

SECTION 1

PROGRAM MANAGEMENT

01.A GENERAL

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

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

01.A.03 Each employee is responsible for complying with applicable safety and occupational health requirements, wearing prescribed safety and health equipment, reporting unsafe conditions/activities, preventing avoidable accidents, and working in a safe manner.

01.A.04 Safety and health programs, documents, signs, and tags shall be communicated to employees in a language that they understand.

01.A.05 Worksites with non-English speaking workers shall have a person(s), fluent in the language(s) spoken and English, on site when work is being performed, to translate as needed.

01.A.06. The Contractor shall erect and maintain a safety and health bulletin board in an area commonly accessed by workers. The bulletin board shall be maintained current, in clear view of on-site workers; and protected against the elements and unauthorized removal. It shall contain at least the following safety and health information:

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- a. Map denoting the route to the nearest emergency care facility.
- b. Emergency phone numbers.
- c. Copy of the most up-to-date accident prevention plan (APP) shall be mounted on or adjacent to the bulletin board or state the location, which will be accessible on the site by all workers.
- d. Copy of current activity hazard analysis/analyses (AHA) shall be mounted on or adjacent to the bulletin board or state the location, which will be accessible on the site by all workers.
- e. Occupational Safety and Health Administration (OSHA) Form 300A shall be posted in accordance with OSHA requirements and mounted on or adjacent to the bulletin board or state the location, which will be accessible on the site by all workers.
- f. Copy of Safety and Occupational Health deficiency tracking log shall be mounted on or adjacent to the bulletin board or state the location where it will be accessible by all workers upon request. (See content in 01.A.12.d.)
- g. Safety and Health promotional posters.
- h. Date of last lost workday injury.
- i. OSHA Safety and Health Poster.

01.A.07 USACE Project Managers (PMs) shall ensure that a safety and occupational health plan is developed, in accordance with the Safety and Occupational Health Reference Document contained in the USACE Business Manual, and incorporated into each Project Management Plan (PMP)/Program Management Plan (PrgMP).

01.A.08 USACE Project Delivery Teams (PDTs) will develop the safety and occupational health plan to be incorporated in the PMP

and are responsible for assuring that safety and occupational health requirements are properly addressed and executed throughout the life cycle of each project.

01.A.09 For USACE activities where USACE employees are engaged in other than routine office/administrative functions, a project specific safety and health plan (SSHP) shall be developed, implemented, and updated as necessary. > **See Section 28.**

- 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 safety and occupational health office agree on the benefit of such a program in accident prevention.
- b. The project safety and health plan shall address applicable items listed in Appendix A in addition to the USACE Command's safety and occupational health program requirements.

01.A.10 A position hazard analysis (PHA) shall be prepared, updated as necessary, and documented by the supervisor of each USACE position as warranted by 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 are ergonomic, lighting, light lifting and carrying, and indoor air quality. > **See Figure 1-1 for an outline of a PHA.**

- a. The GDA, using the advice of the safety and occupational health office, shall determine the need for analysis for each position within his or her area of responsibility.
- b. In developing the analysis for a particular position, supervisors should draw upon the knowledge and experience of employees in that position and the safety and occupational

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health office.

c. Supervisors will review the contents of PHAs with employees upon initial assignment to a position, and at least annually or whenever there is a significant change in hazards.

01.A.11 Before initiation of work at the job site, an APP with appropriate appendices (e.g., SSHP for hazardous waste site cleanup operations, Lead Compliance Plan when working with lead, Asbestos Hazard Abatement Plan when working with asbestos) -- written in English by the Prime Contractor for the specific work and hazards of the contract and implementing in detail the pertinent requirements of this manual -- will be reviewed and found acceptable by the GDA. APPs shall be developed and submitted by the Contractor in the formats provided in Appendix A of this manual. 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 by the nature of the work an item is not applicable, the Contractor will so state and provide a justification for why that element/sub-element is not applicable.
> **See Appendix A.**

a. The plan will be developed by qualified personnel and will be signed in accordance with Appendix A.1. The Contractor shall be responsible for documenting the qualified person's credentials.

b. On contract operations, the Contractor's plan will be job-specific and will include work to be performed by subcontractors and measures to be taken by the Contractor to control hazards associated with materials, services, or equipment provided by suppliers.

