

DEPARTMENT OF THE ARMY  
Corps of Engineers, Omaha District  
106 S. 15<sup>th</sup> Street  
Omaha, Nebraska 68102-1618

OM 385-1-1

CENWO-SO

Memorandum  
No. 385-1-1

1 November 2002

Safety  
SAFETY AND OCCUPATIONAL HEALTH PROGRAM

**History:** This memorandum supersedes the Omaha District's DM 385-1-1 dated 1 Nov 97.

**Summary:** This memorandum establishes the Omaha District's safety and occupational health program.

1. References: See Appendix A.

2. Duties and Responsibilities.

a. Commander. The Commander's personal safety policy is published by memorandum.

b. Supervisors.

(1) Government personnel in charge of any phase of an Omaha District activity are directly responsible for the enforcement of safety policies.

(2) Safety performance will be incorporated into performance evaluations of all employees.

(3) Supervisors will indoctrinate all new employees and ensure continuous training of applicable safety requirements and operating procedures. Mandatory safety training requirements for new employees are located on the District Safety home page.

c. All employees will:

(1) Observe safe work practices as established in applicable USACE, Division, District regulations, and supervisory instructions.

(2) Promptly eliminate or report to supervisors any known unsafe condition or practice.

(3) Report all accidents, no matter how minor, to their supervisor or other persons of authority.

d. Contracting Division will:

(1) Review all purchase orders, equipment rental and or architect-engineer/service contracts to ensure appropriate accident provisions are included.

(2) Route any questionable items through the Safety and Occupational Health Office (SOHO) for review prior to purchase.

e. Engineering Division will:

(1) Ensure applicable safety design criteria and national safety and health standards are incorporated into all designs prior to issuance of invitation for bid or requests for proposals.

(2) Consult with Corps of Engineers (CE) construction representatives concerning the adequacy of design and safety features.

(3) Coordinate the review of plans and specifications with the SOHO.

f. Construction Division will:

(1) Ensure accident prevention programs are applied at all construction locations. Include safety requirements when field surveys and inspections are conducted.

(2) Consult with design engineers concerning the adequacy of design and safety features of all projects.

(3) Provide for required safety training at all projects and operating locations.

(4) Ensure employees are provided with such items of personal protection as the hazard of the work dictates. Ensure supervisory personnel enforce the use of personal protective equipment (PPE).

g. Operations Division will:

(1) Assign responsibilities and authority to supervisory personnel within the division.

(2) Provide for required safety training at all projects and operating locations.

(3) Ensure employees are provided with such items of personal protection as the hazard of the work dictates. Ensure supervisory personnel enforce the use of PPE.

h. Civilian Personnel Advisory Center (CPAC) will:

(1) Ensure new employees receive initial indoctrination regarding the safety and health requirements of the District.

(2) Keep the SOHO advised of new or revised policies and procedures concerning compensation, medical treatment, and other matters impacting safety and occupational health.

(3) Ensure CA Forms 1 and 2, Federal Employee's Notice of Traumatic Injury and Illness and Claim for Continuation of Pay/Compensation, respectively, are coordinated through the SOHO.

(4) Ensure appropriate pre-employment physical examinations are successfully completed.

(5) Ensure occupations requiring job-related examinations are identified.

i. Logistics Management Office will:

(1) Report safety-related problems within the Omaha-based buildings to General Services Administration (GSA) and follow-up to ensure hazards are corrected.

(2) Manage the Omaha District's vehicle fleet. Establish accident notification procedures for vehicle users. Ensure vehicles are maintained and dispatched without safety deficiencies.

(3) Establish licensing procedures for vehicles and mobile equipment.

(4) Identify physical qualifications required for vehicle and mobile equipment operators.

j. Area Engineers and Operations/Lake Managers will:

(1) Keep current on the accident experience of all work under their supervision. Review all accident reports to ensure primary causes are identified and positive corrective action is taken.

(2) Assign responsibilities and authority to supervisory personnel.

(3) Ensure supervisory personnel promote the safety program and take necessary steps to correct deficiencies.

(4) Ensure only safe equipment and facilities are placed in service.

(5) Provide and enforce the use of PPE.

(6) Enforce safety requirements on the job and ensure that all accident reports are promptly and properly submitted.

(7) Review contractor's written safety programs and site-specific safety plans.

(8) Ensure an activity hazard analysis (AHA) is prepared and reviewed for each major phase of work on contractor and/or Government operation.

k. Resident Engineers/Area Engineers will:

(1) Hold monthly safety meetings with contractor representatives.

(2) Ensure Government representatives include comments concerning their accident prevention activities in quality assurance reports on construction activities.

(3) Provide orientation in the control of work hazards and training for all new employees.

(4) Provide and enforce the use of PPE.

(5) Include safety performance in annual performance appraisals.

(6) Keep current on the accident experience at work sites under their control. Review reports of all accidents to ensure primary causes are identified and positive corrective action is taken.

l. Program and Project Management will:

(1) Keep current on the accident experience of all work under their supervision. Review and report all accidents providing final report to the SOHO.

(2) Maintain a record and report to the SOHO by the fifth working day of the month for all man-hours worked (Government and contractor) for the prior month.

- (3) Ensure safety requirements are enforced on the job and that all employees are wearing the appropriate PPE.
- (4) Coordinate with the SOHO on all matters pertaining to safety and occupational health (SOH).
- (5) Assist in the preparation and review of corrective actions, including analysis of cost effectiveness for SOH deficiencies.
- (6) Develop and manage the SOH program for the District to include worker safety, occupational and environmental health, and contractor and public safety.
- (7) Ensure plans and specifications are reviewed for SOH criteria.
- (8) Maintain accident and reporting statistics. Provide advice to District regarding any SOH matter.
- (9) Hold managers accountable for employee safety.
- (10) Ensure employees have adequate training to perform their jobs safely.

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KURT F. UBBELOHDE  
Colonel, EN  
Commanding

DISTRIBUTION:  
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## APPENDIX A

### REFERENCES

1. 5 CFR 339, Office of Personnel Management, Medical Qualification Determinations.
2. 10 CFR 0 through 171, U.S. Nuclear Regulatory Commission Regulations.
3. 29 CFR 1910, Department of Labor, Occupational Safety and Health Administration, Occupational Safety and Health Standards.
4. 29 CFR 1926, Department of Labor, Occupational Safety and Health Administration, Safety and Health Regulations for Construction.
5. 29 CFR 1960, Department of Labor, Occupational Safety and Health Administration, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters.
6. 49 CFR 171 through 199, Department of Transportation, Hazardous Materials Regulations.
7. Executive Order 12196, Occupational Safety and Health Programs for Federal Employees.
8. DoD Instruction 6055.1, Occupational Health Surveillance Manual.
9. AR 11-34, The Army Respiratory Protection Program.
10. AR 15-6, Procedure for Investing Officers and Boards of Officers.
11. AR 40-3, Medical, Dental and Veterinary Care.
12. AR 40-5, Preventive Medicine.
13. AR 95-1, Flight Regulations.
14. AR 385-10 and USACE Sup 1, The Army Safety Program, with USACE Supplement 1.

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15. AR 385-16, System Safety Engineering and Management.
16. AR 385-40, Accident Reporting and Records, with USACE Supplement 1.
17. AR 385-55 and USACE Sup 1, Prevention of Motor Vehicle Accidents, with USACE Supplement 1.
18. AR 600-55, The Army Driver and Operator Standardization Program.
19. DA Pam 40-501, Hearing Conservation Program.
20. ER 385-1-6, Standard Color and Markings for Hard Hats, 12 May 89.
21. ER 385-1-31, The Control of Hazardous Energy, 1 Aug 94.
22. ER 385-1-40, Occupational Health Program, 28 Jul 80.
23. ER 385-1-85, Safety and Occupational Health Program Management Evaluation, 31 Jul 91.
24. ER 385-1-86, Government Employee Diving Operations, 26 Jul 94.
25. ER 385-1-89, Hearing Conservation Program, 19 Jan 83.
26. ER 385-1-90, Respiratory Protection Program, 28 Mar 83.
27. ER 385-1-91, Training, Testing and Licensing of Boat Operators, 30 Sep 94.
28. ER 385-1-92, Safety and Occupational Health Document Requirements for Hazardous, Toxic, and Radioactive Waste (HTRW) and Ordnance and Explosive Waste (OEW) Activities, 1 Sep 00.
29. ER 385-1-96, USACE Ergonomics Program Policy, 01 Jun 00
30. ER 385-1-98, Safety and Occupational Health – FUSRAP Accident Reporting Policy, 20 Dec 01
31. ER 1130-2-500, Partners and Support (Work Management Policies).

32. ER 1130-2-540, Environmental Stewardship Operations and Maintenance Policies.
33. EM 385-1-1, U.S. Army Corps of Engineers Safety and Health Requirements Manual.
34. EP 385-1-40, Boards of Investigation.
35. EP 385-1-58, Medical Surveillance Handbook.
36. EP 415-1-260, Resident Engineer's Management Guide.
37. TB MED 503, Respiratory Protection Program.
38. TB MED 503, The Army Industrial Hygiene Program.
39. TB MED 506, Occupational Vision.
40. TB MED 524, Control of Hazards to Health from Laser Radiation.
41. Occupational Health Guidelines for Chemical Hazards, National Institute for Occupational Safety and Health (NIOSH) and Occupational Safety and Health Administration (OSHA), Department of Health & Human Services (NIOSH) Publication No 81-123, January 1981.
42. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH, OSHA, U.S. Coast Guard (USCG), and Environmental Protection Agency (EPA), October 1985.
43. USACE Chemical Hygiene Plan, CESO-I memorandum dated 19 July 1991, subject: OSHA Required Chemical Hygiene Plan.
44. NAVSEA 0994-LP-001-9010 and 0920, U.S. NAVY Diving Manuals.
45. National Oceanographic and Atmospheric Administration, NOAA Diving Manual, October 1991.
46. NWDR, 385-1-1, Safety and Occupational Health (SOH) Program, 1 February 2001.
47. ANSI Z87.1, Occupational and Industrial Eye and Face Protection

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48. ANSI Z88.2, Practices of Respiratory Protection.
49. ANSI Z385.1, Emergency Eye Wash and Shower Equipment.
50. Public Law, Occupational Safety and Health Act of 1970.
51. FAR 52-236, Stop Work Authority

## APPENDIX A, ANNEX A

### DEFINITIONS

Abatement Plan. An orderly plan for abating known hazards.

Accident. An unplanned event, which may result in death, injury, or illness to personnel, or damage to property.

Activity Hazard Analysis (AHA). A written plan that identifies the hazards for each activity performed in that phase and the procedures and safeguards to eliminate the hazards or reduce the risk to an acceptable level.

Authorized Entrant. An employee who is authorized by the confined space coordinator to enter a permit required confined space.

Competent Person. One who can identify existing and predictable hazards in the working environment or working conditions that are dangerous to personnel and who has authorization to take prompt corrective measures to eliminate them.

Confined Space. A space that is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit (e.g., tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and is not designed for continuous employee occupancy.

Days Restricted Duty. These are cases that are more serious than first aid but do not result in lost days away from work. Days restricted duty are days that the employee was able to work, but not at full capacity.

Designated Authority. The senior person in charge or his/her appointed representative for the operation being considered.

Energized. Connected to an energy source or containing residual or stored energy.

Energy Source. Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

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Hazard Severity. An assessment of the worst potential consequence defined by degree of injury, occupational injury, or property damage.

Hot Work Permit. The written authorization to perform operations that could provide a source of ignition; e.g., riveting, welding, cutting, burning, or welding.

Immediately Dangerous to Life or Health (IDLH). Any condition that poses an immediate threat of loss of life; may result in irreversible or immediate serious injury or severe health effects.

Injury. Traumatic bodily harm such as a cut, fracture, amputation, stress, or strain.

Lockout. The placement of a lockout device on an energy-isolating device, to ensure equipment being controlled cannot be operated until the lockout device is removed.

Lost Time Accident. A nonfatal traumatic injury which causes any loss of time from work beyond the day or shift in which it occurred or a nonfatal nontraumatic illness/disease that causes disability at any time.

Lost Workday Case. Lost workdays are days away from work because of occupational injury or illness. This does not include the day of the injury or the day the employee returns to work, holidays, weekends, or other nonworking days.

Material Safety Data Sheet (MSDS). Information about a specific chemical or product which provides information about its hazards, flammability, reactivity, PPE, etc., that is furnished by the manufacturer.

Occupational Illness. Any abnormal condition or disorder, other than one resulting from a traumatic injury, caused by exposure to factors associated with the occupation environment such as dust, vapors, fumes, caustics, acid, noise, etc.

Hazard Analysis. A documented process by which the duties (or tasks) of an employee's job position are outlined, the actual or potential hazards of each duty are identified, and measures for the elimination or control of those hazards are developed.

Radiation Protection Officer (RPO). An individual designated by the Commanding Officer to administer the District Radiation Protection Program.

Risk Assessment Code (RAC). An evaluation of a risk in terms of loss should a hazard result in an accident compared with the probability of an accident from accepting the risk.

Safety Management Evaluation. An annual review of safety program requirements of field project, lake, and area offices and District elements.

Tagout. The placement of a tag on an energy-isolating device to indicate that the energy and the equipment being controlled may NOT be operated until the tag is removed.

APPENDIX B

ACCIDENT INVESTIGATION AND REPORTING

**IMMEDIATE NOTIFICATION TO DISTRICT COMMANDER**

Incidents that should be reported directly to the Commander by telephone include all Class A and Class B accidents and accidents that may generate inquiries at the District, Division, or HQUSACE.

**IMMEDIATE NOTIFICATION TO SOHO**

1. Fatalities (Government and contractor).
2. Lost workday cases for very serious injury (may result in permanent disability) or multiple injuries (three or more) involving Government and/or contractor employees.
3. Property or fire damage if over \$200,000 (Government and contractor).
4. Any unusual incident that might raise questions at the HQUSACE level or generate inquiries from the Post or Base Commander or create substantial public interest.

TELEPHONE

Duty hours ----- (402) 221-4051

After Duty hours  
and weekends ----- (402) 221-4051 (answering service  
will respond)

## ACCIDENT INVESTIGATION AND REPORTING

1. Purpose. To establish procedures for investigating and reporting accidents occurring on Government or contractor operations.

2. Applicability.

a. Area engineers, project engineers, operations managers, and chiefs of Omaha District office elements are responsible for accident investigation and reporting. These responsibilities include the preparation and submission of accident reports to the District SOHO.

b. Individuals who are responsible for the preparation and review of the accident report are responsible for ensuring that adequate corrective measures are taken.

c. Contractors will be required to complete an acceptable ENG Form 3394, USACE Accident Investigation Report.

