

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 is 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 as well as English, on site when work is being performed, to interpret and translate as needed.

01.A.06 The Contractor shall erect and maintain a safety and health 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 safety and health information:

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- a. A map denoting the route to the nearest emergency care facility;
- b. Emergency phone numbers;
- c. A copy of the most up-to-date Accident Prevention Plan (APP) shall be mounted on or adjacent to the bulletin board, or a notice on the bulletin board shall state the location of the APP. The location of the APP shall be accessible on the site by all workers;
- d. A copy of the current Activity Hazard Analysis/analyses (AHA) shall be mounted on or adjacent to the bulletin board, or a notice on the bulletin board should state the location of the AHAs. The location of the AHAs shall be accessible on the site by all workers;
- e. The Occupational Safety and Health Administration (OSHA) Form 300A, Summary of Work Related Injuries and Illnesses, shall be 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 or adjacent to the bulletin board, which shall be accessible on the site by all workers;
- f. A copy of the Safety and Occupational Health deficiency tracking log shall be mounted on or be 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.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), in accordance with the Safety and Occupational Health Reference Document contained in the USACE Business Manual, shall ensure that a safety and

occupational health plan is developed for funded projects and incorporated into each Project Management Plan (PMP)/Program Management Plan (PrgMP). The PM shall collaborate with the customer on project safety goals and objectives and subsequently communicate these through the PMP/PrgMP safety and occupational health plan and Project Delivery Team (PDT) meetings.

01.A.08 USACE PDT shall develop the safety and occupational health plan to be incorporated in the PMP and is responsible for assuring that safety and occupational health requirements are properly addressed and executed throughout the life cycle of each project.

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

b. Unified Facilities Guide Specification (UFGS) for Safety and Health (currently 01 35 26) shall be used in all USACE contract work and those contracts administered on behalf of the USACE under the provisions of FAR Clause 52.236-13.

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).

01.A.09 For USACE activities where USACE employees are engaged in functions other than routine office or administrative duties, a project safety and health 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 Safety

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and Occupational Health Office (SOHO) agree on the benefit of such a program for 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.

c. For Hazardous Waste Operations and Emergency Response (HAZWOPER) sites, refer to Section 28 for Site Safety and Health Plan (SSHP) guidance.

01.A.10 A position hazard analysis (PHA) shall be prepared, updated as necessary, documented by the supervisor, and reviewed by the command's SOHO for 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 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 version of a PHA may be found on the HQUSACE Safety Office Website.**

a. The GDA, using the advice of 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 should draw upon the knowledge and experience of employees in that position in addition to the SOHO.

c. A complete PHA document shall indicate that the hazards, control mechanisms, Personal Protective Equipment (PPE) and training required for the position were discussed with the employee, and 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 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 shall be reviewed and found acceptable by the GDA.

a. The APP shall contain appropriate appendices (for example, 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).

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

c. APPs shall be developed and submitted by the Contractor in the format 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 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. > **See Appendix A.**

d. For limited scope supply, service and R&D contracts, the Contracting Officer and local SOHO may authorize an abbreviated APP. > See Appendix A, paragraph 11 for details.

e. The APP shall be developed by Qualified personnel and then signed in accordance with Appendix A, paragraph 1. The Contractor shall be responsible for documenting the Qualified person's credentials.

f. For contract operations, the Contractor's APP shall be job-specific and should include work to be performed by subcontractors. In addition, the APP should state measures to

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be taken by the Contractor to control hazards associated with materials, services, or equipment provided by suppliers.

g. Updates to the APP shall be reviewed and approved by the GDA.

FIGURE 1-1

POSITION HAZARD ANALYSIS (PHA)

POSITION HAZARD ANALYSIS (PHA) FOR USACE EMPLOYEE		
NAME: (Print - Last, First, MI): _____		Prepared by: (Print Name – Last, First, MI): _____
JOB SERIES: _____		Reviewed by (SSHO): _____
JOB TITLE: _____		
JOB NUMBER (SF52): _____		
Date (mo) _ _ (day) _ _ (year) _ _ _ _		
COMMAND NAME & ORGANIZATION CODE: _____		
PRIMARY DUTY LOCATION: _____		
Clearances Required		
EM OPS Team <input type="checkbox"/> First Aid/CPR <input type="checkbox"/> Respirator <input type="checkbox"/> CDL Crane Operator <input type="checkbox"/> Diver <input type="checkbox"/> HTRW <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.
6.	6.	6.
7.	7.	7.