FIGURE 1-1

POSITION HAZARD ANALYSIS

| POSITION HAZARD ANALYSIS (PHA) FOR USACE EMPLOYEE | |
|--|---|
| <u>NAME: (Print - Last, First, MI):</u> _____ | <u>Prepared by: (Print Name – Last, First, MI):</u> _____ |
| <u>JOB SERIES:</u> _____ | <u>Analyzed by (SSHO):</u> _____ |
| <u>JOB TITLE:</u> _____ | <u>Date (mo) _ _ (day) _ _ (year) _ _ _ _</u> |
| <u>JOB NUMBER (SF-52):</u> _____ | |
| <u>COMMAND NAME & ORGANIZATION CODE:</u> _____ | |
| <u>PRIMARY DUTY LOCATION:</u> _____ | |

| Clearances Required | | | | | | | |
|----------------------------|--|--------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <u>EM OPS Team</u> | <u>First Aid/CPR</u> | <u>Respirator</u> | <u>CDL</u> | <u>Crane Operator</u> | <u>Diver</u> | <u>HTRW</u> | <u>Other</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <u>POSITION TASKS</u> | <u>SAFETY AND/OR OCCUPATIONAL HEALTH HAZARDS</u> | | <u>RECOMMENDED CONTROLS</u> | | | | |
| <u>1.</u> | <u>1.</u> | | <u>1.</u> | | | | |
| <u>2.</u> | <u>2.</u> | | <u>2.</u> | | | | |
| <u>3.</u> | <u>3.</u> | | <u>3.</u> | | | | |
| <u>4.</u> | <u>4.</u> | | <u>4.</u> | | | | |
| <u>5.</u> | <u>5.</u> | | <u>5.</u> | | | | |
| <u>6.</u> | <u>6.</u> | | <u>6.</u> | | | | |
| <u>7.</u> | <u>7.</u> | | <u>7.</u> | | | | |

*Note: Examples of potential hazards are as follows:

Safety:
trenching,
electrical, slips,
trips, fall
hazards, etc.

Physical Agent:
Exposure to
heat/cold, noise,
stress, vibration,
radiation, etc.

Chemical: Exposure
to solvents, cadmium,
paints, welding
fumes, pesticides,
etc.

Biological: Exposure to
bloodborne pathogens,
poison ivy, insects, fungi, etc.

FIGURE 1-1 (CONTINUED)

POSITION HAZARD ANALYSIS

| <u>EQUIPMENT TO BE USED</u> | <u>INSPECTION REQUIREMENTS</u> | <u>TRAINING REQUIREMENTS</u> |
|--|--|---|
| <u>List equipment to be used for each task</u> | <u>List inspection requirements for each work task</u> | <u>List safety/health training requirements</u> |
| 1. | 1. | 1. |
| 2. | 2. | 2. |
| 3. | 3. | 3. |
| 4. | 4. | 4. |
| 5. | 5. | 5. |
| 6. | 6. | 6. |
| 7. | 7. | 7. |
| 8. | 8. | 8. |
| 9. | 9. | 9. |
| 10. | 10. | 10. |

This analysis serves as the hazard assessment required by Sections 01, 05, and 06 of EM 385-1-1, U.S. Army Corps of Engineers Safety and Health Requirements Manual. The employee covered by this analysis has been instructed in the tasks to be performed, the hazards to be encountered, the potential adverse effects of exposure to such hazards and the controls to be used. He/she has received adequate training specifically related to safe work practices, administrative and engineering controls and personal protective equipment (PPE) to be used in order to assure assigned work tasks are conducted in a safe and healthful manner. He/she has demonstrated an understanding of the safety and health equipment and PPE to be used to include its limitations, useful self-life, how to properly don, doff, adjust, and wear required PPE and how to properly care for, inspect, maintain, store, and dispose. Attached is documentation of the training received, dates of such training, and the subject matter taught.