3. Procedures.

a. All accidents must be investigated promptly and reported in accordance with AR 385-40, as supplemented

b. Accident investigations are recorded for accident prevention purposes only. Findings and conclusions will not be used as a basis for determining legal liability or charges for negligence.

c. Persons injured or involved in the accident will not prepare or sign accident reports.

d. Who investigates accidents is determined by the first echelon of supervision not supervising the operation. Investigator(s) will be appointed according to the severity of the accident. For example, a Class C accident may be investigated by one properly appointed individual, while a Class A or B accident will require investigation and reporting by a properly appointed board.

e. The results of accident investigations may not be released without prior approval of the Department of the Army (DA) or HQUSACE. All requests for the release of accident reports will be forwarded to the District SOHO.

f. Investigation of motor vehicle accidents will be coordinated with SOHO and Logistics Management. Whenever military or civil police investigation reports will suffice, these reports will be used as the basis for the motor vehicle accident report and a copy will be submitted with the SF Form 91, Operator's Report of Motor Vehicle Accident, and ENG Form 3394, USACE Accident Investigation Report.

g. Accident Investigation Boards.

(1) A Board of Investigation will be appointed to investigate all Class A and B accidents, Government or contractor. Commanders may appoint a board of investigation for any accident he/she feels needs more extensive investigation.

(2) The report of a Board will be filed as enclosure 1 to the ENG Form 3394. The Board will be appointed by the Commander and will be composed of appropriate technical and management specialists. A safety professional will be appointed as technical advisor.

(3) Board procedures, board reports, and timelines are outlined in EP 385-1-40.

4. Quick Reference Charts. Quick reference charts are located in Appendix B, Annexes A and B.

5. Safety Exposure Data. Submit to SOHO by the fifth working day of each month, the contractor man-hours worked for the prior month. This information is due from all project and area offices, as well as any local District offices overseeing contractor man-hours.

APPENDIX B, ANNEX A  
QUICK REFERENCE CHART  
FOR REPORTING GOVERNMENT EMPLOYEE ACCIDENTS

Accident Class	Notification of Accident (First Report)	ENG Form 3394	OSHA Log	Notify OSHA
A	Immediately (Note 3)	Board Report (25 Days) (Note 1)	Yes	Yes
B	Immediately (Note 3)	Board Report (25 Days) (Note 1)	Yes	Yes
C	Immediately (Note 2)	7 Days	Yes	No
D	Immediately (Note 2)	7 Days	No	No
Medical Treatment	Not Required	Yes	Yes	No

NOTE 1: Class A and B accidents require investigation by a board and the ENG Form 3394 will be made a part of that report.

NOTE 2: Use Notification of Accident (First Report) – Refer to Form Flow NWO Form 1880

NOTE 3: Immediately means as soon as possible after learning of the incident but no later than 8 hours. Units will have established notification procedures to cover 24 hours a day including weekends and holidays.

Note 4: All public fatalities where the Corps has Title 36 jurisdiction will be reported immediately to SOHO.

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A = \$1M or more and/or fatality or permanent total disability.

B = \$200K or more, but less than \$1M and permanent partial disability and/or three or more people are hospitalized.

C = \$20K or more, but less than \$200K and/or nonfatal injury resulting in loss of time from work beyond day/shift when injury occurred. Nonfatal illness/disability causes loss of time from work.

D = Property Damage \$2K or more, but less than \$20K.

APPENDIX B, ANNEX B

QUICK REFERENCE CHART  
FOR REPORTING CONTRACTOR ACCIDENTS

Accident Class	Notification of Accident (First Report) (NWO Form 1880)	USACE ENG Form 3394	Notify OSHA
A	Immediately (Note 2)	Board Report (25 Days) (Note 3)	Yes
B	Immediately (Note 2)	Board Report (25 Days) (Note 3)	Yes
C	Immediately (Note 1)	7 Days	No
D	Immediately (Note 1)	7 Days	No
Medical Treatment (no-lost workdays)	Not Required	No	No

NOTE 1: Use Notification of Accident (First Report) – Flow Form NWO 1880 (sample provided at Appendix B, annex C).

NOTE 2: Immediately means as soon as possible after learning of the incident but no later than eight (8) hours. Units will have established notification procedures to cover 24 hours a day including weekends and holidays.

NOTE 3: Class A and B accidents require investigation by a board and the ENG Form 3394 will be made a part of that report.

A = \$1M or more and/or fatality or permanent total disability

B = \$200K or more, but less than \$1M and or permanent partial disability and/or three or more people are hospitalized.

C = \$20K or more, but less than \$200K and/or nonfatal injury resulting in loss of workday - Nonfatal illness/disability causes loss of workdays.

D = Property Damage \$2K or more, but less than \$20K.



## APPENDIX C

### ACCIDENT PREVENTION ON CONTRACT WORK

1. Purpose. This appendix states responsibilities for the enforcement of accident prevention measures on contract work managed by the Omaha District. The accident prevention provisions shall be given the same emphasis as other contract provisions for control of work. The contractor shall be required to comply with established safety requirements. The prime contractor shall assume responsibility for compliance by all their subcontractors.
2. Applicability. This appendix is applicable to all Omaha District elements that oversee contractor activities.
3. References.
  - a. EM 385-1-1
  - b. Title 29, CFR, Part 1926
  - c. FAR 52.236
  - d. Appendix A
4. Specifications.
  - a. In addition to EM 385-1-1, Safety and Health Requirements Manual, the specifications for all contract work will include other requirements necessary to ensure a high standard of safety performance by the contractor.
  - b. This requirement applies equally to construction contractors and service contractors. This applies to most service contracts, however, not small purchase orders.
5. Contractor's Accident Prevention Plan.
  - a. For large construction contracts, the Commander will send a letter to each contractor following a contract award to ensure cooperation, coordination, and an understanding in the application of the accident prevention requirements of the contract. The letter will reference the requirements for a written accident prevention plan, AHAs and pre-work conference.

b. The contractor's written accident prevention plan will be carefully reviewed by the Government official in charge of the work. The plan can either be accepted or returned to the contractor at that level. When accepted, one copy will be forwarded through Construction Division to Contracting Division for inclusion in the contract files.

c. Documentation will show the plan has been accepted and who took the action. The plan will include all the elements of Appendix A, EM 385-1-1.

d. An accident prevention plan will be included in all contract specifications that require a site safety and health plan (SSHP). When an SSHP is required, a separate accident prevention plan submittal will not be required.

#### 6. Pre-Construction Safety Meeting.

a. The area/project office with responsibility to administer the contract will schedule and conduct the pre-construction safety meeting. Normally, the pre-construction meeting should deal with all phases of the work. For the safety portion to be successful, three factors should be included:

(1) The written accident prevention plan should have been previously submitted by the contractor and reviewed and accepted by the Corps representatives.

(2) Contractor personnel who will provide on-site supervision of the job will attend the meeting.

(3) If the work will take place on a Government installation, safety representatives from the installation will attend the meeting.

b. The following items are recommended subjects for discussion:

(1) Discuss any questionable areas of the written accident prevention plan.

(2) Discuss any unusual hazards that will be found during construction.

(3) Ensure the contractor understands the requirements for an AHA.

(4) Ensure installation safety personnel understand what their authority and responsibilities are in regard to contractor operations.

(5) Clearly define the areas of responsibility and authority of USACE representatives to enforce safety.

7. Responsibility of Government Employees Assigned to the Project. Whenever any Government employee observes that a condition or work situation is creating a risk of life or limb (imminent danger situation), the employee will immediately take the following actions:

a. Direct contractor's representatives to immediately remove workers from the area of danger and to cease dangerous practice.

b. If the contractor's representative is not at the location of the dangerous condition, the employee will direct the workers to remove themselves from the dangerous location and cease the hazardous operation.

c. If the contractor refuses to comply with the above actions, the Government employee should immediately request the contracting officer's representative to issue a written "stop work order" in accordance with provisions of the contract.

8. Stop Work Order. If all attempts to secure voluntary compliance with safety requirements are not successful, the contracting officer's representative may issue a "stop work order." The order applies only to that portion of the work that is affected by the actions or lack of actions by the contractor. All of the facts of the proceedings must be documented in writing. The contractor shall be informed in writing of the extent of the stoppage of work, the date and hour work has stopped, the reason for the action, and the conditions under which work may proceed again.

9. Quality Assurance Reports. Each quality assurance report will contain a written record of observations, the orders issued, and the action taken on accident prevention matters.

10. Activity Hazard Analysis.

a. An AHA will be developed at the beginning of any major phase of construction to review the specific hazards anticipated and the measures planned to eliminate them.

b. The AHA will be prepared and accepted at the field office level. AHAs will be made available for review during safety surveys of the respective projects. AHAs will be reviewed with employees actually performing the work as the job progresses (tool box safety meetings).

11. Employee Conduct. When a contractor's employee endangers himself/herself or others by flagrant disregard of safety and health regulations, the contractor will be requested to discharge the offender in accordance with the contract clauses entitled "Material and Workmanship."

12. Department of Labor (DOL) Visits. When a DOL or state compliance officer of the Occupational Safety and Health Administration (OSHA) requests entrance to the contractor work-site, this is a matter between the contractor and DOL.

a. The CE representative may elect to accompany the contractor representative and the compliance officer.

b. In order to keep track of the impact of OSHA inspections of contractors, the District SOHO will be advised immediately of any DOL inspections or investigations and the results. The CE representative should notify the SOHO, by phone, when notice of an impending OSHA inspection or investigation is received or an inspector shows up at the site without prior notice. Written reports or citations will be obtained by the CE representative and forwarded to the District SOHO. The reports are required at HQUSACE within 24 hours of the inspection.

APPENDIX D  
CONFINED SPACE PROCEDURES

1. Purpose. This appendix emphasizes the procedures for safe entry and work within confined spaces.

2. Applicability. This appendix applies to all elements of the Omaha District where confined spaces are located and employee entry is possible.

3. References.

a. Title 29, CFR, Part 1910

b. Title 29, CFR, Part 1926

c. EM 385-1-1

d. Appendix A

4. Responsibilities.

a. Each activity, USACE, USACE contractor, and USACE facility shall maintain a written permit-required confined space program. All the required elements of the written program are outlined in Table b-1, Permit Required Confined Space program elements.

b. Area /resident/project engineers and district/division and branch chiefs will:

(1) Administer the confined space program within their area of responsibility.

(2) Maintain a current inventory of confined spaces.

(3) Ensure all personnel working in or around confined spaces are protected from hazards and that they follow the requirements of the confined space permit system.

(4) Appoint a Confined Space Coordinator (CSC) to oversee the confined space program. The CSC is appointed to ensure each area/project has a single point-of-contact for confined space entry issues. His/her appointment is by no means meant to supersede the chain of command or relieve supervisors of their responsibilities. Ensure that the CSC receives adequate training.

c. Supervisors.

(1) Ensure only qualified and adequately trained employees are assigned tasks as entrants or attendants for permit-required confined space entry. The SOHO and the Resource Management Office will provide assistance in obtaining training.

(2) Only authorized entrants and attendants who have been medically evaluated will be allowed to work in confined space. They must have the ability to physically remove incapacitated personnel from the confined space during an emergency. They must have the ability to wear PPE, to include respirators.

(3) Ensure either an in-house rescue team or outside rescue team will be able to respond to a request for rescue service.

(4) Ensure proper equipment is provided and maintained if confined space entry is authorized.

(5) Do not allow entry into a permit-required confined space without an approved permit.

(6) Ensure contractors are provided with all available information on hazards in or around a permit-required confined space. Include safety rules and emergency procedures the contractor must be aware of to protect his/her employees.

d. SOHO will:

(1) Implement and monitor the District confined space program.

(2) Evaluate and inventory confined spaces, as requested.

(3) Provide training or assistance in obtaining training for CSC, supervisors, entrants, and attendants.

(4) Provide advice in the purchase, use, and maintenance of equipment including testing, monitoring, communication, and PPE.

(5) Provide technical assistance.

e. Other Duties. Duties of the following personnel are outlined in EM 385-1-1.

- (1) Authorized Entrant
- (2) Attendant
- (3) Entry Supervisor
- (4) Members of Rescue and Emergency Teams

5. Training. Entrants, attendants, and supervisors shall receive specific training as outlined in EM 385-1-1.

6. Definitions. Refer to EM 385-1-1 and Title 29, CFR, Part 1910.146, for definitions.

## APPENDIX E

### DIVING PROCEDURES (CONTRACT)

1. Purpose. This appendix outlines safety procedures to be observed during all Government contracted diving operations within the Omaha District.
2. Applicability. This appendix is applicable to all Omaha District elements who contract for or oversee diving operations.
3. References.
  - a. EM 385-1-1
  - b. Title 29, CFR, Part 1910, Subpart T
  - c. U.S. Navy Diving Manual, Vol I
  - d. Appendix A.
4. Definitions. Definitions are listed in Section 30, EM 385-1-1.
5. General.
  - a. Operations Division will appoint and train a District dive coordinator (DDC) with responsibility for management of all field diving activities.
  - b. The SOHO will appoint and train a safety dive coordinator (SDC) who will have responsibility for oversight of underwater diving activities within the District. The SOHO coordinator will:
    - (1) Review the diving plan, AHA, and accident management plan submitted by the diving contractor.
    - (2) When justified by the underwater dive, be present at the dive site to inspect compliance with the diving plan.
    - (3) Collaborate with other Government employees who monitor diving activities.

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c. Verification of diving team qualifications and experience to include divers, diving supervisor, and tenders and evidence of air purity certification will also be provided to the alternate dive coordinator (ADC) for review prior to commencement of operations. A lack of diver experience or qualifications to perform the tasks stated in the scope of work will be cause for rejection or cessation of operations. A copy of each diver's logbook will be included in this review.

d. All contract diving operations performed for the Omaha District will be performed in accordance with EM 385-1-1, Title 29, CFR, Part 1910 and the U.S. Navy Diving Manual, Vol I. Where a difference exists in the standards, the more stringent shall apply. Where the specifications are more stringent than the regulations or standards, the specifications will apply.

## APPENDIX E, ANNEX A

### NITROX GAS DIVING

1. Purpose. This policy defines responsibilities for underwater diving operations performed with the use of nitrox as a breathing mixture by contract diving personnel for the U.S. Army Corps of Engineers, Omaha District.
2. Applicability. This policy is applicable to all manned diving activities on Omaha District Corps of Engineers property or under the control of state and local governments.
3. Scope. This policy is directed at controlling diving operations using nitrox gas only. Other mixed-gas formulas, such as tri-mix, heliox, etc., are not covered by this policy.
4. References.
  - a. Engineer Manual 386-1-1, Safety and Health Requirements.
  - b. U.S. Navy Diving Manuals
  - c. Code of Federal Regulations, Occupational Safety and Health Standards, 29 CFR 1910. subpart T.
  - d. National Oceanographic and Atmospheric Administration, NOAA Diving Manual.
5. Definition. Nitrox, for the purposes of this policy, is defined as any Oxygen/Nitrogen mixture at a ratio of 21 percent oxygen and 79 percent nitrogen that is found naturally occurring in air.
6. Policy.
  - a. The use of nitrox gas for diving operations has become a routine and acceptable practice to improve over all safety of divers as well as improve the effectiveness of diving operations. While the benefits of using nitrox can be significant, the use of any breathing gas in lieu of naturally occurring air brings with it hazards that must be addressed. Nitrox gas is most effective in shallow water with a maximum depth of 100 feet. It can significantly extend the divers bottom time (time the diver is under the water) depending on the depth used.
  - b. The DDC may elect to implement and enforce more conservative diving requirements depending on conditions and situations. Under no circumstances will the operational

requirements be less than specified in this policy without the specific authorization of the DDC.

