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Department of Defense INSTRUCTION

NUMBER 6055.1

August 19, 1998

DUSD(ES)

SUBJECT: DoD Safety and Occupational Health (SOH) Program

- References:
- (a) DoD Instruction 6055.1, "DoD Occupational Safety and Health Program," October 26, 1984 (hereby canceled)
 - (b) DoD Directive 4715.1, "Environmental Security," February 24, 1996
 - (c) Section 7902 of title 5, United States Code
 - (d) Section 651 *et seq.* of title 29, United States Code (1985 & Supplement)
 - (e) through (v), see enclosure E1.

1. REISSUANCE AND PURPOSE

This Instruction:

- 1.1. Reissues reference (a) to establish SOH as core values of the Department of Defense.
- 1.2. Updates policies, procedures, and responsibilities for administering a comprehensive DoD SOH program under reference (b).
- 1.3. Implements the provisions of references (c), (d), (e), (f), and (g) as they apply to the DoD SOH program and the reduction of costs due to accidents and occupational illnesses.

2. APPLICABILITY AND SCOPE

This Instruction:

- 2.1. Applies to the Office of the Secretary of Defense (OSD), the Military

Departments (including the Coast Guard when it is operating as a Military Service in the Navy, and the Army-Air Force Exchange Service), Chairman of the Joint Chiefs of Staff, the Combatant Commands, the Inspector General of the Department of Defense, the Uniformed Services University of the Health Sciences, the Defense Agencies, and the DoD Field Activities, including any other integral DoD organizational entity or instrumentality established to perform a Governmental function (hereafter referred to collectively as "the DoD Components"). The term "Military Services," as used herein, refers to the Army, the Navy, the Air Force, and the Marine Corps.

2.2. Encompasses all DoD personnel and operations worldwide during peacetime and military deployments. These provisions consider limitations on the applicability of 29 U.S.C. 651 *et seq.*, E.O. 12196 and 29 CFR 1960 (references (d), (f), and (g)) to the Department of Defense. These limitations include the exemptions or exceptions from Department of Labor (DoL) oversight for military personnel, military-unique operations and workplaces, specific conditions governed by other statutory authorities, and, in certain overseas areas, conditions governed by international agreements.

2.3. Includes risk management, aviation safety, ground safety, traffic safety, occupational safety, and occupational health.

2.4. Excludes explosive safety covered under DoD 6055.9-STD (reference (h)) and fire prevention and protection covered under DoD Instruction 6055.6 (reference (i)).

2.5. Does not apply generally to DoD contractor personnel and contractor operations. Additional details are given in enclosure E5. In peacetime operations performed in the Continental United States or its territories or possessions, the contractor is responsible directly to Federal or State Occupational Safety and Health Administration (OSHA) for the safety and health of contractors' employees. See enclosure E3. for evaluation of DoD contractor exposures during wartime and peacekeeping operations.

3. DEFINITIONS

Terms are defined in enclosure E2.

4. POLICY

It is DoD Policy:

4.1. To eliminate accidents, deaths, and occupational illnesses by applying risk management strategies towards achieving an annual goal of significant reductions in all accidents and occupational injuries and illnesses, with the ultimate goal of zero accidents, no occupational injuries and illnesses, and compliance with DoD SOH standards and policies.

4.2. For the DoD Components to reduce costs and eliminate unnecessary expenditures per the mandate in 31 U.S.C. (reference (e)).

4.3. To hold commanders responsible for SOH program performance. Managers, supervisors, and military personnel and civilian workers are accountable for preventing accidents and workplace illness, but the ultimate safety of human and material resources is a command responsibility.

4.4. To prescribe and enforce standards or regulations applicable to those functions for which the Department of Defense has statutory authority for SOH matters.

4.5. To require all new and modernized weapons systems and construction projects to meet applicable safety, life-safety, fire protection, and health standards.

5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Acquisition and Technology, through the Deputy Under Secretary of Defense for Environmental Security (DUSD(ES)), shall:

5.1.1. Serve as the principal advocate for SOH within the Department. Recommend and champion language in the Defense Planning Guidance and the Defense Health Program Medical Planning Guidance to promote sufficient resources in the Components' budgets to carry out the provisions of this Instruction.

5.1.2. Represent DoD safety and health interests through such actions as interfacing with Federal SOH regulators, testifying before Congress on SOH matters, and developing recommendations for Regulations and legislation to eliminate accidents.

5.1.3. Develop policies and provide executive direction to reduce the erosion of resources and readiness caused by accidents, fatalities, injuries, and occupational injuries.

5.1.4. Conduct continuing oversight of the Components' SOH programs.

5.1.5. Establish the SOH Committee, under the Environment, Safety and Occupational Health Policy Board, as part of the Defense Environmental Security Council structure. The SOH Committee shall convene working groups as needed to address specific issues under DoD Directive 4715.1 (reference (b)).

5.2. The Heads of the DoD Components shall:

5.2.1. Establish programs that implement the requirements and procedures of this Instruction. Such programs shall be under the cognizance of one senior SOH official at no lower than the Military Department Assistant Secretary or Defense Agency Deputy Director levels.

5.2.2. Institute systems to use the risk management process at all levels to prevent the accidental loss of personnel, facilities, weapons systems, and equipment during peacetime and wartime.

5.2.3. Ensure that its planning, programming, budgeting, and execution system includes sufficient resources to staff and implement effectively the Component's accident prevention program and Occupational Safety and Health (OSH) program as required by 5 U.S.C. 7902 and 29 U.S.C. 651 *et seq.* (references (c) and (d)).

5.2.4. Develop contingency plans to ensure the expeditious evaluation of requests from Defense contractors for variations, tolerances, and exemptions to any provisions of reference (d) that may be needed to avoid serious impairment of mobilization efforts during times of national emergency. Any requests from contractors for variances, tolerances, or exemptions from OSH standards during periods of declared national emergency will be based upon:

5.2.4.1. The existing variations, tolerances, and exemptions procedures specified in Section 651 of 29 U.S.C. (reference (d)), or

5.2.4.2. Other appropriate statutory authorities allowing the Department of Defense to approve contractor request for variances, tolerances, or exemptions; i.e., Congress transfers the review and approval authority of DoD contractors' requests for variations, tolerances, or exemptions from the Secretary of Labor to the Secretary of Defense.

5.2.5. Report to the DUSD(ES) any situation resulting from compliance with procedures in this Instruction that could impair the defense mission or adversely affect

national security.

5.2.6. Report, by an annual In-Progress Review (IPR), the status of their SOH programs to DUSD(ES).

5.2.6.1. Military Services will gauge and report the effectiveness of their accident, fire and occupational illness prevention programs using the:

5.2.6.1.1. DoD corporate Measures of Merit (E3.11.3 of enclosure E3.).

5.2.6.1.2. DoL data to identify those installations whose lost time injury and illness rates are significantly above the Federal average.

5.2.6.1.3. Occupational Safety and Health Administration (OSHA) citation analysis to identify program implementation problems or DoD policies that need to be changed.

5.2.6.2. During the IPR, Military Services will provide trend information on those installations, Component aggregate trends, and responses to other programmatic questions, including hazard abatement funding status, raised by the DUSD(ES). The Defense Agencies will satisfy these reporting requirements by including the above IPR information in their annual report to OSHA under reference (d) and DoD Instruction 6055.7 (reference (j)).

5.2.7. Coordinate all OSH services within the Pentagon Reservation and other Washington Headquarters Services (WHS)-managed facilities in the National Capital Region (NCR) with the Director, WHS.

5.2.8. Provide copies of their comments on proposed SOH legislation and regulations to the DUSD(ES).

5.3. The Director, Washington Headquarters Services, consistent with the responsibilities assigned in DoD Directive 5110.4 and DoD Instruction 1438.5 (references (k) and (l)), shall:

5.3.1. Provide a comprehensive SOH program implementing the requirements and procedures of this Instruction for the OSD, the Joint Staff, and those DoD Components in the NCR whose worker compensation programs are administered by WHS.

5.3.2. Establish and publish procedures to assist DoD Components in identifying and abating hazardous conditions in DoD-occupied, General Services Administration-controlled administrative space, and in DoD common-support facilities in the NCR.

5.3.3. Ensure that all personnel in the Pentagon Reservation and other WHS-managed facilities in the NCR are aware of available safety, occupational health, medical treatment, surveillance, industrial hygiene, and Computer/Electronic Accommodations Program (CAP) services.

5.3.4. Perform injury and illness trend analysis for all military and civilian personnel in the NCR administered by WHS using data available under the Federal Employees Compensation Act for civilian personnel.

5.3.5. Develop with the DoD Components a coordinated safety and industrial hygiene workplace monitoring program in the Pentagon Reservation and other WHS-managed facilities in the NCR to ensure that all potentially hazardous workplaces are identified and evaluated under reference (g).

5.4. The Directors of Defense Agencies, under OSD Principal Staff Assistants and those that report directly to the Secretary or Deputy Secretary of Defense:

5.4.1. Within 60 days of the change of leadership of a Defense Agency, the Agency's new Director or Commander will be briefed by the Agency's senior SOH professional on the history and current status of SOH efforts. This comprehensive briefing will also detail future initiatives planned to move the Agency toward the DoD goal of zero accidents, along with the logic and rationale detailing how and why these actions are expected to be effective.

5.4.2. Upon completion of this briefing, the new Director or Commander will issue a personal policy statement of the leader's expectations for SOH.

5.4.3. In addition, the leader will revisit and decide upon the proper organizational placement and communication channels between the leadership and the SOH staff. These are decisions each Agency must make, keeping in mind the necessity for direct lines of communication between top activity leaders and their SOH policy and operational staffs.

6. PROCEDURES

Program requirements and procedures are contained in enclosures E3. through E8.

7. EFFECTIVE DATE

This Instruction is effective immediately.


Dave Oliver
Principal Deputy

Enclosures - 8

1. References, continued
2. Definitions
3. DoD SOH Program Requirements and Procedures
4. DoD Personal Protective Equipment Program Policy and Responsibilities
5. SOH Considerations for DoD Contractor Personnel and Operations
6. DoD Ergonomic Program Requirements and Procedures
7. Deriving RACs
8. Performance Evaluation

E3. ENCLOSURE 3

DoD SOH PROGRAM REQUIREMENTS AND PROCEDURES

E3.1. General Administration.

E3.1.1. Management Responsibility. Commanders, supervisors, and managers are responsible for protecting personnel, equipment, and facilities under their command by using the risk management process, and for the effective implementation of safety and occupational health policies. Military and DoD civilian officials at each management level shall advocate a strong SOH program; provide their personnel safe and healthful working conditions; and provide education and training that will enable them to prevent accidents, injuries, and occupational illnesses. Performance evaluations of those responsible DoD Component officials shall reflect personal accountability in this respect, consistent with the duties of the position, with appropriate recognition of superior performance, and conversely, with corrective administrative action for deficient performance. Enclosure E8. provides more detail on evaluations.

E3.1.2. Non-Supervisory Personnel Responsibilities. Non-supervisory DoD personnel shall support the SOH program. This includes compliance with work safety and health standards, proper use of personal protective equipment and clothing, and prompt reporting to DoD management of unsafe conditions, hazardous exposure, or occupational injury or illness. Failure to comply can form the basis for adverse administrative action. Strong support and adherence to SOH programs should reflect favorably in personnel evaluations and prevent accidents, injuries and occupational illnesses.

E3.1.3. SOH Staffing. Qualified Safety and Occupational Health personnel shall be designated at levels of command consistent with the DoD Component's organizational structure, including installation and unit levels, to serve as principal command SOH advisors, accident prevention policy and program developers, performance monitors, and points-of-contact for SOH matters.

E3.1.3.1. Each DoD Component must determine:

E3.1.3.1.1. Whether to assign such SOH responsibility as a primary or collateral duty,

E3.1.3.1.2. What professional qualifications are necessary, noting that

DoD recognizes licensure and professional registration or certification as evidence of competency and strongly supports all eligible DoD personnel to obtain the professional credentials described in paragraph E3.3.1.3,

E3.1.3.1.3. The military or civilian status and grade levels of such officials,

E3.1.3.1.4. Whether to use DoD personnel or contract-out certain SOH services, and

E3.1.3.1.5. The size and professional mix of staffs.

