DEPARTMENT OF THE ARMY
Corps of Engineers, Portland District
P.O. Box 2946
Portland, Oregon 97208-2946

CENWP-SO
Regulation
No. 385-1-1

24 January 2003

Safety
SAFETY AND OCCUPATIONAL HEALTH PROGRAM

History. This issue is a new Portland District regulation.

Summary. This regulation covers all aspects of the Safety and Occupational Health Program for the Portland District. The regulation also breaks down each significant area within the program and expands on each.

Table of Contents

Appendices

Appendices (continured) Page

1. PURPOSE. To assign duties, responsibilities, and establish operating procedures relative to the overall implementation of the Portland District's Safety and Occupational Health (SOH) Program. The policies and procedures set forth are based on Federal, State, and Local regulations. In some instances, policies that are more stringent are established.

2. APPLICABILITY. The policies and procedures prescribed in this memorandum are applicable to all employees of the Portland District and apply to all missions of the District, both military and civil.

3. REFERENCES. Referenced publications are listed in Appendix A.

4. POLICY.

a. The Commander's safety policy is published as a separate document.

b. Integration of safety into all activities and operational procedures is the basic concept of the Corps of Engineers' SOH Program. Accident prevention and risk management will be applied as an operating function to all activities and procedures.

c. Portland District will provide Government employees, visitors, and contractors a safe and healthful environment free from recognized hazards. Every reasonable effort will be made in the interest of accident prevention, fire protection, and health preservation. Contractors, visitors to operating projects, and field office representatives, will be given a safety briefing by the operating project before entering or visiting work areas.

d. All work will be done in accordance with EM 385-1-1 (Safety and Health Requirements Manual), OSHA standards, and other national consensus standards, such as ANSI, NFPA, NEC, etc.

5. OBJECTIVES.

a. To establish and administer a safety program that will assure managers, supervisors, and employees are motivated and trained to integrate Safety and Occupational Health into everything they do.

b. To eliminate and control safety hazards by creating and maintaining safe working conditions, promoting and enforcing safe practices by both Government and contractor employees, incorporating safety into the design of facilities, and providing for the safety of the visiting public.

c. To conserve Corps of Engineers' resources by preventing on-the-job injuries/illnesses and property loss/damage. This includes Corps of Engineers' contractors. Employees are our most valuable resource; an investment in safety is an investment in our employees.

d. To require acceptable safety performance on all jobs from start to finish by all Corps of Engineers managers, supervisors, employees and contractors.

6. GENERAL RESPONSIBILITIES.

a. Chief, Safety and Occupational Health Office (SOHO) is responsible for the overall administration and management of this program.

b. Division and Office Chiefs are responsible for implementing and accomplishing the provisions of this program as specified in each applicable appendix to this NWPR. Specific responsibilities are identified in paragraph 7 below.

c. Division and Office Chiefs and Operation Managers are responsible for the full application of the safety program to all functions and activities under their jurisdiction. Hazards and problems discovered which extend beyond the jurisdiction of the immediate supervisor will be brought to the attention of higher authority. Effective implementation of the accident prevention program requires that every element of the organization assume continuous accident prevention techniques in all its operations.

7. SPECIFIC RESPONSIBILITIES.

a. Division and Office Chiefs will:

(1) Ensure that all recordable accidents are promptly investigated and reported.

(2) Ensure that employees in a non-administrative job have an accurate job hazard analysis for their position and assigned tasks.

(3) Ensure that all employees are aware of their rights and responsibilities regarding safety and occupational health.

(4) Ensure that annual safety inspections are conducted and that safety deficiencies are corrected in a timely manner.

(5) Verify that a workplace hazard assessment has been performed through a written procedure that identifies if hazards are present, or are likely to be present, which necessitates the use of Personal Protective Equipment (PPE).

(6) Ensure that newly appointed supervisors receive basic safety training.

(7) Report all contractor hours worked to the SOHO by the 15th of the month following the month during which the contractor activity occurred. This applies to all contracts for which EM 385-1-1, Safety and Health Requirements Manual are applicable.

b. Chief, Safety and Occupational Health Office will:

(1) Advise the District Commander on all matters of SOH. This includes activities on civil works, operating projects and Hazardous and Toxic, Radioactive Waste (HTRW) sites.

(2) Develop and manage the SOH program to include worker safety, occupational health, public safety, radiological safety, construction safety, operating project safety, and fire prevention.

(3) Study, survey, and evaluate the efforts expended toward the prevention of accidents on all phases of the activities being conducted.

(4) Conduct annual safety management evaluation of District operational projects. Evaluation components to include: the use of Risk Management techniques, program compliance with Federal and State regulations, programmatic compliance with respect to the development of Position Descriptions, Activity Hazard Analysis, workplace hazard assessments and medical monitoring.

(5) Ensure that plans and specifications include necessary SOH requirements. Includes safety engineering criteria, any other pertinent safety, and occupational health requirements for accident and occupational illness prevention. Reviews focus on inclusion of Accident Prevention Plans, Site-Specific Safety and Health Plans (SSSP), Activity Hazard Analyses to ensure that safety concerns are addressed.

(6) Ensure that guidance from higher authority relative to safety and health is communicated to the operating level and that District safety and health procedures are updated to reflect such guidance.

(7) Provide recommendations regarding hazard pay/environmental differential determinations in coordination with Civilian Personnel Advisory Center.

(8) Receive and process district exposure and accident reports; serves as technical advisor on all Portland District Boards of Investigation.

(9) Manage the Office of Workers' Compensation Program (OWCP) and ensures capable employees are returned to work as soon as they are able.

(10) Manage employees' Official Medical Files (OMF) in conjunction to ensure that medical providers maintain records in accordance with the Privacy Act.

c. Chief, Engineering/Construction Division (in addition to the responsibilities identified above in paragraph 7.a) will:

(1) Ensure that all Hazardous, Toxic and Radiological Waste Operations are conducted in accordance with 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response; EM 385-1-1, Section 28; and ER 385-1-92, Safety and Occupational Health Document Requirements For Hazardous, Toxic, and Radioactive Waste (HTRW) Activities.

(2) Ensure that all employees involved in hazardous waste operations and meeting the inclusion criteria, as defined by regulation, are included in a Medical Surveillance Program.

(3) Ensure that all employees exposed to noise at or above the action level are included in a Hearing Conservation Program.

(4) Ensure that all employees that wear or may need to wear respirators (based on hazard assessments of the work environment) have been trained, fit tested (either qualitatively and/or quantitatively) and medically qualified to wear a respirator.

(5) Ensure that all employees required to work in confined spaces and permit required confined spaces, have been trained (minimum–entrant level), possess a basic knowledge of escape/egress from the work area, and have basic understanding on the proper use of air monitoring equipment.

(6) Report all contractor hours worked to the SOHO by the 15th of the month following the month during which the contractor activity occurred. This applies to all contracts for which EM 385-1-1, Safety and Health Requirements Manual, is applicable.

(7) Insert the following paragraph in Architect-Engineer design contracts where appropriate:

> Health and Safety Standards. The facilities, systems, and equipment design standards of the Occupational Safety and Health Act, Code of Federal Regulations, Title 29, Parts 1910 and 1926, as applicable, will be incorporated by the Architect-Engineer into all engineering design and analyses furnished pursuant to this contract. Any problems in incorporating these standards due to conflict with other technical criteria will be promptly submitted to the Contracting Officer for decision.

(8) Ensure that personnel are knowledgeable of safety standards applicable to the construction safety, construction quality management, and risk management processes.

d. Area and Resident Engineers (in addition to the responsibilities identified above in paragraph 7.a) will:

(1) Hold monthly All Hands safety meetings. Minutes will be kept of those in attendance and the topic covered. An informational copy will be furnished to the SOHO. A rotational schedule assigning a different employee the task of presenting a safety topic at each monthly safety meeting is recommended.

(2) Require all quality assurance representatives to include in their daily reports, Quality Assurance Report (QAR) Daily Log of Construction-Civil (ENG Form 2538-2-R) specific safety observations, both positive and negative.

(3) Review all plans and specifications for work at their projects to ensure safe design.

(4) Report all contractor hours worked to the SOHO by the 15th of the month following the month in which the contractor activity occurred. This applies to all contracts for which EM 385-1-1, Safety and Health Requirements Manual, is applicable.

e. Chief, Operations Division (in addition to the responsibilities identified above in paragraph 7.a) will:

(1) Ensure that Operating Managers are evaluated annually for safety performance.

(2) Provide programmatic oversight/technical support for the District water safety program.

(3) Report all contractor hours worked to the SOHO by the 15th of the month following the month in which the contractor activity occurred. This applies to all contracts for which EM 385-1-1, Safety and Health Requirements Manual, is applicable.

(4) Ensure programmatic compliance with the USACE drug-testing program. Ensures that designated position testing is taking place in accordance with Executive Order 12564, Federal and Corps' guidance.

f. Operating Project Managers (in addition to the responsibilities identified above in paragraph 7.a) will:

(1) Designate a person as the collateral duty safety officer.

(2) Ensure that the collateral duty safety officer is adequately trained.

(3) Ensure that each operating project has implemented a written documentation for those programs requiring local standing operating procedures (SOP's) or where the facility has unique equipment, e.g., the control of hazardous energy.

(4) Hold monthly safety meetings and weekly toolbox/section safety meetings

(5) Ensure that all employees receive required safety training such as bloodborne pathogens, hazard communication, the control of hazardous energy, hearing conservation, etc..

(6) Ensure that all employees meeting the inclusion criteria are integrated into the Projects Medical Surveillance Program. Ensures that pre-placement, pre-employment and periodic medical monitoring is coordinated with Occupational Health Program personnel in the SOHO.

(7) Ensure that all employees required to work in confined spaces and permit required confined spaces have been trained (minimum – entrant level), possess a basic knowledge of escape/egress from the work area and have basic understanding on the proper use of air monitoring equipment. In addition, employees shall have an Activity Hazard Analysis, pre-plan for each confined space and rescue teams identified. See 29 CFR 1910.146 for Permit-required confined spaces.

(8) Ensure programmatic compliance with the USACE drug-testing program. Ensures that designated position testing meets requirements set forth in Executive Order 12564, Federal and Corps' guidance.

g. Chief, Civilian Personnel Advisory Center (in addition to the responsibilities identified above in paragraph 7.a) will:

(1) Keep the SOHO advised of new or revised policies and procedures concerning workers' compensation, hazardous work, and other matters impacting on safety and occupational health.

(2) Coordinate pre-employment medical examinations with hiring officials.

h. Chief, Logistics Management Office (in addition to the responsibilities identified above in paragraph 7.a) will:

(1) Ensure that the annual occupational safety and health/fire survey of all GSA-furnished office space is accomplished and written documentation is provided.

(2) Ensure that all Logistics Management employees working with hazardous materials are trained in accordance with the Hazard Communication Standard and, if required, trained as hazardous materials workers in accordance with Department of Transportation Standards.

(3) Ensure that all Logistics Management employees exposed to noise at or above the action level are included in the Hearing Conservation Program.

(4) Provide input on motor vehicle mileage to SOHO for the mileage report to be run by the 15th of each month.

(5) Provide the SOHO with notification of all motor vehicle accidents regardless of the amount of property damage to ensure that statistics are accurate for accident trend analysis.

(6) Responds promptly to employees' concerns as the GSA liaison, regarding safety and health conditions in the District Office.

(7) Develop and maintain an emergency evacuation plan for the District Office and coordinates at least one annual exercise of the plan.

(8) Administer the Occupant Emergency Plan for the District Office.

i. Chief, Real Estate Division (in addition to the responsibilities identified above in paragraph 7.a) will:

(1) Ensure that leased (out-granted) facilities are in compliance with OSHA standards. Real Estate Division personnel doing pre-lease inspections will become familiar with those portions of the standards that apply to the kind of space being leased.

In addition, a paragraph will be written into leases that states, "the lessor will provide facilities that comply with OSHA standards." Incorporates the use of The Environmental Assessment Manual (TEAM) guide for out-granted/leased properties.

(2) Ensure that all operations are conducted in accordance with applicable safety and occupational health standards.

j. Chief, Contracting Division (in addition to the responsibilities identified above in paragraph 7.a) will:

(1) Ensure that all applicable safety clauses are inserted into appropriate contract documents.

(2) Ensure that Material Safety Data Sheets (MSDS) are requested on all purchases of hazardous materials and that these data sheets are directed to the product end-user. Ensures that this guidance is incorporated into all applicable safety clauses of contractual documents.

k. Other team members when making surveys and inspections of field office activities shall:

(1) Observe the work from a safety point of view. Assess the situations and approach inspections and surveys utilizing Risk Management techniques.

(2) Evaluate safety performance within their areas of responsibility.

(3) Discuss observed discrepancies with the official in charge.

(4) Follow all safety procedures when entering hazardous areas.

l. Line Supervisors and Lead persons will:

(1) Ensure the safety of all employees who work under their direction. Incorporate Risk Management techniques into every aspect of the work. For each major activity, an Activity Hazard Analysis will be prepared, reviewed, discussed and maintained on file for future reference.

(2) Know the safety requirements and safe practices applicable to their work, including accident controls in their work methods.

(3) Instruct employees under their supervision in safe work practices. Incorporate safety into employees' yearly performance rating (TAPES). Recognize successes and provide constructive input where improvement indicates.

(4) Provide employees with personal protective equipment (PPE) as required by their work and ensure that it is used. Supervisors will hold employees accountable for not using PPE or other unsafe work practices.

(5) Bring to the attention of higher authorities those hazards or safety problems that extend beyond their immediate jurisdiction. Incorporate Risk Management techniques to assess and reduce risks/hazards.

(6) Ensure that employees attend required safety training and receive counseling regarding unsafe work practices when necessary.

(7) Document warnings to employees who violate safe work practices.

m. Employees will:

(1) Will comply with all safety regulations.

(2) Are responsible for their own actions or inaction concerning personal safety and the safety of others. Employees will immediately report all incidents and accidents to their line supervisor/lead person.

(3) Will immediately notify their supervisor of any safety hazards and/or violations.

(4) Will correct or remove safety hazards within their control.

8. PROCEDURES.

a. Health Hazards. Potential health hazards from toxic materials, noise, waste disposal, or work environment will be evaluated and risk management techniques will be implemented. Proposed plans, designs, operations, or use of new materials which involve potential health hazards not previously evaluated will be brought to the attention of the SOHO which will coordinate evaluation and assessment of the hazards.

b. Hazardous, Toxic Waste Operations (HTRW). HTRW operations will be conducted in accordance with 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response; EM 385-1-1, Section 28; and ER 395-1-92, Safety and Occupational Health Document Requirements For Hazardous, Toxic, and Radioactive Waste (HTRW) Activities.

c. Radiological Safety. Radiological safety matters will be executed in compliance with ER 385-1-80, Radiological Safety and guidance set forth by the Nuclear Regulatory Agency.

d. Preventing Contributory Negligence. Efforts will be made to prevent accidents that might result from negligence, wrongful acts, or omissions by employees of the U.S. Army Corps of Engineers. In no instance will the public be admitted to hazardous area or where their presence could create interference with safety operations. When members of the public are

admitted to Corps activities, they must be accompanied by Corps personnel and provided personal protective equipment commensurate with the operation, as appropriate. Visitors on official duty will be briefed on appropriate hazards and provided applicable personal protective equipment.

e. Public Recreation Areas. At Corps' installations where public recreation is offered, the District operating elements will, in addition to their normal administrative and operating safety responsibilities, provide for the safety of the visiting public. This effort will be directed toward all recreational activities. In the absence of specific federal regulations governing the use and maintenance of public use areas National Consensus Standards will be used. Such standards include but are not limited to the following: The National Water Safety Congress, The National Safety Council, The National Fire Protection Association, The National Electrical Code, etc.

f. Electrical Safety. Portland District will comply with the provisions of National Electrical Code. The design of electrical distribution systems for civil works and military facilities projects involving boat docks, boat yards, marinas, construction sites, and residential occupancies will incorporate adequate provisions for personnel ground-fault circuit interrupter protection. In addition, other circuits that supply receptacles in damp locations or outdoors, such as those for public use, recreational areas, and recreational vehicle parks, will also be provided with suitable personnel ground-fault protection.

g. Procedures for obtaining a waiver of an EM 385-1-1 requirement.

(1) The request must contain the following information:

(a) A written explanation stating the requirement for which the waiver is requested.

(b) List of reason(s) why the exemption is needed.

(c) List of measures that will be taken to provide equivalent protection.

(2) This information must be routed through the District SOHO to the division SOHO. The turnaround time will vary depending upon the complexity of the waiver requested. In all instances, requests for waivers must be forwarded to HQUSACE (CESO) for a decision or, if the Commanding General at Division has granted a waiver. In any case, only a Commanding General may grant a waiver. To expedite the process, the information can be sent via facsimile or email, but it must follow the aforementioned routing procedures and electronic routing must be followed up with a hard copy.

(3) Waiving an OSHA requirement involves the above-mentioned process, including staffing through USACE in addition to approval by OSHA at the Washington, D.C. level.

(4) Waivers are infrequently granted. The justification must be strong and there must be support all along the chain of command. Serious consideration should be given before a request for a waiver is prepared.

9. OCCUPATIONAL SAFETY AND HEALTH ACT PROGRAMS FOR FEDERAL EMPLOYEES.

a. Executive Order 12196, Occupational Safety and Health Programs for Federal Employees, makes each Federal agency head responsible for establishing and maintaining an effective and comprehensive Occupational Safety and Health Program. The Occupational Safety and Health Administration Act is, therefore, applicable to federal workplaces. The rights and responsibilities of employees as developed in 29 CFR, Part 1960, Federal Employee Safety and Occupational Health will be honored. EM 385-1-1, Safety and Health Requirements Manual will be complied with for operational, construction, military and HTRW activities. When an operation is not covered under EM 385-1-1, pertinent OSHA standards will apply. Where EM 385-1-1 and OSHA standards are applicable, the more stringent standard shall apply. Those operations not covered by EM 385-1-1 or OSHA standards will comply with appropriate DA, DOD, State or National Consensus Standards.

b. Department of Labor (OSHA) compliance personnel may visit contractor and government worksites for compliance inspections and are to be extended full cooperation when requested. When an OSHA visit is to be made to a Corps of Engineers' facility, the District SOHO will be immediately notified.

c. Design of new construction, modification, and rehabilitation projects will incorporate the OSHA standards set forth in the Occupational Safety and Health Act, Code of Federal Regulations, Title 29, Parts 1910 and 1926, as applicable.

10. LOAN OF GOVERNMENT PLANT. The responsibility for the prevention of accidents on plant, including floating plant loaned by the owning district to another district or division, will remain with the owning district. This responsibility can only be changed when operational control has been formally transferred in a Memorandum of Understanding signed by responsible officials for both the owning and using organizations.

11. USE OF STOP ORDER. If attempts to secure voluntary compliance with safety requirements are unsuccessful, the Contracting Officer's Representative or his designated representative may issue a work stoppage order. The order will apply only to that portion of the work affected by the actions or lack of actions by the contractor. All of the facts of the proceedings will be documented in writing. The contractor will be informed in writing of the extent of the work stoppage, the date and hour work was stopped the reason for the action, and the conditions under which work may proceed. An accurate record will be kept on all personnel, material, and equipment that the contractor has on hand during the work stoppage, as well as the time worked. This Stop Work Order is different from a suspension of work. Only the Contracting Officer can issue a Suspension of Work of the contract.

12. EVALUATING SAFETY PERFORMANCE. Safety effectiveness, like other management responsibilities, must be measured.

a. Safety Management Evaluations of pertinent district leaders will be conducted annually in accordance with Appendix I of this document.

b. An evaluation of safety performance will be done on all employees in accordance with Total Army Performance Evaluation System (TAPES).

13. APPLICATION.

a. Safety considerations of this regulation will be embodied in all planning, programming, and scheduling of work under direction or technical control of the Corps of Engineers. The applicable and pertinent provisions of EM 385-1-1 and nationally recognized codes and standards for the protection of persons and property will apply to all operations supervised by the Corps of Engineers whether by contract or government forces. In circumstances where literal application of the requirement for a specific job has impractical aspects, the Division Commander is authorized to approve an adaptation that meets the obvious intent of the requirement. Whenever such occasion arises, the matter will be referred to the Division Engineer, ATTN: CENWD-SO, for a decision.

b. All plans, specifications, technical publications, designs, and operating and training procedures will be reviewed before their approval for conformance with established safety codes, standards, and principles. Responsibility for this review rests with the approving authority. Upon request, the SOHO will make selective reviews and analyses to evaluate performance of these responsibilities and ensure that current safety requirements are incorporated into design.

c. Staff and operating officials planning and supervising new, unusual, or particularly hazardous assignments will inform the SOHO in order that safety personnel can study the safety implications and provide an advisory review.