7. Requirements.

a. Equipment:

(1) An approved dual-lock recompression chamber must be on-site, pressurized, and fully operational.

(2) Bailout bottles used as a personal emergency air supply shall be charged with the same nitrox mixture as the primary breathing gas.

(3) Secondary or backup air supply must be equivalent to the primary gas mixture.

(4) All equipment supporting the use of nitrox in mixtures greater than 40 percent shall require that all equipment is "oxygen clean."

b. Training.

(1) All personnel, CE, diving contractor, and anyone associated with any diving operation using any nitrox breathing gas shall be trained according to accepted diving industry standards through organizations such as: IANTD, PADI, NAUI, NASDS, SSI, or the equivalent. This must be a minimum of four classroom hours and four hours of on-the-job training at a working dive that is using nitrox gas; this training must cover all aspects of nitrox diving operations. This training must be fully documented by presenting a certificate of completion or a letter from a documented nitrox instructor, certifying the successful completion of the required training. The specific training shall include the following:

- On the job training
- Oxygen partial pressure limits
- Nitrogen-Oxygen breathing mixtures
- Depth/time limits for oxygen during working dives
- Central nervous system and pulmonary oxygen toxicity
- Analysis of mixed gas breathing media
- Mixed gas equipment (open circuit system)
- Mixed gas equivalent air depths formula and tables

- Nitrox decompression tables
- Nitrox residual nitrogen tables
- Nitrox surface interval table

(2) Equivalent air depth (EAD) formula:

$$EAD = (FN_2)(D + 33) - 33.79$$

FN<sub>2</sub> = Decimal equivalent of nitrogen in mixture  
.79 = Decimal equivalent of nitrogen in air  
D = Depth in feet

(3) NOAA nitrox diving table

(4) Maximum partial pressure of oxygen shall not exceed 1.4 act.

c. Gas Supplies.

(1) On-site gas mixing systems that use any form of containerized pure oxygen and or nitrogen for blending shall require all equipment and human resources necessary to conform to the mixed gas diving operations.

(2) All nitrox gas containers shall be certified as to the "O<sub>2</sub>N<sub>2</sub>" mixture by the vendor supplying the gas and be clearly marked by gas mixture percentage on each container.

(3) Each container of nitrox being placed on-line in support of the diving operations, must be tested with an approved oxygen analyzer by the diver or diving supervisor with the ADC and/or SDC present at the dive site to confirm gas mixture prior to use.

(4) All nitrox gases shall be within + / - 1 percent of the certified mixture.

(5) The DDC and ADC shall specifically approve nitrox mixtures that exceed 40 percent prior to use.

## APPENDIX F

### FIRST AID

1. Purpose. This appendix establishes procedures for first aid and/or medical treatment for on-the-job injuries or illness.
2. Applicability. This appendix is applicable to all Omaha District elements.
3. References.
  - a. Title 29, CFR, Part 1910.151
  - b. Title 29, CFR, Part 1926.50
  - c. EM 385-1-1.
  - d. Appendix A
4. Procedures.
  - a. Every injury and illness incurred on the job, regardless of degree of seriousness, will be given prompt attention.
  - b. Installations outside of the immediate Omaha area will prepare a similar plan and ensure employees are familiar with the plan.
5. First Aid Kits.
  - a. Individual pieces of floating plants, drill crew vehicles, survey party vehicles, and other isolated field work units are required to have a 16-unit first aid kit.
  - b. Vehicles regularly utilized by employees working at remote sites and security guard and ranger vehicles will have the required 16-unit first aid kits.
  - c. Standard 16-unit first aid kits will be utilized in accordance with EM 385-1-1.

6. First Aid/CPR Training.

a. First Aid/CPR training is required, but not restricted to the following employees:

- (1) Designated building first aid representatives.
- (2) Disaster team personnel.
- (3) Key personnel engaged in reservoir management.
- (4) Power plant operators.
- (5) Key personnel on pile drivers, dredges, towboats, drill, and survey parties.
- (6) Launch operators.
- (7) Hired labor foremen.
- (8) Rangers.
- (9) Construction representatives.
- (10) Individuals who routinely work alone in remote areas.
- (11) At least one person with each party of two or more working in remote areas.

b. First Aid/CPR trained personnel will hold a current certificate in first aid training from the American Red Cross or other certified sources.

c. Contact either your local Red Cross or the Omaha District's Resource Management Training and Development Branch to make arrangements for training.

d. Automated external defibrillators (AED) at project offices will be properly maintained and in good working condition per manufacturer's specifications. Trained employees will be available to assist with the AED if needed.

APPENDIX G  
HAZARD COMMUNICATION PROGRAM

- 1 Purpose. This appendix establishes the District's hazard communication (HAZCOM) program.
2. Applicability. This appendix applies to all elements of the Omaha District.
3. References.
  - a. Title 29, CFR, Parts 1910.1200 and 1450
  - b. DOD Instruction 6055.1.
  - c. EM 385-1-1
  - d. Appendix A.
4. Definitions. As defined by Title 29, CFR, Parts 1910.1200 and 1450.
5. General. All personnel exposed or potentially exposed to hazardous chemicals or materials will be made aware of the exposure hazard and countermeasures or controls required to protect themselves. Hazardous chemicals or materials may be in either a solid, liquid, or gaseous state.
6. Responsibility.
  - a. The SOHO will:
    - (1) Maintain information on hazardous materials for research and training.
    - (2) Coordinate worker education/training with occupational health and supervisory personnel.
    - (3) Conduct HAZCOM training.
    - (4) Evaluate the HAZCOM program annually.
  - b. Contracting Division will:

(1) Require a material safety data sheet (MSDS) from the contractor or supplier for each hazardous item procured.

(2) Initiate action in accordance with AR 700-141 to incorporate within contracts the requirement to obtain an MSDS from the contractor or supplier.

c. Supervisors will:

(1) Ensure personnel receive adequate training to protect them from the hazards of each chemical or chemical product in their work area.

(2) Ensure hazardous materials containers are properly labeled and stored.

(3) Provide and require the use of appropriate PPE for each operation in their work area.

(4) Ensure MSDS is requested when ordering materials.

(5) Maintain MSDS on all hazardous/toxic material used in his/her shop.

(6) Maintain current lists of hazardous materials in the work area in all cases; copies of work area hazardous materials lists will be readily available for fire and emergency personnel.

(7) Ensure that personnel authorized to handle shipments and inventory chemical substances are trained to identify shipments of packages that due to damage, unreadable labels, or other problems should not be accepted.

d. All personnel will:

(1) Read and use the information on hazardous materials labels and MSDS.

(2) Use PPE as instructed.

(3) Communicate unsafe work practices and workplace hazards to their immediate supervisor.

(4) Request an MSDS for each hazardous material procured locally or brought into District work areas under a contract.

7. Training. Personnel are to be informed of all potential workplace chemical hazards prior to assignment to a workplace. The seriousness of the threat, likelihood of exposure, and frequency of use will determine the degree of training. Training will be conducted prior to work with chemicals and refresher training when physical or health hazards are introduced.

a. Training will be documented, including signatures of the trainer and trainee. Records are to be maintained for the duration of employment.

b. Methods of instruction may include formal classes, work area meetings, and audiovisual presentations as appropriate.

c. Employee training will cover, as a minimum, the following six subjects:

(1) How to detect the release of hazardous chemicals.

(2) The hazards of all chemicals in the employee's work area and the dangers of any job they may have to do.

(3) How the employee can protect his/herself from these dangers, to include safe work practices and use of protective clothing and equipment.

(4) The details of the District HAZCOM program and the workplace program developed by the supervisor.

(5) The meaning of work area chemical warning labels, an explanation of MSDS.

(6) Emergency evacuation and notification procedures.

d. All personnel will:

(1) Read and use the information on hazardous materials labels and MSDS.

(2) Use PPE as instructed.

(3) Communicate unsafe work practices and workplace hazards to their immediate supervisor.

(4) Request an MSDS for each hazardous material procured locally or brought into District work areas under a contract.

8. Material Safety Data Sheet (MSDS). Each MSDS must include:

a. The material's identity, including the chemical and common names and, in the case of mixtures, all ingredients which have been determined to be health hazards.

b. The name, address, and phone number of the manufacturer.

c. List of physical and chemical hazards and characteristics; i.e., flammable, explosive, corrosive, etc.

d. List of health hazards, including acute affects such as burns or unconsciousness, which occur immediately; and chronic affects such as allergic sensitization, skin problems, or respiratory disease.

e. Safe exposure limits, such as permissible exposure limit (PEL) or threshold limit value (TLV) and symptoms of overexposure.

f. Any generally applicable precautions or control measures which the manufacturer knows.

g. Emergency procedures to include first aid treatment, emergency phone numbers, and how to deal with spill and leak.

h. How to collect and dispose of waste materials.

i. The date the MSDS was prepared or last revised.

9. Labels.

a. All chemical containers will be clearly labeled.

b. Labels will identify the chemical; include hazard warnings, and the name and address of the manufacturer.

c. Labels are not required on portable containers which contain hazardous chemicals intended for immediate use. However, if the container is to be used for storage exceeding the time limit of one work shift (generally eight hours), the container must be labeled.

d. Chemicals in small containers which are obtained from a supply room and distributed to work station storage locations must have a hazard identification label applied before leaving the supply room.

e. Return any chemical containers that have been damaged or have unreadable labels to the supply room to be relabeled or evaluated for disposal.

f. Return any chemical containers that have been damaged or have unreadable labels to the supply room to be relabeled or evaluated for disposal.

## APPENDIX H

### CONTROL OF HAZARDOUS ENERGY

1. Purpose. This appendix identifies procedures to isolate energy sources to prevent unexpected energizing of a system while maintenance or servicing is being performed.
2. Applicability. This appendix applies to all elements of the Omaha District.
3. References.
  - a. Title 29, CFR, Part 1910
  - b. Title 29, CFR, Part 1926
  - c. EM 385-1-1
  - d. ER 385-1-31.
  - e. Appendix A.
4. General. The Hazardous Energy Control Program establishes methods and procedures to safeguard personnel whose duties require them to work on or near any system that produces, uses, or stores hazardous energy. Before personnel perform any servicing or maintenance on a system where the unexpected energizing, start up, or release of kinetic or stored energy could occur and cause injury or damage, the system will be isolated in accordance with the current Hazardous Energy Control Program, Plan and Procedures.
5. Responsibilities. Each activity involved in servicing and maintenance of machines and equipment must establish a written energy control plan that includes responsibilities and procedural steps for lockout/tagout, and requirements for testing the effectiveness of lockout/tagout energy control procedures.
6. Training. All employees involved in the lockout/tagout, safe clearance, and controlling of hazardous energy will receive initial and periodic training to ensure that the purpose and function of the energy control program are understood and the knowledge and skills required for the safe application, usage, and removal of energy controls are acquired by employees. The training will include the requirements of EM 385-1-1 and ER 385-1-31.

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7. Certification. The employer will certify that employee training and/or retraining has been accomplished and is being kept up-to-date. The certification will contain each employee's name and dates of training. Training will be conducted by the element supervisor or designated representative.

8. Inspections.

a. The responsible official at each location will appoint someone to conduct periodic inspections (at least annually) of the hazardous energy control procedures. Individuals selected will be other than those utilizing the specific energy control procedure inspected.

b. The SOHO will conduct an annual review of hazardous energy control programs at each location.

## APPENDIX I

### ASBESTOS ABATEMENT PROCEDURES

1. Purpose. This appendix explains policies, objectives, and responsibilities for the asbestos abatement and control program within the properties housing Corps employees.
2. Applicability. To apply sound control procedures to asbestos abatement activities and minimize the risk of exposure of Corps employees to airborne asbestos fibers.
3. Reference.
  - a. Title 29, CFR, Part 1910.1001
  - b. Title 29, CFR, Part 1926.58
  - c. Title 40, CFR, Part 763
  - d. Appendix A.
4. Definitions. Refer to Title 29, CFR, Part 1910.1001
5. Responsibilities and Procedures.
  - a. Logistics Management Office.
    - (1) Coordinate with GSA to identify upcoming building maintenance and construction activities that may disrupt CE work areas.
    - (2) Communicate this information to the supervisors of the affected areas.
    - (3) Notify the SOHO.
    - (4) Send a representative to pre-construction meetings with GSA, contractors, and other building occupants.
    - (5) Send notices to all employees in advance, via e-mail, whenever asbestos removal will occur.

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b. Safety and Occupational Health Office (SOHO).

- (1) Act as point of contact for employee complaints.
- (2) Send a representative to pre-construction meetings with GSA, contractors, and other building occupants.
- (3) Provide inputs to GSA for the building manager's building-specific asbestos management plan when requested.
- (4) Publish results of air monitoring tests.

## APPENDIX J

### SAFETY AND OCCUPATIONAL HEALTH COMMITTEES

1. Purpose. This appendix establishes procedures for Safety and Occupational Health Committees (SOHC) within the Omaha District. The purpose of the committee is to assist the commander in implementing the Safety and Occupational Health Program at project level.
2. Applicability. This appendix is indirectly applicable to all elements of the District, but specifically, civil works project offices.
3. Reference. AR 385-10, USACE Sup 1
4. General. The SOHC will be established in accordance with AR 385-10. However, it should be noted the committees will not be certified committees as defined by OSHA. The Department of the Army has chosen not to establish certified committees. The difference between certified and non-certified is that the DOL reserves the right to make unannounced visits where non-certified safety committees are established.
5. Committees. At a minimum, a SOHC will be established at each of the civil works projects. Committees may be established at other locations such as construction areas, if needed or desired.
6. Membership. The SOHC membership will be kept to a reasonable number with a minimum of four members. Membership will represent both employees and management. Committee membership will conform with provisions of applicable labor agreements. Committee members will select a chairperson. Alternate members will be selected to ensure an adequate committee attendance at each meeting. Collateral duty safety personnel will be included as a member or advisor to the SOHC. The District SOHO will provide technical advice and assistance when requested.
7. Authority and Responsibility. The committee will assist in monitoring and implementing the District's occupational safety and health program at the project level. The committee will not be established within the chain of command, but will provide recommendations to management in an advisory capacity.
8. Meetings. The committees will meet as often as necessary, but no less than quarterly. Notices of the time and location of meetings will be circulated to all employees represented by the

SOHC. Any member of the committee may request the chairperson to call a meeting if occupational health or safety related problems surface or exist. Minutes of the meeting with a list of those persons attending will be documented, and a copy furnished the SOHO. If agenda items are not critical and do not require committee input, electronic quarterly reports will suffice.