E3.1.3.2. Certain safety and occupational health functions are inherently Governmental In Nature and may not be outsourced to the private sector; i.e., a commander's intrinsic accident and illness prevention obligations. DoD Components and commanders must consider this when developing statements of work for all commercial out-sourcing actions. In general, SOH positions providing policy making and direct advice to command, deployment and military contingency operations, and Contracting Officer Technical Representatives will not be contracted out. Commanders shall ensure that SOH staff members have the necessary qualifications to provide quality assurance oversight of contractors providing safety, industrial hygiene, and occupational health services.

E3.1.3.3. Regardless of internal administrative relationships, environment, safety, and occupational health programs, problems, and issues are closely related and should be integrated to achieve maximum efficiencies. It is essential that workers, organized labor, safety, occupational health, injury compensation, environmental, and fire protection staff work in close coordination. Overall staffing of SOH functions, including supporting organizations such as safety centers and occupational health centers of the Military Departments, shall be sufficient to carry out all of the responsibilities in this Instruction.

E3.1.4. Components shall assure that a SOH program for all civilian and military personnel assigned under their supervision from another Component is provided.

E3.1.5. Protection Against Reprisal.

E3.1.5.1. As a matter of equity and to protect the integrity of both the hazard identification system and accident investigations, the DoD Components shall establish positive procedures to protect all DoD personnel from coercion, discrimination, or reprisals for participation in the SOH program. Such procedures shall include

provisions to ensure individual anonymity, when requested; to ensure prompt, impartial investigation of allegations of reprisal; and to provide appropriate administrative action when such allegations are substantiated. The use of Inspector General channels to investigate such allegations is appropriate for military complaints. Civilian employee complaints shall be processed through the negotiated grievance procedure, if available; otherwise, through the administrative grievance procedure. Fact finding investigations of allegations of reprisal raised under the civilian complaints procedures may be conducted by the Inspector General or other appropriate organizations.

E3.1.5.2. Under the provision of 29 CFR 1960 (reference (g)), protection against reprisal extends specifically to the right of a DoD civilian to decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm, coupled with a reasonable belief that there is insufficient time to seek effective redress through normal hazard-reporting and abatement procedures. In this situation, both the affected employee and local management shall be entitled to the considered opinion of a qualified industrial hygiene, safety, fire prevention, or health professional on the extent of the hazard.

E3.1.6. Dissemination of Information.

E3.1.6.1. Component programs shall ensure that all personnel have access to, and are informed of, the location, availability, and procedures to obtain SOH information. SOH information includes the location and means to contact the local DoD SOH office or offices, technical data, applicable regulations, basic reference standards, specialized consultations, etc. See 29 CFR 1910.1020 (reference (n)) for additional information on the collection and distribution of safety and health data; i.e., material safety data sheets.

E3.1.6.2. A poster with core text described in the OSHA report (reference (g)) shall be conspicuously placed as part of meeting this information dissemination requirement. A tailorable electronic copy of the poster is available on both the OSHA Office of Federal Agency Programs and DUSD(ES) Internet websites. Users should fill in the appropriate local information prior to posting.

E3.1.6.3. Component programs shall also ensure job safety and health analyses, workplace visit reports, specific work safety and health procedures, precautions regarding hazards, planned corrective actions for hazards and interim protective measures, and hazard report forms are readily available in the workplace.

E3.1.7. Reports, Recordkeeping, and Accident Investigations.

E3.1.7.1. Access to Records. Within the Department of Defense, the right of access to relevant civilian employee exposure and medical records shall be in accordance with reference (n), regardless of any argument concerning the applicability of that part to Federal Agencies within the language of reference (g).

E3.1.7.2. Required elements for reports, recordkeeping, and accident investigations are contained in DoD Instruction 6055.7 (reference (j)).

E3.1.8. Contact With OSHA The Office of the Under Secretary of Defense for Environmental Security (ODUSD(ES)) is the sole interface with the OSHA national office for policy issues. The Components' headquarters are the interface with the OSHA national office for technical issues. The Components' programs will establish guidelines for contact with OSHA at the regional and local levels.

E3.2. Risk Management.

E3.2.1. The Risk Management Process shall be institutionalized and be an inherent part of all military operations to address safety and occupational and environment health risks.

E3.2.2. The standard for risk management is leadership at the appropriate level of authority making an informed decision to control hazards or accept safety or health risks. In those circumstances where local resources are not available to control residual risks, leaders will make conscious decisions to either accept the risk or elevate the risk decision to the next higher level of leadership.

E3.2.3. Leaders at all levels must ensure that risk management addressing safety and occupational and environmental health concerns are integrated in all aspects of military operations and not an add-on consideration. The risk management process supplements, but does not supersede, compliance with federally mandated standards or regulations. In those instances when mission accomplishment and military necessity result in the requirement to make risk decisions to override standards, such decisions must be made at the appropriate level of command and based on full consideration of the safety, occupational health and environmental impacts; e.g., the level of risk, hazard involved, mode of entry, synergism, potentiation, exposure, and worst case scenario. The Components shall establish procedures to ensure that these decisions are documented, archived, and reevaluated on a recurring basis.

E3.2.4. In all operations, commanders, leaders, and individual members will use the risk management process defined in enclosure E2. to anticipate problems, identify hazards, assess hazards, develop controls, make risk decisions, and implement controls.

E3.2.5. Risk management techniques will be used in the planning and executing of training operations to ensure it is realistic, yet does not exceed an acceptable level of risk for a non-combat situation.

E3.3. SOH Training, Education, and Qualifications.

E3.3.1. DoD Components SOH training programs shall include the following requirements:

E3.3.1.1. Commanders and Senior Management Officials.

E3.3.1.1.1. Educate executive-level leaders as to: the history and trends of SOH within their Component, the business advantages (cost and savings) of prevention, Executive Branch and Departmental policies and initiatives, and the reasons for protecting people from occupational hazards and improving mission performance by eliminating accidents, injuries, and occupational illnesses.

E3.3.1.1.2. Train leaders and commanders at all levels in the risk management principles, tools, and techniques necessary to create and maintain a culture that promotes a safe and healthful work environment.

E3.3.1.2. Supervisors. Train supervisors in the management skills needed to implement the DoD Component's SOH policies and programs. These skills include: fostering a workplace where hazards are identified and risks managed; identifying and being able to teach subordinates to identify hazards and employ controls; safety motivation; accident reporting and investigation; development of other skills needed to implement the Component's program at the working level; and enforcement action to ensure subordinate compliance.

E3.3.1.3. Full-Time SOH Personnel.

E3.3.1.3.1. Provide formal and informal training courses, educational programs, and other activities to enable those personnel to function effectively as SOH advisors to commanders and management officials. Mandatory continuing education will consist of a blend of technical specialty, management, and leadership development

courses. In addition, where feasible, personnel shall be offered, through a competitive selection process, professional military education; graduate-level SOH education; and developmental assignments within their Component, other DoD Components, other Federal Agencies, and SOH professional organizations.

E3.3.1.3.2. Also, provide training and work assignments to encourage professional SOH credentialing. The Department of Defense recognizes the importance of professional credentials in career development, technical competency, and SOH program effectiveness. Consequently, DoD urges all DoD SOH personnel (military and civilian) to obtain licensure, registration, or certification, as appropriate, in their respective disciplines. These fields include industrial hygiene - Certified Industrial Hygienist; safety - Certified Safety Professional; occupational health nursing - Certified Occupational Health Nurse; health physics - Certified Health Physicist; engineering - Professional Engineer, hearing conservation - Certified Audiologist (Certification of Clinical Competence in Audiology); Certified Professional Ergonomist, and Occupational Health and Safety Technologist.

E3.3.1.4. Non-Supervisory Personnel. Train workers in the Risk Management process. Provide specialized job safety and health training appropriate to the work performed, including the provisions of relevant SOH standards, hazards associated with any materials used in the workplace or processes, hazard reporting, provisions of the DoD Component SOH program, responsibility to follow safety and health procedures, and consequences of noncompliance.

E3.3.1.5. Civilian Employee Representatives. Provide Risk Management training to prepare such representatives to assist in the maintenance of safe and healthful workplaces. The extent of any such training shall depend on local needs.

E3.3.1.6. Collateral or Additional Duty SOH Personnel. Include such Risk Management training as required for the performance of the duties specified in DoD Component programs.

E3.3.1.7. Local Area Hazard Safety Briefing. DoD installations shall develop and keep current pertinent safety and health briefings to include unique local area conditions; i.e., driving conditions, driving laws, weather conditions, and any potential health problems or hazardous conditions on and off the installation. Installations shall develop policy and procedures to ensure that all personnel visiting; e.g., TDY, Guard and Reserve members reporting for training duty, receive this briefing prior to performing official duties or being released on personnel time.

E3.3.2. To encourage efficient use of DoD resources and to avoid unnecessary

duplication, the DoD Components shall, before establishing additional training and education resources, use existing programs in other DoD Components or Federal Agencies.

E3.3.3. Additional specifics related to occupational health are in DoD Instructions 6055.5 and 6050.5 (references (m) and (p)).

E3.4. SOH Standards.

E3.4.1. General.

E3.4.1.1. The DoD Components shall comply with the standards promulgated by OSHA under 29 U.S.C. 651 et seq. (reference (d)) in all nonmilitary-unique DoD operations and workplaces, regardless of whether work is performed by military or civilian personnel. The DoD Components may develop and apply standards that are alternate or supplemental to such OSHA standards, provided that the approval procedures described in paragraph E3.4.5. below are followed.

E3.4.1.2. Although these OSHA-prescribed or approved standards are the primary measure of workplace safety and health, the DoD Components shall, in addition, ensure compliance with other applicable regulatory standards related to SOH that are issued under statutory authority by the Department of Defense or other Federal Agencies (such as the Departments of Transportation and Energy, the Environmental Protection Agency, the Nuclear Regulatory Commission, or the Food and Drug Administration).

E3.4.1.3. Any conflicts between regulatory standards shall be referred to the DUSD(ES) who will resolve the matter with the Secretary of Labor and other responsible Federal officials.

E3.4.2. Military-Unique Operations, Workplaces, Equipment, and Systems.

E3.4.2.1. The DoD Components shall apply OSHA and other non-DoD regulatory safety and health standards to military-unique equipment, systems, operations, or workplaces, in whole or in part, insofar as practicable.

E3.4.2.2. However, OSHA health standards designed to protect personnel from 8 hour exposures to hazardous chemicals may not be applicable for 24 hour exposures, or for multiple exposures and various modes of entry into the body during military operations and deployment situations. When military design, specifications,

or deployment requirements render compliance with existing SOH standards unfeasible or inappropriate, or when no standard exists for such military application, the DoD Components shall develop, publish, and follow special military SOH standards, rules, or regulations which protect personnel from hazardous exposures. Acceptable exposure measures and limits shall be derived from use of the risk management process.

E3.4.3. The DoD Components shall implement OSHA emergency temporary standards (ETS) on the effective date established.

E3.4.4. The DoD Components shall consider any Federal court ruling that rescinds or delays any OSHA standard (including any ETS) in whole or part. If application of the OSHA standard would effectively manage the risks, the DoD Components shall continue to comply with the standard when it is at least as stringent as the old standard and it is based upon good science and risk management using empirical data.

E3.4.5. Alternate OSHA Standards-Approval Procedures. If a DoD Component determines that compliance in a non-military unique work environment with an OSHA standard is not feasible, a proposed alternate standard shall be developed and submitted to the DUSD(ES) after consultation with other DoD Components and with affected employees or their representatives. The DUSD(ES) will review the proposed standard and, barring nonconcurrence, forward the standard to the Secretary of Labor for approval. Upon approval of an alternate standard, the originating DoD Component may proceed with implementation, and the DUSD(ES) will provide a copy of the final document to other DoD Components who, in turn, may elect to adopt the standard. The letter of transmittal to the DUSD(ES) must contain:

E3.4.5.1. A statement explaining why the alternate standard is required.

E3.4.5.2. A description of the proposed alternate standard.

E3.4.5.3. An explanation of how the proposed alternate standard affords equal or greater protection than the standard or standards it replaces.

E3.4.5.4. An indication that employee or employee representative and other DoD Components' comments were solicited, and a summary and analysis of such comments.

E3.4.5.5. A description of interim protective measures in effect pending decision on the alternate standard.

E3.4.6. Supplementary OSHA Standards Development Procedure. In non-military unique workplaces where OSHA standards or other Federal safety standards apply but do not cover, or only partially cover, existing conditions, the DoD Components shall use appropriate national SOH consensus standards under Pub. L. 104-113 (reference (o)). When there is no relevant OSHA or national consensus standard, the DoD Components may develop other protective measures to ensure the safety and health of DoD personnel. Also, the DoD Components may prescribe more stringent exposure limits or monitoring frequencies than those in the basic OSHA standards.