Supervisor Signature _____ Employee Signature _____

Date ___/___/___

Date ___/___/___

01.A.12 Inspections.

a. The APP or the USACE Project Safety and Health Plan shall provide for frequent safety inspections, conducted by competent persons, of the work sites, material, and equipment to ensure compliance with the plan and this manual.

b. In addition to the requirements of subparagraph a., Contractor quality control (QC) personnel - as part of their QC responsibilities - shall conduct and document daily safety and occupational health inspections in their daily QC logs.

c. Identified safety and health issues and deficiencies, and the actions, timetable, and responsibility for correcting the deficiencies, shall be recorded in inspection reports. Follow-up inspections to ensure correction of any identified deficiencies shall be conducted and documented in a like manner.

d. The Contractor shall establish a safety and occupational health deficiency tracking system that lists and monitors the status of safety and health deficiencies in chronological order. The list will be posted on the project safety bulletin board, will be updated daily, and will 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.

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e. The Contractor will immediately notify the GDA of any OSHA or other regulatory agency inspection and provide him/her 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 a copy of any citations or reports issued by the inspector and any corrective action responses to the citation(s) or report(s).

01.A.13 Before beginning each work activity involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or sub-contractor is to perform the work, the Contractor(s) performing that work activity shall prepare an AHA. > **See Figure 1-2 for an outline of an AHA.**

FIGURE 1-2

ACTIVITY HAZARD ANALYSIS

| ACTIVITY HAZARD ANALYSIS | | |
|--|---|---|
| ACTIVITY _____ | | ANALYZED BY/DATE _____ |
| PRINCIPAL STEPS | POTENTIAL SAFETY/HEALTH HAZARDS | RECOMMENDED CONTROLS |
| <i>Identify the principal steps involved and the sequence of work activities</i> | <i>Analyze each principal step for potential hazards</i> | <i>Develop specific controls for potential hazard</i> |
| EQUIPMENT TO BE USED | INSPECTION REQUIREMENTS | TRAINING REQUIREMENTS |
| <i>List equipment to be used in the work activity</i> | <i>List inspection requirements for the work activity</i> | <i>List training requirements, including hazard communication</i> |

a. AHAs will define the activities being performed and identify the sequences of work, the specific hazards anticipated, site conditions, equipment, materials, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level of risk.

b. Work will not begin until the AHA 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.

c. The names of the competent/qualified person(s) required for a particular activity (i.e., excavations, scaffolding, fall protections, other activities as specified by OSHA and this manual) will be identified and included in the AHA. Proof of their competency/ qualification must be submitted to the GDA for acceptance prior to the start of that work activity.

d. The AHA will be reviewed and modified as necessary to address changing site conditions, operations, or change of competent/qualified person(s).

(1) If more than one competent/qualified person will be used on the AHA activity, a list of names shall be submitted as an attachment to the AHA. Those listed shall be competent/qualified for the type of work involved in the AHA and familiar with current site safety issues.

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

01.A.14 An AHA shall be prepared and documented for each USACE activity as warranted by the hazards associated with the activity. Generally, an AHA shall be prepared for all field operations.

a. The GDA, using the advice of the safety and occupational health office, shall determine the need for an AHA for each activity within their area of responsibility.

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b. In developing the AHA for a particular activity, USACE supervisors should draw upon the knowledge and experience of employees in that activity and the safety and occupational health office.

c. The Government will use this process to assess and manage the risk associated with the project.

01.A.15 To assure compliance with this manual, the Contractor may be required to prepare for review specific safety and occupational health 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 safety and occupational health submittal items shall be written in English and provided by the Contractor to the GDA.

01.A.16. The COR or his/her designated representative may immediately stop work when an employee is deemed to be in imminent danger of serious injury or loss of life. > **See Federal Acquisition Regulation (FAR) Clause 52.236-13(d).**

01.A.17 The Contractor shall employ a competent person at each project to function as the Site Safety and Health Officer (SSHO). The SSHO will manage the Contractor's APP. (This may be a collateral duty responsibility unless specified differently in the contract.) > **See Appendix A, paragraphs 4 and 7.** The person(s), as a minimum, must have completed the 10-hour OSHA Construction safety class or an equivalent course applicable to the work to be performed and given by qualified instructors. Such training shall have been within the last three (3) years. An SSHO shall be on-duty at all times when work is being performed and shall be responsible for enforcing and implementing the Contractor's Safety and Health Program in accordance with the accepted APP.