FOR THE COMMANDER:

VICKIE L. ASHENBRENNER
Executive Assistant

21 APPENDICES
App A - References
App B - Accident Investigation and Reporting
App C - Identification and Correction of
Safety and Occupational Health Deficiencies
App D - Position Hazard Analysis/Activity Hazard Analysis
App E - Occupational Safety and Health Committee
App F - Underwater Diving Operations
App G - Collateral Duty Safety Positions
App H - Safety Award Program
App I - Safety Management Evaluation
App J - Safety Training
App K - Personal Protective Equipment
App L - Medical Surveillance and Occupational Health Program
App M - Industrial Hygiene Program
App N - Respiratory Protection
App O - Hearing Conservation
App P - Hazard Communication
App Q - Asbestos Management
App R - Confined space Entry
App S - First Aid and Cardiopulmonary Resuscitation
Annex A - Automated External Defibrillators
App T - Bloodborne Pathogens Protection
Annex A - Universal Precautions to Minimize Exposure to HBV and HIV
Annex B - Risk of Exposure to HBV or HIV Sample Format
Annex C - Safe Disposal of Sharps and Other Contaminated Medical Waste
App U - Ergonomic Program

DISTRIBUTION:
NWP Chiefs Divisions, Staff Offices and Branches
CENWD-SO

Appendix A

REFERENCES

1. Public Law 91-596, Occupational Safety and Health Act of 1970.

2. Executive Orders.

    a. EO 12196, Occupational Safety and Health Programs for Federal Employees.

    b. EO 12564, Drug-Free Federal Workplace

3. Code of Federal Regulations.

    a. 5 CFR 339, Medical Qualification Determination.

    b. 5 CFR 353, Restoration to Duty for Uniform Service or Compensable Injury.

    c. 5 CFR 890, Federal Employee Health Benefits Program.

    d. 10 CFR Parts 19 and 20. Energy, Notices, Instructions and Reports to workers; Inspection and Investigations and Standards for Protection against Radiation.

    e. 29 CFR 1910, Occupational Safety and Health Standards (General Industry).

    f. 29 CRR 1915, Occupational Safety and Health Standards for Shipyard employment.

    g. 29 CFR 1926, Safety and Health Regulations for Construction.

    h. 29 CFR Part 1960, Basic Program Elements for Federal Employee Occupational Safety and Occupational Health Programs and Related Matters.

    i. 40 CFR 171, Certification of Pesticide Applicators.

    j. 40 CFR 763, Asbestos.

    k. 33 USC 569d, Safety Award and Promotional Materials.

4. Army Regulations.

    a. AR 11-9, The Army Radiation Safety Program.

b. AR 11-34, Army Respiratory Protection Program.

c. AR 40-5, Preventive Medicine.

d. AR 200-1, Environmental Protection and Enhancement.

e. AR 385-10, the Army Safety Program.

f. AR 385-40, Accident Reporting and Records.

g. AR 385-55, Prevention of Motor Vehicle Accidents

h. AR 600-55, The Army Driver and Operator Standardization Program.

i. AR 600-85, Army Substance Abuse Program.

j. AR 672-20, Incentive Awards.

k. AR 672-74, Army Accident Prevention Awards Program.

5. DoD Publications.

a. DoDI 1010.15, Smoke-Free Workplace.

b. DoDI 6050.5, Hazard Communication Program.

c. DoD Instruction 6055.1, Safety and Occupational Health Program.

d. DoDI 6055.5, Industrial Hygiene and Occupational Health

6. Engineer Regulations/Manuals/Pamphlets/Supplements.

a. ER 385-1-31, The Control of Hazardous Energy.

b. ER 385-1-40, Occupational Health Program.

c. ER 385-1-80, Radiological Safety.

d. ER 385-1-85, Safety and Occupational Health Program Management Evaluation.

e. ER 385-1-86, Government Employee Diving Operations.

f. ER 385-1-89, Hearing Conservation Program.

g. ER 385-1-90, Respiratory Protection Program.

h. ER 385-1-91, Training, Testing and Licensing of Boat Operators.

i. ER 385-1-92, Safety and Occupational Health Document Requirements for Hazardous, Toxic, and Radioactive Waste (HTRW) Activities.

j. ER 385-1-96, USACE Ergonomics Program Policy.

k. ER 1130-2-550, Recreation Operations and Maintenance Policies.

l. EM 385-1-1, Safety Requirements Manual.

m. EP 385-1-40, Boards of Investigation.

n. EP 385-1-58, Medical Surveillance Handbook.

o. EP 385-1-96, USACE Ergonomics Program Procedures.

p. EP 600-1-3, USACE Drug Testing Procedures for the Army's Drug-Free Federal Workplace Civilian Drug Testing Program.

q. EC 385-1-221, Automated External Defibrillator's (AED's) Policy.

r. USACE Supplement 1 to AR 385-40, Accident Reporting and Records.

7. Portland District Publications/Plans/Programs.

a. NWPR 385-2-1, Safety Awards Program.

b. NPPR 385-1-93, Diving Operations by Contract.

c. NWPR 690-1-1, Incentive Awards Program.

d. NWPR 690-1-810, Emergency Medical Procedures.

e. Bloodborne Pathogens, Exposure Control Plan.

f. NWP Ergonomic Plan.

g. Random Drug Testing Program.

8. National Consensus Standards.

a. National Electrical Code.

b. National Fire Protection Association Codes.

c. ANSI A10.38, Safety Program Elements.

d. ANSI Z16.2, Information Management for Occupational Safety and Health.

e. ANSI Z16.3, Recording and Measuring Employee Off the Job Injury Experience.

f. ANSI Z16.5, Occupational Safety and Health Incident Surveillance.

g. ANSI Z88.2, Practices for Respiratory Protection.

h. ANSI Z41.1, Personal Protection Protective Footwear.

i. ANSI Z87.1, Practices for Occupational and Educational Eye and Face Protection.

j. ANSI Z89.1, Head Protection.

k. ANSI Z358.1, Emergency Eyewash and Shower Equipment.

l. ANSI/HFES 100, Standard for Computer Work Stations.

9. OSHA Publications.

a. 3071, Job Hazard Analysis.

b. 3077, Personal Protective Equipment.

10. EPA 20 T-2003, Managing Asbestos in Place. A Building Owner's Guide to O&M Programs for Asbestos Containing Materials.

11. Centers for Disease control and Prevention, NIOSH 1994. Applications Manual for the Revised NIOSH Lifting Equation.

Appendix B

ACCIDENT INVESTIGATION AND REPORTING

1. PURPOSE. The purpose of this appendix is to establish procedures for investigating, reporting and analyzing all accidents occurring on government or contractor operations. The primary purpose of investigating and reporting accidents is prevention.

2. APPLICABILITY. This appendix applies to all District employees, activities, and Contractors.

3. GENERAL POLICY.

a. All accidents must be investigated promptly and reported to the Safety and Occupational Health Office (SOHO) in a timely manner. An effective prevention program will be instituted to eliminate hazards and prevent recurrence of accidents.

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.

4. PROCEDURES. A typed and properly executed ENG Form 3394 (Accident Investigation Report) will be forwarded to the SOHO within 12 calendar days after knowledge of occurrence for each type accident listed below.

a. Injuries to Personnel. Accident reports are required covering injuries to civilian employees, contractor employees, and military personnel, for the conditions listed below.

(1) Fatal Injuries.

(2) Permanent Total Disability. The complete loss of any member or part of a member of the body, or any permanent impairment of functions of the body or part thereof, to the extent that the injured person cannot follow gainful employment.

(3) Temporary Total Disability. An injury which does not result in death, permanent total or permanent partial disability, but which does result in one (1) or more days of disability (other than the day of the injury).

(4) Permanent Partial Disability. The complete loss of any member or part of a member of the body, or any permanent impairment of the functions of the body or part thereof.

(5) Other Injuries. Also all injuries/illnesses to Federal employees that result in filing a Worker's Compensation claim with the Department of Labor, either traumatic injury (CA-1) or occupational disease (CA-2).

b. Injuries to Public Persons. Accident reports are required for injuries to public persons as follows:

(1) Drowning, other accidents, and permanent disability involving public persons which occur on Corps of Engineers' administered property;

(2) Drowning, which occurs in waters to navigation and power structures under control of the Corps of Engineers; and

(3) Injury in any degree to a public person, an incident to a Corps of Engineers' activity, or an injury occurring on premises under control of the Corps of Engineers, which might result in a claim against the United States or adverse publicity for the Corps.

c. Motor Vehicle Accidents. All accidents involving the operation (whether moving or halted) of any Army vehicle that results in injury, damage to vehicle or to any other property more than $2,000.00. For the purpose of this appendix, "Army Vehicles" will include the following:

(1) All Corps of Engineers' vehicles, regardless of whom was operating the vehicle at the time of the accident;

(2) Vehicles leased or rented and operated by Corps of Engineers' personnel;

(3) Privately owned vehicles when used for official business, authorized by travel orders, and operated by Corps of Engineers' personnel; and

(4) General Service Administration (GSA) vehicles operated by Corps of Engineers' personnel.

d. Private Property Damage. Accidental damage to private property, equipment, or material incident to a Corps of Engineers' activity, regardless of the amount of damage, will be reported.

e. Other Accidents. Accident reports must be submitted covering accidental explosions, fires involving ammunition and other explosives, exposure to microwave or ionizing radiation, chemical exposures, and contamination or damage of property from biological, radiological, or chemical agents.

5. SAFEGUARDING ACCIDENT INFORMATION. The completed ENG Form 3394 and any attachments or copies and extracts will not be appended to or enclosed in any report or document, unless the sole purpose of the other report or document is to aid in accident prevention. Requests for copies of completed accident reports will be in writing and forwarded to the SOHO. Freedom of Information Act (FOIA) requests will be forwarded to Office of Counsel for action.

6. IMMEDIATE NOTIFICATION.

a. An Immediate Accident Report (NWD Form 385-1-R) will be submitted (via fax) to the Safety and Occupational Health Office within 24 hours of the accident.

b. Immediate telephonic notification will be made to the SOHO of any accident resulting in any of the following consequences:

(1) Fatality or permanent total disability to or involving on-duty military, Government, or contractor personnel; also off-duty if on the premises or incident to a Corps of Engineers' activity or operation;

(2) Accidents in which three or more persons are hospitalized;

(3) Damage of more than $200,000.00 or more to Corps of Engineers' or contractor's property and/or equipment;

(4) Any mishap, regardless of the consequences, if it is suspected that it will result in unfavorable criticism of the Corps of Engineers or the Army, or provoke questions at the HQUSACE level; and

(5) Drivers of motor vehicles when involved in a motor vehicle accident will make a telephonic/radio report of the accident to their supervisor as soon as possible after the accident occurs. Supervisors, upon notification, will make an immediate report to Logistics Management Office and SOHO.

c. Notification will include, but will not be limited to the following:

(1) Name of the employee(s) killed or injured, job classification, and project or activity;

(2) Identification of property (ownership) and/or equipment damaged and dollar estimate of damage;

(3) Date and time of accident;

(4) Location of accident to include project name;

(5) If contractor's accident, the contract number and the name of contractor;

(6) Description (who, when, what, why, and how) in as much detail as possible;

(7) Immediate actions taken to control the hazard to prevent further injuries; and

(8) Any other information considered pertinent.

d. Drivers of GSA vehicles will follow the accident reporting steps outlined in the vehicle operator's packet placed in the glove compartment of each vehicle. Information required includes the notification required above, and notification to the GSA motor pool relative to repair or disposition of the damaged vehicle.

e. When reporting an accident that requires immediate telephonic notification after duty hours, or on weekends or holidays, one of the following persons in the order listed, is to be notified:

(1) Chief, SOHO – (503) 808-4540.

(2) Safety & Health Specialist – (503) 808-4539.

f. Regardless of when notification is received, the information will be immediately reported to the Deputy Commander by the Chief, SOHO.

7. GOVERNMENT EMPLOYEE ACCIDENT REPORTING PROCEDURES. The following procedures apply to Government employees sustaining on-the-job traumatic injuries, occupational illness or disease, or property damage.

a. Responsibilities.

(1) Employee. An employee who sustains a job-related injury or illness expects to receive worker's compensation, will obtain from his/her supervisor and complete the employee portion of an OWCP Form CA-1 (for traumatic injury) or a CA-2 (for occupational disease). After completion, the form is returned to the immediate supervisor.

(2) Supervisor.

(a) The supervisor, if possible, will accompany the injured employee to a medical facility. This will ensure the employee reaches medical care safely, and the supervisor can explain the light duty program to the physician.

(b) The supervisor will provide the appropriate CA form to the injured employee. After the employee completes employee's portion, the supervisor will complete the supervisor's portion. Supervisors must complete and give information to the injured employee.

(c) The supervisor will complete an ENG Form 3394, through block 15, on any accident resulting in a lost workday, medical expenses incurred without lost time, or property damage of $2,000.00 or more.

(d) The supervisor must then attach a copy of the ENG Form 3394 to the original CA Form. The two forms will be forwarded to the SOHO within 12 working days from the date of the accident. The original ENG Form 3394 will be forwarded, through management channels as indicated on the form for signature.

b. Signature Chain. The following signature chain is to be used on the ENG Form 3394. After each signature the name must be typed or printed legibly.

(1) Item 15c. First line supervisor completing form.

(2) Item 16. Second line supervisor.

(3) Item 17. Staff Chief.

(4) Item 18. Chief, SOHO.

(5) Item 19. Commander.

c. Government Motor Vehicle Accident. When an accident produces damage to a vehicle, a SF 91 (Standard Form 91) will be completed at the scene of the accident by the government vehicle operator involved in the accident if he/she is physically able. The vehicle operator will forward the completed SF 91 to his/her supervisor. If the total property damage is $2,000 or more an ENG Form 3394 must be completed by the supervisor and forwarded through management channels to the SOHO within 12 working days from the date of the accident.

8. CONTRACTOR EMPLOYEE ACCIDENT REPORTING PROCEDURES. The following reporting procedures apply to all contractor activities performed in the District.

a. In the event of an accident which results in a lost work day or $2,000.00 or more in property damage, an ENG Form 3394 will be completed by the contractor and submitted within 12 workdays to the Contracting Officer's Representative (COR). Should an accident occur resulting in a fatality, $200,000.00 or more in property damage, three or more persons being hospitalized, or any incident which would result in adverse publicity to the Corps of Engineers immediate notification must be made to the COR. The reporting requirement of submitting ENG Form 3394 within 12 working days still applies.

b. The following signature chain is to be used on the ENG Form 3394 on Contractor accidents. After each signature the name must be typed or printed legibly.

(1) Item 15c. Corps Construction Representative and Contractor Representative.

(2) Item 16. Area/Resident Engineer.

(3) Item 17. Division Chief.

(4) Item 18. Chief, SOHO.

(5) Item 19. Commander.

9. ACCIDENT FORMS AND PROCEDURES.

a. The ENG Form 3394 is available through Formflow or normal distribution channels. No hand written forms will be accepted.

b. OWCP CA Forms must be requested through normal distribution channels and stocked in each office.

c. Any questions concerning these reporting procedures should be directed to the SOHO.

10. BOARD OF INVESTIGATION.

a. Report of accidents involving a fatality or permanent total disability to Government, contractor, or military personnel or property damage of $200,000.00 or more will be investigated by a Board of Investigation appointed by the Commander. Members to serve on the Board of Investigation will be composed of technical and management specialists appointed by the Commander. A representative of the SOHO will be appointed as a technical advisor, but not a voting member.

b. The Board of Investigation report will include photos, sketches, diagrams, and other exhibits essential to presenting a clear picture. The original and three copies of the report will be submitted as soon as practical, but in no event later than 30 days after the day of the accident.

c. Guidance on appointing Boards, conducting Boards, and preparing Board Reports is outlined in EP 385-1-40.

d. The Chief, SOHO will travel as soon as possible to all accidents that result in a fatality.

11. ACCIDENT REPORTING INTEGRITY. It will be the responsibility of operating officials to take reasonable steps to insure that all accidents are being properly reported. In any case, where there is doubt as to who is chargeable in an accident, the operating official will submit an accident report to the SOHO, with memorandum outlining facts pertinent to the case, and the decision as to whom is chargeable will be rendered by the Chief, SOHO.

Appendix C

IDENTIFICATION AND CORRECTION OF SAFETY AND OCCUPATIONAL HEALTH DEFICIENCIES

1. PURPOSE**.** To summarize the requirements for periodic safety and occupational health evaluations, reports of unsafe or unhealthful working conditions and procedures for abatement of identified safety and occupational health deficiencies.

2. GENERAL REQUIREMENTS.

a. Under the provisions set forth in 29 CFR, Part 1960, of the Occupational Safety and Health Act, any employee of this district has the right to report unsafe or unhealthful conditions under the following procedures.

b. Each employee is responsible for complying with occupational safety and health standards, rules, and regulations that are applicable to his/her own actions or conduct and for reporting suspected unsafe or unhealthful working conditions.

c. Supervisors are responsible for enforcing occupational safety and health standards, rules, and regulations and for identifying and correcting (or causing the correction of) unsafe or unhealthful working conditions. Risk Management techniques will be used to assess all risks and prompt actions taken to minimize and/or mitigate the risk. A risk assessment matrix is provided at figure C-1. A table showing responsibility for risk decision-making is included.

d. No employee will be subject to restraint, interference, coercion, discrimination, or reprisal by virtue of his/her participation in the reporting of safety and occupational health concerns.

e. When a situation (Immediately Dangerous to Life and Health) is identified during an evaluation, the operation's manager or supervisor will be immediately notified. The supervisor will immediately correct the condition or withdraw personnel from exposure. If the supervisor finds that the hazards cannot be immediately eliminated, he/she should contact the Safety and Occupational Health Office (SOHO) for guidance.

f. When an evaluation is completed, all violations (categories I, II, and III) that cannot be corrected within 30 days will be entered on DA Form 4754 (Violation Inventory Log), which will be used to monitor compliance. It will show the violations in the order of discovery, prescribe abatement dates and indicate a risk assessment code. Uncorrected items from previous logs will be carried over onto the next fiscal year's log. A District-wide consolidated violation Inventory Log will be maintained in the SOHO.

g. Supervisors or their representative will prepare a DA Form 4755 (Notice of Unsafe or Unhealthful Working Conditions) for each hazard in category I or II. The completed DA Forms 4753 will be posted at or near the location of the hazard.

h. DA Form 4756 (Installation Hazard Abatement Plan) will be completed by the Operation Manager or supervisor for all hazards recorded on DA Form 4754. The Hazard Abatement Plan identifies tasks which entail a risk assessment of IIIB or higher and are not correctable within 30 days of date of discovery.

i. Risk Management and Corrective Action.

(1) A risk assessment will be initiated and a risk assessment code assigned to each hazard that cannot be abated within 30 days or which require substantial funding. These categories will conform to the criteria in paragraph 8-Risk Management Definitions. Hazards will also be assessed in terms of correction cost, future intended use of the facility, and availability of desirable alternative methods of control.

(2) Following this risk assessment, a decision will be made on action required. The hazards will be eliminated normally on a worst first basis. If correction time will exceed 30 days, prepare a DA Form 4756 for each deficiency. Violations in category IIIC or below that cannot be immediately corrected will be shown as deferred on DA Form 4754 until resources for correction become available.

(3) Copies of abatement plans (DA Form 4756) will be placed on each bulletin board of the installation or project where personnel notices are usually posted.

(4) Violations that are the responsibility of another command (e.g., Base Engineer) or agency (e.g., GSA) will be brought to the attention of the responsible official for action. The deficiency will be entered on DA Form 4754, but no abatement plan need be prepared.

(5) Operation Managers will ensure that funds needed for a project to correct OSHA deficiencies are entered into the appropriate program/budget documents using category codes SO3, SO4, SO5, etc.

(6) Facility abatement project plans will be reviewed periodically by SOHO personnel and representatives from higher authority.

j. Operation Managers will ensure that the SOHO is provided appropriate completed copies of the following:

(1) Completed self-evaluation checklists.

(2) DA Form 4753 for each category I and II hazard.

(3) DA Form 4754, Inventory Log.

(4) DA Form 4756, Hazard Abatement Log.