E3.4.7. Joint-Use Facilities. When personnel of different DoD Components, or of DoD Components and other Federal Agencies, work in workplaces at the same installation, the DoD Components and other Federal Agencies involved shall be governed by OSHA standards, including approved alternate standards, as a minimum, and host-agency standards. When other Agency standards conflict with OSHA standards, the DoD Components shall refer the matter to the DUSD(ES).

E3.4.8. Review of Proposed National Standards. The Components should review proposed safety and health standards or standards criteria published for comment by OSHA, other regulatory Agencies, the National Institute for Occupational Safety and Health (NIOSH), and consensus standards organizations. Comments may be submitted directly to the Agency proposing the standard, unless a consolidated DoD response is requested by the DUSD(ES).

E3.5. Evaluations of Workplaces and Operations.

The DoD Components shall conduct safety and health evaluations of all workplaces and operations where DoD personnel are regularly employed at fixed installations during peacetime operations, and, to the extent feasible, to wartime and peacekeeping operations. Inspections of workplaces and operations in contractor installations where fewer than 25 DoD personnel are employed shall be at the DoD Component's discretion, based on existing conditions and potential risks. While no formal annual inspection is required, the DoD Components are required to ensure the health and safety of their personnel in the contractor facility. In addition, evaluations shall include determining if contractor operations jeopardize the safety and health of DoD personnel and endanger DoD property.

E3.5.1. Risk assessments and dosimetry of environmental and occupational chemical, radiological, biological, and physical hazards to DoD personnel and

supporting DoD contractor personnel during OCONUS force deployments and construction of prospective health surveillance epidemiology data bases shall be accomplished under DoD Instructions 6050.5 and 6490.3 (references (p) and (q)). Toxic hazards to which DoD personnel and contractors are exposed during wartime and peacekeeping deployments should cover all aspects of the potential hazard, from the source and levels of exposure to health effects of individuals and groups.

E3.5.2. However, in peacetime continental United States operations, Components' SOH programs will not perform any measurements; i.e., perform worker exposure monitoring of contractor worker exposure to DoD equipment unless specifically provided for in contracts between the Government and the contractor, and with prior approval by the Component's health or safety service provider's major command. Refer to enclosure E5. for additional information on SOH considerations for DoD contractors.

E3.5.3. DoD Workplace Visits.

E3.5.3.1. General. At least annually, qualified SOH personnel shall visit every installation workplace. The exact nature of the visit is at the discretion of the local senior SOH professional or as directed by that official's higher headquarters. Visits are to be conducted more frequently based on factors such as the exposure to and potential severity of hazards, actual accident experience, special emphasis programs, changes in the organization's staffing or workplaces, or other event that increases risk of accidents and occupational illnesses. Military personnel and DoD civilian workers or their representatives should be encouraged to participate in these visits to assist in identifying unsafe or unhealthful working conditions. Also, the DoD Components are required to schedule visits, based upon hazard analysis, to ensure the health and safety of their personnel working in DoD contractor facilities. Procedures shall be established to document and follow-up on the correction of deficiencies identified during a visit.

E3.5.3.2. Formal Inspections. The DoD Components shall ensure that formal OSH inspections of workplaces meet the requirements of the OSHA report (reference (g)).

E3.5.3.3. Hazardous Duty and Environmental Differential Pay Evaluations. Upon request of the personnel office, qualified SOH personnel shall evaluate workplaces and working conditions. They shall provide the personnel office a professional opinion on workplace conditions and make recommendations for reducing any hazards. DoD Components will eliminate or reduce hazards that justify such pay.

E3.5.4. DoL Inspections and Investigations of DoD Working Conditions. In accordance with E.O. 12196 (reference (f)), OSHA and NIOSH officials, acting as representatives of the Secretary of Labor, are authorized to conduct announced or unannounced inspections of all DoD workplaces -- except military-unique workplaces and nonmilitary-unique workplaces that are staffed exclusively with military personnel.

E3.5.4.1. Such inspections may be: in response to a complaint from a DoD civilian employee or employee representative, in conjunction with any OSHA special emphasis program at installations with high workers compensation claims rates, as part of OSHA's evaluation of DoD Components SOH programs, to conduct civilian fatality investigations, or solely at the discretion of the Secretary of Labor.

E3.5.4.2. DoL representatives shall be admitted to conduct inspections at appropriate DoD workplaces without delay and at reasonable times. Employee representatives have the right to fully participate in the inspections as provided in reference (f) and 29 CFR 1960 (reference (g)).

E3.5.4.3. DoL representatives will be directed to report to the DoD installation commander or the commander's representative. They shall be required to show identification and proof of appropriate security clearance if entry into closed/secure areas is required. A closing conference with the installation commander, or that commander's designee, shall be arranged before the DoL representative's departure. The installation commander shall invite authorized representatives of civilian employees to attend the opening and closing conferences.

E3.5.4.4. DoL representatives shall be provided access to all pertinent SOH information regarding workplaces consistent with national security requirements.

E3.5.4.5. Component programs will ensure prompt abatement of hazards and initiation of interim safeguards (see paragraph E3.7.) as a result of valid notices of violation issued by a DoL representative. Components will ensure information on valid notices of violation is provided for inclusion in the Defense Environmental Information Exchange to avoid similar notices at other installations.

E3.5.4.6. Component programs will establish procedures for responding to DoL inspection reports and resolving conflicts. Conflicts not resolved at the Component level will be elevated to DUSD(ES) for resolution with the OSHA national office.

E3.5.4.7. Families of Accident Victims. After the accidental death of a

Extract from *Department of Defense Instruction, (DoDI) 6055.1, DoD Safety and Occupational Health (SOH) Program, 19 August 1998*, with emphasis added in underlined text:

DoDI requires that the risk management process shall be institutionalized and be an inherent part of all military operations to address safety and occupational and environment health risks:

"2.3. Includes risk management, aviation safety, ground safety, traffic safety, occupational safety, and occupational health.

"4. **POLICY.** It is DoD Policy:

"4.1. To eliminate accidents, deaths, and occupational illnesses by applying risk management strategies towards achieving an annual goal of significant reductions in all accidents and occupational injuries and illnesses, with the ultimate goal of zero accidents, no occupational injuries and illnesses, and compliance with DoD SOH standards and policies.

"4.3. To hold commanders responsible for SOH program performance. Managers, supervisors, and military personnel and civilian workers are accountable for preventing accidents and workplace illness, but the ultimate safety of human and material resources is a command responsibility.

"5. Responsibilities.

"5.2. The Heads of the DoD Components shall:

"5.2.1. Establish programs that implement the requirements and procedures of this Instruction. Such programs shall be under the cognizance of one senior SOH official at no lower than the Military Department Assistant Secretary of Defense Agency Deputy Director levels.

"5.2.3. Ensure that its planning, programming, budgeting, and execution system includes sufficient resources to staff and implement effectively the Component's accident prevention program and Occupational Safety and Health (OSH) program as required by 5 U.S.C. 7902 and 29 U.S.C. 651 et seq. (references (c) and (d)).

"6. **PROCEDURES.** Program requirements and procedures are contained in enclosures E3. through E8.

"E3. ENCLOSURE 3. DoD SOH PROGRAM REQUIREMENTS AND PROCEDURES

"E3.1. General Administration.

"E3.1.1. Management Responsibility. Commanders, supervisors, and managers are responsible for protecting personnel, equipment, and facilities under their command by using the risk management process, and for the effective implementation of safety and occupational health policies. Military and DoD civilian officials at each management level shall advocate a strong SOH program; provide their personnel safe and healthful working conditions; and provide education and training that will enable them to prevent accidents, injuries, and occupational illnesses. Performance evaluations of those responsible DoD Component officials shall reflect personal accountability in this respect, consistent with the duties of the position, with appropriate recognition of superior performance, and conversely, with corrective administrative action for deficient performance. Enclosure E8. provides more detail on evaluations.

"E3.2. Risk Management.

"E3.2.2. The standard for risk management is leadership at the appropriate level of authority making an informed decision to control hazards or accept safety or health risks. In those circumstances where local resources are not available to control residual risks, leaders will make conscious decisions to either accept the risk or elevate the risk decision to the next higher level of leadership.

"E3.2.3. Leaders at all levels must ensure that risk management addressing safety and occupational and environmental health concerns are integrated in all aspects of military operations and not an add-on consideration. The risk management process supplements, but does not supersede, compliance with federally mandated standards or regulations. In those instances when mission accomplishment and military necessity result in the requirement to make risk decisions to override standards, such decisions must be made at the appropriate level of command and based on full consideration of the safety, occupational health and environmental impacts; e.g., the level of risk, hazard involved, mode of entry, synergism, potentiation, exposure, and worst case scenario. The Components shall establish procedures to ensure that these decisions are documented, archived, and reevaluated on a recurring basis.

"E3.5. Evaluations of Workplaces and Operations.

The DoD components shall conduct safety and health evaluations of all workplaces and operations where DoD personnel are regularly employed at fixed installations during peacetime operations, and, to the extent feasible, to wartime and peacekeeping operations...

"E3.5.3. DoD Workplace Visits.

"E3.5.3.1. General. At least annually, qualified SOH personnel shall visit every installation workplace. The exact nature of the visit is at the discretion of the local senior SOH professional or as directed by that official's higher headquarters. Visits are to be conducted more frequently based on factors such as the exposure to and potential severity of hazards, actual accident experience, special emphasis programs, changes in the organization's staffing or workplaces, or other event that increases risk of accidents and occupational illnesses. Military personnel and DoD civilian workers or their representatives should be encouraged to participate in these visits to assist in identifying unsafe or unhealthful working conditions..."

DD

Army Regulation 40-5

Medical Services

Preventive Medicine

**Headquarters
Department of the Army
Washington, DC
25 May 2007**

UNCLASSIFIED

SUMMARY of CHANGE

AR 40-5
Preventive Medicine

This rapid action revision, dated 25 May 2007--

- o Includes the definition of "deployment" from Joint Publication 1-02 and Department of Defense Instruction 6490.03 (para 1-5d).
- o Introduces the 10 essential national public health services established by the American Public Health Association (para 1-6d).
- o Establishes acquired immunodeficiency syndrome as a specific disease of military concern, separate from a sexually transmitted disease (para 1-7a(2)).
- o Clarifies responsibilities of The Surgeon General with respect to developing medical criteria for exposure to chemical/biological/radiological/nuclear warfare agents (para 2-8b).
- o Emphasizes the role of military audiologists as the managers of installation hearing clinical and conservation services (para 2-18j).
- o Incorporates the change in name of the U.S. Army Safety Center to the U.S. Army Combat Readiness Center (para 2-19b(2)).
- o Updates the mission parameters of the Department of Defense Serum Repository (para 2-19m).
- o Adds new responsibility paragraph for the Commander, U.S. Army Medical Research and Materiel Command (para 2-24).
- o Adds the following new related publications: Department of Defense Directive 5400.11 (para 2-19m), Department of Defense Regulation 4500.9-R (para 2-19x), Department of Defense Directive 5134.8 (app A, sec II), and an Institute of Medicine Report entitled Noise and Military Service: Implications for Hearing Loss and Tinnitus (app A, sec II).
- o Adds definitions to the glossary for the following terms: direct reporting unit; garrison; and hearing readiness, clinical, operational, and conservation services (glossary, sec II).
- o Changes "operational risk management" to "composite risk management" (throughout).
- o Incorporates the name changes for Army commands, Army service component commands, and direct reporting units (throughout).

- o Incorporates changes in acronyms and capitalization of words based on guidance from the U.S. Army Records Management and Declassification Agency (throughout).

