediately reported to the GDA. These accidents shall be investigated in depth to identify all causes and to recommend hazard control measures. The GDA shall immediately notify the SOHO when any of these occurs and subsequently follow-up with official accident reports as prescribed by regulation. a. Fatal injury/illness;

b. Permanent totally disabling injury/illness;

c. Permanent partial disabling injury/illness;

d. One (1) or more persons hospitalized as inpatients as a result of a single occurrence;

e. \$500,000 or greater accidental property damage;

f. Three (3) or more individuals become ill or have a medical condition which is suspected to be related to a site condition, or a hazardous or toxic agent on the site;

g. USACE aircraft destroyed or missing;

h. Contractors are responsible for notifying OSHA in accordance with 29 CFR 1904.39 within 8-hours when their employee(s) is fatally injured or 1 or more persons are hospitalized as inpatients as a result of a single occurrence.

01.D.05 In addition to the above, any mishap occurring in any of the following high hazard areas shall be immediately reported to the GDA. These mishaps shall be investigated in depth to identify all causes and to recommend hazard control measures. The GDA shall immediately notify the local SOHO when any one of these occurs and subsequently followup with official reports as prescribed by regulation. HQUSACE-SO must also be notified immediately (within 24-hours) and provided follow-up investigative findings within 10-days of occurrence.

a. Electrical – to include Arc Flash, electrical shock, etc.;

b. Uncontrolled Release of Hazardous Energy (includes electrical and non-electrical);

c. Load Handling Equipment (LHE) or Rigging;

d. Fall-from-Height (any level other than same surface), and

e. Underwater Diving.

➤ Note: The reporting and associated investigation of these mishaps is considered a leading indicator. As such, this information is to be used for data collection, data trending and correction of hazards or program deficiencies before they result in an accident. To encourage reporting of these mishaps, for the betterment of all, this data is NOT to be used for any other reason. > See Appendix Q for “Mishap” definitions.

01.D.06 Except for rescue and emergency measures, the mishap scene shall not be disturbed until it has been released by the investigating official.

01.D.07 The Contractor is responsible for obtaining appropriate medical and emergency assistance and for notifying fire, law enforcement, and regulatory agencies. The Contractor shall assist and cooperate fully with the GDA conducting the Government investigation(s) of any mishap.

01.D.08 Records of all first aid treatments shall be maintained and submitted to the GDA upon request.

a. Records shall include, at a minimum, employee’s name, job title, date and type of

mishap , causes and corrective actions taken (i.e., AHA review, process changes, establishment of controls, personnel qualifications and training, etc.).

b. This data shall be reviewed and analyzed by the SSHO and/or SOHO for corrective action as appropriate.

## 01.E Emergency Planning.

01.E.01 Emergency Plans to ensure employee safety in case of fire, inclement weather or other emergency shall be prepared, in writing, and reviewed with all affected employees. Emergency plans shall be tested to ensure their effectiveness.

a. Plans shall include escape procedures and routes, critical plant operations, employee accounting following an emergency evacuation, rescue and medical duties, means of reporting emergencies, and persons to be contacted for information or clarification.

b. On-site emergency planning shall be integrated with off-site emergency support. Documentation of specific on-site emergency services shall be made and may include written agreements, memoranda for record, telephone conversation logs, etc. The emergency services provider should be offered an on-site orientation of the project and associated hazards.

c. The SSHO or designated on-site personnel, shall be responsible for checking the weather conditions at a minimum of twice a day.

d. The employer's APP or Project SOH Plan shall include a discussion of:

(1) Severe weather triggers to alert the SSHO to monitor weather conditions continuously;

(2) Training on severe weather precautions and actions;

(3) Identified area of retreat, or other actions to be taken such as evacuation, work delay, etc.

(4) If lightning is observed, all Load Handling Equipment (LHE), drill rigs, work on elevated platforms or scaffolding, roofing activities, tree trimming activities, pole climbing activities, or work in open areas shall stop. A determination shall be made as to the proximity to the operation being performed. Once lightning is seen, count the number of

seconds until you hear the thunder. Divide number of seconds by 5 to get the distance the lightning is away from you. If lightning is 10-miles away or less, work should stop until 30minutes after the last audible thunder or visible flash of lightning.

(5) For floating plant, boats, and marine activities, the APP shall address securing the vessel and evacuation of personnel during severe weather. > See Sections 19.A.03 and 19.A.04.

01.E.02 Planning for any operation shall include the total system response capabilities to minimize the consequences of accidents or natural disaster and shall consider communications, rescue, first aid, medical, emergency response, emergency equipment, and training requirements.