3. EVALUATIONS.

a. Annual Evaluations. All installations are to conduct annual safety evaluations by the applicable supervisor or his/her representative using the appropriate self-inspection checklist for each type of workplace (industrial, office, public use area, etc.). The SOHO will provide technical assistance upon request. Evaluations will be performed by persons who have sufficient technical competence to recognize unsafe or unhealthful working conditions and who are familiar with the safety and occupational health standards applicable to the facility or operation. Corrective actions, taken or pending, will be documented on the self-evaluation checklist.

b. OSHA Inspections of Government Workplaces Conducted by the Department of Labor.

(1) Federal OSHA officials must be granted access to DoD workplaces and installations immediately and at reasonable times in accordance with Section 8(a) of Public Law 91-596.

(2) Federal OSHA officials will present appropriate identifying credentials (and security clearance, if required) and state the purpose of the visit to the DoD installation. The Corps of Engineers' representative on site will immediately notify the SOHO of the inspection. A representative of the Commander will accompany, if possible, OSHA officials on his/her inspections and investigations. An employee representative (non-management) will be permitted to participate in the inspection.

(3) A closing conference with the Operation Manager or a designated representative will be arranged prior to the OSHA Inspector's departure. The Operation Manager will invite an authorized representative of employees to attend the opening and closing conferences.

(4) OSHA Inspector will, upon request, be provided access to safety and occupational health information. This information may include data on hazardous materials, copies of recent safety inspection reports, hazard abatement plans, and accident or injury compensation claims data.

(5) Responses to OSHA inspection reports will originate at the local level. Unresolved conflicts may be elevated to a higher command and DoD echelons for interagency resolution. The SOHO will inform the Division SOHO who will, in turn, report to USACE.

c. Periodic Inspections by the SOHO.

(1) Safety and occupational health inspection reports prepared by the SOHO will be written as an informal memorandum. This document will be sent to the appropriate supervisor through the chain of command. A copy will be furnished to the supervisor to expedite abatement of identified hazards.

(2) The inspection report will specify a suspense date depending on the number and nature of the deficiencies.

(3) The inspection report will include: date of inspection, names of inspector and personnel that accompanied the inspector, each deficiency identified and a recommended corrective action and training and/or other safety issues discussed or identified by project personnel.

(4) A written response, when requested, will be provided to the SOHO, and it will address each deficiency identified on the initial report.

(5) Inspections of construction contracts will be documented in an informal memo or a memorandum for record as determined by the Chief, SOHO. All deficiencies will be listed with applicable citations and will include possible solutions, as discussed with the contractor and contract representative. Deficiencies will be discussed with the Quality Assurance Representative and Area/Resident Engineer, and these deficiencies will be documented on the Daily Report, ENG Form 2538-2-R. Subsequent Daily Reports will document the corrective actions taken.

4. REPORTS OF UNSAFE OR UNHEALTHFUL WORKING CONDITIONS.

a. Reports of unsafe or unhealthful working conditions by Portland District personnel will be handled at the local operating level (Project Office, Area/Resident Office, District Division or Separate Office, Section or Branch Office, etc.). Employees should use the following hierarchy when reporting an unsafe or unhealthful condition.

(1) An oral report directly to the supervisor.

(2) An oral or written report through established supervisory or operational channels.

(3) A written report to the SOHO including email and other informal means of written communication.

b. Procedures for forwarding a written report of a serious safety issue to the SOHO include the following:

(1) Report will be made in writing on DA Form 4755 (Employee Report of Alleged Unsafe or Unhealthful Working Conditions). The report should be signed and submitted directly to the SOHO only after the above-noted priority procedures have been accomplished.

(2) Employees may request anonymity and these requests will be honored. Appropriate disciplinary action may be taken for violating this prohibition.

(3) A report that appears to involve an imminent danger situation will be investigated immediately. If an imminent danger situation is discovered, the immediate supervisor and activity head (Area/Resident Engineer, Resource Manager, Section or Branch Chief, etc.) will be notified immediately and will correct the condition or withdraw personnel from exposure. If the hazard cannot be immediately eliminated, the SOHO will be contacted for guidance.

(4) All reports other than those involving an imminent danger will be investigated, and the originator of the report will be notified in writing within 15 days following the completion of the inspection. If this 15-day suspense cannot be met, the originator will be provided with an interim response. If it is determined that a hazard exists, the reply will include a summary of the actions to be taken and the anticipated date that the corrective action will be completed. If it is determined that the hazard does not exist, the reply to the employee will include the basis for that decision. The originator will encourage informal contact if additional explanations are desired. Every effort will be made to resolve the originator's question or dissatisfaction.

c. Safety and Occupational Health deficiencies identified through Reports of Unsafe or Unhealthful Working Conditions will be documented on DA Forms 4753, 4754, and 4756 as appropriate.

5. SAFETY AND OCCUPATIONAL HEALTH DEFICIENCIES. Deficiencies identified by other means such as accident investigations, interviews, job hazard analyses, etc., will be entered onto DA Forms 4754, 4755, and 4756 as appropriate.

6. DEFICIENCY CORRECTIONS. The SOHO will monitor the correction of all identified deficiencies.

7. NECESSARY FORMS. All forms necessary to comply with subject requirements are available from the SOHO.

8. RISK MANAGEMENT DEFINITIONS. The process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk costs with mission benefits.

a. Abate - To eliminate or permanently reduce a safety or occupational health deficiency by coming into compliance with the applicable standard(s).

b. Accident - An unplanned event or series of events that result in death, injury, occupational illness, or damage to or loss of equipment or property.

c. Controls - Actions taken to eliminate hazards or reduce their risks.

d. Exposure - The frequency and length of time subjected to a hazard.

e. Hazard - Any real or potential condition that can cause injury, illness, or death of personnel or damage to or loss of equipment, property, or mission degradation.

f. Hazard Severity - An assessment of the worst potential consequence, defined by degree of injury, occupational illness, or property damage that could occur. A Roman numeral will assign hazard severity categories according to the following criteria (Figure C-1):

(1) Category I - Catastrophic. May cause death, permanent total disability, major property damage or severe environmental damage.

(2) Category II - Critical. Significant mission degradation, permanent partial disability (exceeding 3 months), extensive damage to equipment or significant environmental damage.

(3) Category III - Marginal. Minor damage to equipment, property, or environment. Lost days due to injury not exceeding 3 months.

(4) Category IV -Negligible. Little or no adverse impact on mission capability. First aid or minor medical treatment. Little or no environmental or property damage.

g. Imminent Danger - A hazardous situation for which risk assessment code of Category I or II has been assigned or that which poses an immediate threat that is likely to cause death or serious injury; e.g., an employee working on a roof without positive fall protection.

h. Probability - The probability that a hazard will result in an accident, based on an assessment of such factors as location, exposure in terms of cycles or hours of operation, and affected population. Accident probability will be assigned an Arabic letter according to the following criteria:

(a) Level A -- Occurs very often in service life or several times over the duration of a specific mission or operation. Always occurs.

(b) Level B -- Likely. Occurs several times in service life or expected to occur several times during a mission or operation.

(c) Level C -- Occurs some time in the service life or may occur about as often as not during a specific mission or operation.

(d) Level D -- Seldom. Remotely possible, could occur sometime. Occurs sporadically.

(e) Level E -- Unlikely to occur. Can assume it will not occur, but not impossible. Occurs very rarely.

i. Risk - Chance of hazard or bad consequences; exposure to chance of injury or loss. Risk level is expressed in terms of hazard probability and severity.

j. Risk Assessment - An expression of possible loss described in terms of hazard severity, and mishap probability.

k. Risk Assessment Code (RAC) - An expression of risk that combines the elements of hazard severity and mishap probability.

l. Risk Decision - The decision to accept or not accept the risk(s) associated with an action; made by the commander, leader, or individual responsible for performing that action.

m. Risk Management - The process of identifying and controlling hazards to protect the work force. It is applicable to any mission and environment. The steps are (1) identify hazards, (2) assess the hazard, (3) develop controls and make risk decision (must meet minimum standards), (4) implement control, and (5) suspense and evaluate.

n. Severity - The expected consequence of an event in terms of degree of injury, property damage, or other mission-impairing factors (loss of combat power, adverse publicity, etc.) that could occur.

The purpose of the Risk Assessment Matrix is to provide employees at all levels a tool by which to evaluate a workplace hazard and determine the appropriate approval authority required to proceed (e.g. if a particular activity has an unlikely frequency of a hazard occurring and the results of an unsuspected accident would be negligible, the decision to continue the activity can be approved at his/her supervisor's level).

RISK ASSESSMENT MATRIX

E -Extremely High Risk H -High Risk M – Moderate Risk L – Low Risk		PROBABILITY				
		FREQUENT	**LIKELY**	**OCCASIONAL**	**SELDOM**	**UNLIKELY**
SEVERITY	**CATASTROPHIC**	**E**	**E**	**H**	**H**	**M**
	CRITICAL	**E**	**H**	**H**	**M**	**L**
	MARGINAL	**H**	**M**	**M**	**L**	**L**
	NEGLIGIBLE	**M**	**L**	**L**	**L**	**L**

		PROBABILITY				
		FREQUENT A	**LIKELY B**	**OCCASIONAL C**	**SELDOM D**	**UNLIKELY E**
SEVERITY	**CATASTROPHIC I**	DISTRICT ENGINEER				
	CRITICAL II		DIVISON CHIEF			
	MARGINAL III		**OPERATIONS MGR OR RESIDENT ENGINEER**			
	NEGLIGIBLE IV		SUPERVISOR			
		RISK LEVEL				

Figure C-1

Appendix D

POSITION HAZARD ANALYSIS/ACTIVITY HAZARD ANALYSIS

1. PURPOSE. To provide guidance on the preparation of Position Hazard and Activity Hazard Analyses. The purpose of the Position Hazard Analysis (PHA) and/or the Activity Hazard Analysis (AHA) is to systematically identify hazards and specify controls to minimize or eliminate their effect.

2. APPLICABILITY. This appendix applies to all District employees and operations based on the severity of hazards associated with each operation. This generally includes all positions that involve fieldwork and excludes positions limited to only administrative tasks.

3. RESPONSIBILITIES.

a. Safety and Occupational Health Office.

(1) Reviews, accepts and signs all PHAs.

(2) Forwards copies of all accepted PHAs to the following: the employee, the immediate supervisor, and the appropriate administrative officer if the employee works at a field office/project.

(3) Maintains the original PHA on file in the SOHO.

b. Supervisors.

(1) Ensure that accurate PHAs are prepared for and reviewed with every employee under their supervision if warranted by the nature of the job.

(2) Ensure that each PHA is accurate for each specific position.

(3) Review the PHA with each employee and ensure that both he/she understand the duties and sign it.

(4) Return the completed PHA to the Safety and Occupational Health Office (SOHO).

(5) Ensure that an Activity Hazard Analysis (AHA) is completed for all major work activities. It is unreasonable to prepare an AHA for every activity; therefore, AHAs should be limited to infrequent activities, high-risk activities and/or new or unfamiliar activities. Activities involving crane operations, activities over water, work at heights, etc., are areas that should be considered.

c. Employees will actively participate in the development of AHAs and PHAs.

4. DEFINITIONS.

a. Activity Hazard Analysis – A documented process by which the steps (procedures) required to accomplish a work activity are outlined. The actual or potential hazards of each step are identified, and measures for the elimination or control of those hazards are developed.

b. Position 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.

5. BACKGROUND. The terms Job Hazard Analysis, Activity Hazard Analysis, Safety Hazard Analysis and Position Hazard Analysis have typically been used interchangeably. The Corps of Engineers Safety and Health Requirements Manual use the terms: Position Hazard Analysis and Activity Hazard Analysis. Those terms are used herein for consistency. To ensure that a PHA or an AHA is thorough and accurate, the supervisor and the employees knowledgeable with the task/position should be involved throughout the process.

a. Activity Hazard Analysis.

(1) Activity Hazard Analyses are used to:

(a) Train new employees. The employee learns the essentials of the job, the hazards associated with each step and the recommended safe job procedures.

(b) Identify hazards that are difficult to control, which may lead to alternate methods of accomplishing the work.

(c) Review the task with all employees at a tailgate safety meeting prior to starting the actual task.

(2) Developing an AHA:

(a) Identify the major activity, i.e., confined space entry, excavation, etc.

(b) Break the job down into its major components. When identifying these the criteria for selection should preclude jobs that are too broad or too narrow. For instance, the complex task of constructing a maintenance building versus the simple act of hammering a nail illustrates the above two extremes. Be sure to start at the beginning with the very first work activity and continue through cleanup and/or the finished product.

(c) Identify probable hazards associated with those activities. Keep in mind that every possible hazard cannot be identified. The hazard must be specific, i.e., asphyxiation due to oxygen deficient atmosphere. To assist in identifying hazards, ask the following questions:

1 Is there danger of striking against, being struck by, or otherwise making injurious contact with an object?

2 Can the worker be caught in, by, or between objects and moving parts of machinery?

3 Is there a potential for a slip, trip, or fall to the same level or another?

4 Is there a danger of strains caused by pushing, pulling, lifting, bending, or twisting?

5 Are there environmental hazards (toxic gas, vapor, fumes, dust, heat, or radiation)?

(d) Develop practical, specific controls for each hazard. Do not use general precautions such as, stay alert, use caution, etc. For example, avoid something like crane operator should have knowledge of EM 385-1-1. A better statement might be, Crane operator will be certified and demonstrate proficiency in accordance with EM 385-1-1. Each hazard must correspond with a specific control that will eliminate or reduce the likelihood of the hazard causing an accident.

b. Position Hazard Analysis.

(1) Position Hazard Analyses are used to:

(a) Indoctrinate new employees unfamiliar with the hazards associated with their new position or new tasks--indoctrination should occur prior to their initial assignment.

(b) Identify whether an employee is required to wear personal protective equipment (i.e., hardhat, respirator, protective clothing, etc.).

(c) Identify whether an employee should be in the Medical Surveillance Program.

(d) Teach new employees the hazards associated with major job duties and the recommended safe job procedures.

(e) Provide supportive documentation/rational for the procurement of safety equipment for individual employees.

(2) Developing a PHA.

(a) Identify the major activity, i.e., inspection of construction, sampling on HTRW site, operating a vessel under 26 feet in length, etc.

(b) Identify general locations at which these activities are likely to occur, i.e., construction sites, hazardous waste sites, operating projects, etc.

(c) Identify probable hazards commonly associated with these activities. Keep in mind every possible hazard cannot be identified. The hazard must be specific, i.e., compressive foot injury, oxygen deficiency, etc.

(d) Identify the exact method of controlling each specific hazard, i.e., wear hard-toed safety boots, monitor air for oxygen, etc.

Appendix E

OCCUPATIONAL SAFETY AND HEALTH COMMITTEE

1. PURPOSE. To provide recommendations and technical support to either the Operations Manager or the District Commander on matters of Safety and Occupational Heath. An effective Safety Committee should:

a. Create and maintain active interest in safety and health and the reduction of accidents and incidents.

b. Discuss and take effective action on the principal accident/incident causing conditions.

c. Help stimulate an awareness of safety and health issues and foster an atmosphere of cooperation between management and workers.

d. Identify problems, formulate policy and procedures, monitor and improve workplace health and safety.

2. APPLICABILITY. This appendix is applicable to all Operating Project employees, either permanent or temporary, and to the District as a whole.

3. RESPONSIBILITIES, DUTIES, SCOPE, AND OBJECTIVES.

a. The Commander:

(1) Ensures Operating Projects/Facilities integrate safety committees in to their day-to-day operations. The size of the committee will be at the discretion of the Operation Manager. Members should consist of equal representation of management, union representatives, and workers.

(2) Allows time for the committee to meet and/or conduct inspections.

b. Operations Manager:

(1) Appoints members to the project safety committee. The size of the committee will be at the discretion of the manager, but should be at least three members to ensure employees from varied backgrounds are involved. The following structure is recommended: project safety officer, union representative and other employees (assigned for specified period, i.e., 12 -24 months). Safety committees will develop criteria to ensure proactive committee member participation.

(2) Allows time for the committee to meet and/or conduct inspections.

c. Committee members may perform the following tasks as well as other assignments directed by the Operations Manager:

(1) Follow up on direct causes of accidents/incidents occurring on the project or facility in order to pinpoint problems and recommend corrective actions.

(2) Conduct inspections of the workplace on a periodic basis and document findings.

(3) Record minutes of monthly safety meetings.

(4) Recommend, schedule, or conduct safety training or safety meeting topics.

4. MEETINGS. Meetings will be held bi-monthly.

5. MEETING MINUTES. Minutes of the meetings will be recorded and submitted to the Operations Manager with a copy forwarded to the Safety and Occupational Health Office.

Appendix F

UNDERWATER DIVING OPERATIONS

1. PURPOSE. This appendix supplements policies and responsibilities for underwater diving operations and related activities for Portland District.

2. POLICY. It is the policy of the Portland District that all diving operations be conducted in a prudent manner which will provide for maximum efficiency of operation and minimum potential hazard to personnel, property, and equipment. It is also the policy of the Portland District that diving operations are only conducted when the task to be performed cannot be reasonably conducted by other means not involving diving. For contract diving operations, only qualified commercial diving companies and personnel will be utilized.

3. GENERAL.

a. Government diving operations in the Portland District will be conducted in accordance with the provisions of ER 385-1-86, Government Personnel Diving Operations.

b. All contractor diving operations will be done in accordance with EM 385-1-1, section 30, NPPR 385-1-93, Diving Operation by Contract and Portland District Dive Program Policies.

c. All contractor and/or Government diving operations will be arranged through the District Diving Coordinator.

d. The District Diving Coordinator may elect to implement and enforce more stringent diving requirements, but under no circumstances will the operational requirements be less than specified in this regulation without the specific authorization of the Commander.

e. To ensure all aspects of safe diving operations have been covered, the use of an optional Diving Operations Checklist is recommended.

f. Hyperbaric chambers.

(1) Transportable hyperbaric/recompression chambers are required on all dives:

(a) In water in excess of 30 feet when a decompression chamber is not within close proximity. Close proximity is any area in which the response time of emergency medical services is five minutes or less.

(b) Involving altitude diving (diving at elevations greater than 1,000 feet).

(c) Hyperbaric chambers are required on site for all Nitrox or mixed-gas diving.

g. Manning levels

(1) All dive operations will conform to minimum manning levels as stated in EM 385-1-1, Appendix N. In situations where there exists an appreciable increased hazard to the diver for fouling, entrapment or entanglement, such as on or around hydroelectric facilities or navigational locks, there will be a minimum manning level of five persons, a diver, a stand-by diver, two tenders and a Dive Supervisor.

(2) In all situations where the diver does not have free access to the surface within a radius of six to ten feet, it shall be considered a penetration dive. Manning levels will include seven persons including a diver, an in-water tender, a stand-by diver, three tenders and a Dive Supervisor.

h. Snorkeling will be conducted only with prior approval and under the auspices of the District's safety manager and the District Diving Coordinator. Scientific snorkeling operations are allowed by and will conform to ER 385-1-86, Government Employee Diving Operations on a case-by-case basis. The minimum requirements are as follows:

(1) A snorkeling protocol will be developed and included in the Project Management Plan. Snorkeling will be limited to a maximum depth of five feet and will be limited to streams where a person can safely cross the stream without loosing their footing due to the current. Appropriate thermal protection will be provided snorkelers.

(2) An Activity Hazard Analysis will be developed in accordance with EM 385-1-1 on a specific case-by-case basis for each snorkeling mission. Particular detail will be given to currents and other environmental considerations.

(a) All divers must be certified and all must have first aid/CPR and O2 training per EM 385-1-1.

(b) Breath holding/snorkeling diving operations will only be conducted for scientific diving purposes in observation of plant and animal life.

(c) Snorkeling/breath hold divers must be certified Corps divers (EM 385-1-86, 13d.1).

(d) Snorkeling teams will be manned in accordance with Appendix E (minimum of 3).

(e) A snorkeling/breath hold stand-by diver must be dressed out and ready for immediate deployment while a snorkeled/breathe hold diver is in the water.

(3) Records for snorkeling activities will be maintained. These records will include as a minimum: an annual physician letter stating fitness to perform snorkeling surveys, an activity hazard analysis and a snorkeling plan. The latter will be based on the requirements of EM 385-1-1, section 30.A13. The Safety and Occupational Health Office (SOHO) or District Diving Coordinator will periodically review these records.