This regulation is a comprehensive and substantive revision of the 1990 policy and responsibilities relating to preventive medicine. Specifically, this major revision, dated 22 July 2005--

- o Redefines preventive medicine and preventive medicine services (chap 1, section II).
- o Requires the incorporation of health threats into the Army's operational risk management process (chap 1, para 1-5e).
- o Revises the list of the preventive medicine components of the Army Occupational Health Program (chap 1, para 1-7d).
- o Incorporates the concepts of the Joint Staff's Force Health Protection strategy (chaps 1 and 2).
- o Adds medical surveillance and occupational and environmental health and exposure surveillance policies and responsibilities (chaps 1 and 2).
- o Incorporates measures to decrease the risk and improve the management of communicable disease outbreak on an installation (chaps 1 and 2).
- o Implements Department of Defense Directive 6490.2 and Department of Defense Instruction 6490.3 policy and procedures for medical surveillance (chaps 1 and 2).
- o Implements Department of Defense Instruction 6055.1 policy and procedures for ergonomics (chaps 1 and 2).
- o Requires the addition of programs and services for vision conservation and readiness, deployment occupational and environmental health threat management, health risk assessment, medical and occupational and environmental health surveillance, surety programs, ergonomics, population health management, and health risk communication (chaps 1 and 2).
- o Redefines responsibilities for preventive medicine programs and services (chap 2).
- o Adds additional Army Secretariat and Army Staff responsibilities (chap 2).
- o Incorporates the U.S. Army Medical Department Functional Proponent for Preventive Medicine and the Proponency Office for Preventive Medicine (chap 2, para 2-8b).
- o Requires the use of the Reportable Medical Events System (chap 2).

- o Identifies responsibilities for commanders of regional medical commands (chap 2).
- o Provides guidance and responsibilities for using the Defense Health Program activity structure and codes for preventive medicine budget execution tracking and program analysis and review (chap 2).
- o Establishes an installation-level ergonomics subcommittee and a vision conservation and readiness team (chap 2).
- o Rescinds Requirement Control Symbol, Medical-3 (RCS MED-3) command health report requirement, DA Form 3075 (Occupational Health Daily Log), and DA Form 3076 (Army Occupational Health Report (RCS MED-20)).
- o No longer prescribes DD Form 2215 (Reference Audiogram) and DD Form 2216 (Hearing Conservation Data), which are now prescribed by Department of the Army Pamphlet 40-501.
- o No longer prescribes DD Form 2493-1 (Asbestos Exposure, Part I-Initial Medical Questionnaire) and DD Form 2493-2 (Asbestos Exposure, Part II-Periodic Medical Questionnaire), which are now prescribed by Department of the Army Pamphlet 40-11.
- o No longer prescribes DA Form 3897-R (Tuberculosis Registry), which is now prescribed by Department of the Army Pamphlet 40-11.
- o No longer prescribes DA Form 5402-R (Barber/Beauty Shop Inspection), which is now prescribed by Department of the Army Pamphlet 40-11.
- o Eliminates the term "installation medical authority" and replaces it with "medical commander" throughout this regulation.
- o Removes detailed roles, functions, procedural guidance, and technical standards and criteria throughout this regulation for inclusion in other appropriate Army publications.

Headquarters
Department of the Army
Washington, DC
25 May 2007

*Army Regulation 40-5

Effective 25 June 2007

Medical Services

Preventive Medicine

By Order of the Secretary of the Army:

GEORGE W. CASEY, JR.
General, United States Army
Chief of Staff

Official:


JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army

History. This publication is a rapid action revision. The portions affected by this rapid action revision are highlighted in the Summary of Change.

Summary. This regulation establishes practical measures for the preservation and promotion of health and the prevention of disease and injury. This regulation implements Executive Order 12196; Department of Defense 1400.25-M; Department of Defense 6055.5-M; Department of Defense Directives 1000.3, 1010.10, 4715.1, 6000.12, 6050.16, and 6490.2; Department of Defense Instructions 1322.24, 4150.7, 6050.5, 6055.1, 6055.5, 6055.7, 6055.8, 6055.11, 6055.12, 6060.2, 6060.3, 6205.2, 6205.4, and 6490.3, and Presidential Review Directive 5.

Applicability. This regulation applies to all elements of the Army across the full spectrum of military operations from peacetime through major theater warfare. This regulation applies to all Army personnel to include the Active Army; the Army National Guard/Army National Guard of the United States and United

States Army Reserve personnel on active duty or in drill status; United States Military Academy cadets; United States Army Reserve Officer Training Corps cadets, when engaged in directed training activities; foreign national military personnel assigned to Army components; and civilian personnel and nonappropriated fund personnel employed by the Army worldwide. Except for those preventive medicine services defined in Department of Defense Instruction 6055.1 for supporting Department of Defense contractor personnel during outside continental United States force deployments or specifically provided for in contracts between the Government and a contractor, this regulation does not generally apply to Army contractor personnel and contractor operations. This regulation is applicable during mobilization.

Proponent and exception authority.

The proponent of this regulation is The Surgeon General. The proponent has the authority to approve exceptions to this regulation that are consistent with controlling law and regulations. The proponent may delegate the approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25-30 for specific guidance.

Army management control process.

This regulation contains management control provisions and identifies key management controls that must be evaluated (see appendix B).

Supplementation. Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from HQDA (DASG-PPM-NC), 5109 Leesburg Pike, Falls Church, VA 22041-3258.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to HQDA (DASG-HS), 5109 Leesburg Pike, Falls Church, VA 22041-3258.

Committee Continuance Approval.

The Department of the Army Committee Management Officer concurs in the establishment of an installation-level ergonomics subcommittee.

Distribution. This publication is available in electronic media only, and is intended for command level C for the Active Army, the Army National Guard/Army National Guard of the United States, and the United States Army Reserve.

*This regulation supersedes AR 40-5, dated 22 July 2005.

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Glossary

Chapter 1 Introduction

Section I General

1-1. Purpose

This regulation—

- a.* Establishes policies for preventive medicine.
- b.* Defines preventive medicine and directs the establishment of preventive medicine programs and services.
- c.* Assigns responsibilities for—
 - (1) Improving and sustaining health throughout the Army and across the spectrum of military operations, including joint and combined operations.
 - (2) Developing and implementing preventive medicine programs and services.
 - (3) Providing preventive medicine resources, services, and technical support.
 - (4) Providing preventive medicine guidance, strategy, doctrine, and oversight.
 - (5) Conducting comprehensive, coordinated military health surveillance activities to include medical surveillance and occupational and environmental health (OEH) surveillance for Army personnel throughout their time in service.
 - (6) Identifying or developing military-unique OEH standards, criteria, and guidelines.
 - (7) Identifying, developing, and providing military-specific force health preparedness, protection, sustainment and recovery interventions and measures.
 - (8) Implementing Department of Defense Directives (DODDs) and Department of Defense Instructions (DODIs), including those listed in appendix A.

1-2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1-4. Responsibilities

Responsibilities are listed in chapter 2.

1-5. Preventive medicine policies

The Army will—

- a.* Enhance and sustain optimal levels of health and fitness of all Army personnel by applying the principles of population medicine to promote health and prevent and minimize the impacts of diseases and injuries as defined in paragraph 1-7, below.
- b.* Protect Army personnel from potential and actual harmful exposures to chemical/biological/radiological/nuclear (CBRN) warfare agents; endemic communicable diseases; food-, water-, and vector-borne diseases; ionizing and nonionizing radiation; combat and operational stressors; heat, cold, and altitude extremes; environmental and occupational hazards; toxic industrial materials (TIMs); and other physical agents.
- c.* Adhere to Federal, state, and host nation laws, regulations, and guidance governing OEH during peacetime in nondeployed situations and during training exercises, except for uniquely military equipment, systems, and operations as authorized in Executive Order 12196. These statutes and regulations also apply during military operational deployments and war unless specifically exempted by appropriate authority based on the tactical situation. Contractors whose personnel are using Government-furnished facilities will similarly adhere to Federal, state, and host nation laws, regulations, and guidance governing OEH.
- d.* Strive to adhere to peacetime United States (U.S.) or host nation health standards, whichever are more stringent, during military operational deployments.
 - (1) Deployment is defined as the relocation of forces and materiel to desired operational areas. Deployment encompasses all activities from origin or home station through destination, specifically including intracontinental United States, intertheater, and intratheater movement legs, staging, and holding areas (Joint Publication 1-02, definition no. 4; DODI 6490.03).
 - (2) When the mission or the overall health of deployed personnel warrant risk decisions that may require overriding the peacetime health standards, such decisions should be made by the first general officer (or colonel frocked to the grade of brigadier general) in the chain of command or as specified in the operational plans and orders.
 - (3) These decisions must be based on a complete consideration of operational as well as health risks and available

contingency guidance and criteria so that the total risk to our Soldiers and civilians is minimized. This decisionmaking will be deliberate, documented, and archived.

e. Use the composite risk management process to minimize the total health threat and risk to personnel in garrison, training, contingency operations, and war. Army health policies are intended to allow commanders to execute the full spectrum of military operations while minimizing the total health risk to Soldiers and civilian employees, according to applicable Department of Defense (DOD)/Army policies, implementing instructions, and regulations.

f. Have Army leaders make informed risk decisions about OEH risks and consider, in all risk decisions, health risks to personnel arising from short-term and long-term exposures across the full spectrum of operations.

g. Operate a system of medical, behavioral, and OEH surveillance to—

- (1) Provide preventive medicine assessments supporting composite risk management decisionmaking.
- (2) Identify health threats to Army personnel and other Military Health System beneficiaries.
- (3) Assist in establishing military public health and health promotion goals and targets.
- (4) Monitor and assess the health status of all Army personnel throughout their service.
- (5) Report the health status of Army units and the impact on readiness.
- (6) Archive data for future analyses.

h. Incorporate Army preventive medicine information management and information technology requirements into military health information systems.

i. Inform Army personnel and co-located contractor personnel of health threats, risks, and appropriate unit and individual preventive countermeasures using health risk communication techniques.

j. Provide pre-placement, job transfer, periodic, and termination medical examinations for military personnel and civilian employees potentially exposed to health hazards in the work environment.

k. Ensure all preventive medicine laboratories are accredited or abide by accepted quality assurance procedures to guarantee the accuracy and quality of the data.

l. Ensure all new equipment and materials acquired by the Army are subjected to a health hazard assessment (HHA).

m. Ensure that all new chemicals and materials being added to the Army Supply System have a toxicity clearance.

n. Procure and use in any military operation within the continental U.S. (CONUS) and outside the continental U.S. (OCONUS) only those pesticide active ingredients that are not cancelled by the U.S. Environmental Protection Agency for use within the U.S.

o. Acquire, archive, and store health-related data using only approved military health information systems and procedures that will comply, when applicable, with the provisions of the Health Insurance Portability and Accountability Act, codified in Part 201 et seq., Title 42, United States Code (42 USC 201 et seq.); and the Act's regulations, Parts 160, 162, and 164, Title 45, Code of Federal Regulations (45 CFR Parts 160, 162, and 164).

Section II

The Preventive Medicine Functional Area

1-6. Background

a. Preventive medicine is one of the functional areas of Army health care delivery for which The Surgeon General (TSG) is the Army functional proponent. It is the application of many of the principles of public health and preventive medicine practice to military situations and populations. A component of force health protection, preventive medicine is the anticipation, prediction, identification, surveillance, evaluation, prevention, and control of disease and injuries. These include—

- (1) Communicable diseases.
- (2) Vector-, food-, air-, and water-borne diseases.
- (3) OEH-related diseases and injuries.
- (4) Disease and non-battle injuries (DNBIs).
- (5) Training injuries.

b. Core public health functions as applied to military preventive medicine include assessment, policy development, and assurance. Assessment includes the key capabilities of general health evaluation of the beneficiary populations, medical surveillance, occupational and environmental health surveillance, investigation of outbreaks, and determination of risk factors and causes of major disease and injury syndromes. Policy development includes advocacy, prioritization of needs, development of plans and policies, and provision of resources to implement programs, plans, and policies. The assurance function includes the direct provision and assurance of delivery of services; it entails implementing programs, plans and policies; management of resources; and monitoring outcomes. A key aspect of all public health practice is effective communication and education with all affected populations.

c. Preventive medicine supports the concept of population health management within the Military Health System. Population health management is the intentional and proactive use of a variety of individual, organizational, and population interventions to help improve patterns of disease and injury burdens, health status, and the health care demand of defined populations. Preventive medicine support includes individual and community health risk and needs

assessments, surveillance, program planning, defined responses, and health outcome evaluation for the entire beneficiary community.

d. Army preventive medicine will include relevant and appropriate capabilities and functions of the following 10 essential national public health services established by the American Public Health Association:

- (1) Monitoring health status to identify community health problems.
- (2) Diagnosing and investigating health problems and health hazards in the community.
- (3) Informing, educating, and empowering people about health issues.
- (4) Mobilizing community partnerships to identify and solve health problems.
- (5) Developing policies and plans to support individual and community health efforts.
- (6) Ensuring compliance with laws and regulations that protect health and ensure safety.
- (7) Linking people to needed health services.
- (8) Assuring a competent public health and personal health care work force.
- (9) Evaluating effectiveness, accessibility, and quality of personal and population-based health services.
- (10) Researching new insights and innovative solutions to health problems.

e. Effective preventive medicine will meet the following objectives:

- (1) Improvement in beneficiary health.
- (2) Reduction in short- and long-term health risks.
- (3) Reduction of health care costs due to chronic disease and conditions caused by injury.
- (4) Improved performance through reduced morbidity.
- (5) Improvement in Soldier and other beneficiary self-care capabilities and activities.
- (6) Mitigation of the impact of large-scale public health emergencies.

f. The process for providing effective preventive medicine services consists of the following actions:

- (1) Identification of requirements and objectives.
- (2) Allocation of resources to accomplish objectives.
- (3) Development of policies, plans, and implementing guidance.
- (4) Accomplishment of objectives.
- (5) Demonstration of accomplishments using process and outcome measurements.

g. Knowledge and application of the principles of obtaining and executing resources through the Military Planning, Programming, Budgeting, and Execution System are essential skills for Army preventive medicine personnel. Without such skills, preventive medicine personnel responsible and accountable for obtaining and executing resources will not be able to perform those functions.