*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 (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.	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 ensure 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 shelf-life, how to properly don, doff, adjust, and wear required PPE, and how to properly care for, inspect, maintain, store, and dispose of such equipment. Attached is documentation of the training received, dates of such training, and the subject matter taught.

Supervisor Signature _____ Employee Signature _____

Date ___ / ___ / _____

Date ___ / ___ / _____

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01.A.12 Inspections.

a. The APP or the USACE project safety and health plan shall provide for frequent safety inspections/audits, conducted by a Competent Person, 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) 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 must also be conducted and documented in inspection reports.

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 shall be posted on the project safety 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).

01.A.13 Contractor-Required AHA. 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. An electronic version AHA may be found on the HQUSACE Safety Office Website.**

a. AHAs shall define the activities being performed and identify the work sequences, the specific anticipated hazards, 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 shall 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 (for example, excavations, scaffolding, fall protection, other activities as specified by OSHA and this manual) shall be identified and included in the AHA. Proof of their competency/qualification shall be submitted to the GDA for acceptance prior to the start of that work activity.

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

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(1) If more than one Competent/Qualified Person is used on the AHA activity, a list of names shall be submitted as an attachment to the AHA. Those listed must 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 or she has reviewed the AHA and is familiar with current site safety issues.

FIGURE 1-2

ACTIVITY HAZARD ANALYSIS (AHA)

Date Prepared: _____

Project Location: _____

Prepared By: _____

Job/Task: _____

Reviewed By: _____

<u>JOB STEPS</u>	<u>HAZARDS</u>	<u>CONTROLS</u>	<u>RAC</u>
<u>Identify the principal steps involved and the sequence of work activities.</u>	<u>Analyze each principal step for potential hazards.</u>	<u>Develop specific controls for potential hazards.</u>	<u>Assign Appropriate Risk Assessment Code (RAC) per AR 385-10.</u>
<u>EQUIPMENT</u>	<u>TRAINING</u>	<u>INSPECTIONS</u>	
<u>List equipment to be used in the work activity.</u>	<u>List training requirements.</u>	<u>List inspection requirements.</u>	

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

- a. The supervisor, utilizing the recommendations of the SOHO, should determine the need for an AHA for each activity within his or her area of responsibility.
- b. In developing the AHA for a particular activity, USACE supervisors should draw upon the knowledge and experience of employees in that activity as well as the SOHO.
- c. The Government uses this process to assess and manage the risks associated with the project.

01.A.15 To ensure 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 a designated representative shall 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 Site Safety and Health Officer (SSHO). The Contractor shall employ a minimum of one Competent Person at each project site to function as the SSHO, depending on job complexity, size and any other pertinent factors.

- a. The SSHO shall be a full-time responsibility unless specified differently in the contract. The SSHO shall report to a senior project (or corporate) official.

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b. The SSHO(s), as a minimum, must have completed the 30-hour OSHA Construction safety class or as an equivalent, 30 hours of formal construction safety and health training covering the subjects of the OSHA 30-hour course (see Appendix A, paragraph 4.b) applicable to the work to be performed and given by qualified instructors. > ***The SSHO is also required to have five (5) years of construction industry safety experience or three (3) years if he possesses a Certified Safety Professional (CSP) or safety and health degree.***

c. An SSHO (or a Designated Representative, as identified in the APP/AHA and as deemed appropriate/equivalent to SSHO by the GDA) shall be on-site at all times when work is being performed.

d. The SSHO shall be responsible for managing, implementing and enforcing the Contractor's Safety and Health Program in accordance with the accepted APP.

e. SSHOs shall maintain this competency through 24 hours of formal safety and health related coursework every four (4) years.