9. Employees. All Government employees represented by the SOHC are encouraged to provide input to the SOHC on safety and occupational health matters.

## APPENDIX K

### COMMAND ERGONOMICS PLAN

1. Purpose. This appendix establishes guidance to develop an effective ergonomics program as part of the Commander's overall safety and occupational health program.
2. Applicability. This appendix is applicable to all Omaha District employees that conduct lifting, handling, carrying, repetitive motion, or other physical activities that stress the body's capabilities.
3. Reference. EM 385-1-1, EP 385-1-96, Appendix A
4. Definitions.
  - a. Cumulative Trauma Disorder (CTD). Disorders of muscles, tendons, peripheral nerves, or vascular system. These can be caused, precipitated, or aggravated by intense, repeated, or sustained exertions, motions of the body, insufficient recovery, vibration, or cold.
  - b. Ergonomics. The field of study that seeks to fit the job to the person, rather than the person to the job. This is achieved by the evaluation and design of workplaces, environments, jobs, tasks, equipment, and processes in relationship to human capabilities and interactions in the workplace.
  - c. Workplace Risk Factors. Action in the workplace, workplace conditions, or a combination thereof that may cause or aggravate a work-related musculoskeletal disorder. Workplace risk factors include, but are not limited to, repetitive, forceful or prolonged exertions; frequent or heavy lifting; pushing, pulling, or carrying of heavy objects; a fixed or awkward work posture, contact stress; localized or whole-body vibration, cold temperatures, and poor lighting (leading to awkward postures). These workplace risk factors can be intensified by work organization characteristics such as inadequate work-rest cycles, excessive work pace and/or duration, unaccustomed work, lack of task variability, machine work, and piece rate.
  - d. Work-Related Musculoskeletal Disorder (WMSD). An injury or an illness of the muscles, tendons, ligaments, peripheral nerves, joints, cartilage (including inter-vertebra discs), bones, and/or supporting blood vessels in either the upper or lower extremities, back, or neck, that is associated with musculoskeletal disorder workplace risk factors and are not limited to cumulative trauma disorders, repetitive strain injuries or illnesses, repetitive motion injuries or illnesses, and

repetitive stress injuries and illnesses. Refers collectively to signs or persistent symptoms or clinically diagnosed work-related musculoskeletal disorders when they are caused or aggravated by exposure to workplace risk factors.

#### 5. General Items and Program Goals.

a. The SOHO will implement the ergonomics program for the Omaha District. This plan will be staffed throughout the Omaha District and the Safety and Occupational Health Council. This will include the following:

(1) Educate the workforce in the importance of procuring ergonomic furniture and work stations.

(2) Coordinate with CPAC to review and forward all WMSD cases to Office of Worker's Compensation for review and action.

(3) Provide ergonomic workstation reviews periodically and upon request to reduce and/or eliminate repetitive and prolonged status activities, forceful exertions, awkward postures, excessive vibrations, and other WMSD-related conditions. Assign a risk assessment code (RAC) using the safety RAC scoring system and enter items into the District's hazard abatement log, and, if necessary, the master hazard abatement log. Meet with individual supervisors to help educate and inform them of options to assist their employees in reorganizing and/or changing their present workstation to enhance ergonomic concerns.

(4) Monitor all accident reports for ergonomic-related injury trends.

(5) Assist with the preparation of AHA that address WMSD concerns.

(6) Obtain management commitment and employee involvement to aggressively prevent CTD injuries and control claims and costs related to these injuries by using a proactive approach.

(7) Recommend administrative controls whenever necessary to reduce exposure.

(8) Provide training to all employees potentially exposed to WMSDs.

(9) Provide educational material for our contractors and sample job hazard analysis (JHA) dealing with WMSDs for specialized trades.

(10) Include WMSDs as a rating element in the safety management evaluations of Omaha District elements.

b. The CPAC will coordinate with SOHO to provide information on employee compensation case status, as related to present and future duty restrictions.

c. Contracting Division and interior designers will coordinate with SOHO regarding ergonomic review of all new requests for furniture, workstations, machines, etc. Omaha District policy will be to procure ergonomically-designed equipment when feasible.

d. Division managers and supervisors will:

(1) Educate employees on principles of ergonomics and WMSDs.

(2) Perform ergonomic and JHA on proposed and current work processes to identify hazardous conditions and unsafe work practices.

(3) Coordinate with SOHO and CPAC compensation specialist to identify positions that can be utilized for light duty and return to work programs.

(4) Participate with SOHO when performing worksite ergonomic surveys and develop corrective actions for identified deficiencies.

(5) Ensure personnel engaged in high risk hazardous occupations receive task specific injury prevention ergonomic review.

(6) Ensure adequate financial resources are available to meet program needs with special emphasis on mishap prevention for WMSDs.

(7) Ensure adequate planning is given to ergonomic issues when making work-related assignments.

(8) Utilize administrative controls to limit duration and frequency of exposure to WMSD hazards.

e. Omaha District employees will:

(1) Notify their supervisor immediately of any worksite condition that could contribute or lead to WMSDs.

(2) Make recommendations on how worksite/stations may be changed to eliminate or reduce hazards that contribute WMSDs.

(3) Report immediately all WMSD cases through the accident reporting channels.

(4) Utilize all equipment provided to help reduce repetitive and prolonged static activities, forceful exertions, awkward postures, excessive vibration, and workstations lacking adjustability.

(5) Participate in the Command Ergonomic Program by taking the mandatory training.

(6) Assist in the identification of high-risk assessments.

6. Actions. Ergonomic surveys of workstations and JHA preparation guidance are available from the SOHO upon request. Ergonomic training is mandatory and will be presented by the SOHO. The SOHO is responsible to evaluate program participation and effectiveness.

## APPENDIX L

### SAFETY EDUCATION, PROMOTION, AND PERFORMANCE

1. Purpose. This appendix establishes procedures for education, promotion, and performance of safety and occupational health duties and responsibilities.
2. Applicability. This appendix is applicable to all Omaha District elements.
3. Safety Education.
  - a. Each new division/office chief has safety and health responsibilities and will be processed through the SOHO for a safety orientation.
  - b. New Government employees will be given safety instructions at the time of appointment in accordance with current District directives pertaining to employee orientation. Supervisors will in turn give employees periodic additional safety instructions as the nature of the work demands.
  - c. Government officials in charge of contract work will ensure that each construction inspector/representative has been thoroughly trained in the fundamentals of accident prevention and assumes the responsibilities assigned him/her by the safety program. The inspector/representative shall be familiar with both the normal hazards inherent in the work being performed and all safety measures necessary to eliminate these hazards.
4. Safety Performance. The safety performance of all managers, supervisors, and employees is required to be evaluated as a part of the overall performance appraisals. Accordingly, all performance standards will contain prescribed safety performance criteria that are consistent with the duties involved. For help in drafting an appropriate standard, please contact the SOHO.
5. Safety Training Sources. Safety training may be accomplished in many ways. Division chiefs, area engineers, project engineers, project managers, and resident engineers are responsible for identifying the need and extent of training. Employees may attend resident courses, in-house training, correspondence courses, or participate in safety meetings or toolbox sessions. Training is also available through several of the means listed below:
  - a. Videos, films, slides, posters, decals, publications, etc.
  - b. Local conferences, OSHA, NIOSH, NFPA, American Red Cross, State Highway Patrol, local police department, local fire department, local universities, local hospitals, National Safety Council, and local safety councils.

APPENDIX L, ANNEX A  
SAFETY AND HEALTH PERFORMANCE STANDARDS  
GENERAL GUIDELINES

1. Managers.

- a. Ensure employees are provided a safe and healthful working environment in accordance with established safety and health policies.
- b. Evaluate the safety performance of subordinate supervisors.
- c. Implement the safety and occupational health program requirements applicable to the program areas assigned to the organization.

2. Supervisors.

- a. Ensure subordinate employees are provided a safe and healthful working environment in accordance with established safety and health policies.
- b. Include evaluation of the safety performance of subordinate employees in performance standards.
- c. Include safe planning as an integral part of the overall planning of activities supervised.
- d. Schedule appointments for physical and audio examinations when required.

3. Employees.

- a. Minimize the risk of injury or other losses due to accidents by performing work in accordance with established safety and health policies.
- b. Promote the safety and occupational health program objectives of the office, branch, etc. Maintain personal work area free of hazardous conditions in accordance with established safety and health standards.

c. Maintain records and support safety activities such as AHA, mishap reports, and safety meeting minutes. Obtain information, such as catalogs and guidelines, to facilitate the purchase of safety equipment; e.g., glasses, shoes, etc.

d. Prepare, maintain, and review AHA annually to ensure safe work practices are the standard procedure for tasks.

## APPENDIX M

### SAFETY AWARD PROGRAM

1. Purpose. The purpose of this appendix is to establish the Omaha District's annual safety award.
2. Applicability. This appendix is applicable to all project and area offices within the Omaha District. This does not apply to contractors.
3. Responsibility. The SOHO performs an annual management evaluation of each project/area office. Awards may be given based on safety performance of duties. The Commander, the SOHO, or other supervisors or managers may present an award to the deserving employee.
4. Policy. The safety award will be utilized to recognize significant safety program achievements in the operation of Omaha District installations and activities throughout the year.
5. Benefit. To encourage a safe and healthful working environment and to motivate employees to participate in the safety program. This award will provide favorable recognition and promote safety and health throughout the District.
6. The Award. The award will be determined by the SOHO.
7. Administration. The SOHO will provide all administration necessary for the award.

APPENDIX N  
OCCUPATIONAL HEALTH REQUIREMENTS

1. Purpose. This appendix establishes the responsibilities and procedures for implementing the occupational health requirements.

2. Applicability. This appendix is applicable to all Omaha District elements.

3. References.

a. Title 29, CFR, Parts 1910 & 1926

b. ER 385-1-40

c. ER 385-1-58

d. EM 385-1-1

e. Appendix A

4. General. This appendix establishes requirements for health hazard evaluations, implementation of exposure control measures, and procedures for medical surveillance of employees with potential exposures to chemical, physical, and biological agents on the job.

5. Responsibilities.

a. CPAC will:

(1) Ensure necessary pre-employment medical examinations are obtained when filling all vacant positions.

(2) Ensure all vacancy announcements and position descriptions clearly identify and list all recognized health hazards of the position.

b. Supervisors will:

(1) Appoint an individual to act as the point of contact for administration of the medical surveillance program (MSP).

(2) Ensure employees meet their scheduled medical examination appointment with the examining physician.

(3) Review annually the working conditions paragraph in the employee job descriptions and ensure employees are not required to work beyond their physical capabilities.

(4) Advise the SOHO whenever new activities, processes, chemicals, or equipment that may produce health hazards are introduced into the working environment.

(5) Take specific action as may be necessary as a result of medical findings. Such action may include modification of the work environment, transfer of an individual worker to another job, detail of an individual worker to another job pending correction of the work environment, and the possibility of a medical disability retirement.

c. The SOHO will provide administration, coordination, and technical review on occupational health matters, industrial hygiene, and medical surveillance.

#### 6. Medical Examinations.

a. All personnel listed in the hazardous occupational inventory (HOI) will be given a periodic medical examination.

b. The medical tests will vary and be based on exposure to hazardous substances or harmful physical agents on the job and regulatory requirements.

c. Seasonal and temporary personnel of the Corps who work in a hazardous environment will be included in the MSP, if warranted by their exposure to hazardous substances or harmful physical agents.

d. The SOHO, in cooperation with the U.S. Public Health Service, will determine which tests are performed per regulatory requirements, and exposure records.

e. The frequency of examinations and/or specific tests will be determined by the criteria stated in the applicable regulations and exposure. For example, in the case of chest roentgenograms (x-rays), there is one performed as a part of the baseline examination. Thereafter, the examining physician usually determines the frequency of the chest roentgenograms. Some exposures require chest roentgenograms based on a schedule stated in OSHA regulations or recommended by medical authorities.

f. There are three primary reasons for performing job-related examinations:

(1) To determine a worker's capability to physically and mentally perform a job without undue risk or harm.

(2) To indicate individuals who are hypersensitive to low level hazardous agents.

(3) To detect early effects resulting from accidents or inadvertent exposure to hazardous agents.

## APPENDIX N, ANNEX A

### MEDICAL SURVEILLANCE EXAMINATIONS

1. Applicability. This annex applies to employees who do not utilize military medical facilities. Employees at work sites who receive medical examinations from military medical facilities shall contact the person that manages the MSP for proper procedures.
2. Pre-placement Medical Examinations. Job applicants applying for positions identified as a medical surveillance required position will be identified for a pre-placement exam by CPOC and placed in the MSP by SOHO.
3. Medical Examinations.
  - a. Job Related Medical Examinations. All workers performing hazardous duties will be listed in the HOI and given a periodic medical examination.
  - b. The medical examination will vary for each employee and will be based on an employee's exposure to hazardous substances and harmful physical agents on the job. Seasonal and temporary employees who work in a hazardous environment will be included in the MSP if warranted by their exposure to hazardous substances or harmful physical agents.
  - c. The frequency of the examinations is determined by the criteria stated in the regulations.
  - d. Employees who are assigned or transferred to a position that is included in the HOI will receive periodic medical examinations. The HOI is maintained by the SOHO, but it is the responsibility of the supervisor to update any changes in employee status.
4. Criteria for Separation Medical Examinations. The supervisor will notify SOHO as soon as possible of any employee serving in a position included in the MSP that is leaving Government service or transferring to another agency. The requirement for a final medical examination will be determined by the SOHO.
5. General Instructions.
  - a. The supervisor will submit HOI changes to SOHO within a month of any changes. The supervisor will notify the SOHO as soon as possible of any employee who will be leaving Government service or transferring to another agency.

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b. The SOHO will prepare and distribute the necessary health forms for the local Omaha employees with preparation instructions. The project/area point of contact will prepare and distribute the medical forms for their employees.

c. An MSP point of contact will be appointed for each project/area. This person will schedule employees for examinations with local health clinics. Employees utilizing the U.S. Public Health Service in Omaha will be contacted directly by the Health Unit personnel.

d. The supervisor will direct employees to the examining physician and provide the time within the workday to accomplish the required physical.

e. The examining physician will complete the medical examination and discuss the test results with the employee examined. The physician will then forward all test results to SOHO. SOHO will forward to the employee's supervisor. The test results will be placed in the employee's official medical record.

f. Individuals whose medical tests identify a potential work-related problem may be referred to a physician for further evaluation, and any job limitations will be stated on the report to supervisor.

g. Cost of tests completed without authorization from the operations/area manager or the SOHO will be at the employee's expense.