4. RESPONSIBILITIES.

a. The District Commander will appoint a District Diving Coordinator and a Deputy District Diving Coordinator who are responsible to the Commander for the proper management and administration of the diving program within the District. These individuals will work closely with SOHO and keep the SOHO manager informed of all diving operations.

b. Chief, SOHO will provide support to all diving operations conducted within Portland District.

c. Resident Engineers, Project Managers, and Chiefs of Operations and Maintenance at each project are charged with ensuring the efficiency and safety of diving operations within their areas of responsibility. These individuals may, at their discretion, employ additional levels of supervision on diving operations as long as the chain of responsibility remains clearly defined. In addition, they have the authority to stop a dive but may not override a decision by the diving supervisor to stop a dive.

d. District Diving Coordinator:

(1) Approves the need for all dives and consult with technical division chief concerning emergency determinations.

(2) Maintains current copies of all diving regulations.

(3) Assures that organizations and individuals that perform diving operations for Portland District meet minimum requirements.

(4) Reviews and approves contractor diving plans.

(5) Performs inspections and audits to ensure compliance with regulations and requirements.

(6) Resolves conflicts in field interpretation or regulations and requirements.

5. RECORDKEEPING.

a. All dives will be recorded on ENG Form 4615-R, Diving Log. For repetitive dives, ENG Form 4616-R, Repetitive Dive Worksheet, will be completed and attached to the diving log. The contractor will keep the original records and will provide two legible copies to the diving supervisor. The diving supervisor will forward one copy to the District Diving Coordinator.

b. In addition to the above records, for dives outside the no-decompression limits, deeper than 100 feet, or using mixed gases, the following additional information will be recorded and maintained:

(1) Decompression table designation including any modifications.

(2) Elapsed time since last pressure exposure if less than 24 hours or repetitive dive designation for the diver.

(3) For each dive in which decompression sickness is suspected or symptoms are evident, a description of symptoms including depth, time of onset and a description of treatment and results of treatment will be documented.

6. CONTACTS.

a. Diving Coordinator: Donald Hibbs, CENWP-OP-B

Telephone	(541) 374-4591
Cell Phone	(541) 980-1900

b. Alternate Diving Coordinator: Susan Fox, CENWP-OP-B

Telephone	(541) 808-5404
Cell Phone	(503) 706-0762

Appendix G

COLLATERAL DUTY SAFETY POSITIONS

1. PURPOSE. To provide guidance on the duties, responsibilities and technical development of collateral duty safety persons.

2. APPLICABILITY. This appendix applies to all Operating Projects within the District.

3. RESPONSIBILITIES.

a. Safety and Occupational Health Office:

(1) Provides technical assistance to the project safety officer on request.

(2) Informs the Operations Manager and project safety officer of training opportunities.

b. Operations/Facilities Manager:

(1) Appoints a project safety officer from the project staff.

(2) Ensures that the project safety officer receives adequate training. Minimum training is the OSHA Training Institute, OSHA 600, Collateral Duty Course for Other Federal Agencies, or comparable.

(3) Establishes a written list of duties for the project safety officer.

c. Project Safety Officer:

(1) Serves as the Operations Managers' primary resource for safety and occupational health issues.

(2) Serves as the program point of contact for project hazard communication program.

(3) Coordinates and schedules safety training, with vendor, supervisors and project manager.

(4) Acts as liaison between Safety and Occupational Health Office and Operations/Facility manager.

(5) Provides technical assistance to Construction Quality Assurance Representative providing oversight on construction contract activities at the Project/facility.

(6) Provides safety training and safety indoctrinations to new hires, including temporary, term and Stay-in-School employees.

(7) Conducts periodic monitoring of respiratory protection program. Ensures that the project or facility has a designated Program Administrator.

(8) Conducts safety inspections/evaluations, including the observation of work practices.

(9) Assists with the development of Activity and Position Hazard Analyses.

(10) Notifies the industrial hygienist of upcoming work that requires monitoring.

(11) Prepares responses to safety inspection/evaluation reports.

(12) Conducts monitoring (air and/or noise).

(13) Reviews accident reports for accuracy and completeness.

(14) Participates as a member or the chairperson of the ergonomics committee. This is often comprised of the same members as the safety committee.

(15) Coordinates medical surveillance examinations with workers and appropriate administrative officer to include industrial hygiene exposure surveys or health history updates when necessary.

(16) Coordinates, reviews, updates, the overall Project Safety Plan. Oversees other individual input on specific portions of the plan (e.g., respiratory protection, asbestos, lead programs).

Appendix H

SAFETY AWARDS PROGRAM

1. PURPOSE. The purpose of this appendix is to establish the annual safety and occupational health awards program for the Portland District.

2. APPLICABILITY. This appendix is applicable to all projects, facilities and area offices within the District.

3. POLICY. Safety awards will be utilized to recognize significant safety program achievements and performance in the operation of Portland District installations and activities throughout the year.

4. 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.

5. TYPES OF AWARDS.

a. Safety Award for Outstanding Operating Project Group/Crew. The award will be given on a group/crew basis for noteworthy safety achievement. Management of the group/crew Safety Awards portion of the program is the responsibility of Division and individual managers and supervisors.

b. Safety Award for Outstanding Motor Vehicle Operations. A revolving award presented annually, to the office driving the most miles in the District during the year without experiencing a chargeable motor vehicle accident.

c. District Commander's Safety Performance Awards.

(1) District safety awards plaques will be presented on an annual basis to recognize exceptional and highly successful safety performance of District Offices, Branches and Field Offices.

(2) The Safety and Occupational Health Office (SOHO) must receive nominations by 1 November each year for review of the previous year's activity.

(3) The SOHO will submit its recommendations to the Commander for approval. Nominations will contain the following information:

(a) Office name.

(b) Person in charge.

(c) Period of time covered by award.

(d) Man-hours of exposure.

(e) Injury frequency and severity rate.

(f) Amount and number of property/equipment/vehicle damage losses.

(g) Nature of work activities, major hazards, safety program, special initiatives in SOH, SOH training, and any other pertinent information necessary to provide a sound justification to properly evaluate the nominees.

Appendix I

SAFETY MANAGEMENT EVALUATION (SME)

1. PURPOSE. To provide guidance to district leaders in implementing the District Safety and Occupational Health (SOH) Program, and to assist in evaluating the effort and effectiveness to that end. Each supervisor/manager will be evaluated only on those objectives applicable to his/her mission and function. All objectives identified herein are based on existing safety policy.

2. APPLICABILITY. This appendix applies to Portland District leaders as identified herein.

3. RESPONSIBILITIES. These vary according to position and are listed below.

a. The Safety and Occupational Health Manager will conduct a safety management evaluation (SME) on each project/facility with personnel engaged in activities other than routine administrative or office work, as identified.

(1) The completed SME will be given to the appropriate rating supervisor. A copy will be provided to the Deputy Commander, and the evaluated supervisor; a copy will be filed in the Safety and Occupational Health Office (SOHO).

(2) The Chief, SOHO, will complete SMEs by 30 June each year.

b. Chief, Engineering/Construction:

(1) Ensures that resident, area and project engineers support the safety objectives identified below.

(2) Ensures that accidents are promptly investigated and reported in accordance with Appendix B.

(3) Ensures that accidents are analyzed and the true causal factors and corrective actions are identified.

(4) Ensures that appropriate personnel receive the appropriate design safety training.

c. Construction Office Engineers (area, resident, and project) will:

(1) Ensure that accidents are promptly investigated and reported in accordance with procedures in Appendix B.

(2) Ensure that accidents are analyzed and the true causal factors and corrective actions are identified.

(3) Ensure that all daily reports contain relevant and meaningful safety comments.

(4) Ensure that equipment inspections are done on all equipment prior to being used.

(5) Ensure that contractors conduct daily safety inspections.

(6) Ensure that accident prevention plans are reviewed and accepted prior to the commencement of work.

(7) Ensure that activity hazard analyses are reviewed and accepted prior to the commencement of work on each phase.

(8) Posts the Commander's written SOH policy in the workplace.

d. Chief, Engineering/Construction Division will:

(1) Ensure that appropriate personnel receive hazardous/toxic waste activity training.

(2) Ensure that appropriate personnel are in a respiratory protection program, and that they receive medical evaluations prior to wearing respirators and receiving respirator training.

(3) Ensure that site-specific safety and health plans for hazardous and toxic waste investigation, design, and construction activities are developed, reviewed, approved, and overseen in accordance with ER 385-1-92.

e. Chief, Operations Division will:

(1) Ensure that operational managers support the safety objectives identified below.

(2) Ensure that accidents are promptly investigated and reported in accordance with procedures in Appendix B.

(3) Ensure that accidents are analyzed and the true causal factors and corrective actions are identified.

f. Operations Managers will:

(1) Post the Commander's written SOH policy throughout the workplace.

(2) Promptly investigate and report accidents in accordance with procedures in Appendix B.

(3) Analyze accidents and identify the true causal factors and corrective actions.

(4) Develop a written, site-specific program in place for each applicable program (standard operating procedure or station standing order). Include the following: hazard communication program (inventory of chemical hazards; collection of material safety data sheets [MSDS]; worker training and container labeling), respiratory protection program, hearing conversation program, control of hazardous energy, and a confined space entry procedures program.

(5) Ensure that the following components of the medical surveillance program are implemented: Pre-employment job-related medical examinations, medical surveillance examinations, and termination examinations.

(6) Develop an annual Industrial Hygiene Implementation Plan (IHIP) to identify and prioritize SOH needs to include training and IH surveys as a minimum and demonstrate progress towards achieving the IHIP.

(7) Ensure that annual safety inspections are conducted and documented.

g. The Chief of PPMD will ensure that project managers notify the SOHO of safety-related issues and relevant meetings regarding these issues. The objectives are to ensure that safety is addressed throughout the lifecycle of the project to include participation on the Product Delivery Team.

4. SAFETY MANAGEMENT EVALUATIONS (SME). Each applicable objective will be evaluated and a narrative written summary will be based on the preponderance of findings. The summary will be in memorandum format. This summary will be discussed with the manager at an exit briefing. A written copy will be forwarded to the manager and his/her supervisor within five working days.

5. GENERAL.

a. Accident Reporting. The intent of this task is to ensure prompt and complete accident investigations with effective corrective actions; flash reports and the ENG Form 3394 will be evaluated for each accident by the affected Operating Project. The Project must address the

accident cause identified in block 11 of the ENG Form 3394. Block 11 must be completed and at least one causal factor must be marked yes. The SOHO will maintain an accident log and a tracking sheet for each accident. Both of these will be reviewed to evaluate this task.

b. Government Facility Safety and Occupational Health Inspections. The intent of this objective is to ensure a safe and healthful workplace by conducting a minimum of one safety inspection per year. This task will be evaluated by a review of the self-inspection checklists submitted by each office.

c. Construction Safety Inspections. The intent of this task is to promote safety awareness on construction contracts by documenting SOH observations. Examples of SOH observations may include: deficiencies noted during site visit, comments/instructions given to contractor related to SOH issues, accidents reported/discovered, safety meetings held and topics discussed, follow-up information on previous observations, and comments on positive actions/activities. This task will be evaluated by reviewing six months of ENG Form 2538-2-R's.

d. Construction Safety and Occupational Health Program Administration. The intent of this task is to ensure that contractors are made aware of their safety responsibilities early on in the contract process. This task will be evaluated by reviewing files of a minimum of three contracts active during the evaluation period to ensure the Accident Prevention Plans were accepted before the commencement of work.

e. Public Safety and Health. Operating Projects will conduct periodic inspection of public use areas to ensure adequate maintenance. The inspection will be evaluated by reviewing public use area inspection checklists.

f. Design Safety. To ensure that District/Project designers stay abreast of changes in safety-related design issues, training should be provided in seismic protection, fire suppression, life safety code or others. This task will be evaluated by a discussion with the Chief of Engineering/Construction Division.

g. General Safety Awareness. To ensure employees are aware of the Commander's policy and the persons responsible for safety and occupational health throughout the agency. Employee bulletin boards should have the Commander's SOH policy posted as well as the DoD SOH poster.

h. Site-Specific Safety Programs. Operating Project Managers must develop a written, site-specific program for each applicable program. These programs include but not limited to the following: communication program, respiratory protection program, hearing conversation program, control of hazardous energy, and a confined space entry procedures program. These plans will be evaluated annually.

i. Medical Surveillance. The intent of this program is to ensure that the following components are implemented: pre-employment job-related medical examinations, medical surveillance examinations, and termination examinations. This will be evaluated by comparing the Position Description and set of duties with each new employee and with the operation's manager and/or the administrative officer.

j. Industrial Hygiene Implementation Plan (IHIP). Ensure that Operations Manager's plan for industrial hygiene monitoring and related training. A review of training records and IH survey reports will be conducted annually.

k. Safety Meetings. The intent of this task is to ensure Government employees keep abreast of safety requirements. This will be evaluated by a review of the safety meeting minutes sent in to the SOHO.

Appendix J

SAFETY TRAINING

1. PURPOSE. To identify safety and occupational health training requirements.

2. RESPONSIBILITIES. Each Supervisor/Lead or designee will ensure the following:

a. Each new and transfer employee is given a safety indoctrination to include:

(1) A review of their specific job, including a review of the employee's Position Description.

(2) A review of the Risk Management process including Position Hazard/Activity Hazard Analysis.

(3) His/her rights and responsibilities regarding safety and occupational health.

(4) Accident reporting and reporting unsafe working conditions.

(5) The Worker's Compensation Program.

(6) An overview of the Corps of Engineers' Safety Manual, EM 385-1-1.

b. His/her employees are provided the appropriate training to safely perform required job.

3. GENERAL.

a. All Division, Branch, and Office Chiefs and Area, Resident, and Project Engineers will receive training, which will enable them to implement the Occupational Safety and Health Program as it pertains to their employees and functions. Such orientation should include coverage of Section 19 of OSHA, Executive Order 12196, and the District Safety and Occupational Health Program.

b. All supervisors will receive training that includes supervisory responsibility for providing and maintaining safe and healthful working conditions for employees. Introductory and specialized courses that will enable supervisors to recognize and eliminate or control safety and occupational health hazards in their working units will be emphasized. Such training will also include the development of skills in training and motivating subordinates toward assuring safe and healthful work practices.

c. Safety training may be accomplished in various ways. For example, employees may utilize resident courses, in-house training, and correspondence courses, participate in safety meetings and toolbox sessions, and use web-based (Internet) training and view safety videos available from State and Federal video reference libraries. In all cases, the goal of training will be to provide employees with relevant and appropriate information to allow them to develop and maintain competencies within a specific program.

d. The Safety and Occupational Health Office (SOHO) will assist in determining training needs, advise the supervisors of alternatives, and provide support and training materials.

e. Employees represented by labor organizations recognized by the District will include both introductory and specialized courses that will enable such groups to function safely in their positions and prepare them for participation in workplace safety and health inspections.

f. The SOHO will maintain a database for SOH related training. To ensure safety training is documented, copies of sign-up sheets will be forwarded to the SOHO each quarter.

4. MANDATORY SAFETY TRAINING.

a. Occupational Noise Exposure. The employer will administer a continuing, effective hearing conservation program for employees who are exposed to noise at or above the 8-hour time-weighted average of 85 decibels measured on the A scale (slow response). The minimum training requirements are identified in the referenced OSHA standard.

Regulation(s):	29 CFR 1910.95, 29 CFR 1926.101 and EM 385-1-1, Section 05.C.
Audience:	Training is required for all employees included in the Hearing Conservation Program.
Refresher Increment:	Annually.

b. Emergency Action Plans. Each supervisor will, upon initial assignment, review the parts of the plan that employees must know to protect themselves in the event of an emergency.

Regulation(s):	29 CFR 1910.38, 1926.35 and EM 385-1-1, Section 01.E.
Audience:	All employees.
Refresher Increment:	Annually.

c. Portable Fire Extinguishers. Where portable fire extinguishers are provided in the workplace, the employer will provide training in fire extinguisher use and hazards involved with incipient stage fire fighting. The supervisor will ensure training is accomplished upon the initial assignment of the employee.

Regulation(s):	29 CFR 1910.157(g) and EM 385-1-1, Section 09.E.04 and appendix L.
Audience:	All employees.
Refresher Increment:	Annual review of procedures, recommended.

d. Respiratory Protection. In workplaces where respirators are necessary to protect the health of the employee, or whenever respirators are required by the employer, the employer will establish and implement a written respiratory protection program.

Regulation(s):	29 CFR 1910.134, 1926, 1915 and EM 385-1-1, Section 05.E and appendix L.
Audience:	Employees who are required to use respirators. The training must be comprehensive, understandable, and recur annually and more often if necessary.
Refresher Increment:	Annually and as required.

e. Medical Services and First Aid. In the absence of an infirmary, clinic, or hospital in near proximity to the workplace, employees will be trained to render first aid. Adequate first aid supplies will be readily available.

Regulation(s):	29 CFR 1910.151(a) & (b), 1915.58, 1926.50 and EM 385-1-1, Section 03.A.
Audience:	Designated first-aid responders, employees with first-aid responsibilities, written or unwritten, and employees that routinely work in remote locations.
Refresher Increment:	2 years (for First-Aid cards – American Heart Association).

f. Automated External Defibrillators (AED's). Personnel who are required to use AED's will be trained in basic life support and cardio-pulmonary resuscitation.

Regulation(s):	EC 385-1-221.
Audience:	Employees designated in writing as an AED user.
Refresher Increment:	Recommend quarterly exercises. Recommend re-certification concurrent with First Aid/CPR.

g. Power Industrial Trucks (Forklifts). Only trained and authorized operators will be permitted to operate a powered industrial truck.

Regulation(s):	29 CFR 1910.178, 1915.120.
Audience:	Individuals designated by the employer to operate a powered industrial truck (forklifts).
Refresher Increment:	3 years.

h. Crane Operator Training. Only designated personnel will be permitted to operate each specific type of crane. Designated is defined by OSHA as selected or assigned by the employer as being qualified to perform specific duties.

Regulation(s):	29 CFR 1910.179(b)(8), 29 CFR 1910.180(b)(3), and EM 385-1-1, Section 16.C.
Audience:	Individuals that operate cranes.
Refresher Increment:	2-year recommended frequency.

i. Asbestos. The employer will institute a training program for all employees exposed to airborne concentrations at or above the action level or excursion limit of asbestos. The training will be given upon initial assignment and annually thereafter. The training requirements are included in the referenced OSHA regulation. A shortened awareness level course should be given annually to all employees assigned to work in facilities containing asbestos.

Regulation(s):	29 CFR 1910.1001, 29 CFR 1915.1001, 29 CFR 1926.1101 and EM 385-1-1, Section 6 and 23.
Audience:	Individuals involved in asbestos abatement, Classes I, II and III.
Refresher Increment:	Annually (Worker/Supervisor Training).

j. Hazard Communication. The employer will ensure those employees handling and working with chemicals will not remove or deface labels on containers of hazardous chemicals. Employers will maintain any material safety data sheets (MSDS's) are received with incoming shipments of hazardous chemicals and ensure that they are readily accessible.

Regulation(s):	29 CFR 1910.1200(h)(2) and EM 385-1-1, Section 1.
Audience:	All employees working with or around hazardous chemicals/substances.
Refresher Increment:	No specific increment. Recommend annual refresher.

k. Defensive Driving. Defensive driving will be given to all employees required to drive Government vehicles upon initial assignment and every 3 years thereafter.

Regulation(s):	AR 385-55 and AR 600-55.
Audience:	This course is mandatory for all employees who operate a Government vehicle. NOTE: All employees that operate Government vehicles should be on file in the Logistics Management Office, Transportation Branch.
Refresher Increment:	3 years.

l. Lockout/Tagout or Safe Clearance Training. The requirements for this training are listed in the OSHA reference below:

Regulation(s):	29 CFR 1910.147(7), ER 385-1-31, and EM 385-1-1, Section 12.
Audience:	All individuals who work with or around hazardous energy sources. Employees directly affected by the program need thorough training, and those that are not directly affected but work in close proximity need awareness-level training. The awareness-level training is to teach employees the purpose of the program and the importance of not tampering with locks or tags.
Refresher Increment:	Annually.

m. Boat Operator Training. Training covers safe boat operation, including Federal, State, local laws and regulation(s). The course includes testing and licensing of boat operators.

Regulation(s):	ER 385-1-91 and EM 385-1-1.
Audience:	All employees operating boats under 26 feet in length. NOTE: The USCG requires boat operator licensing for vessels over 26 feet in length.
Refresher Increment:	5 years (8-hour refresher).

n. Contract Diving Inspector Training. Provides Corps employees with skills, knowledge, techniques, and methods to monitor diving operations.