1-7. Preventive medicine programs and services

This paragraph broadly describes the components and scope of the Army preventive medicine functional areas. It directs the development and implementation of a wide range of specific preventive medicine/military public health programs and services. Health surveillance and epidemiology; toxicology and laboratory services; health risk assessment; and health risk communication are foundation components of Army preventive medicine that directly support and must be integrated into the other components of preventive medicine. The detailed implementing guidance and instructions for each of the required programs and services in this regulation are provided in Department of the Army Pamphlet (DA Pam) 40-11. The publication of new Army documents with guidance and instructions specific to any of the required individual programs and services is authorized. The following describe the Army preventive medicine functional areas:

a. *Disease prevention and control.*

(1) Primary care, preventive medicine, and other health care providers in both tables of distribution and allowances (TDA) and tables of organization and equipment (TOE) medical organizations deliver disease prevention and control services. These services, delivered in clinical and nonclinical settings, are initiated to prevent the occurrence and reduce the severity and consequences of diseases in individuals and populations. Examples include screening and monitoring procedures for early detection of disease (using a variety of clinical examinations and laboratory tests), immunizations to prevent disease, chemoprophylaxis for individuals exposed to infectious diseases, infection control, and preventive medicine counseling.

(2) Disease prevention and control programs and services will be provided according to the detailed implementing instructions and guidance published in DA Pam 40-11, chapter 2. Specific programs, services, and capabilities will be established and provided for the following areas:

(a) Communicable disease prevention and control to include—

1. Immunization and chemoprophylaxis.
2. Acute respiratory disease.
3. Meningococcal infection.
4. Malaria.

5. Viral hepatitis.
 6. Sexually transmitted diseases.
 7. Acquired immunodeficiency syndrome.
 8. Rabies.
 9. Tuberculosis.
 10. Biowarfare threat.
- (b) Travel medicine.
 - (c) Population health management.
 - (d) Hospital-acquired infection control.
- b. *Field preventive medicine.*

(1) The principles and practices of Army preventive medicine will apply to all Army individuals and units in all field-training environments and across the full spectrum of military operations. Field preventive medicine services will focus on the health and fitness components of force medical readiness and on the operational management and effective communication of health risks.

(2) The overall objectives of field preventive medicine are to provide commanders with healthy and fit deployable forces; to sustain the health and fitness in any military operation; and to prevent casualties from DNBI and stress reactions.

(3) Field preventive medicine services will include capabilities from the following U.S. Army Medical Department (USAMEDD) functional areas, as described in Field Manual (FM) 4-02, chapter 5:

- (a) Preventive medicine services.
- (b) Veterinary services.
- (c) Combat and operational stress control.
- (d) Dental services (preventive dentistry).
- (e) Laboratory services (those supporting the above four USAMEDD functional areas).

(4) Field preventive medicine services will be provided according to Army doctrine published in FM 4-02, FM 4-02.17, FM 4-02.18, FM 4-02.19, FM 4-25.12, FM 8-51, FM 8-55, and their supporting references, as well as in DA Pam 40-11, chapter 3.

(a) Soldiers will apply the basic individual preventive medicine measures prescribed in FM 8-55, paragraph 11-5, and FM 21-10/MCRP 4-11.1D, chapter 2. Unit leaders will motivate, train, and equip subordinates prior to and during field training exercises and all deployments to defeat the medical threat through the use of individual and unit preventive measures as described in FM 4-25.12, chapters 1-2 and appendices A-D, and FM 21-10/MCRP 4-11.1D, chapters 2 through 4 and appendix A.

(b) Company-sized units will establish and employ manned, trained, and equipped unit field sanitation teams (FSTs), according to the Army doctrine published in FM 4-02.17, chapter 2 and appendix A, and FM 4-25.12, chapters 1-2 and appendixes A-D.

(c) Medical and OEH surveillance will be provided for each Soldier from accession through the entire length of each Soldier's service commitment. Such surveillance will be provided according to the doctrinal principles defined in FM 4-02.17, chapters 3, 4, 6 through 9, and appendixes A, C, E, and F. Additional guidance can be found in DA Pam 40-11, chapter 6.

(d) Field preventive medicine information management needs will be met using standard military medical and nonmedical information and communication systems, and tactics, techniques and procedures prescribed by doctrine (for example, FM 4-02.16, chapters 1 through 5 and appendixes A-H).

(e) Health risk communication will be provided in the field through planning and implementation using proven processes and tools.

c. *Environmental health.*

(1) In Army preventive medicine, environmental health consists of those capabilities and activities necessary to anticipate, identify, assess, and control risks of immediate and delayed-onset DNBI to personnel from exposures encountered in the environment. These exposures include risks from chemical, biological, radiological, and physical hazards. These risks will be evaluated using standardized risk assessment principles and procedures.

(2) Environmental health programs and services will be provided according to the detailed implementing instructions and guidance published in DA Pam 40-11, chapters 3 and 4. Environmental health programs, services, and capabilities will be established and provided for the following specific areas:

- (a) Drinking water.
- (b) Recreational waters.
- (c) Ice manufacture.
- (d) Wastewater.
- (e) Pest and disease vector prevention and control.
- (f) Solid waste.

- (g) Hazardous waste.
- (h) Groundwater and subsurface release of hazardous constituents.
- (i) Regulated medical waste.
- (j) Waste disposal guidance.
- (k) Spill control.
- (l) Air quality.
- (m) Environmental noise.
- (n) Climatic injury prevention and control.
- (o) Sanitation and hygiene, including the following topics:
 1. Troop housing sanitation.
 2. Barber and beauty shops.
 3. Dry cleaning operations.
 4. Mobile home parks.
 5. Child development services facilities.
 6. Recreational areas.
 7. Laundry operations.
 8. Confinement facilities.
 9. Food service sanitation.
 10. Sports facilities, gymnasiums, and fitness centers.
 11. Tattooing and piercing businesses.
- d. *Occupational health.*

(1) In Army preventive medicine, occupational health consists of those capabilities and activities necessary to anticipate, identify, assess, communicate, mitigate, and control occupational disease and injury threats. This includes management of the risks to personnel from exposures encountered at their worksite in garrison and field settings. Occupational health hazards include risks from chemical, biological, radiological, physical, and psychological threats. These risks will be evaluated using standardized risk assessment methodologies.

(2) The Army Occupational Health Program's medical components will be developed and provided consistent with the Defense Safety and Occupational Health Program and implemented according to the detailed instructions and guidance published in DA Pam 40-11, chapter 5. Occupational health programs, services, and capabilities will be established and provided for the following specific areas:

- (a) Medical surveillance examinations and screening.
- (b) Health hazard education.
- (c) Surety programs.
- (d) Reproductive hazards.
- (e) Bloodborne pathogens.
- (f) Hearing readiness, clinical, operational, and conservation services.
- (g) Vision conservation and readiness.
- (h) Workplace epidemiological investigations.
- (i) Ergonomics.
- (j) Radiation exposure and medical surveillance.
- (k) Industrial hygiene.
- (l) Personal protective equipment.
- (m) Respiratory protection.
- (n) Asbestos exposure control and surveillance.
- (o) Injury prevention and control.
- (p) Occupational illness and injury prevention and mitigation.
- (q) Work-related immunizations.
- (r) Recordkeeping and reporting.
- (s) Worksite evaluations.
- (t) Other Federal programs (for example, Department of Labor (DOL), Office of Workers' Compensation).
- (u) Evaluation of occupational health programs and services.

(3) Other occupational health-related programs and services that are not listed above will also be provided according to the detailed instructions and guidance published in DA Pam 40-11, chapter 5. These programs and services will include—

- (a) Army aviation medicine.
- (b) HHA of Army equipment and materiel.
- (c) Medical facility and systems safety, health, and fire prevention.

(d) Nonoccupational illness and injury.

(4) Where local commanders establish and resource a command Prevention of Violence in the Workplace Program, preventive medicine will assist upon request.

e. Health surveillance and epidemiology.

(1) Health surveillance is defined to be those capabilities and activities necessary to effectively collect, analyze, report, and archive information pertaining to the—

(a) Health status of Army personnel throughout their time in service.

(b) Health hazards, risks, and exposures to Army personnel.

(c) Preventive medicine and health risk communication measures necessary to counter those hazards and reduce risks.

(d) Diseases, injuries, and behavioral problems that result from those hazards.

(2) Epidemiology will consist of those capabilities and activities necessary to effectively identify Army populations at risk of disease, injury, or behavioral difficulties and the associated risk factors to—

(a) Identify and characterize morbidity and mortality in Army populations.

(b) Identify the causes of occupational, environmental, and infectious diseases.

(3) Health surveillance and epidemiology programs and services are critical to the success of preventive medicine activities in disease prevention and control; field preventive medicine; occupational health; environmental health; and Soldier, family, and community health and health promotion. Programs and services will be developed and implemented according to the detailed implementing instructions and guidance published in DA Pam 40-11, chapter 6. Health surveillance and epidemiology programs, services, and capabilities will be established and provided for the following specific areas:

(a) OEH surveillance in deployment, training, and in garrison.

(b) Defense Occupational and Environmental Health Readiness System (DOEHS).

(c) Occupational Health Management Information System.

(d) Medical surveillance.

(e) Epidemiology.

f. Soldier, family, community health, and health promotion.

(1) Soldier, family and community health programs and services consist of activities necessary to anticipate, identify, assess, and communicate health needs across a continuum of home, school, and work environments as well as specific communicable and chronic disease prevention and control activities. Soldier readiness is a priority in the development and execution of these programs. They are intended to address and improve the level of population health. The cornerstone of these programs and services is a comprehensive community health needs assessment. This assessment is the basis for a program document that plans, implements, evaluates, and prioritizes local health needs, resource agencies, and program implementation.

(2) Soldier, family, and community health programs and services will be developed and implemented according to the detailed implementing instructions and guidance published in DA Pam 40-11, chapter 7. Community health programs, services, and capabilities will be provided to support the following areas:

(a) Soldier medical readiness.

(b) Soldier dental readiness.

(c) Community health support of Army operations.

(d) Communicable disease prevention and control.

(e) Community health needs assessment.

(f) Community health referrals.

(g) Chronic disease prevention and control.

(h) Case management.

(i) Child and youth services.

(j) Health of school-age children.

(k) Childhood lead poisoning prevention.

(l) Spousal and child abuse.

(m) Family safety.

(n) Women's health.

(o) Health assessment.

(p) Tobacco use cessation.

(q) Nutrition.

(r) Stress management.

(s) Alcohol and substance abuse prevention and control.

(t) Suicide prevention.

(u) Spiritual health and fitness.

(v) Oral health.

(3) Health promotion is concerned with the promotion of wellness through health education and related activities designed to facilitate behavioral and environmental changes that will improve and maintain health as prescribed in AR 600-63, chapters 1-5.

(4) USAMEDD health promotion services to support the Army Health Promotion Program will be developed and implemented according to the detailed instructions and guidance published in DA Pam 40-11, chapter 7.

g. Preventive medicine toxicology and laboratory services.

(1) Preventive medicine toxicology and laboratory services provide for the analytical needs of all elements of preventive medicine.

(2) Toxicology programs and services will be developed and implemented according to the detailed instructions and guidance published in DA Pam 40-11, chapter 8. Toxicology programs, services, and capabilities will be established and provided for the following specific areas:

(a) Toxicological assessments of potentially hazardous materials.