01.A.18. The Prime Contractor is responsible for assuring subcontractor compliance with the safety and occupational health requirements contained in this manual.

01.B INDOCTRINATION AND TRAINING

01.B.01 A qualified person(s) shall conduct all training required by this manual.

01.B.02 Employees shall be provided safety and health indoctrination prior to the start of work and continuing safety and health training to enable them to perform their work in a safe manner. Employee indoctrinations will be documented in writing by date, name, and content.

01.B.03 Indoctrination and training shall be based on the safety and health 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 maintaining safe and healthful work environments;
- b. General safety and health policies and procedures and pertinent provisions of this manual;
- c. Employee and supervisor responsibilities for reporting all accidents;
- 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 position and/or activity hazard analyses; and
- g. Specific training as required by this manual.

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01.B.04 All visitors to USACE Government or Contractor controlled sites hosting hazardous conditions will be briefed by a qualified person on the hazards to be expected on the site and the safety and health controls required (i.e., hard hat, foot protection, etc.).

The person-in-charge of the site will assure that all visitors entering the site are properly protected and are wearing or provided with the appropriate personal protective equipment (PPE). Site personnel should maintain a stock of common PPE (i.e., hard hats, eye protection, ear plugs, reflective vests, etc.) for use by visitors. The site manager will provide an escort for all visitors while on site. A visitor sign-in log will be maintained on 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 safety and health 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 by supervisors or foremen for all workers.

b. Meetings shall be documented, including the date, 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 will be informed of all scheduled meetings in advance and be invited to attend.

01.B.06 A hazard communication program shall be implemented in accordance with 29 Code of Federal Regulations (CFR) 1910.1200 or 1926.59.

a. The written hazard communication program shall address, as a minimum, the following: training (to include potential safety and health effects from exposure), labeling, current inventory of hazardous chemicals on site, and the location and use of Material Safety Data Sheets (MSDSs).

- b. When hazardous substances are brought onto the job site, all employees potentially exposed to the substance will be advised of information in the MSDS for the substance.
- c. A copy of the MSDS for each hazardous substance at the project will be maintained in an inventory, will be provided to the GDA, and will be made available to all potentially exposed employees. For emergency response purposes, each entry in the inventory shall include the approximate quantities (e.g., liters, kilograms, gallons, pounds) that will be on site at any given time. In addition, a site map will be attached to the inventory showing where inventoried hazardous substances are stored. The inventory and the site map will be updated as frequently as necessary to ensure accuracy. > ***The inventory and site map shall be integrated into requirements of this Section and 06.B.01.***

01.B.07 Emergency situations.

- a. The employer shall provide training in handling emergency situations that may arise in the activities or use of equipment on the project.
- b. All persons who may have occasion to use emergency and rescue or lifesaving equipment shall be familiarized with the location of the equipment, trained in the proper use of the equipment and its capabilities and limitations, and medically qualified for its use.

01.C PHYSICAL QUALIFICATIONS OF EMPLOYEES

01.C.01 All persons shall be physically, medically, and emotionally 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.

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01.C.02 At no time while on duty may employees use or be under the influence of alcohol, narcotics, intoxicants, or similar mind-altering substances. Employees found under the influence of or consuming such substances will be immediately removed from the job site. Contractors shall enforce the drug-free workplace requirements specified in Appendix A as part of their APP.

> See Appendix A.

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.C.04 Operators shall not be permitted to operate beyond the following limits: **> See Section 19 for Marine activities.**

a. 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 will be provided for rest in each 24-hour period.

b. Operators of motor vehicles, while on duty, shall not operate vehicles for a continuous period of more than 10 hours in any 24-hour period; nor shall any employees, while on duty, operate motor vehicles after being in a duty status for more than 12 hours during any 24-hour period. A minimum of 8 consecutive hours will be provided for rest in each 24-hour period.

01.C.05 Compressed-air workers.

a. No person shall be permitted to enter a compressed-air environment until examined by a licensed physician and found to be physically qualified to engage in such work.