Regulation(s):	ER 385-1-86 and EM 385-1-1.
Audience:	Individuals who will be inspecting contract diving operations; i.e., the District Diving Coordinator and his/her Alternate. This course is an approved HQ USACE diving inspector course. Alternative courses must be approved by CESO.
Refresher Increment:	4 years.

o. Electrical Safe Work Practices. Provides both electrical workers and non-electrical workers with sufficient knowledge of electricity to recognize and avoid electrical hazards.

Regulation(s):	29 CFR 1910.331 and EM 385-1-1.
Audience:	Individuals who will be working on, near, or with energized electrical equipment including but not limited to the following: premises wiring, wiring for connection to supply, other wiring, hydroelectric turbines/generators, and switch gear.
Refresher Increment:	No increment specified.

p. Pesticide Application. Prepares employees for State pesticide application license.

Regulation(s):	40 CFR 171.
Audience:	Employees who are required to be licensed pesticide applicators.
Refresher Increment:	Annual license/5-year Refresher.

q. Bloodborne Pathogen Awareness Training. Applies to all occupational exposure to blood or other potentially infectious materials.

Regulation(s):	29 CFR 1910.1030.
Audience:	Individuals identified as having a risk of occupational exposure to other potentially infectious materials such as blood or other bodily fluids. Awareness training is recommended for all employees.
Refresher Increment:	Annually.

r. Safety and Health Decision Making For Managers. This course meets the intent of OSHA's HTW supervisory training requirement.

Regulation(s):	29 CFR 1910.120.
Audience:	Individuals responsible for managing or supervising health and safety programs for employees working at hazardous waste sites, treatment storage and disposal facilities, or responding to chemical emergencies.
Prerequisites:	Individuals must attend the 40-hour Safety and Health for Hazardous Waste Sites before attending this course.
Refresher Increment:	No increment specified.

s. Hazardous Waste Operations and Emergency Response. Meets the intent of OSHA's 40-hour training requirement for HTW work.

Regulation(s):	29 CFR 1910.120, EM 385-1-1, Section 28.
Audience:	All employees working with or around hazardous wastes (DERP, IRP, FUDS, EPA, or Superfund sites). Those employees who have attended the 40-hour Safety and Health for Hazardous Waste Sites and are working on or plan to work on a DERP, IRP, FUDS, EPA, or Superfund site during the current year should attend this 8-hour refresher.
Refresher Increment:	Annually.

t. Confined Space. The employer will provide training so that all employees involved in confined-space entry acquire the understanding, knowledge, and skills required to safely perform their duties associated with confined spaces.

Regulation(s):	EM 385-1-1 and 29 CFR 1910.146.
Audience:	All employees subject to entering confined spaces.
Refresher Increment:	Annually.

u. Back Injury Prevention. Provides information on proper lifting techniques, back exercises, and back physiology.

Regulation(s):	EM 385-1-1.
Audience:	Mandatory for individuals who are employed in positions requiring lifting, repeated bending, and/or manual labor type positions. Recommended for all employees.
Refresher Increment:	No increment specified.

v. Lead/Cadmium. Provides information on the hazards of working with lead and cadmium.

Regulation(s):	29 CFR 1910.1025, 29 CFR 1910.1027, 29 CFR 1926.62, and 29 CFR 1926.63.
Audience:	Individuals who work with lead at or above the action level or for whom the potential for skin or eye irritation exists. Individuals who have the potential for being exposed to cadmium. This training is required regardless of the exposure level.
Refresher Increment:	Annually.

5. RECOMMENDED SAFETY TRAINING.

a. Accident Investigation and Reporting. This training covers accident investigation techniques, when to report accidents, and how to complete accident report forms.

Regulation(s):	AR 385-40 and EM 385-1-1.
Audience:	Individuals responsible for accident investigations, i.e., supervisors, foremen, and construction representatives.
Refresher Increment:	No increment specified.

b. Underground Storage Tank Removal. Informs an employee of safety and environmental issues associated with underground storage tank removal.

Regulation(s):	40 CFR Part 280, EM 385-1-1, Section 28(G).
Audience:	Individuals who work with or around storage tank removal facilities.
Refresher Increment:	Not applicable.

c. Position/Activity Hazard Analysis. Provides an explanation of the job and activity hazard analysis processes.

Regulation(s):	29 CFR 1910.133, EM 385-1-1, Section 1 and OSHA Pamphlet 3071.
Audience:	Those individuals who are working with or are going to work with job hazard analyses.
Refresher Increment:	Before beginning each activity involving a type of work presenting hazards not experienced in previous project operation(s).

Appendix K

PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. PURPOSE. This appendix prescribes requirements and policies for providing personal protective equipment (PPE) necessary to protect the health and safety of District and contract employees.

2. APPLICABILITY. Protective Equipment, including PPE for eye, face, head and extremities, protective clothing, respiratory devices, and protective shields and barriers will be provided. The equipment will be used and maintained in a sanitary and reliable condition wherever it is necessary due to hazards of processes, mechanical and chemical and/or environmental hazards are encountered.

3. GENERAL POLICY.

a. Employers are required to assess the workplace to determine if hazards that require the use of PPE are present or are likely to be present. If hazards or the likelihood of hazards are found, employers must select and have affected employees use properly fitted PPE suitable for protection from existing hazards.

b. Wherever it is necessary by reason of hazards of processes, environmental, or chemical, radiological, or mechanical hazards, encountered in a manner capable of causing injury or impairment to the function of any part of the body through absorption, inhalation or physical contact, PPE will be utilized.

c. The decision to provide PPE will be based solely on the need for protection and not the frequency or length of exposure.

d. PPE will not be provided and/or used as a substitute for items of work clothing, which employees would normally provide at his/her own expense according to the requirements and working conditions of the position. For example, an employee who normally works outside in the winter is expected to report to work properly dressed for outside work, i.e., heavy coat, hat, boots, gloves, etc.

e. Employers must certify in writing that a workplace hazard assessment/position hazard analysis has been performed.

4. RESPONSIBILITIES.

a. Safety and Occupational Health Office will:

(1) Provide technical assistance to supervisors and employees concerning the selection, use and training needed to properly wear PPE and ensure compliance with all applicable regulations.

(2) Ensure that each supervisor has completed an accurate Position Hazard Analysis (PHA) for each employee.

(3) Maintain records of current PHAs for justification of PPE procurement.

b. Supervisors will:

(1) Conduct a hazard assessment to determine if hazards that would necessitate the use of PPE are or are likely to be present. If so, the supervisor will ensure a PHA is prepared, noting the hazard and PPE utilized is completed.

(2) Select and instruct each employee in the use and type of PPE that will protect the employee from the hazards identified in the aforementioned assessment.

(3) Communicate selected decisions to each employee.

(4) Select properly fitting PPE for each employee.

(5) Provide training to all employees who use PPE, and include training requirements in PHA. Each employee will be trained in the following subjects:

(a) The need for when, where, how and why to wear PPE,

(b) The specific types of PPE required,

(c) The proper ways to don, doff, adjust, and wear PPE,

(d) The limitations of the PPE,

(e) The proper care, cleaning and maintenance of PPE, and

(f) Useful life, replacement, and disposal procedures for PPE.

(6) Provide retraining as necessary. Circumstances where retraining may be required include when:

(a) The supervisor has reason to believe that an employee does not have the understanding and skill required to properly use PPE,

(b) Changes in the workplace render previous training obsolete,

(c) Changes in the types of PPE to be used render previous training obsolete, and

(d) Inadequacies in an employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.

(7) Establish an inspection, cleaning, and maintenance program to ensure that PPE is maintained properly in a good working and a sanitary condition.

(8) Verify in writing that the required workplace assessment has been performed.

(9) Verify that employees who are required to use PPE have received the required training, been tested, and have demonstrated an understanding of the proper use and procedures to be followed.

(10) Enforce the correct use of selected PPE.

c. Employees will:

(1) Demonstrate an understanding of the training specified above, and the ability to properly wear the PPE.

(2) Inspect, clean, and maintain PPE. Cleaning is particularly important for eye and face protection devices, where dirty or fogged lenses could impair vision. PPE will be decontaminated or disposed of in a manner that protects employees from exposure to hazards.

(3) Wear PPE as required.

(4) Discuss annually the effectiveness of his/her PPE in the PHA review process.

5. POLICY. The following information is provided for use in your District and Project documents.

a. Foot Protection.

(1) Protective footwear, such as rubber boots, protective covers, ice clamps-ons, and steel toed boots will be worn by all persons exposed to hazards of the feet (including, but not limited to: puncture, slipping, electrical, or chemical hazards).

(2) Employees who are required to lift, move, or carry material or objects that could cause foot injuries if dropped, or employees who operate or work around moving equipment capable of causing foot injuries will be required to wear foot protection.

(3) All safety shoes/boots will conform to ANSI Z41.1.

(4) The need for safety shoes/boots must be identified on the PHA with concurrence of supervisor and employee before the safety shoes/boots can be procured. The actual hazard and control, as listed on the PHA, must be specific, i.e., compressive hazard/steel toe boot, uneven terrain/sturdy field boot with ankle support, etc.

(5) Employees who are required to wear foot protection daily will be initially authorized two pair of safety shoes/boots and thereafter authorized replacements as necessary. Employees who do not have daily exposure will be authorized one pair and replacement will be on an as-needed basis.

b. Eye Protection.

(1) Protective eye wear will be furnished all employees whose duties subject them to potential injury from flying particles, dust, chemicals, ultraviolet radiation, glare, or abrasive materials. Those employees who are furnished protective eye wear will be required to wear it at all times when engaged in the activity for which it is furnished. Areas where eye protection is required will be identified and posted with a sign stating Eye Protection Required or comparable wording at all points of access.

(2) Prescription ground safety glasses will be furnished to all employees who must wear corrective lenses and are subjected to the hazards stated in paragraph 6a above. All protective glasses furnished must conform to ANSI Z87.1, Standard Practice for Occupational and Educational Eye and Face Protection. All frames for safety glasses, whether prescription or plain, will be equipped with safety side shields. Contact lens wearers are also required to wear appropriate eye and face protection.

(3) Non-prescription safety glasses or goggles will also be provided. The type selected will be appropriate for the hazard. The type selected should be made by the immediate supervisor because he/she is most familiar with the hazards associated with the tasks under his/her control.

(4) Guidance concerning protective eye protection is provided in EM 385-1-1, Section 5B.

(5) Procurement. When an employee's supervisor decides that eye protection is necessary and prescription ground safety glasses are required, either as original issue or as replacement for damaged glasses, a requisition with an accurate prescription from a doctor or clinic will be submitted as applicable.

c. Hearing Protection. Hearing protection will be worn in accordance with the District's Hearing Conservation Program and EM 385-1-1, Section 5C.

d. Protective Headgear.

(1) All Government personnel who work on or visit field construction or operation activities will wear hard hats in accordance with EM 385-1-1, Section 5D. All protective headgear will meet the requirements of ANSI Z89.1.

(2) Field offices will maintain a supply of hard hats for visitors. Hard hats, complete with winter liners, will be furnished to Government employees. Hard hats worn by Government employees will be white. Hard hats will conform to the following standard markings: a 1-inch band of red reflective material will be placed along the base of the hat crown with a 5-inch break in front. A Corps of Engineers' insignia will be centered horizontally at the front of the hat, with the base of the insignia about 3/4 inch above the base of the hat crown. Key personnel will have their names placed above the insignia and their organizational titles below. The use of names and titles is optional for other employees. Military rank of active duty personnel may precede the name. Names and titles may be printed in capital letters or embossed on tape. Drilling holes for mounting military or other insignia that will not destroy the integrity of the hat shell will be allowed.

(3) Operators of All-Terrain Vehicles (ATV) or motorcycles will wear helmets.

e. Reflective Vests. All employees assigned to work along streets or highways or involved in backing heavy equipment or dump trucks or similar jobs will be provided and will wear highly visible and reflective vests or coats. This includes surveyors and employees involved in emergency operations.

f. Hand Protection. The appropriate protective gloves will be selected based on the hazard, glove manufacturer's charts, MSDSs and other appropriate guidance.

g. Back Belts. Appliances such as back belts, back braces and wrist rests are not considered PPE. Before purchasing and using such devices, discuss effectiveness with trained ergonomics personnel. The Office of the Surgeon General (OTSG) does not support the blanket use of back belts as an injury preventive measure.

h. Other. Based on JHA other PPE should be provided to the employee. Examples include but are not limited to the following:

(1) Chemical resistant coveralls,

(2) Sunscreen,

(3) Insect repellents,

(4) Chainsaw chaps,

(5) Welding leathers,

(6) Body harnesses,

(7) Snake proof boots or leggings,

(8) Personal flotation devices (PFDs), or

(9) Knee pads.

Appendix L

MEDICAL SURVEILLANCE AND OCCUPATIONAL HEALTH PROGRAM

1. PURPOSE. This regulation prescribes policies and responsibilities for the execution of the Medical Surveillance and Occupational Health Program to:

a. Recognize, evaluate and control health hazards in Portland District workplaces,

b. Medically evaluate 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, and

c. Reduce and keep to a minimum manpower and economic loss caused by occupational exposure, illness and injury of personnel.

d. Ensure compliance with applicable policy, regulations, standards and criteria promulgated by the Occupational Safety and Health Administration (OSHA), Office of Personnel Management (OPM), other Federal, Department of Defense (DoD), Department of Army (DA), U.S. Army Corps of Engineers (USACE) and national consensus organizations such as the American Conference of Governmental Industrial Hygienists (ACGIH) and American National Standards Institute (ANSI).

2. APPLICABILITY. This applies to all Portland District employees and missions.

3. RESPONSIBILITIES.

a. Safety and Occupational Health Office (SOHO) will:

(1) Provide oversight of the Medical Surveillance Program to include: review of industrial hygiene survey reports, review of medical results of work-related laboratory tests and feedback from the reviewing physician. Serve as the NWP Drug Program Coordinator in accordance with EP 600-1-3.

(2) Maintain records of industrial hygiene surveys, investigate, and ensure that work practices are modified if the results of an employee's medical examination indicate that she/he has a physiological disorder that is work related.

(3) Retain copies of agency letters and/or medical records in the Employee's Medical File (EMF). The agency letter contains only work-related information. The examining physician usually maintains the complete medical records.

(4) Ensure that supervisors and their employees have completed an accurate Position Hazard Analysis (PHA) for each employee in accordance with EP 385-1-58 and EM 385-1-1 that details identified health hazards.

(5) Review completed PHAs and coordinate the completion of an Industrial Hygiene Exposure Survey (IHES) or comparable document for each employee. A sample IHES is on page L-9.

(6) Incorporate the results of the IHES into baseline and annual Health Hazard Inventory (HHI) data collection and analysis procedures.

(7) Coordinate Industrial Hygiene (IH) surveys in accordance with EP 385-1-58 to include baseline health hazard exposure assessments.

(8) Assist with risk assessments to help prioritize hazard abatement or control.

(9) Recommend corrective actions to manager regarding follow-up of abatement actions.

(10) Coordinate with program/project management, engineering, construction and civil works operations organizations to ensure that industrial hygiene requirements are fully integrated into engineering and construction work projects. Conduct industrial hygiene review of specifications, scopes of work, etc., to identify, eliminate or control health hazards.

(11) Provide technical assistance and oversight to ensure managers and supervisors provide IH&OH services to protect employees from recognized health hazards.

(12) Conduct training programs to ensure employees are informed of workplace health hazards and their potential effects and the proper use of personal protective equipment.

(13) Provide technical assistance to supervisors and employees concerning IH and occupational health (OH) issues and concerns.

(14) Conduct or coordinate announced or unannounced inspections and annual program evaluations to determine the adequacy of the IH and OH programs.

b. Operations Managers or Supervisors will:

(1) Review Positions Descriptions (PDs) and notify the Civilian Personnel Advisory Center (CPAC) and Safety and Occupational Health Office (SOHO) of physical requirements, potential exposures and special conditions of employment and Personal Protective Equipment (PPE) required for the position.

(2) Develop an Industrial Hygiene Implementation Plan that will serve to prioritize and update program service requirements annually. Schedule IH surveys and evaluate potentially hazardous work areas on an annual basis.

(3) Notify the SOHO immediately of plans for introducing new activities, processes, or chemicals into the work environment.

(4) Inform employees of potentially hazardous operations and environments and ensure Standard Operating Procedures (SOPs) and controls are developed, implemented and adhered to in order to prevent or reduce exposure to as low as reasonably achievable.

(5) Provide a list of all employees requiring medical surveillance based on previous medical surveillance records, union agreements, and employees' ages.

(6) Coordinate the distribution and completion of the IHES, work history forms and/or coordinate and schedule interviews between a safety professional and the employee. Forward the completed forms to the reviewing/examining health facility.

(7) Identify and maintain a listing of employees in work unit(s) requiring medical surveillance, and inform employees of actions regarding their medical surveillance.

(8) Provide the reviewing physician with job descriptions upon request.

(9) Ensure that all recommendations indicated on the agency letter are reviewed and evaluated for possible implementation. The decision not to implement a recommendation must be coordinated with the SOHO and the examining clinic/physician.

c. Employees will:

(1) Maintain health status commensurate with the duties of the job. (Health maintenance is the primary responsibility of the employee).

(2) Demonstrate by work practices an understanding of the training completed.

(3) Comply with the requirements of this ER 385-1-40, EP 385-1-58, EM 385-1-1 and this regulation.

(4) Report to supervisor, any workplace condition, potential exposure or physical ailment that would prevent the performance of a designated task or mission.

(5) Accurately complete the IHES, work-history form and/or participate in interviews with Safety and Occupational Health professionals or Industrial Hygienists to determine exposures.

(6) Receive periodic medical examinations as prescribed. Employees may sign an information release and request the physician to send the entire medical file to the SOHO for retention in the EMF.

d. Civilian Personnel Advisory Center will:

(1) Support the Safety and Occupational Health Office in obtaining occupational health services for qualified personnel in accordance with EP 385-1-58 and applicable human resource regulations and guidelines.

(2) In coordination with the Safety and Occupational Health Manager, establish and oversee human resource requirements associated with the management of the occupational health program not authorized to be performed by the SOHO.

(3) Assure that working conditions and medical and physical qualifications are incorporated in the classification of positions and in the recruitment and placement processes.

(4) Ensure the maintenance of employee exposure, medical and workers' compensation data, etc., records in accordance with 5 CFR Part 293.

4. INDUSTRIAL HYGIENE SURVEYS. Surveys and monitoring conducted will be in accordance with Appendix M of this document.

5. CRITERIA FOR INCLUSION IN THE MEDICAL SURVEILLANCE PROGRAM.

a. For each employee identified on the PHAs, a determination must be made of whether the employee meets the inclusion criteria. This determination is made based on completed IHESs, IHHEs and as indicated below. If the job duty or tasks an employee performs results in the employee meeting the criteria required for inclusion in the program, the physical examination requirements or appropriate laboratory tests will be identified using Medical Examination Requirements for Chemical and Physical Hazards.

b. All full-time permanent, temporary, and part-time military and civilian employees of the Corps are eligible for inclusion in the Medical Surveillance Program (MSP). Inclusion will occur: when an employee's work with chemical, biological, or physical agents is of sufficient duration and concentration that physiological damage could occur, where required or provided for by Federal regulations, by physical standards of position descriptions, by DOD, DA or USACE requirements, by current collective bargaining agreements, or as otherwise recommended or required by the Portland District.

c. The TLVs or PELs of a substance are expressed as 8-hour, time-weighted averages (refer to ACGIH or 29 CFR 1910, Subpart Z - Toxic and Hazardous Substances). Extended or overtime shifts require adjustments of allowable limits. Utilize the following criteria for including the employee in the MSP:

(1) If the exposure exceeds the more stringent of TLV-TWA, TLV-STEL, TLV-C, BEI or OSHA PEL, the employee is enrolled in the MSP.

(2) If the concentration of the material is less than the TLV or PEL but exceeds the Action Level concentration, the employee(s) must work with the material at least 30 days in a year or 10 days in any month to be included in the MSP. Work is defined as being engaged in the normal activities of the job rather than serving in a purely supervisory, administrative or consultative role.

(3) If an employee's exposure to a substance is less than the Action Level concentration, inclusion in the MSP would not be indicated regardless of the time the employee performs the work except as indicated below:

(a) Medical surveillance will be provided as required by Federal Regulations, DOD, DA or USACE requirement, or as required by a current collective bargaining agreement.