(b) Toxicity clearances for Army chemicals and materiel.

(c) Toxicologically based assessments of health risks.

(3) Laboratory programs and services will be developed and implemented according to the detailed instructions and guidance published in DA Pam 40-11, chapter 9. In addition to the necessary analytical capabilities, laboratory programs and services will be established and provided for the following specific areas:

(a) Certification and accreditation.

(b) Quality control and quality management.

(c) DOD Cholinesterase Monitoring Program.

h. Health risk assessment.

(1) Health risk assessment is those capabilities and activities necessary to identify and evaluate a health hazard to determine the associated health risk (probability of occurrence and resulting outcome and severity) of potential exposure to the hazard.

(2) Health risk assessment programs and services will be developed and implemented according to the detailed implementing instructions and guidance in DA Pam 40-11, chapter 10. Health risk assessment programs, services, and capabilities will be established and provided for all preventive medicine programs and service areas.

i. Health risk communication.

(1) Health risk communication is defined to be those capabilities and activities necessary to identify who is affected by potential or actual health and safety threats, to determine the interests and concerns those people have about the threats, and to develop strategies for effectively communicating the complexities and uncertainties associated with the scientific processes of determining risk. Effective risk communication can only be accomplished through building and maintaining relationships that provide a framework of credibility for the message and the messenger.

(2) Health risk communication programs and services will be developed and implemented according to the detailed implementing instructions and guidance in DA Pam 40-11, chapter 11. Health risk communication programs, services, and capabilities will be established and provided for all preventive medicine program and service areas.

1-8. Technical and consultative assistance

Technical assistance will be available through preventive medicine units, U.S. Army medical centers (USAMEDCENs), U.S. Army medical department activities (USAMEDDACs), regional medical commands (RMCs), and U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). All technical assistance will be coordinated with the appropriate commands. Consultative assistance may be obtained from command surgeons, the U.S. Army Medical Department Center and School (USAMEDDC&S), U.S. Army Medical Research and Materiel Command (USAMRMC), veterinary commanders, and U.S. Army Dental Command (USADENCOM).

Chapter 2

Responsibilities

2-1. The Assistant Secretary of the Army (Installations and Environment)

The Assistant Secretary of the Army (Installations and Environment) (ASA(I&E)) will—

a. Provide executive leadership at the Army Secretariat level to ensure timely—

(1) Integration of DOD directives and policies concerning Army OEH with Army policies, doctrine, and guidance.

(2) Compliance with the Army OEH requirements.

b. Establish goals, policies, priorities, and oversight for Army OEH.

c. Provide Army OEH input to the defense planning guidance and the defense medical planning guidance in coordination with the Assistant Secretary of the Army (Manpower and Reserve Affairs) (ASA(M&RA)).

d. Provide policy, goals, guidance, and management oversight of the Army Occupational Health Program, as the Army component of the DOD Safety and Occupational Health Program.

2-2. The Assistant Secretary of the Army (Manpower and Reserve Affairs)

The ASA(M&RA) will—

a. Provide executive leadership at the Army Secretariat level—

(1) To ensure timely integration of DOD directives and policies concerning health and fitness with Army policies, doctrine, and guidance.

(2) For the development and implementation of Army health and fitness policies.

b. Oversee the integration of Army health and fitness policy with Army activities, operations, policies, and doctrine.

c. Provide preventive medicine input to the defense planning guidance and the defense medical planning guidance in coordination with the ASA(I&E).

2-3. The Assistant Secretary of the Army (Acquisition, Logistics, and Technology)/The Army Acquisition Executive

The Assistant Secretary of the Army (Acquisition, Logistics, and Technology)/Army Acquisition Executive (AAE) will plan, program, and budget for the integration of preventive medicine factors with the Army's acquisition programs. This includes but is not limited to—

a. The HHA of Army materiel and systems throughout the full life cycle of these items (see AR 40-10, para 2-1; AR 70-1, para 2-10; AR 200-1, para 1-8; and AR 385-16, para 4a(2)).

b. The development of nonmedical material (such as instruments, equipment) in conjunction with the USAMEDD to rapidly identify and assess the short- and long-term health risks to Army personnel presented by deployment OEH threats.

c. The establishment of procedures to assure that program managers and other individuals authorized to add chemicals and chemical-based materiel to the Army Supply System request toxicity clearances for those products.

2-4. The Deputy Chief of Staff, G-1

The Deputy Chief of Staff, G-1 will—

a. Provide executive leadership at the Army staff level for the integration of health and fitness policies and doctrine with Army personnel policies and doctrine.

b. Ensure that Army personnel data in support of designated major joint deployments are provided to the Defense Manpower Data Center. Data will include daily strength by unit and total deployed, grid location of each unit (company size and higher), and inclusive dates of individual Army personnel deployment. These personnel data provide denominators for deployment medical surveillance analyses as well as location information for identifying potential exposures for OEH surveillance.

c. Ensure that the Deputy Chief of Staff, G-1 information systems, which include medical data, are compatible with Army medical information systems.

2-5. The Deputy Chief of Staff, G-2

The Deputy Chief of Staff, G-2 will—

a. Advise the ASA(I&E) and TSG on medical intelligence.

b. Provide functional policy and guidance on collection and dissemination of medical intelligence.

c. Serve as Army liaison with DOD intelligence agencies on all matters regarding medical intelligence.

2-6. The Deputy Chief of Staff, G-3/5/7

The Deputy Chief of Staff, G-3/5/7 will exercise Army general staff responsibility for the integration of preventive medicine into Army planning and training.

2-7. The Deputy Chief of Staff, G-4

The Deputy Chief of Staff, G-4 will ensure the—

a. Integration of preventive medicine factors into—

(1) The transportation, storage, handling, and disposal of hazardous material or hazardous waste.

(2) Deployable housing, food preparation, water purification, mortuary affairs, laundry, and shower operations.

b. Coordination of field sanitation activities.

2-8. The Surgeon General

a. The Surgeon General will execute and provide oversight of preventive medicine activities as outlined in this regulation and will—

(1) Provide leadership, proponentcy, policy, prioritization, oversight, and coordination for Army-wide preventive medicine programs and services.

(2) Plan, program, budget, and oversee the execution of resourcing in support of preventive medicine and health promotion activities consistent with—

(a) DOD and Department of the Army (DA) policies and guidance.

(b) The resourcing provided in the Defense Health Program by the Office of the Assistant Secretary of Defense for Health Affairs.

(c) The resourcing provided in the operations and maintenance, Army (OMA) account.

(3) Determine and direct the use of appropriate preventive measures, pharmaceuticals, and biologics for disease and injury control.

(4) Ensure that prevention is integrated with the practice of Army medicine at all levels and in all settings.

(5) Determine if Army medical and nonmedical materiel presents a health hazard to personnel, according to AR 40-10, paragraph 2-6, and AR 70-1, paragraph 2-18, and provide medical policies, health standards and guidance, and recommendations to protect personnel from the health hazard presented by that materiel.

(6) Develop functional policy and guidance for the medical components of Army deployment OEH threat policies.

(7) Develop guidance that allows commanders to quantify and mitigate the health risks resulting from exposures to occupational and environmental hazards.

(8) Develop policy for medical care to prevent disability from occupational injuries and illnesses.

(9) Execute the medical aspects of the Army Occupational Health Program.

b. The USAMEDD Functional Proponent for Preventive Medicine will serve as TSG's principal advisor on preventive medicine issues. The Proponency Office for Preventive Medicine will provide staff support to the USAMEDD Functional Proponent for Preventive Medicine. The USAMEDD Functional Proponent for Preventive Medicine will—

(1) Have TSG authority for preventive medicine policies, standards, regulations, and directives to protect and promote health, improve effectiveness, communicate health risks, and enhance the environment of Army personnel.

(2) Provide strategic direction, guidance, and prioritization for preventive medicine activities that take into account USAMEDD strategies and validated medical threat assessments.

(3) Provide staff support and consultative services for preventive medicine to the Army staff and to U.S. Army Medical Command (USAMEDCOM) and Office of The Surgeon General (OTSG) staffs.

(4) Execute TSG's responsibilities, as specified in AR 200-1, paragraph 1-18, functioning as the Army executive point of contact for all OEH aspects of the Army's Environmental Program and as TSG's reviewing authority for all environmental documents submitted by DA activities.

(5) Execute TSG's responsibilities in implementing the preventive medicine components of Army deployment OEH threat policies by—

(a) Developing policy and guidance for the medical surveillance and the OEH surveillance aspects of those Army policies, as well as policies developed by the Assistant Secretary of Defense for Health Affairs or the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs. Specifically, the Functional Proponent for Preventive Medicine will be responsible for the development of chemical, biological, and radiological health criteria and guidelines to support Army deployment OEH threat policies. This includes criteria and guidance on long-term acceptable levels of exposures and risks resulting from exposures to low levels of OEH threat agents for various exposure scenarios, consistent with the policies and guidance provided by the Assistant Secretary of Defense for Health Affairs or the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs.

(b) Developing consistent guidance that allows commanders to quantify and mitigate, through their medical or other appropriately qualified assets, the health risks resulting from exposures to OEH threats during deployments. This guidance may include other aspects of identifying, quantifying, and communicating risks, such as direct and indirect bioassay measurements in addition to the monitoring of ambient exposure levels.

(c) Supporting and advocating the preventive medicine requirements for adequate Defense Health Program and other appropriate funding to ensure timely and effective implementation of Army deployment OEH threat policies and procedures.

(6) Execute TSG's responsibilities for The Army Chemical Agent Safety Program and Biological Defense Safety Program according to AR 385-61, paragraph 1-4i, and AR 385-69, paragraph 1-4c, respectively.

(7) Execute TSG's responsibilities for the Army Ergonomics Program.

(8) Coordinate with the Director of Army Safety to ensure Army compliance with Occupational Safety and Health Act (Public Law 91-596, as amended) health standards.

(9) Provide preventive medicine representation and liaison as appropriate.

(10) Coordinate with the USAMEDDC&S and USAMRMC concerning doctrine, organizations, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) solutions to Army preventive medicine issues.

(11) Coordinate with U.S. Army Training and Doctrine Command (USATRADOC) concerning the prevention and control of injuries and communicable diseases in recruit and other training populations.

(12) Coordinate with the Assistant Surgeon General for Force Projection on clinical preventive medicine policies.

(13) Coordinate the inclusion of preventive medicine in medical information management and information technology initiatives.

- (14) Provide staff oversight including process and outcome metrics for execution of preventive medicine activities.
- (15) Coordinate with the U.S. Army Materiel Command (USAMC) Logistic Civil Augmentation Program concerning combat service support contracts written in support of contingency operations.
- c. The USAMEDD professional consultants will advise and assist the USAMEDD Functional Proponent for Preventive Medicine.

2-9. The Director of Army Safety

The Director of Army Safety will—

- a. Coordinate with TSG and the USAMEDD Functional Proponent for Preventive Medicine on occupational safety and health issues including medical aspects of safety policy regarding hazard communication and hazardous materials program requirements.
- b. Exchange accidental injury data with TSG for an accurate assessment of the Army health status.
- c. Provide support to commanders in developing and implementing installation ergonomics programs.
- d. Advance partnership initiatives that prevent workplace injuries and illnesses.

2-10. The Commander, U.S. Army Corps of Engineers/Chief of Engineers

The U.S. Army Corps of Engineers (USACE) and the Chief of Engineers, in addition to the responsibilities in paragraph 2-11, below, will—

- a. Coordinate with TSG and the USAMEDD Functional Proponent for Army Preventive Medicine on the health aspects of environmental issues including environmental compliance, environmental baseline surveys, environmental health site assessments, pollution prevention, hazardous waste minimization, risk assessment, and risk communication program requirements.
- b. Ensure coordination of environmental program data with TSG for an accurate assessment of the impact of environmental conditions on the Army health status.
- c. Ensure that health risk assessments are submitted to TSG for review and approval.

2-11. Commanders, Army commands, Army service component commands, and direct reporting units

Commanders, Army commands (ACOMs), Army service component commands, and direct reporting units will provide command emphasis, resources, policy implementation, guidance, and oversight to subordinate commands and activities to execute preventive medicine activities within their commands.