6. CPAC will:

a. Ensure necessary pre-employment medical examinations are performed when filling vacant positions.

b. Ensure all vacancy announcements and position descriptions clearly identify and list all recognized health hazards of the position, address the requirement for use of protective clothing and equipment when required by the position, and are reviewed/updated annually or as soon as a health hazard is recognized.

7. SOHO will:

a. Provide administration, coordination, and technical review on occupational health and medical surveillance matters.

b. Provide overall administrative management of the MSP.

c. Monitor the total cost for all medical services.

8. Employees will: Notify the supervisor of any unusual health condition or change in health status that warrants medical evaluation or considerations relative to work assignments.

APPENDIX N, ANNEX B

OCCUPATIONAL NOISE - HEARING CONSERVATION PROGRAM

1. Purpose. This annex establishes procedures to protect personnel from harmful effects of noise at work.
2. Applicability. This procedure is applicable to all Omaha District elements.
3. References.
  - a. Title 29, CFR, Part 1910.95, Occupational Noise Exposure.
  - b. AR 40-5, Preventive Medicine, paragraph 5-16, Hearing Conservation.
  - c. AR 385-30, Safety Color Code Marking.
  - d. ER 385-1-89, Hearing Conservation Program.
  - e. TB MED 501, Hearing Conservation.
  - f. Appendix A
4. Hazardous Noise.
  - a. Steady state noise is considered hazardous when it equals or exceeds 85dB(A).
  - b. Impulse or impact noise is considered hazardous when it exceeds 140dB(A).
5. Training. All personnel included in the hearing conservation program will receive annual training in accordance with ER 385-1-89. Consultation and assistance in training will be available through the SOHO and/or Training and Development Branch.
6. Prevention. The prevention of hearing loss from exposure to noise involves a coordinated application of engineering control, personnel protective equipment, and medical control measures supplemented by health, education, supervision, and training of personnel. Initiation of a program is required in all areas where the noise exposure currently is at or in excess of 85 dB(A).

a. One of the following solutions can be used to control noise problems.

(1) Elimination or reduction of a noise at its source, e.g., bolting down loose covers.

(2) Isolation of the source, e.g., enclosing a machine with a sound absorbing material.

(3) Vibration isolation; e.g., shock mounts.

(4) Absorption of direct noise; e.g., using acoustical materials on walls and ceilings.

(5) When effective engineering and/or administrative work practices are not feasible or while they are being instituted, PPE will be provided and used.

b. Protection may consist of earplugs or earmuffs, whichever device will be worn consistently by the exposed individuals.

(1) Earmuffs or individually fitted earplugs will be furnished employees, and the use enforced on noise level exposure above 85dB(A).

(2) Both earplugs and earmuffs will be available and worn for exposures above 108dB(A).

c. A warning sign will be conspicuously placed at the entrance to areas where sound levels exceed 85dB(A).

d. When an individual machine or piece of equipment exceeds a noise level of 85dB(A), a sign, label, or decal will be placed on or near the machine to warn of high noise exposure and that hearing protection is required while machine or piece of equipment is operating.

7. Inclusion Criterion. All employees who routinely work with noise hazardous equipment or in a noise-hazardous area must be included in the hearing conservation program.

8. Audiometric Tests. Personnel in the hearing conservation program will be provided audiometric tests, given a formal orientation in the prevention of hearing loss, and will be required to wear hearing protectors.

a. In situations where employees are infrequently exposed to hazardous noise for short durations (such as walk-through noise areas), audiometric testing and formal training may not be practical or necessary.

(1) Exposures of 15 minutes in any 24-hour period to hazardous noise of 85-101dB(A) will not require audiometric testing or formal training, but the use of hearing protectors is still mandatory.

(2) Judgments concerning the exclusion from audiometric testing and training will only be made by the SOHO.

b. A baseline audiogram will be initiated for personnel who are routinely exposed to noise in excess of 85dB(A) within six months of an employee's first exposure. Thereafter, audiograms on a frequency basis will be required. These audiograms will be obtained in conjunction with the medical examinations required by the Safety and Occupational Health Program.

c. If an audiogram indicates a significant threshold shift (STS), the personnel will be retested as soon as possible after a 14-hour period away from work place noise, but within 30 days. The purpose of the retest is to determine if the threshold shift is temporary. If a retest indicates that an STS exists, the results of the retest will be considered the annual audiogram and will be substituted as the employee's new base line. If a retest does indicate that an STS still exists, the employee will be sent to an audiologist or otolaryngologists for a clinical audiological evaluation at the Government's expense.

#### 9. Caution Signs for Noise Hazardous Areas.

a. Signs will be posted at entrances to or on the outer boundary of all well defined work areas in which employees could be exposed to hazardous noise.

b. Warning signs will clearly indicate that the area is a high noise area and shall indicate that hearing protection is required.

c. Signs will be in accordance with AR 385-30, Safety Color Code Marking and Signs.

d. Each tool or piece of equipment which produces A-weighted sound pressure levels of 85 dB or greater will be marked conspicuously to alert personnel, except in those cases where an entire space is designated as a noise hazardous area.

## APPENDIX O

### OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) VISITS

1. Purpose. This appendix establishes procedures for managers to follow when OSHA targets them for a visit.
2. Applicability. This appendix is applicable to all Omaha District managers who are responsible for one or more District worksites.
3. References.
  - a. Executive Order 12196
  - b. Appendix A
4. Jurisdiction.
  - a. OSHA has authority to conduct unannounced inspections at CE projects and worksites. Unannounced inspections will generally take place as a result of an employee complaint.
  - b. OSHA may also make announced visits. These visits are generally targeted visits that are initiated because of higher than average accident rates.
  - c. OSHA may conduct an investigation in the case of a work-related fatality.
5. Procedures.
  - a. Federal and State OSHA officials must be granted access to Department of Defense (DoD) workplaces on DoD installations without delay and at reasonable times in accordance with Section 8(a) of Public Law 91-596.
  - b. Federal or State OSHA officials will present appropriate identifying credentials and state the purpose of the visit to the DoD installation. The CE representative on-site will notify the area/project office involved in the proposed inspection. The SOHO will also be notified as soon as possible of the inspection as HQUSACE is required notification within 24 hours. A representative of the Commander will accompany OSHA officials on their inspections and investigations.

c. When OSHA officials require entry to a classified area and these officials cannot effectively be prevented from access to the classified material therein, the following procedures will apply:

(1) The CE representative will immediately notify the DoD activity exercising security supervision over the workplace of the need for a personnel security clearance to enter the classified area.

(2) The DoD security activity will verify that denial of access to classified material cannot be accomplished through such means as covering the material to deny visual access, etc.

(3) In the case of Federal OSHA officials, the DoD security activity, after verifying the need for a personnel security clearance, will contact the appropriate cognizant security office and request verification of the Federal OSHA official's personnel security clearance. If the OSHA official's name is not on the list of cleared Federal OSHA personnel furnished the cognizant security office, they will contact the OSHA regional or area office and request an appropriately cleared OSHA official.

(4) In the case of State OSHA officials, the DoD security activity, after verifying the need for a personnel security clearance, will in coordination with the State OSHA official, request the cognizant security office to contact the nearest OSHA regional or area office for a cleared Federal OSHA official to conduct the necessary inspection of the classified area.

d. No photographs will be taken by Federal or State OSHA officials on DoD installations. Any photographic services requested by such officials will be provided by the installation commander of the appropriate acting commanding officer (ACO). Negatives and photographs shall be tentatively classified "Confidential" and submitted to the appropriate DoD component official or his authorized representative for review as required for compliance with Title 48, USC Section 795, and Executive Order 10104, prior to release to authorized Federal or State OSHA.

## APPENDIX P

### HAZARD ABATEMENT - GOVERNMENT OPERATIONS (RISK ASSESSMENT AND MANAGEMENT)

1. Purpose. This appendix establishes procedures for identification and abatement of unsafe or unhealthful working conditions.
2. Applicability. This appendix is applicable to all Omaha District elements, employees and supervisors.
3. References.
  - a. Title 29, CFR, Part 1910.60
  - b. Appendix A
4. Definition. A definition of hazard is any existing or potential condition in the workplace that, by itself or by interacting with other variables, can result in death, injury, property damage, and other losses.
5. Responsibilities. There are five key steps to the Army's Risk Management Process: (1) Identification and integration opportunities evaluation, (2) Assess improvement opportunities, (3) Develop integration procedures, (4) Implement integration procedures, and (5) Measure and reassess degree of integration with results. Mandatory risk management training for all employees is available on the SOHO homepage.
  - a. Each employee, including the supervisor who is an employee as well as a supervisor, is responsible for identifying and correcting unsafe and unhealthful conditions in his/her work area or reporting such conditions in accordance with established procedures. Mandatory risk management training is available on the SOHO homepage for all employees.
  - b. The Chief, SOHO is designated as the District Safety and Occupational Health Official and is responsible for representing the District in matters pertaining to the program. An effective and comprehensive occupational safety and health program will be established consistent with the appropriate safety standards of higher authority. The SOHO will develop a system to identify and abate unsafe or unhealthful conditions. They will develop a tracking system to ensure identified hazards are promptly abated or where long-term solutions are necessary, ensure they are tracked until they have been properly abated.

c. Area engineers, project engineers, and project managers will appoint a collateral duty safety person as a single point of contact for the SOHO. Collateral duty safety personnel will be trained by the SOHO or obtain collateral duty training from OSHA or another safety training source.

6. Reporting Procedures. Unsafe or unhealthful working conditions may be identified in several different ways; e.g., formal inspections, daily workplace inspections, surveys, accidents, or lessons learned from other locations.

a. Employees are encouraged to correct unsafe or unhealthful working conditions immediately if possible. If they cannot correct them, they should immediately notify their supervisor.

b. Supervisors will correct all hazards that are within their resources to do so. Hazards that are long-term (more than 30 days) to correct or not within the resources of the supervisor will be elevated through channels to the SOHO. Each level of management having responsibility will use their resources to abate the hazard.

c. Hazards that cannot be abated within 30 days will be entered on the hazard abatement log maintained in the SOHO. The hazard abatement log is in two parts. Part I contains all hazards with a RAC of 1, 2, or 3 (1 being the most severe). Part II contains all hazards with a RAC greater than 3.

d. The SOHO will follow-up on all hazards listed in Part I and Part II until they have been satisfactorily abated. Part I will be forwarded to the Commander for his review no less than quarterly.

7. Self-Inspections. Area and project engineers, lake managers and all chiefs of District elements are responsible for the performance and documentation of OSHA surveys for their units. Training needed to perform inspections will be identified and reported to the SOHO. Supervisors in charge of the facility will ensure that the persons conducting the inspection have sufficient technical competence to identify hazardous physical conditions and violations of Title 29, CFR, Part 1910.

8. Hazard Categories.

a. The DOD system of classifying hazards will be utilized. This system combines the severity of hazard with the probability of mishap to establish a priority for abatement.

b. Hazard Severity. This is an assessment of the worst potential consequence, defined by degree of injury, occupational injury, or property damage that could ultimately occur. Hazard severity categories will be assigned a Roman numeral according to the following criteria:

Category I - Catastrophic: May cause death or permanent total disability, system loss, or major property damage.

Category II - Critical: May cause permanent partial disability or temporary total disability in excess of three months, major system damage, or significant property damage.

Category III - Marginal: May cause minor injury, lost workdays or compensatable injury or illness, minor system damage, or minor property damage.

Category IV - Negligible: First aid or minor supportive medical treatment of minor system impairment.

c. A second factor in estimating risk is the probability that a hazard will result in a mishap. This probability is based on an assessment of factors such as location, exposure in terms of cycles or hours of operation, and affected population components. Mishap probability will be assigned an Arabic letter according to the following criteria:

Subcategory A - Likely to occur immediately or within a short period of time.

Subcategory B - Probably will occur in time.

Subcategory C - May occur in time.

Subcategory D - Unlikely to occur.

d. Overall RAC. This is an expression of risk which combines the elements of hazard severity and mishap probability; e.g., IA, IIIB, etc. The table below depicts a representative ranking order of RACs. An RAC of 1 establishes the highest priority for correcting a deficiency.

HAZARD SEVERITY

MISHAP PROBABILITY

	A	B	C	D
I	1	1	2	3
II	1	2	3	4
III	2	3	4	5
IV	3	4	5	5

9. Reporting Requirements. Inspections will be performed and reported on an annual basis and reports submitted to the SOHO by 30 September of each year.

10. Abatement of Deficiencies.

a. Deficiencies will be corrected on a worst first basis.

b. Deficiencies with a code 1 are to be corrected immediately. Those coded 2 and 3 shall be targeted for correction within 30 days. Items with a code of 4 or 5 should be corrected as soon as possible to prevent degeneration into a higher risk category.

c. When an inconsistency cannot be corrected in 30 days, interim or alternative measures for protecting employees shall be instituted. This action will be recorded by the SOHO on the District Master Hazard Abatement Plan and tracked until resolved.

11. Employee Reports of Unsafe or Unhealthy Working Conditions.

a. Employees or their representatives who believe that an unsafe or unhealthful working condition exists in the workplace will have the right and are encouraged to make a report of the unsafe or unhealthful working condition.

b. Employees may report alleged unsafe or unhealthy working conditions with assurances that prompt action will be taken to evaluate the report and, when appropriate, corrective measures will be taken. No employee will be subject to restraint, interference, coercion, discrimination, or reprisal for filing a report.

c. Employees are encouraged to report unsafe or unhealthful working conditions to their supervisor as a first step.

d. If an employee is not satisfied with their supervisor's response to the report, a DA Form 4755, Employee Report of Alleged Unsafe or Unhealthful Working Conditions, will be completed and sent or hand carried to the SOHO.

e. If an employee so desires, by checking the appropriate box under item 5 of DA form 4755, the name of the employee reporting the alleged unsafe or unhealthful conditions will not be disclosed outside the SOHO as authorized by AR 385-10, The Army Safety Program, or Title 29, CFR, Part 1960.

f. The designated District Safety and Occupational Health Official will process the report, determine the need for an inspection, schedule the inspection, and notify the employee of whether he/she may accompany the inspector.

g. Alleged unsafe or unhealthful conditions reported under this procedure are not a grievance and will be handled separately from grievance procedures. Reporting in this manner will not interfere in any way with prior, simultaneous, or subsequent use of employee grievance or collective bargaining agreements.