(b) Specific medical examinations will be provided when identified as being required for a job, or as provided for in 5 CFR Part 339, EM 385-1-1, or when other pertinent requirements arise.

d. Employees, whose exposures or conditions do not meet the inclusion criteria above, will not be included in medical surveillance unless a written justification for inclusion has been forwarded from the supervisor to the SOHO. The justification must state that medical surveillance is required to protect the health of the employee. The Safety and Occupational Health Manager will coordinate this action with an IH and/or Occupational Health Physician before approval or rejection.

6. PERIODIC MEDICAL EXAMINATIONS.

a. Once it has been determined that an employee should be included in the MSP, each employee will complete a baseline work history. The work histories will be evaluated first by a safety and occupational health professional and then by a medically qualified health professional. The specific content of those examinations, including lab work, will be based upon the information contained in the work history.

b. An employee will receive periodic medical examinations based on a review of the employee's work history, and work place exposures. Qualified medical personnel will determine the content of these examinations.

(1) An employee with incidental exposures does not need a comprehensive medical examination annually, e.g., HTRW technical managers.

(2) Regardless of exposure, an employee required to wear a respirator must be medically cleared. This medical clearance is less comprehensive.

(3) More-frequent examinations may be required based on exposures.

c. Each employee's work history will be reviewed by a physician and the results of each medical examination will be forwarded to the District Nurse. A letter stating the medical condition of the employee *as it pertains to the performance of his/her job* will be sent to the immediate supervisor. A comprehensive report of the employee's examination will be sent to the employee in a confidential envelope. *Only work-related summary information will be examined by anyone other than the employee and the examining medical professionals. The original copy of the medical records will be maintained by the examining clinic or physician for comparison with past or future examinations.*

d. It is important to determine whether a new hire should be included in the MSP as soon he/she is brought on board. Medical examinations for new hires must be completed within 6 months after hiring by the administrative officer. This prevents the gaining organization from buying physical conditions related to previous employment and establishes an accurate baseline from which to work by determining reliable on-the-job exposures. Discrimination based on previous injuries or the suspected possibility of re-injury is illegal.

7. OCCUPATIONAL PROGRAM.

a. Supervisors will determine the degree of hazard for each job in their area of responsibility.

b. Hazard areas will be signed and eye protection will be provided. The wearing of eye protection will be strictly enforced.

c. Crane operators and operator trainees must meet the physical requirements as specified in ANSI B30.5 which are as follows:

(1) Vision of at least 20/30 Snellen in one eye and 20/50 in the other with or without glasses.

(2) Ability to distinguish colors regardless of position if color differentiation is required for operation.

(3) Adequate hearing with or without a hearing aid for specific operation.

(4) Operators will have sufficient strength, endurance, agility, coordination, and speed of reaction to meet the demands of equipment operation.

(5) Evidence of physical defects or emotional instability that could render a hazard to the operator or others, or that in the opinion of the examiner could interfere with the operator's performance may be sufficient cause for disqualification. In such cases, specialized clinical or medical judgments and tests may be required.

(6) Evidence that an operator is subject to seizures or loss of physical control will be sufficient reason for disqualification. Specialized medical tests may be required to determine these conditions.

(7) Operators and operator trainees should have normal depth perception, field of vision, reaction time, manual dexterity, coordination, and no tendencies to dizziness or similar undesirable characteristics.

d. Illumination surveys will be conducted periodically to ensure that adequate lighting levels are maintained.

e. Periodic training in eye injury prevention will be scheduled annually.

f. Welders will receive annual eye examinations.

8. RESPIRATORY PROGRAM. Refer to Appendix N.

9. HEARING CONSERVATION PROGRAM. Refer to Appendix O.

10. BLOODBORNE PATHOGENS PROGRAM**.** Refer to Appendix T.

11. ASBESTOS MANAGEMENT PROGRAM. Refer to appendix Q.

12. EMERGENCY OPERATIONS DEPLOYMENT.

a. Prior to deployment on local emergency operations exercises, all persons will provide a letter from their personal physicians stating they're physically fit for the assigned duties, along with a current record of immunizations.

b. Prior to deployment on a national emergency response team, all persons will complete the *Emergency Response Medical Screening and Clearance Packet* developed by USACE and available through the Emergency Management Office.

13. IMMUNIZATIONS. Personnel will be offered, at Government expense, those immunizations determined necessary to prevent occupational disease or required for emergency operations deployment. Immunizations shall not be administered at Government expense for personal foreign travel. Immunizations are usually limited to Hepatitis B, Hepatitis A, and Tetanus. Immunizations are based on job-related exposures.

14. DEFINITIONS. Refer to EP 385-1-58.

15. VOLUNTARY HEALTH MAINTENANCE. Voluntary health maintenance occupational health services are encouraged, but not mandated. Title 5 USC 7901 provides the basic legal authority for providing both voluntary and required occupational health services. The services provided are as follows:

a. Employee Assistance Program.

b. Fitness Center.

c. Exercise equipment at each operating project.

INDUSTRIAL HYGIENE EXPOSURE SURVEY (IHES) INTERVIEW SUMMARY
EMPLOYEE DATA FOR HEALTH HAZARD EXPOSURE ASSESSMENT
(For use of this form see NWPR 385-1-1. See Marks Number 40-5h for filing, retention, and disposition instructions.)

INTERVIEW DATE *(yyyy/mm/dd)*

PRIVACY ACT STATEMENT: **Authority:** 5 CFR 339.205 **Purpose:** This assessment documents occupational exposures. **Routine Use:** The information gathered on this assessment is used to monitor industrial hygiene exposure and impact on employee health. This assessment will be filed in the employee's official medical record file and will not be released except as required by law or regulation. **Disclosure:** The refusal to provide personal information requested may result in the applicant not being able to continue performing his or her assigned job duties and responsibilities. The employee may be subject to administrative penalties.

A. EMPLOYEE INFORMATION ***(Please Print)***

1. LAST NAME	2. FIRST NAME	3. MIDDLE INITIAL	4. DATE OF BIRTH	5. SEX (M / F)

6. WORK ADDRESS/ LOCATION	7. OFFICE SYMBOL	8 WORK PHONE NUMBER	9. SUPERVISOR (Name)

10. JOB TITLE

11. POSITION TITLE

12. POSITION NUMBER

13. CURRENTLY IN MEDICAL SURVEILLANCE MONITORING PROGRAM FOR:
- ☐ CHEMICALS
- ☐ NOISE
- ☐ RESPIRATOR USE
- ☐ OTHER *(Specify):* _____

14. CLEARANCES NECESSARY *(Check applicable boxes.):*
- ☐ BOAT
- ☐ CRANE OPERATOR
- ☐ DRIVER *(CDL)*
- ☐ OTHER *(Specify):* _____

15. IS EMPLOYEE A RESPIRATOR USER?
- ☐ NO
- ☐ YES *(Select type):*
  - ☐ AIR PURIFYING
  - ☐ SUPPLIED AIR
  - ☐ SCBA

B. EXPOSURE INFORMATION SUMMARY ***(Frequency and severity must both be completed.)***

EXPOSURE	*FREQUENCY *(L, M, H)*	**SEVERITY *(I, L, M, H)*	NOTES / SIGNATURE	
			INDUSTRIAL HYGIENIST	PHYSICIAN
1. NOISE				
2. ASBESTOS				
3. HEAVY METALS *(Welding Fumes: mild steel, stainless steel, aluminum or other (example: List As, or Hg)*				
4. LEAD *(Medium > 30 days/year at Action Level)*				
5. CADMIUM *(Medium > 30 days/year at Action Level)*				

For Illustration Purposes Only

***EXPOSURE FREQUENCY:**
L = Low: 0-12 *(one day/month or less)*
M = Medium 12-52 *(one day/week or less)*
H = High 52 + *(more than one day/week)*

****EXPOSURE SEVERITY:**
I = Incidental: *(Process and/or products are used nearby.)*
(Worker passes through area or conducts inspection and is not involved with job producing potential exposure.)
L = Low: *(Less than 1/2 the PEL or TLV)*
M = Medium: *(From 1/2, up to the full PEL or TLV)*
H = High: *(Greater than the PEL or TLV)*

NWP FORM 40-1-R, Nov 2002 (V1.00) *Proponent Office: CENWP-SO*

B. EXPOSURE INFORMATION SUMMARY CONTINUATION *(Frequency and severity must both be completed.):*				
EXPOSURE	*FREQUENCY *(L, M, H)*	**SEVERITY *(I, L, M, H)*	NOTES / SIGNATURE	
			INDUSTRIAL HYGIENIST	PHYSICIAN
6. SOLVENTS				
7. FORMALDEHYDE				
8. DUSTS				
9. PESTICIDES				

C. OTHER SIGNIFICANT EXPOSURES WHICH SHOULD PROMPT EXAMINATION *(Please enter both frequency and severity and provide any necessary clarifying comments.)*				
EXPOSURE	*FREQUENCY *(L, M, H)*	**SEVERITY *(I, L, M, H)*	NOTES / SIGNATURE	
			INDUSTRIAL HYGIENIST	PHYSICIAN
1. HEAVY LIFTING (Over 20 lbs)		*not applicable*		
2. VIBRATION REPETITIVE MOTION		*not applicable*		
3. CORROSIVES (Example: acid, base, quick lime)				
4. HEAT STRESS *(Example: Tyvek Suit)*				
5. OTHER (Specify: PCBs, Ozone, EMF, Fiberglass, Confined Space)				

For Illustration Purposes Only

D. CERTIFICATION	
1. INDUSTRIAL HYGIENE INTERVIEWER *(Signature/Date)*	2. AGENCY REPRESENTATIVE *(Signature/Date)*

***EXPOSURE FREQUENCY:**
L= Low: 0-12 *(one day/month or less)*
M=Medium 12-52 *(one day/week or less)*
H= High 52+ *(more than one day/week)*

****EXPOSURE SEVERITY:**
I= Incidental: *(Process and/or products are used nearby.)*
(Worker passes through area or conducts inspection and is not involved with job producing potential exposure.)
L= Low: *(Less than 1/2 the PEL or TLV)*
M=Medium: *(From 1/2, up to the full PEL or TLV)*
H= High: *(Greater than the PEL or TLV)*

NWP FORM 40-1-R, Sep 2002 (V1.00) *Proponent Office: CENWP-SO*

Appendix M

INDUSTRIAL HYGIENE PROGRAM

1. PURPOSE. This appendix prescribes requirements to ensure that employees and staff are trained to recognize evaluate, and control hazards caused by exposure to hazardous materials such as toxic chemicals, biological, and physical agents.

2. APPLICABILITY. This appendix will apply to all employees and activities of the District.

3. GENERAL POLICY.

a. All activities, materials, and equipment will be evaluated to determine the presence of hazardous environments or if hazardous or toxic agents could be released into the work environment. Identification of the chemical, biological, or physical agents to which workers are exposed must be accomplished as a first step to ensure healthy and safe work environments.

b. To ensure that potentially hazardous work environments are identified supervisors, with advice and assistance from a safety professional, must complete a Position Hazard Analysis (PHA) for each position. Details concerning PHAs are discussed in Appendix D. The analysis will identify all substances, agents and environments that present an occupational health hazard and identify a specific control (administrative or engineering) for the hazard. Testing and monitoring of work environments shall be accomplished using the guidance provided in EM 385-1-1.

c. Annual industrial hygiene (IH) surveys will be conducted in workplaces with potential chemical, biological and physical agents. A qualified industrial hygienist or other competent person will perform these annual surveys. The designated authority before the start of any operations must approve this program. These annual industrial hygiene surveys are to be accomplished as part of the overall hazard inspection program detailed in Appendix C. The hazard control program will incorporate a risk and priority action system to systemically evaluate and eliminate hazards based on exposure potential and severity. A Risk Assessment Code (RAC) system and accompanying Priority Action Code (PAC) system should be incorporated into the program.

d. Exposure through inhalation, ingestion, skin absorption, or physical contact to any chemical, biological or physical agent in excess of the acceptable limits specified in the ACGIH "Threshold Limit Values and Biological Exposure Indices" will be prohibited. In case of conflicts between ACGIH and other standards or regulations (OSHA), the more stringent will prevail.

e. Hazardous or potentially hazardous exposures will be reduced first by means of elimination or substitution of the agent or chemical, secondly by the use of engineering or work practice controls, or finally by the use of personal protective equipment (PPE).

f. An industrial hygiene implementation plan (IHIP) will be developed listing IH functions, resources available and a priority schedule for accomplishing the required tasks. Specific industrial hygiene program and functional areas are discussed in paragraph 6 of this appendix.

4. RESPONSIBILITIES.

a. Safety and Occupational Health Office (SOHO) will:

(1) Ensure competent industrial hygienists and resources are available to effectively provide oversight of the industrial hygiene program.

(2) Ensure that an IH program document is developed reflecting the activities and program requirements within the District, which is to be reevaluated at least annually.

(3) Review each employee's Industrial Hygiene Exposure Assessment (IHEA). See Appendix L of this document.

(4) Ensure that each supervisor has completed an accurate position hazard or activity hazard analysis for his/her work area. Validate these analyses and incorporate in baseline or annual health hazard inventory data collection and analysis procedures.

(5) Develop an IHIP that will serve to prioritize and update program service requirements annually. Schedule and evaluate potentially hazardous work areas on an annual basis.

(6) Conduct IH surveys and assess results.

(7) Conduct a risk assessment to develop priorities for hazard abatement and control.

(8) Provide technical assistance concerning industrial hygiene issues and concerns, including use of engineering controls, personal protective equipment and respiratory protection.

(9) Ensure maintenance of worker exposure data record keeping in accordance with all applicable regulatory guidance.

(10) Conduct follow-up on abatement actions.

(11) Develop an Industrial Hygiene Implementation Plan (IHIP) annually.

(12) Develop a Health Hazard Inventory (HHI) for the District.

b. Project Safety Officer will:

(1) Develop an Industrial Hygiene Implementation Plan (IHIP) annually for the operating project.

(2) Develop and maintain a Health Hazard Inventory (HHI) for the Operating Project.

(3) Ensure that each supervisor has completed an accurate position hazard or activity hazard analysis for his/her work area.

(4) Provide training to employees relative to exposures and controls.

c. Supervisors will:

(1) Conduct a PHA for each employee to determine if health hazards are, or are likely to be, present in his/her representative work area.

(2) Ensure MSDSs are obtained and reviewed for all hazardous chemicals in the workplace and displayed in an accessible location. Notify the SOHO immediately for assistance when new substances are procured that are identified as being highly toxic or a reproductive hazard.

(3) Inform employees of potentially hazardous operations and environments and ensure SOP's are developed to minimize potential exposures.

(4) Ensure employees attend required training and/or retraining.

(5) Be aware of the employees under his/her supervision requiring medical surveillance and keep employees apprised of actions regarding medical surveillance.

d. Employees will:

(1) Demonstrate an understanding of the training above.

(2) Follow all SOPs including the use of administrative, engineering and work controls.

(3) Call attention to any potential exposure situations to his/her supervisor.

5. INDUSTRIAL HYGIENE PROGRAM FUNCTIONS. The District Industrial Hygienist, working under the direction of the safety office, will provide the following support service to the Operating Projects:

a. Exposure Monitoring Plan. This consists of breathing zone, hazardous material and chemical exposure monitoring, ventilation studies and indoor air quality studies.

b. Industrial hygiene equipment maintenance and calibration. This will be coordinated with Logistics Management. Check for no-cost calibration services that may be available at local Army posts.

c. Medical Surveillance and Occupational Health Program. All employees in the District who are potentially exposed to hazardous chemicals or environments will be considered for inclusion in the medical surveillance program. Details concerning the Medical Surveillance and Occupational Health Program are contained in Appendix L.

d. Personal Protective Equipment Program. See Appendix K for details.

e. Respiratory Protection Program. See Appendix N for details.

f. Hazard Communication Program. See Appendix P for details.

g. Asbestos Management. See Appendix Q for details.

h. Confined Space Entry Program. See Appendix R for details.

I. Hearing Conservation Program. See Appendix O for details.

j. Specification and Design Review. Plans for new or modified equipment, construction, and purchasing or service contract activities to ensure appropriate and adequate engineering controls and sound design concepts are incorporated in all plans and specifications when they relate to IH or occupational health issues. Ensure appropriate criteria for storage and use of hazardous materials, equipment and operations that produce chemical, physical, and/or biological hazards. Evaluates risks, recommends design changes and provides approval or disapproval.

k. HTRW Safety and Health (including OE and Chemical Agent/Surety issues). See ER 385-1-92 for details.

l. Ergonomics Program. See Appendix U for details.

m. Bloodborne Pathogens Program. See Appendix T for details.

n. Training. The IH may provide training on the following topics: OSHA guidelines, employee orientation, respiratory protection, asbestos, lead & cadmium, pesticides, hazardous waste operations, hearing conservation, personal protective equipment, automated external defibrillators (AEDs) and respiratory protection. See individual Appendices and Appendix J for details.

o. Epidemiological Investigations. Industrial hygiene assistance may be needed concerning disease or illness outbreaks within the District. An epidemiologist or occupational health physician, outside the District, may be needed to assist in these investigations. AR 40-5 contains information concerning these issues.

p. Contract Work. Special safety requirements pertaining to control of occupational health hazards on specific projects, which are not included in EM 385-1-1 will be included in the contract specifications and reviewed by the industrial hygienist for IH/OH compliance.

6. PERIODIC IH REQUIREMENTS.

a. Monitoring. To provide developmental/programmatic compliance with State and Federal regulations, the following are examples of IH monitoring that is typically needed at an operating project/facility:

Air monitoring of welding/cavitation repair, personal noise monitoring, air monitoring of open-air solvent tanks, air monitoring for ozone in turbines, air monitoring during abrasive blasting operations, survey of air quality of compressors for supplied air respirators, air monitoring during painting operations, and a hazardous material inventory.

b. Annual Training. To provide the Project Safety Officer/District Safety Office with support information in the development and implementation of a compliant program, the following are examples of training typically needed at an operating project/facility:

Asbestos, Lead and Cadmium, Back Injury Prevention, Hearing Conservation, Respiratory Protection, Hazard Communication, Laser Safety, Personal Protective Equipment (PPE), Confined Space Entry, AEDs and Bloodborne Pathogens. See Appendix J for specifics on training requirements.

EXAMPLE
Health Hazard Inventory (HHI)
(Project name)

Welding fumes-cavitation repair.
Welding fumes-welding shop.
Solvent tanks-natural resource garage, metal shop.
Wood dust-Natural Resource wood shop.
Noise-equipment operation, powerhouse, wood shop, metal shop, lawnmowers, weed eaters, chainsaws.
Electromagnetic Fields (EMF)-powerhouse.
Ozone-generator barrel / housing.
PCBs, Non-PCBs electrical equipment known to be on site. May exist in some capacitors and other electrical equipment, but can't be verified without destructive testing. PCB's can also be found in some paint systems.
Pesticides.
Lead & Cadmium – welding, soldering, paint, abrasive blasting.
Asbestos – Each project should have an asbestos inventory and management plan.
Paint vapors-paint spray booth.
Indoor Air Quality (IAQ).
Radar from vessels.
Exhaust & carbon monoxide-lockwall.
Lighting-stairwells of powerhouse.
Radon.
Drinking Water Quality.

EXAMPLE

Portland District
Risk Assessment

This matrix should be used to prioritize IH needs based on the requirements of AR 40-5 and the Occupational Health Act of 1970. It is used to ensure safe and healthful working conditions at all operating projects within Portland District.

The priority scheme used to assess risk is as follows:

Exposure Frequency
0-12 (one day/month or less)=Low (3)
12-52 (one day/week or less)=Medium (2)
52+ (more than one day/week)=High (1)

Exposure Severity
I=Incidental (Process and/or products are used nearby), worker may pass through the area or may conduct short inspection. Worker is not involved with the job that is producing the exposure.
L=Low (less than ½ the PEL or TLV.)
M=Medium (From ½, up to the full PEL/TLV.)
H=High (Greater than the PEL/TLV)

		SEVERITY			
		H	**M**	**L**	**I**
FREQUENCY	**1**	H1	M1	L1	I1
	2	H2	M2	L2	I2
	3	H3	M3	L3	I3

Sample District IHIP

The implementation schedule for training and industrial hygiene services are based on the present mission of each project. The priority scheme used in this plan is as follows:
1-Has a direct bearing on worker health.
2-Is mandatory based on federal regulation or law.
3-Is recommended by national consensus standards or SOHO professional.