2-12. The Director, Army National Guard/Army National Guard of the United States

The Director, Army National Guard/Army National Guard of the United States, will—

- a. Provide emphasis, resources, policy, and implementation guidance to each state and territory adjutant general.
- b. Appoint the Army National Guard/Army National Guard of the United States Surgeon to coordinate with TSG and the USAMEDD Functional Proponent for Preventive Medicine on preventive medicine issues.

2-13. The Commanding General, U.S. Army Forces Command

The Commanding General, U.S. Army Forces Command, in addition to the responsibilities in paragraph 2-11, above, will—

- a. Coordinate with the USAMEDDC&S to identify the required force structure and capabilities to implement the preventive medicine aspects of combat health support according to military doctrine.
- b. Coordinate with OTSG in planning, programming, and budgeting for required capabilities to implement the preventive medicine aspects of combat health support according to Army and Joint doctrine.
- c. Coordinate with USAMEDCOM, USATRADO, and the Army Deputy Chief of Staff, G-3/5/7 to provide in-theater medical analytical capability (using organic or augmented medical assets) for theater-level, rapid nuclear (and radiological), biological, chemical, environmental and infectious disease risk identification and assessment to support operational health risk management.

2-14. The Commanding General, U.S. Army Training and Doctrine Command

The Commanding General, USATRADO, in addition to the responsibilities in paragraph 2-11, above, will—

- a. Develop, in coordination with USAMEDCOM, doctrine, tactics, techniques, and procedures; implementation plans; operational requirements; and appropriate training and education for leaders and others to use in assessing, managing, and countering deployment OEH threats.
- b. Incorporate training in deployment OEH into USATRADO leadership schools as appropriate.
- c. Develop and implement, through the U.S. Army Chemical School and in close cooperation with the USAMEDCOM, the doctrinal, training, organizational, and materiel solutions to the risks presented by chemical and biological agents, toxic industrial hazards, and radiation.
- d. Coordinate with USAMEDCOM and OTSG regarding health issues in the training base.

- e. Incorporate deployment and garrison risk mitigation of communicable diseases and injuries into cadre training.

2-15. The Commanding General, U.S. Army Materiel Command

The Commanding General, USAMC, in addition to the responsibilities in paragraph 2-11, above, will—

- a. Support the AAE in developing the nonmedical materiel (such as instruments, equipment) in conjunction with the USAMEDD to rapidly identify and assess the short- and long-term health risks presented by deployment OEH threats.
- b. Support the AAE, program executive officers, and program managers in analyzing all emerging Army systems for environmental effects, including noise and toxic and hazardous wastes associated with normal system testing, operation, use, maintenance, and disposal.

2-16. The Commander, U.S. Army Medical Command

The Commander, USAMEDCOM, in addition to the responsibilities defined in paragraph 2-11 above, will—

- a. Provide health care services and resources of the Army within CONUS, Europe, Pacific, Alaska, Puerto Rico, Hawaii, and Guam and other territories.
- b. Develop and execute installation, regional, and worldwide preventive medicine programs to support the entire spectrum of military operations.
- c. Plan and program for OMA, Army and Defense Health Program funding requirements. Prioritize, budget, and resource all USAMEDCOM subordinate command assets necessary to support preventive medicine. Use the Defense Health Program activity structure and codes for effective Defense Health Program budget execution tracking and program analysis and review (see Defense Finance and Accounting Service—Indianapolis Center (DFAS-IN) Manual 37-100-FY). Track execution of OMA resources provided for preventive medicine programs and services.
- d. Coordinate with the DA staff and appropriate medical organizations OCONUS to provide preventive medicine augmentation support when directed or requested.
- e. Provide command guidance and oversight including program evaluation of the priorities, services, and direction for preventive medicine with the assistance of the USAMEDD Functional Proponent for Preventive Medicine.
- f. Monitor the obligation of funds for USAMEDCOM preventive medicine assets against the Defense Health Program activity structure to ensure that expenditures coincide with priorities.
- g. Provide command guidance to the USAMEDDC&S and to the USAMRMC for preventive medicine issues and needs for DOTMLPF solutions.
- h. Ensure the development of doctrine, implementation plans, procedures, capabilities, and training relative to medical and OEH surveillance to address exposures to Soldiers and civilian employees throughout their time in service.
- i. Ensure that deployment OEH training is incorporated into the USAMEDDC&S curriculum.
- j. Include preventive medicine in Army medicine strategic and mid-term planning activities.
- k. Establish chemical, biological, radiological, and nuclear advisory medical teams at appropriate locations.
- l. Establish a performance improvement program for preventive medicine.
- m. Develop appropriate strategies and processes to ensure the availability of adequate information management and information technology support to implement the prevention-related objectives and requirements of Army deployment OEH threat policies.
- n. Develop the procedures and guidance for USAMEDCOM subordinate commands to obtain intelligence products regarding medical, industrial, and other environmental threats.
- o. Prepare the production requirements for valid intelligence product requests to the USAMEDCOM supporting intelligence office as defined in the Department of Defense Intelligence Production Program.
- p. Ensure that any requests for reimbursable preventive medicine services (from either Active Army or Reserve Component organizations) are assessed by preventive medicine staff in coordination with RMC or USAMEDCOM resource management staff and program analysis and evaluation staff prior to accepting any additional missions or program growth. Such requests will be evaluated for impact on existing programs and resources and, if approved, will be provided according to Army principles encoded in the Economy Act (31 USC 1535 and 1536).
- q. Provide periodic evaluation of installation occupational health programs along with a plan to ensure appropriate followup and resolution of corrective actions. A copy of the evaluation along with the plan for resolution should be provided to the installation commander.

2-17. Commanders, regional medical commands

Commanders of regional medical commands (RMCs) will—

- a. Provide command and operational guidance, oversight, mentorship, coordination, and consultative support for effective preventive medicine programs and services within the region based on this regulation and the guidance provided in DA Pam 40-11.
- b. Plan, program, prioritize, budget, and resource all RMC assets necessary to support preventive medicine based on priorities, policy, and guidance from TSG. Use the Defense Health Program activity structure and codes for effective Defense Health Program budget execution tracking and program analysis and review (see DFAS-IN Manual

37-100-FY). Track execution of Defense Health Program and OMA resources provided for preventive medicine programs and services.

c. Develop, train, staff, equip, and operate augmentation response teams to support the full spectrum of military operations, including the stability and support operations defined and described throughout FM 8-42.

d. Coordinate support for Army Reserve and Army National Guard/Army National Guard of the United States units requiring preventive medicine services according to established memorandum of agreement/understanding, this regulation, and the guidance provided in DA Pam 40-11.

e. Ensure that any requests for reimbursable preventive medicine services (from Active Army or Reserve Component organizations) are assessed by preventive medicine staff in coordination with RMC resource management staff before accepting any additional missions or program growth. Such requests will be evaluated for impact on existing programs and resources and, if approved, will be provided according to Army reimbursable policy (see 31 USC 1535 and 1536).

f. Review and consolidate environmental program requirements submitted from military treatment facilities (MTFs) within the region for transmission to USAMEDCOM.

g. Conduct a formal evaluation of each installation Occupational Health Program within the region at least once every 3 years. Evaluation officials may come from occupational health assets within the region or from other USAMEDCOM assets. Results of these evaluations will be forwarded to USAMEDCOM along with formal plans for corrective actions. Correction of identified deficiencies also will be forwarded to USAMEDCOM when completed.

2-18. Commanders, U.S. Army medical centers and U.S. Army medical department activities

Commanders of USAMEDCENs and USAMEDDACs, as the local medical authorities, will—

a. Establish and provide effective installation and clinical preventive medicine programs and services, designating a chief of preventive medicine to execute the commander's installation and clinical preventive medicine responsibilities. The primary purpose of preventive medicine services is to support installation commanders in preventing disease and injury throughout the health services support area, not to function solely as an in-house clinical service.

(1) Preventive medicine services will be resourced accordingly for the installation support mission—

(a) Personnel.

(b) Funding.

(c) Office and laboratory space.

(d) Equipment and supplies.

(e) Transportation and communication.

(2) The chief of preventive medicine, on behalf of the medical commander, is responsible for establishing, implementing, and directing the preventive medicine programs and services described in this regulation. The chief of preventive medicine, or his or her designee, will—

(a) Serve as consultant and provide preventive medicine liaison to the installation commander and staff and tenant activities.

(b) Establish and maintain liaison with appropriate Federal, state, and local public health authorities.

(c) Serve as the medical representative on installation boards, councils, and committees.

b. Plan, program, prioritize, budget, and resource all assets necessary to support installation and clinical preventive medicine programs and services based on the priorities, policy, and guidance from TSG. Use the Defense Health Program activity structure and codes for effective budget execution tracking and program analysis and review (see DFAS-IN Manual 37-100-FY). Track execution of Defense Health Program and OMA resources provided for preventive medicine programs and services (see DA Pam 40-11, para 1-6).

c. Provide local implementing guidance for installation and clinical preventive medicine programs and services described in this regulation.

d. Ensure that medical events on the current tri-Service list are reported through the Reportable Medical Events System (RMES) as soon as possible after the diagnosis has been made or within 48 hours. This includes case reports from subordinate clinics and clinics at satellite locations.

(1) The U.S. Army Medical Surveillance Activity (USAMSA) maintains the current tri-Service list of reportable medical events on the USAMSA Web site (<http://amsa.army.mil>). The staff at USAMSA can provide current versions of the RMES software for use at each preventive medicine service. Technical assistance may be obtained from USAMSA, USACHPPM, ATTN: MCHB-TS-EDM, Bldg. T20, 6900 Georgia Avenue, Washington, D.C. 20307-5001; or through the USAMSA Web site (http://amsa.army.mil/AMSA/amsa_home.htm).

(2) Commanders must also comply with all Federal, state and local medical reporting requirements including applicable Occupational Safety and Health Administration (OSHA) requirements for work-related injuries and illnesses.

e. Participate on Armed Forces disciplinary control boards and coordinate with representatives of civil agencies concerned with health and welfare as prescribed in AR 190-24/OPNAVINST 1620.2A/AFI 31-213/MCO 1620.2C/COMDTINST 1620.1D, chapter 2.

f. Coordinate with medical departments of other military services; appropriate representatives of international,

Federal, state, and local public health organizations; and those organizations responsible for developing consensus standards.

g. Ensure complete documentation of workload for all installation and clinical preventive medicine programs and services.

h. Provide a health consultant to the local installation child development services according to AR 608-10, paragraph 2-3c.

i. Provide preventive medicine representation to installation boards, councils, and committees, as directed by published instructions establishing such boards, councils, and committees.

j. Ensure that assigned military audiologists have the primary duty title of Installation Hearing Program Manager; that their primary responsibility is to manage the installation hearing clinical and conservation services; and that they are afforded at least 50 percent of their available time to accomplish the installation hearing conservation mission, for example, health education, unit visits, command inspections, and range inspections.

k. Ensure that the job series codes for all supported civilian employees are entered into medical surveillance databases.

l. Establish a Hospital Infection Control Program and a hospital infection control committee to oversee and guide efforts to prevent and control hospital-acquired infections according to the implementing guidance provided in DA Pam 40-11, chapter 2.

m. Ensure that any requests for reimbursable preventive medicine services (from either Active Army or Reserve Component organizations) are assessed by preventive medicine staff in coordination with USAMEDCEN or USAMED-DAC resource management staff prior to accepting any additional missions or program growth. Such requests will be evaluated for impact on existing programs and resources and, if approved, will be provided according to Army reimbursable policy (see 31 USC 1535 and 1536).

n. Serve as or appoint a director of health services as principal medical advisor to the installation commander and staff on health care delivery matters, including installation and clinical preventive medicine programs and services for the installation commander's area of responsibility. The director of health services, in coordination with the chief of preventive medicine services, will—

(1) Notify unit and installation commanders of special or potentially serious health problems. The initial telephonic or electronic notification will be followed by a written report within 72 hours. The purpose is to inform commanders of serious sanitary deficiencies, OEH hazards, potential epidemic conditions, or other serious situations that may affect the health of the command.

(2) Provide preventive medicine information along with other health-related input to the Installation Status Report according to AR 210-14, paragraphs 9 and 11, and implementing instructions as published by the DA Assistant Chief of Staff for Installation Management.

(3) Work with the installation safety manager to provide the installation commander with a comprehensive Safety and Occupational Health Program that includes, but is not limited to, ergonomics, injury prevention and control, respiratory protection, industrial hygiene, hearing conservation, vision conservation and readiness, hazard communication, laboratory safety, and occupational health surveillance.