## APPENDIX Q

### PERSONAL PROTECTIVE EQUIPMENT GENERAL REQUIREMENTS

1. Purpose. This appendix outlines requirements for the use of personal protective equipment (PPE).
2. Applicability. These requirements apply to all Omaha District elements and employees.
3. Responsibility.
  - a. Supervisors are responsible for identifying the need for protective clothing, providing personal protective equipment (PPE) when warranted, and enforcing the use of the clothing and equipment.
  - b. Supervisors will establish procedures to train personnel in the requirements for selection, use, inspection, and care of personal PPE.
  - c. Use and maintenance of the clothing and equipment is the responsibility of the user. However, supervisors will establish a maintenance program that includes cleaning, disinfecting, replacing unserviceable parts, periodic inspection by qualified persons, and proper storage to protect against environmental conditions that might contaminate the PPE or lessen its effectiveness.
  - d. Qualified safety and health personnel will evaluate workplaces, operating procedures, and hazardous material data to determine work hazards and health risks.
4. References.
  - a. EM 385-1-1
  - b. Appendix A
5. Policy.
  - a. Methods of controlling harmful exposures in the workplace are generally engineering controls, administrative controls, and the use of personal PPE, least desirable is the use of PPE.

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b. While engineering controls and administrative controls can reduce or eliminate exposure, PPE only provides a barrier that can fail or be misused, thereby exposing the worker.

c. For those jobs where engineering controls or administrative controls will not completely eliminate the hazard, PPE or clothing will be used.

d. Written policies on the requirements and use of PPE are in EM 385-1-1. However, each supervisor must develop local policies and ensure that policies are communicated to employees and visitors. Supervisors, with the help of the SOHO, will select the proper type of equipment, ensure that employees are trained in the correct use and maintenance of their equipment, and enforce the use of PPE.

6. The annexes to this appendix discuss in more detail the requirements for specific types of PPE.

a. Annex A, Vision and Face Protection

b. Annex B, Respiratory Protection

c. Annex C, Other Protective Clothing and Equipment.

7. For information concerning other requirements, contact the SOHO.

APPENDIX Q, ANNEX A  
VISION AND FACE PROTECTION

1. Purpose. This annex establishes procedures for vision and face protection.
2. Applicability. This procedure is applicable for all Omaha District elements. Vision and face protection must be provided to employees wherever and whenever an operation or activity is classified as hazardous to the eye. Vision and face protection provided will conform to the American National Standards Institute (ANSI) Standard Z87.1, Occupational and Industrial Eye and Face Protection.
3. References.
  - a. Title 29, CFR, Part 1910
  - b. EM 385-1-1
  - c. ANZI Z-87 and Z-358.1
  - d. Appendix A
4. Requirements.
  - a. Supervisors must identify eye hazards and PPE requirements.
  - b. All employees, contractors, and visitors must be informed of areas identified as eye hazardous and the required eye protection.
  - c. The SOHO will assist supervisors in determining the correct eye protection for various activities.
  - d. OSHA standards require that safety glasses and goggles meet standards developed by ANSI. Equipment that meets these standards is stamped with the Z-87 logo.
  - e. The wearing of contact lenses under a respiratory protection mask is prohibited in industrial areas whenever chemical eye hazards are encountered and where the air contains foreign particles which could work under the lens and cause serious injury to the cornea.

f. Motor vehicle operators and mobile equipment operators will meet the visual requirements of the license-issuing agent (generally the state of residency).

5. Emergency Eyewash Fountains.

a. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for emergency use.

b. Initial emergency treatment is usually mechanical flushing of the eyes with an adequate supply of water. ANSI Z-358.1, for emergency eyewash and shower equipment, states that active flushing should continue for a period of 15 minutes.

c. All employees with a potential exposure to corrosive materials will be instructed in the proper use of eyewash fountains and the length of time necessary to flush the eyes.

d. Consideration must be given to the type of hazard present when selecting eye/face wash equipment. Portable eyewash fountains generally are sealed units that work on a pressurized system. The tanks are pressured by use of a hand pump. The possible loss of pressure requires increased maintenance checks to recharge them if necessary. Squeeze bottles and other plastic container devices have a water capacity less than the portable pressurized eye fountain and generally will not meet the flow rate requirements. These units will often lose water through evaporation, become contaminated, are easily misplaced, and may not be available in an emergency. Based on these considerations, the following guidance is provided on the installation of emergency eyewash systems.

(1) Eyewash squeeze bottles will not be substituted for appropriate eyewash systems.

(2) Permanent eye wash systems will be installed where chemical splash hazards exist and there is a continuous source of clean water.

(3) Portable eyewash fountains may be allowed in remote areas when no continuous flow of fresh water is available.

e. All eyewash units will be in accessible locations that require no more than 10 seconds to reach. The travel route should be direct without obstacles such as doorways, steps, or blocked aisles.

f. All eyewash units will routinely be checked. Lines should be flushed at least monthly to verify proper operation.

APPENDIX Q, ANNEX B  
RESPIRATORY PROTECTION

1. Purpose. To establish procedures that provide protection for all employees required to wear respiratory protection.

2. Reference.

a. Title 29, CFR, Part 1910.134

b. EM 385-1-1

c. Appendix A

3. Background. Exposure limits are established for airborne concentrations of potentially hazardous dusts, fumes, mists, and vapors above which employees must not be exposed. Where feasible, engineering controls must be implemented to reduce employee exposure to hazardous substance below these exposure limits. Where engineering controls are not feasible or while these controls are being instituted, appropriate respirators will be used to protect the health of employees.

4. Policy. Respirators will only be used in lieu of engineering or administrative controls.

a. When engineering controls, process changes, or chemical substitution (capable of reducing exposures to less than 1/2 the PEL or TLV and 1/10 the derived air concentrations (DAC) are not feasible.

b. During the interim, until other control measures can be implemented.

c. During emergencies.

5. Responsibilities.

a. Employees. All employees will be familiar with and comply with written procedures.

(1) Use all respiratory protective equipment in accordance with direction provided by the supervisor.

- (2) Immediately leave a contaminated area if the respirator malfunctions.
- (3) Notify their supervisor of suspected respiratory hazards and potential problems.
- (4) Take appropriate medical examinations.

b. Supervisors.

- (1) All supervisors of employees required to wear a respirator will have written procedures covering the use of respirators.
- (2) Ensure only qualified and adequately trained employees are assigned tasks requiring use of respiratory equipment.
- (3) Ensure respirator users are medically evaluated to wear respiratory protection.
- (4) Ensure all respiratory protective equipment is NIOSH and Mine Safety and Health Administration (MSHA) approved.
- (5) Ensure monitoring of work-site conditions to evaluate worker airborne contaminant exposure.
- (6) Through AHA, review job duties and identify positions that require employees to use respiratory protection.
- (7) Provide for fit testing and training annually.
- (8) Enforce the use of respirators where mandatory.

c. The SOHO will.

- (1) Recommend types of respiratory protective equipment to be used.
- (2) Ensure training and fit-testing programs for personnel issuing or using respiratory protective equipment is adequate.
- (3) Provide technical assistance in resolving respiratory protection issues.

(4) Evaluate annually each District element's respiratory protection program for effectiveness.

(5) Provide for and coordinate industrial hygiene investigations and work area surveillance to determine worker exposure levels to toxic substances when requested by area, project, or District elements.

6. Medical Examinations. Employees who use respirators must be physically able to perform the work and use the equipment.

a. The initial medical examination to determine medical/physical fitness will include a hands-on examination by the physician, a medical history, pulmonary function test, and specific medical tests.

b. The physician will be informed of the employee's anticipated exposure to hazardous materials.

c. The physician will provide a written opinion based on the employee's current physical condition, past medical history, and anticipated work activities as to the employee's fitness to wear a non-powered air-purifying respirator.

7. Training. Each employee required to wear a respirator will receive annual training in the proper use and limitations of respiratory protective equipment and have a record of such training. Training will provide the following:

a. Explanation of the hazards of respirator misuse.

b. Discussion of the limitations of engineering controls in negating the necessity of respirator usage.

c. Respirator selection criteria.

d. Donning and doffing the respirator.

e. Usage of the respirator.

f. Inspecting and maintaining the respirator.

- g. Emergency situations.
- h. Proper seal check (positive and negative-pressure) and fit-testing procedures.
- i. Qualitative and quantitative fit-test procedures.

#### 8. Equipment.

a. Respiratory protective equipment will be used as issued. No modification or substitution to issued equipment, with the exception of one-for-one cartridge replacement, will be permitted.

b. Breathing air-type compressors shall be designed specifically for their intended use and shall be equipped with an approved regulator, suitable in-line air purifying sorbent beds, and filters inserted into the supply line to assure breathing air quality. Only airline hoses specifically approved for use with a given supplied air respirator will be used to supply air from the breathing-air manifold to air-supplied half-mask, full-face, or hood-type respirators. Substitutions or use of fitting adapters are prohibited. These requirements are necessary to maintain NIOSH approval.

c. Respirators issued to an individual employee will be used only by the person to/for whom the respirator was issued.

d. Individual employees will be responsible for cleaning, sanitizing, and storage of issued respirators. Cleaning procedures will be in accordance with the manufacturer's recommendations and approved plans. Respirators, when not in use, will be kept sealed in plastic bags stored away from contaminants, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals. They will be protected from crushing or other damage.

e. All respirators will be inspected prior to issue and all defective parts will be replaced.

f. The respirator face-piece fit will be pressure checked each time a respirator is put on.

g. Cartridges used for HEPA filtration in non-powered air-purifying respirators will be discarded when the employees go through personal decontamination procedures.

#### 9. Repair of Respirators.

a. Respirator assembly and repair will be done only by qualified personnel who have been trained. Respirators will be returned to the manufacturer for repairs as necessary.

b. Respirator airline hoses will be visually inspected for defects such as cuts, damaged fittings, or excessive wear prior to each use. Defective units will be repaired or discarded.

10. Respirator Selection.

a. Respirators will be selected and used based on the hazards to which the worker is exposed, the work environment, and the characteristics/limitations of the respirator.

b. All respiratory protective systems used will have NIOSH and MSHA approval.

c. Air-supplied respirators are required for contaminant levels that exceed those for which filtering or purifying types are approved.

d. For questions concerning PEL, work-site conditions, and respirator requirements, contact the SOHO.

APPENDIX Q, ANNEX C  
OTHER PROTECTIVE CLOTHING  
AND EQUIPMENT

1. Purpose. This annex establishes guidance for clothing items not mentioned in previous annexes of Appendix R.

2. Applicability. This annex is applicable for all Omaha District elements.

3. References.

a. Title 29, CFR, Parts 1910 and 1926

b. EM 385-1-1

c. Appendix A

4. Protective Coveralls. Protective clothing such as coveralls can range from a Tyvek suit to a flame retardant cotton to polyester material. For employees working on or around water, clothing with floatation qualities may be necessary. The supervisor will determine the actual type of protective coverall needed in the AHA for the particular operation or job being performed.

CAUTION: When wearing protective coveralls such as Tyvek, exercise caution to prevent heat stress. Tyvek is not very strong but is more airtight than polyester coveralls. If a Tyvek is worn for a period of time in hot weather, the potential for heat stress exists.

5. Hand Protection. An employee's hands are the most important tool they have. Hand hazards include pinch points, hot spots, rotating machinery, and certain hand tools. Hands should be protected by machine guards or by wearing protective gloves. Employees should be aware that there are times when gloves should not be worn. Never wear gloves near rotating equipment or other devices in which the glove could get caught. Do wear gloves when working with

chemicals, hot machinery, knives, or other hand tools. The type of glove to be worn will be determined by the supervisor of the activity being performed. This should be detailed in an AHA.

6. Foot Protection. Omaha District employees will be provided safety shoes, boots, or removable toe caps when they are exposed to potential foot injury hazards on the job. There are many ways people injure their feet on the job, the most common is from falling objects. Others are puncture injuries, slips and falls, and inattention when working around dangerous equipment. One way to protect your feet is to be sure your work area is neat and orderly. A second method is to cover your feet with the appropriate protective footwear. The supervisor will determine the appropriate protective footwear.

7. Head Protection. All Government personnel who work on or visit field construction, operations, or HTRW activities will wear hard hats. Hard hat wearing policies on field activities not related to construction will be posted at the project. The SOHO will assist in identifying those operations where the wearing of hard hats is mandatory.

- a. Field offices will maintain a supply of clean hard hats for visitors.
- b. Contractors will furnish and enforce the use of protective headgear as required by the contract. Contractors will maintain a supply of clean hard hats for visitors.

## APPENDIX R

### PUBLIC RECREATION SAFETY POLICY AND PROCEDURES

1. Purpose. This appendix establishes the procedures for administering a public recreation safety program designed to minimize the probability of public drowning and other accidents at CE recreation areas.
2. Applicability. This appendix is applicable to all Omaha District elements involved with public recreational areas at CE facilities.
3. Responsibility.
  - a. The Commander is authorized to establish rules and regulations to ensure reasonable precautions are taken to prevent property damage and personal injury accidents to members of the public at recreational facilities under the jurisdiction of Omaha District.
  - b. Operations Division will provide staff supervision and technical assistance on all matters pertaining to recreation safety. Operations Division will conduct the overall district-wide recreation safety program, prepare budgets for the program, and ensure sufficient personnel are assigned to administer the program.
  - c. The SOHO will assist Operations Division in obtaining recreational safety reference materials, serve on the water safety committee and provide assistance to Operations Division on all recreational activities.
  - d. Engineering Division will incorporate the necessary safety features into the design of recreation areas and structures and obtain pamphlets developed to acquaint the public with the facilities and pertinent safety information.
  - e. Real Estate Division will:
    - (1) Include appropriate safety requirements in leases or licenses to ensure that public park and recreational areas, including CE out granted concession areas, are constructed and operated in accordance with recognized safety standards.

(2) Ensure current leases or licenses include specific safety functions or activities that the grantees will perform; e.g., distribution of storm-warning information, flying of storm flags, and safety indoctrination given to persons who rent boats, cabins, motorcycles, etc.

f. The Public Affairs Office will work with SOHO and Operations Division team members on methods to place public service announcements with the broadcast media and methods to monitor the use of these announcements. Public Affairs Office will also provide assistance to SOHO for all special events that include the Commander or his/her Deputies. Such assistance includes input and suggestions on program and location of events, coordination with publicity media, preparation of Commander's remarks, and overseeing proper photographic coverage.

g. The Office of Counsel will provide counsel and guidance on all legal matters pertaining to recreation safety.

h. The Security and Law Enforcement Office will furnish advice on jurisdiction of law enforcement officials.