PROGRAM FUNCTIONS	RAC/ Priority	Frequency	Action
Industrial Hygiene Program Document	2	Every 3 years	Safety Office
Position Hazard Analysis (PHA)	2	As needed	Supervisor
Health Hazard Inventory	2	As needed	Op. Project
Industrial Hygiene Implementation Plan	2	As needed	Op. Project
Medical Surveillance Program and Coordination	1	As needed	Op. Project
Unscheduled work site visits (complaints, emergencies,	1	Upon request	Safety Office
Hazard Communication			
Hazardous material inventory	2	Annually	Op. Project
Hazardous material storage inspection	2	Annually	Safety Office
Asbestos Inspection, Management Planning, and Design	2	Upon request	Safety Office
Ordinance & Explosives clean-up activities to include conventional OE and Chemical Waste Materials (CWM)	1	Upon request	Engineering/ Construction
Lead Hazard Control	L3	Upon request	Op. Project
Noise Monitoring			
Individual(personal) monitoring	H1	Quarterly	Op. Project
Octave band Analysis	H1	Upon request	Op. Project
Area surveys	H1	Biennial	Op. Project
Illumination Survey	M1	Upon request	Op. Project
Ventilation Review			
Measure exhaust in welding hoods	L2	Annually	Op. Project
Measure exhaust in wood shop	L2	Annually	Op. Project
Indoor air quality surveys	L1	Upon request	Op. Project
Air Monitoring			
Monitor ozone	L3	Upon request	Op. Project
Measure exhaust in paint spray booths	H3	Annually	Op. Project
Welding fumes-cavitation repair	H2	Annually	Op. Project
Welding fumes-welding shops	M1	Annually	Op. Project
Hydrogen Sulfide-fish ladder pump-out (LWSC)	L3	Annually	Op. Project
Solvent tanks (parts washer)	I3	Upon request	Op. Project
Asbestos air sampling	M3	Upon request	Op. Project
Abrasive blasting	M2	Upon request	Op. Project

Training			
Hazard Communication	1, 2	Annually	Op. Project
Hearing Protection	1, 2	Annually	Op. Project
Respirator Use & Maintenance	1, 2	Annually	Op. Project
Bloodborne Pathogens	1, 2	Annually	Op. Project
Confined Space Entry	1, 2	Annually	Op. Project
PPE	1, 2	Annually	Op. Project
First aid & CPR	2	Biennial	Op. Project
Back Injury Prevention	3	Annually	Op. Project
Lead & Cadmium	2	Annually	Op. Project

Sample Operating Project IHIP

Operating Project Name

IH Function	Priority	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Annual Survey	2												
Update LOHHI	1												
Ventilation Survey (HVAC)	3												
Open surface tanks (solvents)	2												
Spray paint booths	2												
Periodic Sampling													
Welding (cavitation repair)	1												
Calibration of equipment	2												
Noise monitoring	1												
Training													
Confined space Training	2												
Hearing Conservation	2												

IH Function	Priority	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Respirator Training:	2												
Fit tests	2												
Med. Surveillance Interviews	3												
Wood dust	2												
Lead survey	3												
Annual Hazardous material Inventory													
Bloodborne Pathogens Training	2												

Appendix N

RESPIRATORY PROTECTION

1. PURPOSE. This appendix prescribes requirements and policies for controlling occupational diseases caused by breathing air contaminated with harmful exposures to airborne contaminants such as fumes, dusts, mists, gases, aerosols, or vapors. This program ensures that all practical safeguards and precautions are taken to prevent occupational disease or injury to personnel from respiratory exposure to hazardous atmospheres.

2. APPLICABILITY. The Respiratory Protection Program requirements apply to Corps of Engineers' employees based on how often they are in respiratory protection during the course of a year.

3. RESPONSIBILITIES.

a. Safety and Occupational Health Office (SOHO)will:

(1) Provide all supervisors of employees in the respiratory protection program the latest OSHA, DA, and CE guidance.

(2) Provide technical assistance as needed for the implementation of all program requirements.

(3) Assure adequate monitoring of air in areas with potential airborne exposures periodically and when processes or materials change.

(4) Provide educational materials and sources for training.

(5) Evaluate program effectiveness periodically.

b. Operational Project/Facility. If the Operational Project/Facility determines respirators are necessary to protect the workers a written respirator program with specific procedures for protecting the workers must be developed and implemented.

c. Program Administrator. The Project/Facility must designate a Program Administrator to oversee and implement the respiratory protection program. The administrator is responsible for managing the overall program requirements. Parts of the program can be delegated to others, but accountability for the whole program must reside with the administrator. The administrator must be suitably trained though OSHA does not require specific qualifications for the training. According to requirements found in 29 CFR 1910.134 the respiratory protection program administrator will:

(1) Assess the work area to determine if there are potential respirable hazards, have exposures evaluated, and establish control methods for each hazard.

(2) Request through chain of command engineering controls for respirable hazards.

(3) Select and provide respiratory protection for each specific exposure when engineering controls and administrative controls are not feasible.

(4) Provide training and arrange for a medical evaluation for each employee who will be required to wear a respirator.

(5) Enforce the correct wearing of the selected respirator.

(6) Inspect respiratory protective equipment routinely used at least quarterly. Implement a change out schedule based on the hazards/exposures identified in the work environment.

(7) Note the date of inspection for respirators used for emergency use only. Expedite replacement and repair of equipment failing inspection.

(8) Maintain written records at work site indicating:

(a) Air monitoring data used to assess respiratory hazards and the selected respirator for each exposure.

(b) Names of authorized users for each respirator.

(c) Dates of respirator wearer/authorized user medical exams, fit testing, and training.

(d) Inspection and maintenance reports.

(e) Annual medical certification that employee is capable of wearing specific respirator under specific work conditions.

(f) Annual training certificates indicating that class covered description of respirators, intended use, protection factors, limitations, proper wearing, adjustment, fit-testing, cleaning, storage, inspection and maintenance.

(9) Request assistance as necessary from District SOHO.

(10) Report problems to the Program Administrator he/she is unable to resolve.

d. Employees will:

(1) Clean, inspect, maintain, store, and wear respirator in accordance with manufacturer's instructions and site specific training.

(2) Review with supervisor, at least annually, any problems or suggestions to minimize respirable hazards and document the meeting on a signed copy of up-dated position hazard analysis.

(3) Report any malfunction of engineering controls or respirator to his/her supervisor immediately.

Appendix O

HEARING CONSERVATION

1. PURPOSE. To prevent occupational noise-related hearing loss among District personnel.

2. APPLICABILITY. This appendix applies to all Portland District personnel. District personnel will be provided protection against the effects of hazardous noise exposure whenever the sound-pressure levels exceed 85 dB(A) steady-state expressed as a time-weighted average (TWA) or 140 dB(A) impulse.

3. DEFINITIONS.

a. Audiogram – A chart, graph, or table, resulting from an audiometric test showing an individuals' hearing threshold levels as a function of frequency.

b. Baseline audiogram - The audiogram against which future audiograms are compared.

c. Decibel - A measure of sound pressure.

d. dB(A) (decibels, A-scale) - A weighted measure of sound pressure used with sound level meters. The weighting causes the sensitivity of the sound level meter to vary with the frequency and intensity of sound and in doing so duplicates the response of the human ear.

e. Impulse noise - High-intensity noise which exceeds 140 dB(P) (P-scale) and occurs with intervals greater than one second between peaks.

f. Steady noise - Sound that does not significantly change in intensity or frequency with time.

g. Standard threshold shift - A change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

4. RESPONSIBILITIES.

a. Safety and Occupational Health Office (SOHO) will:

(1) Provide program oversight and technical assistance.

(2) Recommend adequate controls for hazardous noise.

(3) Maintain noise measurement exposure and evaluation data.

(4) Ensure that audiograms are analyzed, reviewed, and compared to the employee's baseline audiogram.

b. Operations/Facility Managers will:

(1) Ensure operating project has a written hearing conservation program in place.

(2) Ensure annual audiograms are given to all applicable employees and reviewed by a competent person.

(3) Ensure noise evaluations are conducted in areas and operations suspected of being noise-hazardous.

(4) Ensure adequate controls are implemented to reduce noise to below hazardous levels.

(5) Ensure exposed employees are notified of all designated noise-hazardous areas and equipment under their control and/or within their working environment.

c. Supervisors will:

(1) Ensure that areas and/or equipment designated as noise-hazardous are posted, request noise evaluations of areas suspected of being noise hazardous, and evaluate work methods and procedures to detect suspected or potential noise hazards.

(2) Identify employees whose duties require exposure to designated noise-hazardous areas or equipment and ensure that these employees are included in the Hearing Conservation Program.

(3) Ensure that all employees entering a designated noise-hazardous area are furnished and wear appropriate hearing protective devices. (Hearing protection will be made available near all designated noise-hazardous areas).

(4) Identify positions that require exposure to noise-hazardous areas/equipment when submitting recruitment actions to the Civilian Personnel Advisory Center (CPAC).

(5) Enforce the use of hearing protective devices and implement disciplinary action when necessary.

d. Employees will:

(1) Wear hearing protective devices.

(2) Take appropriate audiograms as directed.

(3) Notify supervisor of suspected noise hazards, hearing problems, and hearing protective devices in need of replacement.

e. A sample standard operating procedure is available from the SOHO upon request.

Appendix P

HAZARD COMMUNICATION

1. PURPOSE. This appendix sets forth the procedures to ensure that the hazards of all chemicals used in the Portland District are evaluated and that information concerning those hazards is provided to affected employees so they may protect themselves from those hazards. This appendix does not apply to hazardous, toxic, and radiological waste mitigation.

2. APPLICABILITY. This applies to all Portland District employees that use or handle hazardous materials in the workplace.

3. RESPONSIBILITIES.

a. Safety and Occupational Health Office (SOHO) will:

(1) Coordinate with the Operating Projects/Facilities to ensure that all chemicals in the workplace have Material Safety Data Sheet (MSDS).

(2) Coordinate with the Chief, Logistics Management Office to ensure that MSDSs are forwarded to the user with delivery of the materials.

(3) Maintain a complete copy of Hazardous Material Inventory for the District.

(4) Provide necessary training aids/materials.

(5) Coordinate Hazard Communication training with affected offices.

(6) Periodically check compliance on the labeling of hazardous materials.

(7) Periodically check compliance of the availability of Material Safety Data Sheets.

(8) Provide a sample hazard communication program on the District Intranet.

b. Operating Projects/Facilities. The Portland District subscribes to the use of an Electronic Database. Electronic access and other alternatives to maintaining paper copies of the material safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options. The employer will:

(1) Maintain in the workplace copies of the required material safety data sheets for each hazardous chemical, and will ensure that MSDSs are readily accessible during each work shift to employees when they are in their work area(s).

(2) Ensure that employees have been provided hazard communication training before initial work assignments.

(3) Maintain a current Hazardous Material Inventory and an MSDS for each item on the inventory.

(4) Provide a current copy of each Hazardous Material Inventory to the Safety and Occupational Health Office (SOHO).

(5) Designate a Hazard Communication (HCC) coordinator to oversee the local program.

(6) Ensure that portable containers into which hazardous materials are transferred will be labeled with either an extra copy of the original manufacturer's label, DD Form 2522 or comparable (i.e., NFPA/HMIS label). This is not a requirement for portable container transfer intended for immediate use.

(7) Review incoming MSDSs for new products or changes to existing MSDSs and convey the information to all affected employees.

c. Environmental Compliance Coordinator and/or (ECC) Project Safety Officer will:

(1) Implement the Hazard Communication program locally.

(2) Review the project labeling system periodically and update as required.

(3) Ensure that Hazard Communication training is provided to all new employees before initial work assignments and anytime a new chemical is introduced into the workplace.

(4) Review each MSDS for accuracy and completeness and consult with the SOHO if additional research or information is needed. The MSDS Pocket Dictionary (available from SOHO) can be used as a guide to reviewing MSDSs.

(5) Maintain a Hazardous Material Inventory of all hazardous materials and update the inventory as necessary

d. Employees will:

(1) Attend Hazard Communication training before using hazardous materials and whenever a new hazardous material is introduced to the workplace.

(2) Inform supervisor of new hazardous materials in the workplace.

(3) Wear appropriate personal protective clothing and equipment.

Appendix Q

ASBESTOS MANAGEMENT

1. PURPOSE. To educate and inform District personnel of the health risks and proper maintenance procedures when working with asbestos containing materials.

2. APPLICABILITY. This appendix is applicable to all District personnel.

3. PROGRAM OBJECTIVES. The objectives of this plan are to inform personnel of the presence of asbestos in the workplace and provide guidance for the routine and emergency maintenance involving asbestos. Adherence to this plan will help maintain an environment free of asbestos contamination within District buildings and facilities. Specific objectives include: (1) clean up asbestos fibers previously released, (2) prevent future release by minimizing asbestos containing materials (ACM), and (3) monitor the condition of asbestos within the District buildings and facilities. The Operation & Maintenance program will remain in effect until all asbestos containing materials are removed from the building or facility.

4. RESPONSIBILITIES.

a. Operating Projects/Facilities Manager will:

(1) Ensure that an asbestos survey is conducted for all facilities.

(2) Ensure that all employees have been properly trained prior to working with asbestos.

(3) Implement an asbestos management plan at his/her operating project.

(4) Maintain an asbestos inventory of the operating project.

(5) Ensure that employees who work with asbestos are included in the medical surveillance program.

(6) Maintain training records in database.

b. Employees will:

(1) Attend training prior to initial assignment of working with asbestos.

(2) Attend asbestos awareness/worker/supervisor training as prescribed by State regulations.

(3) Participate in a medical surveillance program.

(4) Wear appropriate personal protective equipment.

c. Safety & Occupational Health Office will:

(1) Maintain copies of asbestos plans and inventories.

(2) Coordinate asbestos surveys with project safety officer.

(3) Maintain copies of asbestos exposure/medical monitoring in official medical file (OMF).

Appendix R

CONFINED SPACE ENTRY

1. PURPOSE. This appendix prescribes procedures for safe entry into and work conducted in confined spaces (CS) in accordance with 29 CFR 1910.146, Permit Required Confined Spaces.

2. APPLICABILITY. These procedures apply to all District employees.

3. RESPONSIBILITIES.

a. Safety and Occupational Health Office (SOHO) will:

(1) Track confined space entry training.

(2) Maintain master list of all confined spaces in the District.

(3) Assist Operation Manager(s)/engineers in evaluating the hazards of confined spaces.

(4) Ensure that the procedures in place at each operating project are reviewed annually.

b. Operation Manager(s)/Division Chief/Branch Chief(s) will:

(1) Develop Standard Operating Procedures (SOP) for confined space entry at operating project(s).

(2) Ensure that a competent person evaluates all confined spaces to determine whether the confined space should be classified as a permit-required confined space.

(3) Maintain a comprehensive list of all permit required confined spaces and provide a copy to the Safety and Occupational Health Office (SOHO).

(4) Ensure that monitoring data is collected and maintained for each confined space. Atmospheric tests made will include time, date, permissible exposure limit concentrations, employees' names, description and location of the space and the name of the person collecting the data.

(5) Ensure that all affected employees attend confined space training commensurate with his/her duties.

(6) Maintain training records, for entrants, attendants and rescue personnel.

c. Employees will:

(1) Attend confined space entry training annually.

(2) Respect permit required confined space signs.

(3) Be aware of and comply with confined space entry procedures.

4. DEFINITIONS.

a. Atmosphere - refers to the gases, vapors, mists, fumes or dusts within a CS.

b. Attendant - an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all the attendant's duties as assigned in the Confined-Space Entry Program.

c. Authorized entrant - an employee who has been authorized by the employer to enter a permit space. As a minimum, authorized entrants must be trained in the hazards of CS entry.

d. Confined space - refers to any space that:

(1) Is large enough and so configured so that an employee can bodily enter and perform assigned work.

(2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry).

(3) Is not designed for continuous employee occupancy.

e. Hazardous atmosphere - an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (unaided escape), injury, or acute illness from one or more of the following causes:

(1) Flammable gas, vapor, or mist in excess of 10% of it's Lower Flammable Limit (LFL).

(2) Airborne combustible dust at a concentration that meets or exceeds its LFL.

(3) Atmospheric oxygen concentration below 19.5% or above 23.5%.

(4) Atmospheric concentration of any substance for which a dose or a permissible exposure limit (PEL) is published in 29 CFR 1910.1000, Toxic and Hazardous substances, which could result in employee exposure in excess of its dose or PEL. **(Note: An atmospheric substance that is not capable of causing death, incapacitation, impairment of ability to self rescue, injury, or acute illness due to its health effects is not covered by this provision.)**

(5) Any other atmospheric condition that is immediately dangerous to life or health. (Note: For air contaminants for which OSHA has not determined a dose or PEL, other sources such as material safety data sheets (MSDS) may be used).

f. Lower flammable limit (LFL) - refers to the minimum concentration of a combustible gas or vapor in air (usually expressed in percent by volume at sea level), which will ignite if an ignition source (sufficient ignition energy) is present.

g. Non-Permit Confined Space - a CS that does not contain or, with respect to atmospheric hazards, have potential to contain any hazard capable of causing death or serious physical harm.

h. Oxygen deficient atmosphere - refers to an atmosphere with less than 19.5% oxygen by volume. Normal air at sea level contains approximately 21 percent oxygen by volume.

i. Oxygen enriched atmosphere - refers to an atmosphere with greater than 23.5% oxygen by volume.

j. Permit-Required Confined Space - a confined space that has one or more of the following characteristics:

(1) Contains or has a potential to contain a hazardous atmosphere (see definition above).

(2) Contains a material that has the potential for engulfing an entrant.

(3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor, which slopes downward and tapers to a smaller cross-section.

(4) Contains any other recognized serious safety or health hazard.

k. Prohibited condition - a condition in a permit space that is not allowed by the permit during the period for which the permit is authorized.

l. Qualified person - a person designated by the Project Engineer or designee, in writing, as capable (by education and/or specialized training) of anticipating, recognizing, and evaluating employees' exposure to hazardous substances or other unsafe conditions in a CS. This person will be capable of specifying necessary control and/or protective action to ensure worker safety.

m. Rescue service - the personnel designated to rescue employees from permit spaces.

n. Respirator (approved) - a device that is designed to protect the wearer from inhalation of harmful atmospheres and has been approved by the Bureau of Mines and the National Institute for Occupational Safety and Health (NIOSH) and Mine Safety and Health Administration.

o. Retrieval system - the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

Appendix S

FIRST AID AND CARDIOPULMONARY RESUSCITATION

1. PURPOSE. To set forth guidelines and standards to be followed by Portland District personnel in the areas of first aid and cardiopulmonary resuscitation (CPR) in accordance with 29 CFR 1910.151.

2. APPLICABILITY. This appendix applies to all District employees.

3. RESPONSIBILITIES.

a. Safety and Occupational Health Office (SOHO) will:

(1) Provide oversight of the First Aid/CPR Program.

(2) Maintain lists of trained first-aid responders at District Office and at each project/field office.

b. Portland District – Robert Duncan Plaza (RDP) will:

(1) Provide support to the District program by soliciting volunteers from RDP staff to serve as "designated first-aid responders".

(2) Ensure that employees select a designated first-aid responder to receive the training in first aid, CPR and Automated External Defibrillators (AEDs).

c. Each Operations/Facility Manager will:

(1) Identify an appropriate number of designated first-aid responders dependant upon the size of staff and the nature of work.

(2) Ensure that the selected employees receive the training in first aid and CPR.

(3) Provide training materials such as alcohol for disinfecting, bandages, slings, etc.

4. PROCEDURES.

a. Every injury and illness incurred on the job, regardless of degree of seriousness, will be given prompt attention with an Immediate Notification Form filled out and sent to the SOHO.

b. 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.

c. Vehicles regularly utilized by employees working at remote sites, and security guard and ranger vehicles will have prescribed first aid kits.

d. Standard 16-unit first aid kits will be utilized in accordance with EM 385-1-1, section 03.B.

APPENDIX S, ANNEX A

AUTOMATED EXTERNAL DEFIBRILLATORS

1. PURPOSE. This provides policy and guidance concerning the use of automated external defibrillators (AEDs). These devices are used to assist in saving lives due to sudden cardiac arrest.

2. APPLICABILITY. This is applicable District wide.

3. POLICY. Procurement of AEDs will be made based on an assessment of need. All Hydroelectric Projects within the District meets this need under 29 CFR 1910.269 (b) (1) (ii) which states that all personnel in generating stations working on exposed or energized lines 50 volts or more shall be capable of being reached within four (4) minutes by cardiopulmonary resuscitation (CPR) and first aid trained personnel. By Executive Order, all Federal Buildings will have AEDs with volunteer employees trained in First Aid, CPR, and AED usage.

a. Use of AEDs for the Public.