> ***For limited service contracts, for example, mowing (only), park attendants, rest room cleaning, the Contracting Officer and Safety Office may modify SSHO requirements and waive the more stringent elements of this section.***
> ***See Appendix A, paragraphs 4 and 11.***

> ***For complex or high hazard projects, the SSHO shall have a minimum of ten (10) years of safety-related work with at least five (5) years experience on similar type projects.***

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

01.A.19 Collateral Duty Safety Personnel. USACE organizations may be augmented by Collateral Duty (Army civilian) safety personnel. Collateral duty safety personnel shall:

- a. Be appointed through written orders;
- b. Have met the requirements of 29 CFR 1960.58, training of collateral duty safety and health personnel and committee members, before reporting to duty;
- c. Give their safety duties proper priority;
- d. Report directly to their unit manager concerning safety-related matters;
- e. Coordinate activities with their supporting SOHO.

01.B INDOCTRINATION AND TRAINING

01.B.01 A Qualified Person(s) 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 with safety and health indoctrination prior to the start of work as well as continuous safety and health 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 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 the maintenance of safe and healthful work environments;
- b. General safety and health policies and procedures and pertinent provisions of this manual;

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- 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 PHAs and/or AHAs;
- g. Specific training as required by this manual.

01.B.04 All visitors to USACE Government- or Contractor-controlled sites presenting hazardous conditions shall be briefed by a Qualified Person on the hazards to be expected on the site and the safety and health controls required (for example, hard hat, foot protection, etc.). The person in charge of the site shall ensure that all visitors entering the site are properly protected and are wearing or provided with the appropriate PPE. Site personnel should maintain a stock of common PPE, such as hard hats, eye protection, ear plugs, and reflective vests, for use by visitors. The site manager shall provide an escort for all visitors while on site. A visitor sign-in log shall 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 for all workers by supervisors or foremen.
- 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, medically, and emotionally (ready, willing and able) 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 OSHA guidelines, Department of Transportation (DOT) regulations, and 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 mind-altering substances.

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

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.C.04 Operators are not be permitted to operate beyond the following limits:

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 twelve (12) hours of duty time in any 24-hour period, including time worked at another occupation. A minimum of eight (8) consecutive hours shall 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 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 twelve (12) hours during any 24-hour period. A minimum of eight (8) consecutive hours shall be provided for rest in each 24-hour period.

01.C.05 Compressed-air workers.

a. No person is 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 ten (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 one (1) year, that person shall be reexamined by a physician to determine if he/she remains physically qualified to engage in compressed-air work.

d. All other requirements for compressed-air work should be as specified in the contract technical provisions.

01.D ACCIDENT REPORTING AND RECORDKEEPING

01.D.01 All accidents occurring incidentally to an operation, project, or facility for which this manual is applicable shall 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 as soon as reasonably possible but no later than 24 hours.

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

01.D.02 An accident that has, or appears to have, any of the consequences listed below shall be immediately reported to the GDA. The following accidents shall be investigated in depth to identify all causes and to recommend hazard control measures. The GDA shall immediately notify the SOHO of all serious accidents and subsequently follow-up with official accident reports as prescribed by regulation. **Contractors are responsible for**

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notifying OSHA when one or more of their employees are seriously injured.

- a. Fatal injury/illness;
- b. Permanent totally disabling injury/illness;
- c. Permanent partial disabling injury/illness;
- d. Three or more persons hospitalized as inpatients as a result of a single occurrence;
- e. \$200,000 or greater accidental property damage or damage in an amount specified by USACE in current accident reporting regulations
- f. Arc Flash Incident/Accident; or
- g. USACE aircraft destroyed or missing.

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 shall 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 within 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, at 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 have been taken to reduce or eliminate such exposures.

c. Submit project work hours to the COR monthly in the format 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.

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.

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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 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. This means of communication could include a cellular phone, two-way radios, hard-line telephones or other acceptable means. 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. An employee check-in/check-out communication procedure shall be developed to ensure employee safety.

01.F EMERGENCY OPERATIONS.

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