#### 4. The Program.

a. Recreation facilities will be designed, constructed, maintained, and operated with minimum hazards to the public.

b. Safety on recreation sites is achieved by engineering, education, publicity, and enforcement. To accomplish this, each project will appoint a project safety ranger to coordinate all safety activities. Ranger duties will include assisting in developing a project safety plan. This plan will identify hazards or potential unsafe conditions in each area of operation including Government and contract operations that might conflict with recreation. The plan will include measures to be taken to eliminate or reduce these hazards.

c. Arrangements will be made with the weather bureau to transmit storm warning information to the powerhouse and local radio stations. Establish procedures for transmitting this information onto local Government park managers and CE concessionaires.

d. Encourage CE concessionaires and local Government agencies to fly storm-warning flags.

e. Install lights at boat ramps where feasible.

f. Erect signs and sound systems to warn boat operators concerning sudden increases in discharges below powerhouses.

g. Ensure navigation channels, swimming areas, danger zones, tail waters, and hazardous areas are adequately marked with directional and information buoys, markers, signs, or barricades. Project roads and boat launching ramps will be adequately maintained and identified by signs, barricades, or other markings for the protection of the visiting public.

h. When justified by conditions, install signs to warn of drop-offs, caving banks, poor ice, traffic, and other hazards. Fencing will be considered for particularly serious hazards such as caving banks near recreation areas and around unguarded inlet structures.

i. Install electric lines underground, particularly in camping areas.

j. Provide approved type toilets and trash containers in areas where public use is concentrated.

k. Establish speed limits and traffic patterns on reservoir roads. Obtain state sanction, if possible.

l. Maintain safety equipment and materials; e.g., first aid kits, search, rescue and recovery equipment, portable signs and barricades, communications equipment, vehicles, motor boats, and fire fighting equipment.

m. Ensure CE functions are performed in a manner that will minimize danger to the public.

n. Monitor and control, where possible, water pollution, sanitation, poisonous plants, mosquitoes, and other health hazards.

o. Inform the public of safety requirements associated with boating, fishing, swimming, water skiing, scuba and skin diving, camping, ice fishing, hunting, etc.

p. Encourage state and other responsible officials to establish and enforce laws concerning boating, swimming, control of traffic, and prevention of public disturbances.

q. Provide training for resource management personnel in such subjects as first aid, water safety, and small craft safety.

- r. Participate in the National Safe Boating Week and National Water Safety Congress.
- s. Place water safety displays in the District's visitor centers and information centers.

5. Education. An education program on recreation safety is designed to increase the knowledge and improve the skill of participants and to develop a greater respect for safe practices. The program must be designed to reach both regular users from the local area and the occasional users who come in from greater distances. The primary means of contact is through the news media, the distribution of information pamphlets, strategic placement of signs, efforts of civic organizations, actions of marine equipment suppliers, and through personal contact with visitors. To further the educational efforts, project personnel will concentrate on the following program areas.

- a. Promote and maintain public interest in recreational safety through the establishment of local water safety councils.

- b. Present talks before civic groups; i.e., Parent Teachers Association, Boy Scouts, 4-H, sportsmen's clubs, school assemblies, etc.

- c. Present campfire programs that include the use of displays, films, slide presentations, and talks.

6. Enforcement. Project engineers and lake managers will enforce the rules and regulations affecting safety in accordance with Title 36, CFR, Chapter III, and rules established by the Commander. Enforcement is best accomplished by coordinating with state, county, and local law enforcement officials.

7. Conferences and Meetings. During the annual meeting of reservoir managers and other similar meetings, a session will be scheduled to discuss and exchange ideas and methods pertaining to public safety. The SOHO will be represented at these meetings.

APPENDIX S  
RADIOLOGICAL SAFETY

1. Purpose. This appendix implements the USACE Radiation Protection Program within the Omaha District.
2. Applicability. This appendix is applicable to all USACE personnel and personnel visiting a work site under the jurisdiction of USACE where radioactive material or a radiation-generating device may be present.
3. References.
  - a. AR 385-11
  - b. ER 385-1-80
  - c. EM 385-1-80
  - d. EM 385-1-1
4. Responsibilities.
  - a. The Commander will designate a person to serve as Radiation Protection Officer (RPO).
  - b. The Chief of SOHO, in concert with the RPO, will establish the radiation protection program.
    - c. All elements of the District procuring, storing, possessing, shipping, transferring, using, and disposing of radioactive materials or devices that produce ionizing radiation will designate a point of contact to interface with the Chief of SOHO and RPO on radiation matters.
5. Personnel Dosimetry. Personnel designated to work on HTRW sites with suspected radiation sources will, prior to going on site, obtain a dosimeter badge from the SOHO. The badge will be worn while on site and returned to the SOHO upon completion of work at the site. The SOHO will have it analyzed, and the results will be given to the individual and a copy placed in their medical file.

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6. Inventory and Leak Tests. The RPO will inventory sources on hand every six months and record the results. All sealed sources will be leak tested at least every six months. Changes in use procedures or location of sources will require leak tests.

## APPENDIX T

### SAFETY MANAGEMENT EVALUATIONS

1. Purpose. This appendix establishes procedures for surveying, analyzing, and evaluating each District office, Division, or Installations' management effort and effectiveness toward implementation of all facets of the District Safety and Occupational Health Program.
2. Applicability. This appendix is applicable to all Omaha District field, project, lake, area offices, and ordnance District office elements.
3. References.
  - a. ER 385-1-85
  - b. NWDR 385-1-1
  - c. Appendix A
4. Program Evaluation. Selected District elements will be evaluated annually by the SOHO. Those elements selected will be furnished a copy of the criteria to be used and rating system for the evaluation in advance of the evaluation.
5. Standards of Performance. The Commander or rating supervisor of the area engineer, project engineer, operations manager, or division chief of the selected District element being evaluated will be furnished a copy of the evaluation. The results of the evaluation will serve as a basis to measure safety performance in employee performance appraisals (see Appendix L, Annex A for a sample safety and health performance standard).

APPENDIX U  
SAFETY MEETINGS

1. Purpose. This appendix establishes requirements for safety meetings for Government employees in the Omaha District. This also applies to Government observation of the contractor safety meetings in the District.
2. Applicability. This appendix is applicable for all District, area, project, lake, and resident office employees.
3. Meetings.
  - a. Office Employees. Safety meetings for office employees (District and area/project offices) will be held on a quarterly basis.
  - b. Operating Elements. Operating and field elements such as powerhouses, maintenance forces, and drill crews will hold safety meetings at least monthly, with supervisory meetings held at least quarterly. Weekly toolbox safety meetings are appropriate for temporary summer hires on fieldwork for at least the first month of their employment.
  - c. Shift Employees. Shift employees whose duty hours make it impracticable for them to attend safety meetings will be excused from those meetings they are unable to attend. However, these employees will be furnished minutes of the meetings by their supervisors. The supervisors will discuss any pertinent items that were presented at the meeting. Documentation must show that shift employees have received and reviewed the minutes.
  - d. Supervisors. Supervisors are responsible for scheduling, conducting, and ensuring all employees attend safety meetings. They must also ensure that the subjects are pertinent and meaningful.
4. Briefing Materials.
  - a. Safety and health videos, films, slides, etc., may be obtained from the District library. Suggested items for discussion are:

- (1) Office safety.
- (2) Safety in the home and off the job.
- (3) Defensive driving.
- (4) Safety of site visitors.
- (5) Review of any accidents or near-accidents that occurred since the previous meeting.
- (6) Discussion of unsafe conditions that have not been corrected on projects.
- (7) Discussion of hazards to be expected on future work.
- (8) Review of contractor safety programs and evaluation of degree of compliance.
- (9) Review of sections of EM 385-1-1 applicable to the work being performed.
- (10) Evaluation of effectiveness of existing safety programs.
- (11) Discussion of ideas or methods for improving the safety program.
- (12) Acquisition and use of PPE.
- (13) Ergonomics.

b. Reports. A brief report of safety meetings, together with a list of personnel attending the meeting, will be kept on file.

#### 5. Contractors.

a. Contractor forces are required to hold a minimum of one safety meeting each week in accordance with EM 385-1-1, General Safety and Health Requirements, for all workers on the contracted projects. Written reports of these meetings with the date, time, signatures of persons attending, subjects discussed, and meeting leaders are contractually required. Government field personnel responsible for contract activities should periodically spot check to ensure safety meetings are held and required documentation is kept.

b. In addition to the weekly meeting for all employees, EM 385-1-1 requires a monthly meeting be held with all supervisors on the construction project. These monthly meetings will include both contractor and CE personnel and, on larger contracts, will consist of several “zone” meetings. A report of each of these meetings must be on file at CE offices for review during safety surveys.

## APPENDIX V

### BLOODBORNE PATHOGENS PROTECTION GENERAL INFORMATION

1. Purpose. This appendix establishes procedures for preventing transmission of hepatitis B virus (HBV) or human immunodeficiency virus (HIV) and guidelines to follow if exposure is suspected or occurs.

2. Applicability. This appendix is applicable to all Omaha District elements where employees are potentially exposed to HBV or HIV.

3. Reference. Title 29, CFR, Part 1910-1030

4. Universal Precautions. In order to prevent transmission of infectious agents, it is imperative that universal precautions be followed whenever there is a possibility of exposure to blood or body fluids. See Annex A for barrier precautions to minimize exposure to HBV and HIV.

5. Exposure Reporting. Needle sticks and any exposure to blood or body fluids into the mucous membranes, especially those where no barrier precautions were used or available, must be reported immediately to supervisors who in turn should notify the SOHO.

6. Medical Counseling. Medical counseling will be provided for all workers tested positive for HBV or HIV through the Employee Assistance Program.

7. Employee Classification.

a. As the first step in determining what actions are required to protect worker health, the working conditions and specific tasks that workers are expected to encounter as a consequence of employment will be evaluated by supervisors using the form at annex B. Each employee's position will be classified and the employee will be informed of the following:

(1) The risk of acquiring HBV and HIV.

(2) The availability of hepatitis B vaccine for employees who may be exposed to bloodborne pathogens as a result of performing their official duties.

(3) Policies outlined in this appendix, particularly those for universal precautions and safe disposal of sharps and other waste visibly contaminated with blood or body fluids (annexes C and D).

b. The forms in annexes B and C will be completed in triplicate. The original copy will be sent to the SOHO for review. The duplicate is to be kept in the supervisor's files, and the third copy given to the employee.

c. After review by the SOHO, the original form will be forwarded to the Federal Occupational Health Service (Health Unit) for file in the employee record.

d. Each newly hired employee or any employee transferring to a new position will be trained by the employee's supervisor during orientation.

8. Training. Initial and annual training programs will be established for all employees who perform Category I and/or II tasks as outlined in annex B. No worker should engage in any Category I and/or II task before receiving training pertaining to the standard operating procedures, work practices, and protective equipment required for that task. The training program must include:

a. Transmission modes of HBV and HIV.

b. Types of PPE generally appropriate for Category I and/or II tasks and basis for selection of clothing and equipment.

c. Appropriate actions to take and persons to contact if unplanned Category I or II tasks are encountered.

d. Requirements for work practices and protective equipment specified in written standard operating procedures covering tasks to be performed.

e. Access to and use of protective equipment.

f. Proper disposal of contaminated clothing and/or equipment.

g. Corrective actions to take in the event of spills or personal exposure to fluids or tissues and the appropriate reporting procedures.

9. Records. Records will be maintained documenting:

- a. Classification actions.
- b. Training records indicating dates, names of persons conducting training, names of persons receiving training, and content of training sessions.
- c. Observations of compliance with work practices and use of protective equipment and clothing.
- d. Conditions associated with each incident of mucous membrane or other exposure to body fluids or tissue and a description of any corrective measures taken to prevent a recurrence or other similar exposure.
- e. Vaccination records of personnel classified as doing Category I and/or II tasks.
- f. Declination forms signed by personnel who, although classified as doing Category I and/or II tasks, have chosen not to receive the hepatitis B vaccine.

APPENDIX V, ANNEX A

UNIVERSAL PRECAUTIONS TO MINIMIZE EXPOSURE  
TO HBV AND HIV

Medical history and examination cannot reliably identify all persons infected with HBV, HIV, or other bloodborne pathogens. Therefore, all blood and body fluids from all persons will be considered to be potentially infectious. CE personnel will rigorously adhere to the following infection control precautions to minimize exposure to blood and body fluids. Use appropriate barrier precautions when contact with blood/body fluids is anticipated.

a. Gloves will be worn for touching blood/body fluids, mucous membranes, or non-intact skin and for handling items or surfaces soiled with blood/body fluids. High-risk body fluids include wound drainage, semen, vaginal secretions, and breast milk. Body fluids of lesser risk include urine, feces, saliva, and vomitus. If the fluid cannot be identified, it will be assumed to be of high risk.

b. Masks and protective eyewear/face shield will be worn during procedures that may splatter blood/body fluids on an employee's mouth, nose, or eyes.

c. Ambulance bags or similar shielding devices must be readily available and used for resuscitation. Each CPR provider will be furnished a device for personal use in order that familiarity with the device can be established. A good fact-to-bag seal is easier to achieve with a familiar device; therefore, assuring the device is used properly.

d. Wash hands or other skin surfaces immediately if soiled with blood/body fluids. Wash hands thoroughly with soap and water or a waterless disinfectant hand cleaner immediately after gloves are removed.

e. Employees with exudative lesions (draining cuts or sores) or chapped or abraded skin should not provide emergency care or handle contaminated waste or items until the condition is resolved.

f. Remove visible material and clean the decontaminated surfaces soiled with blood/body fluids with a fresh chlorine bleach solution (1 part bleach to 10 parts water).

g. As soon as is practicable, remove and place clothing saturated with blood/body fluids in a plastic bag. Take a shower before donning fresh clothing. Wash soiled clothing at home using hot water and detergent. Clothing should not be handled during placement into the washer and should be washed separate from other laundry items.

APPENDIX V, ANNEX B

RISK OF EXPOSURE TO HBV OR HIV  
SAMPLE FORMAT

Employee Name \_\_\_\_\_

Job Title \_\_\_\_\_

Location (Office Symbol) \_\_\_\_\_

1. Category I - The employee performs tasks that involve an inherent potential for mucous membrane or skin contact with blood, body fluids, or tissues or a potential for spills or splashes. Universal precautions should be applied for all procedures when it is likely that the employee will have contact with blood or body fluids to prevent transmission of bloodborne pathogens. Hepatitis B vaccine is highly recommended for these employees.

2. Category II - The employee performs tasks that involve no exposure to blood, body fluids, or tissues during the normal work routine, but the employee may be required to perform unplanned Category I tasks. Universal precautions should be used to perform any Category I procedures. Hepatitis B vaccine is recommended for these employees.

3. Category III - The employee performs tasks that involve no exposure to blood, body fluids, or tissues during the normal work routine. No special precautions are necessary to prevent transmission of bloodborne pathogens.