(1) Funds will not be expended for placement of AEDs in parks/recreational facilities or in Ranger vehicles with the intent of providing advanced life support services to the public.

(2) The primary purpose of purchasing AEDs will be to assist Government employees working in high-risk occupations. This does not negate the use of AEDs on contractors or visitors who may benefit from such care if they are within the response time of an AED.

b. Training. Operators of AEDs will be designated in writing and trained in First Aid, CPR and AED usage. The AED users will receive annual refresher training and professional training every two years. This professional training can normally be obtained through the local chapters of the American Heart Association, American Red Cross, or the National Safety Council or local hospital.

c. Standard Operation Procedure (SOP). Each operating project equipped with an AED will develop a written SOP. The SOP will: designate a site AED coordinator, list those personnel who have received training on AEDs and who are on the AED responder team. The SOP will also state the location of each AED and describe the maintenance requirements and frequency of the AED.

d. Liability. All states within Portland District have Good Samaritan laws that grant immunity to people that perform (first aid) emergency care. The Good Samaritan Law covers Government employees providing emergency care within the scope of their training. The immunity provisions in regards to using AEDs are limited as follows:

(1) Individuals using the AED must have received training prior to use of the AED.

(2) The person(s) using the AED must, as soon as possible, call 911 or other emergency numbers.

(3) The AED must be maintained in the manner and tested as required by the manufacturer.

(4) The person(s) who maintains the AED must be trained in the use of such equipment as well as CPR. In addition, such person(s) must contact the local emergency medical service provider serving the area where the equipment is to be used and advise them of the location of the AED.

Appendix T

BLOODBORNE PATHOGENS PROTECTION

1. PURPOSE. This appendix establishes procedures for preventing transmission of the 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 Portland District employees where they are potentially exposed to HBV or HIV.

3. 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 and body fluids. See Annex A for barrier precautions to minimize exposure to HBV and HIV.

4. 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 Safety and Occupational Health Office (SOHO).

5. MEDICAL COUNSELING. Medical counseling will be provided for all workers tested positive for HBV or HIV though the Employee Assistance Program.

6. EMPLOYEE CLASSIFICATION.

a. Each employee's position will be classified to determine 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. The employees 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 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 by the Project. 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 will be filed in the employees Official Medical File (OMF).

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

7. 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 protective clothing and equipment 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.

8. INCIDENT PROCEDURES.

a. A post-exposure medical evaluation and follow-up must be made available **immediately** for employees who have had an exposure incident. Again, an exposure incident means a specific contact (eye, mouth, mucous membrane, non-intact skin, or parenteral) with potentially contaminated blood or body fluids. At a minimum, the evaluation and follow-up must:

(1) Document the routes of exposure and how exposure occurred.

(2) Identify and document the source individual unless the employer can establish that identification is infeasible or prohibited by state or local law.

(3) Obtain consent and test source individual's blood as soon as possible to determine HIV and HBV infectivity and document the source's blood test results. If consent is not obtained, the employer must show that legally required consent could not be obtained. Where consent is not required by law the source individual's blood, if available, should be tested and the results documented. If the source individual is known to be infected with either HIV or HBV, testing need not be repeated to determine the known infectivity.

(4) Provide the exposed employee with the source individual's test results and information about applicable disclosure laws and regulations concerning the source identity and infectious status.

(5) Collect exposed employee's blood as soon as feasible after the exposure incident and test blood for HBV and HIV serological status after obtaining consent.

(6) If the employee does not give consent for HIV serological testing during the collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days.

(7) Provide HBV and HIV serological testing, counseling, and safe and effective post-exposure prophylaxis following the current recommendations of the U.S. Public Health Service.

(8) Provide a Post-Exposure Evaluation. The employer must provide to the health care professional evaluating the employee after an exposure incident, a description of the employee's job duties relevant to the exposure incident, documentation of the route(s) of exposure, circumstances of exposure, and results of the source individual's blood tests, if available, and all relevant employee medical records, including vaccination status. The aforementioned information requires consent of the employee prior to release. All diagnoses must remain confidential.

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 have chosen not to receive the hepatitis B vaccine, even if classified as doing Category I and/or II tasks.

10. PERSONNEL RECORDS. CPAC will place the necessary documentation in the personnel records and will maintain a copy of these records for the length of employment plus 30 years.

APPENDIX T, 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. Employees 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.

1. Gloves will be worn for touching blood/body fluids, mucous membranes or non-intact skin, and for handling items or surfaces soiled with bloody 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 vomit. If the fluid cannot be identified, it will be assumed to be of high risk.

2. 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.

3. 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 because a good face-to-bag seal is easier to achieve with a familiar device.

4. 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.

5. 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.

6. 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).

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

APPENDIX T, ANNEX B

EXPOSURE RISK TO BLOODBORNE PATHOGENS

(For use of this form see NWPR 385-1-1. See Marks Number 40-5h for filing, retention, and disposition instructions.)

PRIVACY ACT STATEMENT: **Authority:** 29 CFR 1910-1030 **Purpose:** This assessment documents occupational exposures. **Routine Use:** The information gathered on this assessment is used to monitor industrial hygiene exposure and impact on employee health. This assessment will be filed in the employee's official medical record file and will not be released except as required by law or regulation. **Disclosure:** The refusal to provide personal information requested may result in the applicant not being able to continue performing his or her assigned job duties and responsibilities. The employee may be subject to administrative penalties.

A. EMPLOYEE INFORMATION ***(Please print)***

1. EMPLOYEE NAME	2. JOB TITLE	3. OFFICE SYMBOL

B. EMPLOYEE RISK ***(Check one block per task below.)***

EMPLOYEE TASKS	CATEGORY DESCRIPTIONS		
	CATEGORY I *(Routine Task):* 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. HB vaccine is highly recommended for these employees.	CATEGORY II *(May be Required):* 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. HB vaccine is recommended for these employees.	CATEGORY III *(Never Done):* 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.
1. Administers first aid to accident victims			
2. Applies dressing or bandages to wounds			
3. Administers mouth-to-mouth resuscitation			
4. Cleans or performs maintenance on items or equipment which may be contaminated with potentially infectious materials.			
5. Picks up or processes waste which may contain items contaminated by blood or body fluids.			

For Illustration Purposes Only

C. EMPLOYEE & SUPERVISOR CERTIFICATION

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 HBV/HIV from the bloodborne pathogen program by contacting the Safety and Occupational Health Office.

1. EMPLOYEE SIGNATURE	2. DATE	3. SUPERVISOR SIGNATURE	4. DATE

NWP FORM 40-2-R, Nov 2002 (V1.00) *Proponent Office: CENWP-SO*

APPENDIX T, ANNEX C

SAFE DISPOSAL OF SHARPS AND OTHER CONTAMINATED MEDICAL WASTE

The following information should be distributed to all District personnel.

1. Needles, syringes, lancets or other sharps shall only be handled with pliers or a similar type tool. 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 coffee can will do as long as the plastic lid is 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 regulated/designated waste receptacle for proper 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. Then place the bag into a second plastic bag and securely fasten before placing into the appropriately marked biohazard/waste receptacle.

9. Do not compact trash.

10. Carry bags away from the body so as not to brush against any sharp objects, which may protrude from the bag.

APPENDIX U

ERGONOMIC PROGRAM

1. PURPOSE. To protect District employees who are at risk of cumulative trauma disorders (CTD), and to design the workplace to be compatible with human dimensions and capabilities. An effective ergonomic program will: reduce physical stress on the employee, increases productivity and worker satisfaction, improves morale, and decreases absenteeism and related medical costs.

2. APPLICABILITY. This appendix is applicable to all Portland District personnel.

3. RESPONSIBILITIES.

a. Safety and Occupational Health Office (SOHO) will:

(1) Implement the Ergonomic Program throughout the Portland District.

(2) Provide training for managers as needed.

(3) Provide training for employees who are identified at high risk for CTDs upon request of the supervisor and in addition to regularly scheduled sessions.

(4) Provide ergonomic surveys of the worksite when employees are identified at moderate to high risk for CTDs or upon request of the supervisor.

(5) Inform managers/supervisors of survey results through a written report of findings and recommendations.

(6) Provide medical evaluation(s) through the SOHO for symptoms associated with work tasks and refer when necessary for further evaluation and treatment. In addition, the SOHO will play an integral role in determining where and when an ergonomic survey is indicated due to employees with physical complaints.

(7) Assist managers and supervisors with implementation of corrective measures through recommendation of types of tools, furnishings, work methods, etc.

b. Supervisors will:

(1) Implement and be familiar with the criteria established in this appendix.

(2) Identify ergonomic risk factors for all employees at his/her worksite(s) using the information given in this appendix.

(3) Request assistance from the SOHO when a comprehensive ergonomic analysis is deemed necessary.

(4) Correct existing ergonomic hazards through redesign or modification of the workstation, work methods, tools and equipment.

(5) Assure that purchases require all new office furnishings, tools, and equipment to be ergonomically designed.

(6) Attend mandatory training sessions for managers or request training through the Safety and Occupational Health Office.

(7) Provide training for employees who are considered moderate to high risk for cumulative trauma disorders.

(8) Refer employees with physical complaints, associated with CTDs for prompt medical evaluation.

c. Employees will:

(1) Attend recommended ergonomic training sessions.

(2) Cooperate with managers/supervisors, SOHO or others who perform ergonomic surveys of their workstation.

(3) Implement recommended changes in their own workstation that they can physically execute such as proper placement of monitor, documents, chair adjustments, and housekeeping.

(4) Make changes in work habits as recommended in training or as a result of an ergonomic survey.

(5) Report promptly symptoms or areas of discomfort associated with work tasks to the supervisor.

(6) Seek early medical evaluation of symptoms through the SOHO or Project health-care physician.

4. WORKSITE ANALYSIS.

a. The supervisor must make initial determination of employees at risk of CTDs through the following:

(1) Conduct annual review of existing injury and illness records such as the Log of Injuries and Occupational Illnesses, CA-1 - Notice of Traumatic Injury, CA-2 - Notice of Disability or ENG Form 3394 - Accident Investigation Report.

(2) Review employees' observations, complaints or suggestions regarding CTD symptoms or ergonomic stressors as early as possible.

(3) Identify and analyze CTD trends in particular departments, job titles and work areas. If musculoskeletal disorders have occurred in the past two years, the supervisor must proceed to further evaluation of the jobs.

(4) Take corrective actions to remove the ergonomic hazards as soon as feasible.

(5) Conduct a baseline screening survey using ergonomic checklists (Annex 1 and 2).

b. Ergonomic Risk Factors. Identification of ergonomic hazards is based on ergonomic risk factors: conditions of a job process, work station, or work method that contributes to the risk of developing CTDs. Not all of these risk factors will be present in every CTD-producing job, nor is the existence of one of these factors necessarily sufficient to cause a CTD.

(1) CTD Risk Factors. Some of the risk factors for CTDs include the following:

(a) Repetitive and/or prolonged activities.

(b) Forceful exertions, usually with the hands or fingers (including pinch grips).

(c) Prolonged static postures.

(d) Awkward postures of the upper body, including reaching above the shoulders or behind the back, and twisting the wrists and other joints to perform tasks.

(e) Continual physical contact with work surfaces, e.g. contact with sharp edges of tables or desks.

(f) Restrictive workstations (inadequate clearances).

(g) Poorly fitting gloves which affect grip strength.

(h) Excessive vibration from power tools.

(i) Cold or wet work - temperature extremes.

(j) Inappropriate or inadequate hand tools.

(k) High frequency and/or high-speed work or work pace near maximum.

(l) Unprotected exposure to excessive noise.

(2) Back Disorder Risk Factors. Risk factors for back disorders include items such as the following:

(a) Poor body mechanics such as: repeated bending over at the waist, repeated lifting from below the knees or above the shoulders, and twisting at the waist, especially while lifting.

(b) Lifting or moving objects of excessive weight or asymmetric size.

(c) Prolonged sitting, especially with poor posture.

(d) Lack of adjustable chairs, footrests, body supports, and work surfaces at workstations.

(e) Poor grips on handles.

(f) Slippery floors.

(3) Multiple Risk Factors. Jobs, operations, or workstations that have multiple risk factors have a higher probability of causing CTDs. In general, employees exposed for a period of two or more hours per day to any risk factor are susceptible to developing a CTD. Likewise, some susceptible individuals may develop symptoms with less than two hours per day exposure to ergonomic risk factors. Supervisors must therefore consider all risk factors as potential problems and consider early intervention and correction.

(4) When risk factors are identified through screening surveys, the supervisor must proceed to identify the cause and fix the problem. If assistance is needed in acquiring a comprehensive ergonomic survey, the SOHO may be contacted.

c. Screening Surveys.

(1) Checklists. The baseline screening survey is performed with an ergonomic checklist. These checklists include the Employee Ergonomic Worksite Evaluation and the Computer Station Checklist. These checklists are available through the Safety Office.

(2) The checklist serves as a tool to assist the supervisor in determining the presence of ergonomic risk factors.

5. HAZARD PREVENTION AND CONTROL.

a. Engineering Controls. The focus of an ergonomic program is to make the job fit the person, not to force the person to fit the job. This can be accomplished by designing or modifying the workstations, work methods, and tools to eliminate excessive stress.

(1) Workstation design. Workstations should be easily adjustable and designed or selected to accommodate the worker who uses them.

(2) Workspace should be large enough to allow for full range of required movements.

(3) Design of Work Methods. Work methods should be designed to reduce static, extreme and awkward postures, repetitive motion, and excessive force.

(4) Tools and Handle Design. Tools and handles, if well designed, reduce the risk of CTDs. Tools and handles will be selected to eliminate or minimize the following stressors:

(a) Chronic muscle contraction or steady force.

(b) Extreme or awkward finger/hand/arm positions.

(c) Repetitive forceful motions.

(d) Tool vibration.

(e) Excessive gripping, pinching, pressing with the hand and fingers.

b. Work Practice Controls. An effective program for hazard prevention and control includes procedures for safe and proper work that are understood and followed by managers, supervisors and employees. Key elements include:

(1) Proper Work Techniques.

(a) Work methods that improve posture and reduce stress and stain on extremities.

(b) Correct lifting techniques (proper body mechanics).

(c) Proper use and maintenance of pneumatic and power tools.

(d) Correct use of ergonomically designed workstations and fixtures.

(2) New employee conditioning period. For new employees assigned to high risk areas a conditioning or break-in period should be required. New and reassigned employees should be gradually integrated into a full workload as appropriate for specific jobs and individuals.

(3) Monitoring. Monitoring should include periodic review of techniques in use and their effectiveness, to include determination of whether the procedures in use are those that have been specified. If not, then it should be determined why changes have occurred and whether corrective action is necessary.

c. Substitution. Substituting a new work process or tool for a work process with an identified ergonomic hazard can effectively eliminate the hazard. One example is replacing a large manual paper stapler with an automatic stapler when stapling large volumes of documents, thus reducing undue force on the hand.

d. Personal Protective Equipment. PPE will be selected with ergonomic stressors in mind. Appropriate PPE will be provided in a variety of sizes, accommodate the physical requirements of workers and the job, and will not contribute to extreme postures and excessive forces.

(1) Proper fit is essential. For example, gloves that are too thick or that fit improperly can reduce blood circulation and sensory feedback, contribute to slippage, and require excessive grip strength.

(2) Other types of PPE that may be selected for use should not increase ergonomic stressors.

e. Administrative Controls. A sound overall ergonomic program includes administrative controls that reduce the duration, frequency, and severity of exposures to ergonomic stressors. Examples of administrative controls include the following:

(1) Reducing the total number of repetitions per employee by such means as decreasing production rates and limiting overtime work.

(2) Providing rest pauses to relieve fatigued muscle-tendon groups. The length of time needed depends on the task's overall effort and time required to finish the task.

(3) Increasing the number of employees assigned to a task to alleviate severe conditions especially in lifting heavy objects.

(4) Using job rotation with caution and as a preventive measure, not as a response to symptoms.

(5) Verifying that mechanical and power tools and equipment are in proper working order and within the manufacturer's original specifications. Sufficient number of spare tools should be readily available.

(6) Minimizing slippery work surfaces and related hazards such as slips and falls through effective housekeeping.

(7) Encouraging task rotation so that the employee does not fatigue muscle-tendon groups by working on one task too long.

(8) Encouraging stretching and recommended exercise breaks to relax and condition muscles.

(9) Providing alternative duty assignments to allow injured muscle-tendon groups time to rest assisting in the healing process. Alternative assignments should be provided when physical limitations (as identified by a health care provider) allow the worker to return to work performing less than his/her normal work requirements. Supervisors needing assistance with alternative duty assignments should contact the Management-Employee Relations Branch of the Human Resource Office.

6. MEDICAL MANAGEMENT.

a. Early treatment and intervention is the key to avoiding long term disabilities created by CTDs. This means encouraging employees to seek early medical evaluation for musculoskeletal complaints and early assessment of the job for possible ergonomic stressors.

b. Employees with musculoskeletal complaints must be evaluated promptly by a health care provider, and appropriate treatment and follow-up must be provided. The employee's personal physician, contract physician or Occupational Health Unit usually does initial evaluation.

c. The effects of the job, either as a contributing or aggravating factor, must be considered, when an employee is diagnosed with any of the following conditions:

(1) Carpal Tunnel Syndrome (hand-median nerve compression).

(2) Tendonitis or tenosynovitis.

(3) Ulnar nerve compression.

(4) DeQuervain's disease (thumb - radial nerve).

(5) Trigger finger

(6) Ulnar nerve compression.

(7) Lateral epicondylitis (tennis elbow - ulnar nerve)

7. EMPLOYEE TRAINING AND EDUCATION.

a. Training is necessary for all levels of employees to enable them to understand and recognize potential ergonomic hazards and actively participate in their prevention and correction. When possible a health care provider or person knowledgeable in ergonomics will conduct training as follows:

(1) Mandatory Training for Managers and Supervisors.

(a) Ergonomic awareness training must be provided for all managers and supervisors at least once and as needed thereafter.

(b) This training will be provided by the Safety and Occupational Health Office or through an outside source that is knowledgeable in ergonomics.

(c) For managers and supervisors unable to participate in scheduled sessions, special arrangements for training can be made through the Safety and Occupational Health Office.

(2) Employee training will be provided as follows:

(a) All employees whose jobs are considered at moderate to high risk for ergonomic stressors will also receive training. This includes employees with jobs exposing them to identified risk factors for a period of two or more hours per day.

(b) Upon request of the supervisor, training sessions will be provided by the SOHO in conjunction with ergonomic surveys and in regularly scheduled sessions.

(c) Training will consist of the following topics:

1 Ergonomic awareness and how to use proper control measures.

2 Symptoms and description of the different types of CTDs, and their treatment.

3 Means of prevention, intervention and causes of CTDs.

4 Protocol for reporting symptoms and requesting a job site analysis.

8. RECORDKEEPING.

a. Under the OSH Act, all work-related illnesses must be recorded on the Log of Injuries and Occupational Illnesses as an occupational illness. These are disorders caused, aggravated, or precipitated by repeated motion, vibration, or pressure. Supervisors should coordinate with the SOHO when reporting.

b. In order to be considered work-related, the exposure at work either caused or contributed to the onset of symptoms or aggravated existing symptoms to the point that OSHA recordability criteria is met.

c. If the following criteria are met, then a CTD illness exists that must be recorded on the OSHA Form 300 http://www.osha-slc.gov/OshDoc/Additional.html. There must be either physical findings or subjective symptoms and resulting action. Namely, there must be either:

(1) At least one physical finding (e.g. positive Tinel's, Phalen's, or Finkelstein's test, or swelling, redness, deformity, or loss of motion), or

(2) At least one subjective symptom (e.g. pain, numbness, tingling, aching, stiffness, or burning), and at least one of the following:

(a) medical treatment (including self-administered treatment when made available to employees),

(b) lost workdays (including restricted work activity), or

(c) transfer/rotation to another job.

(3) Occupational Injuries. Injuries are caused by events in the work environment. To keep recordkeeping determinations as simple and equitable as possible, back cases are classified as traumatic injuries.

(4) All medical records will be retained in the SOHO and maintained by the Occupational Health Nurse in accordance with the Privacy Act of 1974 and 29 CFR 1910.20, Access to Employee Exposure and Medical Records.