- b. Any person working in a compressed-air environment who is absent from work for 10 or more days, or is absent due to sickness or injury, shall not resume work until reexamined by a licensed physician, and found to be physically qualified to work in a compressed-air environment.
- c. After a person has been continuously employed in compressed air for a period designated by a physician, but not to exceed 1 year, that person shall be reexamined by a physician to determine if he/she is still physically qualified to engage in compressed-air work.
- d. All other requirements for compressed-air work will be as specified in the contract technical provisions.

01.D ACCIDENT REPORTING AND RECORDKEEPING

01.D.01 All accidents that occur incidentally to an operation, project, or facility for which this manual is applicable will be investigated, reported, and analyzed as prescribed by the GDA.

- a. Employees are responsible for reporting all injuries or occupationally related illnesses as soon as possible to their employer or immediate supervisor.
- b. Employers and immediate supervisors are responsible for reporting all injuries to the GDA within 24 hours.
- c. No supervisor shall decline to accept a report of injury from a subordinate.

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01.D.02 An accident that appears to have any of the consequences listed below shall be immediately reported to the GDA. These accidents will be investigated in depth to identify all causes and to recommend hazard control measures. The GDA shall immediately notify the Safety and Occupational Health Office of all serious accidents and follow-up with official accidents reports as prescribed by regulation. > **Contractors are responsible for notifying OSHA when one or more of their employees are seriously injured.**

- a. Fatal injury,
- b. Permanent totally disabling injury,
- c. Permanent partial disabling injury,
- d. Three or more persons admitted to a hospital, or
- e. Property damage in an amount specified by USACE current accident reporting regulations.

01.D.03 Except for rescue and emergency measures, the accident scene shall not be disturbed until it has been released by the investigating official. The Contractor is responsible for obtaining appropriate medical and emergency assistance and for notifying fire, law enforcement, and regulatory agencies. The Contractor must assist and cooperate fully with the GDA conducting the Government investigation(s) of the accident.

01.D.04 Daily records of all first-aid treatments not otherwise reportable shall be maintained on prescribed forms and furnished to the GDA upon request.

01.D.05 In addition to any other applicable requirements of this section on contract operations, the Prime Contractor shall:

- a. Maintain records of all exposure and accident experience incidental to the work (this includes exposure and accident experience of the Prime Contractor and subcontractors and, as

a minimum, these records shall include exposure work hours and a log of occupational injuries and illnesses - OSHA Form 300 or equivalent as prescribed by 29 CFR 1904; provide a current copy of OSHA Form 300 or equivalent to the GDA upon request;

b. Maintain health hazard assessment documentation and employee exposure monitoring to chemical, biological, and physical agents as required by Section 06. Provide this information to employees who are characterized by these assessments and exposure monitoring in accordance with OSHA requirements. Immediately notify the GDA of any exposure in excess of the limits specified in Section 06 and the hazard control measures that has been taken to reduce or eliminate such exposures.

c. Submit project work hours to the COR monthly on the form provided by the COR. Work hours include all hours on the project where an employee is in an on-duty pay status.

01.E EMERGENCY PLANNING

01.E.01 Emergency plans to ensure employee safety in case of fire or other emergency shall be prepared, in writing, and reviewed with all affected employees. Emergency plans shall be tested to ensure their effectiveness. **>See 28.A.03 for emergency planning procedures for storing and handling hazardous substances.**

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. This can include written agreements, memorandum for record, telephone conversation

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logs, etc. The emergency services provider should be offered an on-site orientation of the project and associated hazards.)

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 be limited to rescue and escape capability.

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 conspicuously 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. This means of communication could include a cellular phone, two-way radios, hard-line telephones or other acceptable means. The selected communication must be readily available (easily within the immediate reach) of the employee and must be tested prior to the start of work to verify that it effectively operates in the area/environment. An employee check-in/check-out communication procedure shall be developed to assure employee safety.

01.F EMERGENCY RECOVERY OPERATIONS.

01.F.01 In addition to the other pertinent parts of this manual, Civil Emergency Recovery Operations shall be conducted in accordance with Appendix B for both USACE and Contractor activities.