4. The employee's position involves the following work-related tasks:

	I Routine Task	II May be Required	III Never Done
Administers first aid to accident victims	( )	( )	( )
Applies dressing or bandages to wounds	( )	( )	( )
Administers mouth-to-mouth resuscitation	( )	( )	( )

Cleans or performs maintenance on items or  
equipment that may be contaminated with  
potentially infectious materials ( ) ( ) ( )

Picks up or processes waste which may contain  
items contaminated by blood or body fluids ( ) ( ) ( )

5. I have read the above information and have had an opportunity to provide additional information and ask questions. I understand that I may obtain further information about policies and procedures to minimize the risk of transmission of HBV/HIV from the bloodborne pathogen program from my supervisor or by contacting the SOHO.

Employee's Signature \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Supervisor's Signature \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

APPENDIX V, ANNEX C

HBV INFORMATION SAMPLE FORMAT

Employee Name \_\_\_\_\_ Title \_\_\_\_\_

Location \_\_\_\_\_

1. Hepatitis B is a viral infection caused by the hepatitis B virus (HBV) that causes death in 1 to 2 percent of patients. Most people with hepatitis B recover completely, but approximately 5-10 percent become chronic carriers of the virus. Most of these people have no symptoms, but can continue to transmit the disease to others. Some may develop chronic active hepatitis and cirrhosis. HBV also appears to be a causative factor in the development of liver cancer. Thus, immunization against hepatitis B can prevent acute hepatitis and also reduce sickness and death from chronic active hepatitis, cirrhosis, and liver cancer.

2. The hepatitis B vaccine is a recombinant vaccine derived from yeast cells. A high percentage of healthy people who receive three doses of vaccine achieve protection against hepatitis B infection. Full immunization requires three doses of vaccine over a six-month period, although some persons may not develop immunity even after three doses. The vaccine is given in the upper arm in the deltoid muscle. There is no evidence that the vaccine has ever caused hepatitis B or acquired immunodeficiency (AIDS); however, persons who have been infected with HBV prior to receiving the vaccine may go on to develop clinical hepatitis in spite of immunization. The duration of immunity is unknown at this time, but is probably long-term.

3. Persons who have a known hypersensitivity to yeast should not receive this vaccine. The vaccine is also not recommended for pregnant women or nursing mothers.

4. Very few adverse reactions have been recorded. The most typically reported reactions are local site soreness, swelling, and tenderness. Some other reactions reported are nausea, vomiting, abdominal pain/cramps, headache, lightheadedness, fatigue, and weakness. There have been no reported deaths associated with this vaccine.

ACCEPTANCE: I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring HBV infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. I wish to receive the hepatitis B vaccine.

Employee's Signature \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

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Supervisor's Signature \_\_\_\_\_ Date\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

DECLINATION: I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring HBV infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee's Signature \_\_\_\_\_ Date\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Supervisor's Signature \_\_\_\_\_ Date\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

APPENDIX V, ANNEX D

SAFE DISPOSAL OF SHARPS AND OTHER  
CONTAMINATED MEDICAL WASTE

Distribute these disposal tips to all personnel. This information will also be placed in areas easily accessible to patrons.

1. Pick up needles, syringes, lancets, or other sharps by the syringe or handle end with pliers. Items that cannot be grasped in this manner will be carefully swept into a dustpan.
2. Do not attempt to remove the sharp from the holder.
3. Do not remove, bend, clip, or recap needles.
4. Place needles, syringes, lancets, and other sharp objects in a hard plastic or metal container with a screw-on or tightly secured lid. A plastic bleach or fabric softener bottle is suitable for this purpose. A metal coffee container will do but the plastic lid will be reinforced with heavy-duty tape before use. To prevent accidental contact, do not hold the container while discarding the sharp object. Place the closed container into the regular trash receptacle for disposal.
5. Do not put sharp objects in any container that will be recycled or returned to a store.
6. Do not use glass or clear plastic containers.
7. Keep all containers with sharp objects out of the reach of children.
8. Soiled bandages, gloves, and other items will be placed in a securely fastened plastic bag. The bag will then be placed into a second plastic bag and securely fastened before discarding with other trash.
9. Do not compact trash.
10. Carry bags away from the body so as not to brush against any sharp objects that may protrude from the bag.

## APPENDIX W

### INDUSTRIAL HYGIENE & OCCUPATIONAL HEALTH

1. Purpose. This appendix prescribes policies, responsibilities, and execution requirements for the USACE Industrial Hygiene (IH) and Occupational Health Program (OHP) to:

a. Recognize, evaluate, and control health hazards in USACE workplaces and USACE-managed projects.

b. Medically evaluate exposed employees to assure personnel are physically and psychologically capable of performing required job tasks and that physical and mental health are maintained during service or employment.

c. Reduce and keep to a minimum manpower and economic loss caused by physical deficiency, sickness, and injury of military and civilian personnel.

d. Provide for adequate industrial hygiene engineering input (criteria development, review, and field support) for the life cycle of projects (civil, military, support for others, etc.) USACE executes.

e. Ensure compliance with applicable policy, regulations, standards, and criteria.

f. Ensure that the Omaha District is familiar with the resources available, functions, and responsibilities of the IH programmatic area (see Annex A).

2. Applicability. This appendix applies to all elements of the Omaha District where health hazards exist.

3. Reference. EP 385-1-58, Appendix A.

4. Definitions. EP 385-1-58, Chapter 1.

5. Responsibilities.

a. The Chief, Engineering Division, is responsible for providing technical guidance for HTRW and OE programs in accordance with ER 385-1-92, ER 385-1-94, USACE environmental

restoration management plans, and other criteria. Engineering Division will provide IH engineering guidance and support requirements for criteria development and specification development and reviews associated with health hazard recognition, evaluation, and control during the planning and design of projects.

b. HTRW Center of Expertise will develop technical SOH HTRW documents, provide review and oversight of HTRW Design District developed products, provide technical support to USACE commands executing HTRW projects, and serve as the primary point of contact for human health risk assessment and radiation health physics.

c. Planning, Programs, and Project Management Division is responsible for ensuring that appropriate health hazard recognition, evaluation, and control assessment requirements are incorporated in the program management business process during all projects, regulations, and guidance.

d. Construction Division will provide guidance related to IH support, employee exposure prevention, contractor quality control, and Government quality assurance requirements associated with health hazards encountered during construction activities.

e. Operations Division will provide IH and OH guidance for civil works project operations and maintenance, navigation, natural resource management, USACE facility environmental compliance, and emergency management.

f. CPAC will ensure employee position descriptions are current and fully identify the physical demands, exposure potentials, medical surveillance, and PPE required for the job. They will also ensure all newly-hired and current employees are physically capable of performing required job tasks and the management of required and voluntary occupational health to include medical services conducted in accordance with Federal, DOD, DA, and USACE human resources. They also must manage an effective light-duty and management employee relations (MER) program to monitor work-related and non-work related medical restrictions placed on employees that impact on full performance of job duties.

g. The SOHO will:

(1) Provide effective leadership, direction, and sufficient resources to maintain a minimally compliant program.

(2) Ensure effective implementation of a compliant program.

- (3) Conduct initial baseline assessment of health hazards exposure.
- (4) Prepare annual reassessment of health hazards exposure.
- (5) Identify health hazards in a position hazard analysis.
- (6) Incorporate results into a health hazards inventory.
- (7) Prioritize health hazards inventory for further assessment.
- (8) Evaluate exposures and document results.
- (9) Authorize occupational health services based on exposures of job.
- (10) Utilize a qualified occupational health nurse to oversee occupational health results.
- (11) Provide for (by contract) a qualified occupational health physician to provide medical advice, guidance, and be the reviewing physician for all work-related physical examinations and evaluations.
- (12) Manage District's MSP. See Appendix N.
- (13) Develop RAC's to include in the overall hazard abatement/control plan in accordance with DA PAM 4000-503, AR 385-10 and DODI 6055.1.
- (14) Recommend corrective actions to responsible manager to abate identified hazards and review the implementation.
- (15) Conduct follow-up of abatement implementation to assess adequacy or need for correction.
- (16) In coordination with Contracting Division, establish procedures to ensure all purchased hazardous materials are accompanied by the MSDS upon receipt.
- (17) Incorporate all aspects of the IH and OH programs into project management. Provide IH and OHP technical assistance and oversight to ensure managers and supervisors provide

employees authorized IH and OH services, and that employees are protected from recognized health hazards in the workplace.

(18) Ensure training programs are conducted and provide assistance to inform employees of workplace health hazards and their potential effects, the proper use of PPE and the function of the IH and OHP.

(19) Provide technical assistance to supervisors and employees concerning IH and OH issues and concerns, including use of engineering controls, administrative controls, and PPE.

(20) Assure the maintenance of required employee exposure data by CPAC.

(21) Conduct annual inspections/management evaluations to determine the adequacy of the IH and OHP.

(22) Manage and oversee IH and OHP implementation by managers and supervisors.

(23) Ensure in-house IH and health physicist (HP) review to support USACE Command environmental restoration mission.

(24) Integrate IH technical support to the planning, engineering, construction and operations phases of both civil and military funded projects. Also provide IH support in development and review of plans and specifications. Specific IH support is mandatory in the development and review of asbestos and lead hazard control project specifications and support the field project execution.

h. Supervisors will:

(1) Review duties of positions and will notify CPAC and SOHO of physical requirements, potential exposures and special conditions of employment and PPE required for the position.

(2) Complete an accurate and current position hazard analysis for the position where employee is potentially exposed to a health hazard.

(3) Notify SOHO when new activities, processes, or chemicals are introduced into the workplace.

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(4) Inform employees of potentially hazardous operations and environments. Develop and implement controls to prevent or reduce exposures.

(5) Conduct IH and OHP orientation to new employees. Provide training to keep employees abreast of health hazards associated with their specific work environment.

(6) Be knowledgeable of those employees under their supervision requiring medical surveillance and keep employees apprised of actions regarding their medical surveillance.

i. Employees will:

(1) Maintain health status commensurate with duties of their job.

(2) Demonstrate an understanding of all training completed.

(3) Report to their immediate supervisor any workplace conditions, potential exposure situation, or physical ailment that would prevent them from the performance of their designated task or mission.

## APPENDIX X

### ORDNANCE SAFETY PROCEDURES

1. Purpose: This appendix establishes guidance to effectively provide force protection guidance for employees working with ammunition or explosives mission.

2. Applicability: This appendix is applicable to all Omaha District employees, Government-owned, contractor-operated (GOCO) facilities, and contractor operations on Government property.

3. References:

a. AR 385-64

b. DFARS

c. DOD 4145.26M

d. FM 100-14, Risk Management

e. TB 700-2; DOD Explosives Hazard Classifications Procedures

f. Appendix A

4. Definitions:

a. Ammunition and explosives (A&E): includes but is not limited to all items of ammunition; liquid and solid propellants; high and low explosives; guided missiles, warheads; devices, pyrotechnics, chemical agents, and components; and substances associated therewith presenting real or potential hazards to life and property.

b. Five-Step Risk Management Process: The five-step process is the principal risk reduction process to identify and control hazards and make informed decisions (see FM 100-14); identify hazards; assess hazards; develop controls and make risk decisions; implement controls; and supervise and evaluate.

c. Exemption: A written authority that permits a long-term deviation from a mandatory requirement of United States Army ammunition and explosives safety standards. Exemptions will be reviewed for applicability and currency at intervals not to exceed five years.

d. Waiver: A written authority that permits a temporary deviation from a short-term (five years or less) mandatory requirement of United States Army ammunition and explosives safety standards (See exemption).

e. Ordnance and Explosives (OE): Designed to cause damage to personnel or material through explosive force, incendiary action, or toxic effects. OE is defined as bombs and warheads, guided and ballistic missiles, artillery, mortar, and rocket ammunition; small arms ammunition; antipersonnel and antitank land mines; demolition charges, pyrotechnics; grenades, torpedoes and depth charges; containerized or uncontainerized high explosives and propellants; depleted uranium rounds; chemical agents; and all similar constituents in excess of 12 percent per weight will be considered reactive and, therefore, OE. Soils contaminated with secondary explosives at or below 12 percent per weight will be evaluated following HTRW procedures. Surface water and ground water contaminated with explosives will also be evaluated following HTRW procedures.

f. Omaha District Support Team: A group of individuals within Omaha District to include the following:

- (1) Ordnance Program Manager
- (2) Safety Manager
- (3) OE Safety Specialist
- (4) Chief, Industrial Hygiene Section
- (4) Liaison for Engineering Division; OE Mentoring
- (5) OE subject matter expert for contracting procedures

Note: The purpose of the support team is to provide a better means of communicating with the elements within the District that are critically involved in OE issues. Meetings are generally held on a quarterly basis and will cover OE issues as outlined by the OE program manager.

5. Responsibilities:

- a. All explosives accidents as specified in AR 385-40 will be reported immediately to the SOHO.
- b. The SOH manager will serve as a point of contact for all aspects of the MACOM Safety Program including oversight of the explosives safety program in cooperation with the Industrial Hygiene Section, Geotechnical Engineering and Science Branch, Engineering Division.
- c. The SOHO is responsible to implement the requirements in AR 385-64 and outline the responsibilities of all organizations within Omaha District with an explosives mission.
- d. The OE safety specialist in the Industrial Hygiene Section, Geotechnical Engineering and Science Branch, Engineering Division, will review all site plans, safety submissions, and facility designs, and he/she will coordinate this with the SOHO. This will ensure that a qualified review is performed, and all team members are involved.
- e. All explosives safety waivers and exemption requests for facilities and equipment will be routed through the SOHO, after review by the OE safety specialist. The SOHO will provide the Commander with essential risk management data regarding any deficient situation.
- f. The contracting officer must coordinate with the SOHO who administers contractual safety requirements involving A&E to ensure the contract addresses A&E safety issues.
- g. Waivers, exemptions, site plans, work plans, and general construction plans pertaining to Army-owned facilities will be processed through the safety command channels in accordance with DA Pam 385-64.
- h. The contracting officer will coordinate with the ACO and SOHO to ascertain contractor complies with contractual A&E safety requirements and to ensure that the contractor is taking timely and adequate corrective action. The SOHO will perform oversight inspections in cooperation with the OE Safety Specialist.
- i. The ACO and SOHO will monitor contractor accident investigations to ensure that the cause or causes of the accident are properly identified.

j. The ACO, the OE safety specialist, and the SOHO will monitor all contractor accident investigations to ensure appropriate corrective measures are taken to prevent or minimize the impact of recurrence.

k. All requests for waivers, exemptions, and Certificates of Compelling Reasons (CCRs) will be routed through the OE safety specialist and SOHO. The SOHO will assist in preparing the request, staff the request, and forward the complete package to the Commander with a safety recommendation.

l. Industrial Hygiene Section, Geotechnical Engineering and Sciences Branch, Engineering Division, will work closely with the SOHO to ensure all ordnance and explosive-related tasks are reviewed or conducted by qualified and knowledgeable staff.