01.E.03 The number of persons permitted in any location shall correspond to rescue and escape capabilities and limitations.

01.E.04 Emergency alert systems shall be developed, tested, and used to alert all persons likely to be affected by existing or imminent disaster conditions and to alert and summon emergency responders.

01.E.05 Emergency telephone numbers and reporting instructions for ambulance, physician, hospital, fire, and police shall be clearly communicated to all employees, conspicuously and clearly posted at the work site.

01.E.06 Employees working alone in a remote location or away from other workers shall be provided an effective means of emergency communications (i.e., cellular phone, twoway radios, land-line telephones or other acceptable means).

a. The selected communication shall be readily available (easily within the immediate reach) of the employee and shall be tested prior to the start of work to verify that it effectively operates in the area/environment.

b. An employee check-in/check-out communication procedure shall be developed to ensure employee safety.

01.F Emergency Operations. In addition to the other pertinent parts of this manual, Civil Disaster Emergency Operations for floods, earthquakes, hurricanes and other natural disasters shall be conducted in accordance with this manual, generally and with Appendix B specifically, for both USACE and Contractor activities.

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01.G Explosives Activities and Operations.

a. The requirements for the safe use, storage and transportation of commercial explosives on non-military lands/installations are found in Section 29 of this manual.

b. The requirements for the safe use, storage and transportation of commercial explosives on military lands/installations, are found in EM 385-1-97, Explosives Safety and Health Requirements Manual.

c. For all work performed under USACE activities and operations dealing with ammunition and explosives (military munitions), refer to EM 385-1-97.



## STUDY QUESTIONS

1. The provisions of this manual implement and supplement the safety and health standards and requirements contained in 29 CFR 1910, 29 CFR 1926, 29 CFR 1960, EO 12196, FAR Clause 52.236.13, DODI 6055.1, AR 40-5, and AR 385-10. Where more stringent safety and occupational health standards are set forth in these requirements and regulations, \_\_\_\_\_.
  - a. COE-385-1-1 will apply
  - b. 29 CFR 1910 will apply
  - c. 29 CFR 1926 will apply
  - d. the more stringent shall apply
  
2. For limited scope supply, service and R&D contracts, the Contracting Officer:
  - a. doesn't need to worry about safety.
  - b. may not change the contract safety requirements.
  - c. may authorize an abbreviated APP.
  - d. may combine contracts.
  
3. Frequent inspections/audits by a Competent Person of the work sites, material, and equipment will be done to ensure compliance with the APP and the EM385. These inspections/audits will be documented to include:
  - a. the name of the inspector.
  - b. the date.
  - c. all findings.
  - d. all of the above.
  
4. Before beginning each work activity, task, or DFOW, the contractor performing that work activity shall prepare the \_\_\_\_\_.
  - a. Preparatory Phase Checklist
  - b. APP
  - c. initial AHA
  - d. Demolition Plan
  
5. The AHA will be continuously reviewed and modified as necessary to address \_\_\_\_\_.
  - a. changing site conditions
  - b. changing operations
  - c. change of competent/qualified person(s)
  - d. all of the above

6. The SSHO(s), as a minimum, must have completed \_\_\_\_\_ or equivalent.
  - a. 10-hour OSHA training
  - b. 30-hour OSHA construction training class
  - c. STS certification
  - d. High school
  
7. In addition to the training requirements, the SSHO is also required to have proof of employment for: (1) Five (5) years of continuous construction safety experience, or (2) Five (5) years of continuous general industry safety experience, or (3) If the SSHO has a Third-party, Nationally accredited SOH-related certification, only four (4) years of experience is needed.
  - a. True
  - b. False
  
8. All training will be documented in writing, to include the date, name, content, and \_\_\_\_\_.
  - a. Trainer.
  - b. Test scores.
  - c. Certificates issued.
  - d. Weather.
  
9. Contractors are responsible for notifying OSHA in accordance with 29 CFR 1904.39 within 8-hours when their employee(s) is:
  - a. Fatally injured
  - b. 1 or more persons are hospitalized
  - c. Both a and b
  - d. Contractors are not required to notify OSHA
  
10. In areas with frequent inclement weather, the APP shall include discussion of:
  - a. Severe weather triggers to alert the SSHO to monitor weather triggers.
  - b. Training on severe weather precautions and actions.
  - c. Identified area of retreat, preferably a substantial building.
  - d. All of the above.

11. Employees working in a remote location or away from other workers shall be provided:

- a. an effective means of emergency communications.
- b. a box lunch.
- c. a vehicle at their disposal.
- d. a map.