(4) Provide technical and quality assurance oversight of the OEH Program, and provide qualifications and competency oversight for preventive medicine and occupational health service providers.

(5) Advise the installation commander on the health aspects of the installation Environmental Program, and arrange for medical consultation and support services.

(6) Work with the installation pest management coordinator on prevention and control of medically important pests and OEH exposures from pest management operations.

o. Coordinate with field units within the area of responsibility to provide any required or requested supplemental preventive medicine support.

p. Maintain a deployable medical augmentation team to reinforce the medical response team on installations having a chemical surety mission.

q. Designate physicians to provide required physician support to each Occupational Health Program supported by the command, including supported installations where no physician is assigned.

2-19. The Commander, U.S. Army Center for Health Promotion and Preventive Medicine

The Commander, USACHPPM, will—

a. Provide worldwide support of Army preventive medicine activities through consultations, program evaluations, supportive services, program development, development of best practices, investigations, and training in the areas of disease and injury prevention and control; field preventive medicine; environmental health; occupational health; health surveillance and epidemiology; Soldier, family, and community health, and health promotion; preventive medicine toxicology and laboratory services; health risk assessment; and health risk communication.

b. Provide support for comprehensive health surveillance for the Army and DOD, and develop and maintain data analysis and archiving for worldwide military health surveillance activities such as the Defense Medical Surveillance System and DOEHRS. This will include, at a minimum—

(1) Summarizing reportable medical events, injuries, and conditions across installations and commands, and notifying all reporting sites at least monthly.

(2) Assuring injury data are synchronized with Army accidental injury data and with AR 385-40 reporting requirements by direct coordination with the U.S. Army Combat Readiness Center.

(3) Updating and distributing, as needed through official preventive medicine channels, the tri-Service list of reportable medical events, and maintaining the current reportable medical events list on the USAMSA Web site.

(4) Providing timely and useful feedback to assist garrison and field commanders in reducing OEH risks.

c. Provide reference laboratory support for OEH surveillance. These programs include but are not limited to the laboratory quality assurance for the DOD Cholinesterase Monitoring Program; radiological bioassay for the Army; and toxicity clearances and toxicological profiles for chemicals, radiological materials, and unregulated substances commonly found in the military.

d. Develop, train, staff, equip, and operate preventive medicine augmentation response teams to support the full spectrum of military operations as defined and described throughout FM 4-02 and FM 8-42.

e. Provide additional preventive medicine material and personnel augmentation and Preventive Medicine Level V support to deployed forces, including theater medical laboratory support when requested.

f. Serve as the lead agent and the Army liaison for the DOD in executing the Memorandum of Understanding between the Agency for Toxic Substances and Disease Registry and the DOD.

g. Augment local preventive medicine assets by providing installation-level preventive medicine services as directed or as approved by Commander, USAMEDCOM. Such installation-level support may require regionally established memoranda of understanding and close coordination with the medical commander for the region in which support services are provided.

h. Plan, program, budget, and resource USACHPPM preventive medicine capabilities according to priorities set by the USAMEDCOM using the Defense Health Program activity structure and codes for tracking and accountability of Defense Health Program resources. Track execution of any Defense Health Program and OMA resources provided to USACHPPM for preventive medicine programs and services.

i. Provide support to commanders in developing and implementing installation ergonomics and occupational health programs.

j. Conduct periodic evaluations of regional and local preventive medicine programs and services in support of USAMEDCOM oversight responsibilities.

k. Ensure that any requests for reimbursable preventive medicine services (from either Active or Reserve Component military organizations) are assessed by USACHPPM technical staff in coordination with USACHPPM resource management staff prior to accepting any additional missions or program growth. Such requests will be evaluated for impact on existing programs and resources and, if approved, will be provided according to Army reimbursable policy (see 31 USC 1535 and 1536).

l. Provide the following pest management programs and services:

(1) Provide consultative, field, and laboratory services to monitor, evaluate, and support the USAMEDD's role in the Army Pest Management Program. These include—

(a) The Pesticide Regulatory Action System to include the operation of the DOD Pesticide Hotline.

(b) The DOD Lyme Disease Program and other tick-borne disease prevention programs.

(2) Field a Pesticide-Use Reporting System to Army preventive medicine units.

(3) Serve as the DA repository for the archiving of pesticide use reports generated by deployed forces.

(4) Maintain laboratories for the surveillance, identification, and analyses of vector-borne diseases.

m. Operate and maintain the DOD Serum Repository for medical surveillance for clinical diagnosis and epidemiology studies. According to DODD 6490.2, paragraphs 4.12 and 4.13, the serum repository will be used for the identification, prevention, and control of diseases associated with military service. The serum repository and other systems of records containing health surveillance information will comply with the DOD Privacy Program, as defined in DODD 5400.11.

n. Provide OEH guidance to assist commanders in applying the Army risk management process to OEH hazards.

o. Establish and maintain a capability to provide a comprehensive support for the conduct of OEH operational health risk assessments for garrison activities and deployments.

p. Provide the capability to support the TSG responsibility to review and approve human health risk assessments.

q. Provide the capability to support the TSG responsibility to review ecological risk assessments.

r. Provide technical sustenance training to installation preventive medicine organizations and field (TOE) preventive medicine units upon request or as directed.

s. Coordinate with USATRADOC to develop training aids for cadre training on mitigating deployment and garrison risks for communicable diseases and injuries.

t. Provide epidemiologic consultation services to RMCs, ACOMs, Army service component commands, and direct reporting units upon request. These services may include informal or formal analysis, reports, and recommendations.

As needed to support this service, the Commander, USACHPPM, will deploy teams to on-site locations to conduct or assist in field investigations of disease or injury outbreaks or clusters.

u. Review, interpret, and respond to assessment and surveillance data, as needed, to identify, prevent, and control newly identified or evolving health problems. Response capabilities will include regular communication with preventive medicine staffs at the RMCs, ACOMs, Army service component commands, and direct reporting units.

v. Provide technical consultation on Federal Employees' Compensation Act (Sections 8101-8193, Title 5, United States Code (5 USC 8101-8193)), perform review and analysis of available civilian lost-day data, and provide recommendations for targeted interventions to prevent and mitigate work-related injuries and illnesses.

w. Partner with the Director of Army Safety to support the Army Safety and Occupational Health Program.

x. Provide DOD certification training to personnel who sign shipping papers for the transport of medical specimens to include infectious substances, select agents, and regulated medical waste. (See DOD 4500.9-R, chapter 204, part II.)

2-20. The Director, DOD Veterinary Service Activity

The Director, DOD Veterinary Service Activity will—

a. Coordinate with the USAMEDD Functional Proponent for Preventive Medicine on veterinary preventive medicine issues.

b. Develop standards, criteria, and methods to determine the safety of—

- (1) Foodstuffs contaminated with chemical or biological material.
- (2) Subsistence and equipment damaged by man-made or natural disasters.

2-21. Veterinary commanders

Veterinary commanders will, when requested, provide veterinary assets, as resources permit—

a. To support preventive medicine installation and field food sanitation programs, the screening and approval of pets in child development centers and family child care homes, and public health education activities.

b. To support and coordinate zoonotic disease surveillance and control efforts with preventive medicine epidemiology assets.

c. To support theater preventive medicine surveillance by providing any analytical results obtained during a foodborne illness investigation and from the sampling and analysis of all locally procured (within the theater of operations) bottled water, food, and ice to the USACHPPM Deployment Environmental Surveillance Program at USACHPPM, ATTN: MCHB-TS-RDE, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403, for database archiving.

2-22. The Commander, U.S. Army Dental Command

The Commander, USADENCOM will coordinate with the USAMEDD Functional Proponent for Preventive Medicine concerning the health promotion and disease prevention aspects of dental services.

a. Initiatives that support oral health include, but are not limited to, nutrition counseling, tobacco use cessation, delivery of dental sealants and mouth guards, and other preventive medicine program components supporting oral health such as fluoridation of drinking water supplies.

b. The semiannual Community Oral Health Protection Report (formerly the Preventive Dentistry Report) data are submitted through the USADENCOM's Web-based reporting system termed the Corporate Data Application located at <https://conus.dencom.army.mil/>. The data and accompanying narrative provide documentation of activities and outcomes of the Clinical Oral Health and Health Promotion Program as well as the Community Health Promotion and Disease Prevention Program.

2-23. The Commander, U.S. Army Medical Department Center and School

The Commander, USAMEDDC&S, will—

a. Identify, develop, and validate Active Army and Reserve Component preventive medicine requirements. Develop and provide doctrine, training, leader development, organization, and Soldier system solutions to those requirements. Coordinate, through USAMEDCOM, with USAMRMC in the development of materiel solutions to preventive medicine requirements.

b. Coordinate, through the appropriate chain of command, with USAMEDCOM subordinate commands and Reserve Component organizations for participation in and technical support of the preventive medicine components of the training mission and functions of the Academy of Health Sciences.

c. Coordinate, through the appropriate chain of command, with USAMEDCOM subordinate commands and Reserve Component organizations for preventive medicine participation in, and support of, force integration activities, such as—

- (1) Combat and doctrine development.
- (2) Force structure and analysis.
- (3) Theater medical information management.

- (4) Technology insertion.
- (5) War fighting experimentation.
- (6) USAMEDD systems integration.
- (7) Operational test and evaluation.
- (8) Strategic planning and force management.

d. Coordinate, through the appropriate chain of command, with USAMEDCOM subordinate commands and Reserve Component organizations for planning and providing preventive medicine sustainment training for individuals and units.

e. Coordinate, through USAMEDCOM, with the USAMEDD Functional Proponent for Preventive Medicine concerning USAMEDD preventive medicine personnel proponency issues.

f. Coordinate, through the appropriate chain of command, with USATRADOC to incorporate preventive medicine principles into officer and enlisted training manuals and Soldier common task training manuals.

g. Represent and advocate through USATRADOC, and in coordination with USAMRMC, preventive medicine-related Army science and technology objectives.

h. Provide preventive medicine doctrine and training on reportable medical events, the use of the RMES software, pesticide use reporting and recordkeeping, and the North Atlantic Treaty Organization disease and injury reporting procedures.

i. Incorporate appropriate preventive medicine training in command surgeon preparation courses such as brigade/division surgeons' courses, USAMEDD Officer Basic Course, U.S. Army School of Aviation Medicine's Army Flight Surgeons' Primary Course to include deployment surveillance requirements and procedures, OEH-related diseases and injuries, travel medicine, and field preventive medicine.

j. Train health care providers on the principles of preventive medicine and the basics of OEH threats, their potential for health effects, and requirements for treatment and/or medical surveillance.

k. Establish, maintain, and disseminate lessons learned from deployment OEH-related issues from previous and ongoing deployments.

l. Update training support packages for mitigating risk of communicable diseases, injuries, combat and operational stress reactions, and suicide.

2-24. The Commander, U.S. Army Medical Research and Materiel Command

The Commander, USAMRMC, will—

a. Provide biomedical materiel and information solutions for military public health capabilities to enhance, sustain, and protect health, fitness, and performance.

b. Provide capabilities to support DOD and joint surveillance and laboratory diagnosis of emerging and reemerging infectious diseases of military significance.

c. Provide capabilities to support the surveillance for early notification of disease outbreaks of military importance.

d. Support the graduate medical education residency training programs in preventive medicine and occupational medicine through the Walter Reed Army Institute of Research, in collaboration with USACHPPM.

2-25. Health care providers

Health care providers will—

a. Promote the health and fitness of their patients by integrating appropriate and current prevention strategies in their delivery of primary care services.

b. Support and participate in the advocacy of approved Army health promotion and preventive medicine and population health improvement activities.

c. Inform the supporting preventive medicine service of—

(1) All incidences of disease and injury on the Tri-Service Reportable Events list as well as any other incidences that must be reported to local civilian public health authorities, using the guidance provided in DA Pam 40-11 (<http://ansa.army.mil>).

(2) Disease or injury hazards that may require preventive medicine assessment and intervention.

2-26. Commanders at all levels

Commanders at all levels are responsible and accountable for the health of their command. They will—

a. Ensure that the health of all personnel in their command is sustained and protected in all military activities through aggressive implementation of preventive medicine activities. Command Preventive Medicine Program responsibilities should include—

(1) Training.

(2) Hazard control.

(3) Proper use of personal protective measures and protective clothing and equipment.

(4) Immunization and chemoprophylaxis.

(5) Health risk and hazard communication.

(6) Worksite, occupational health, and environmental health surveillance.

(7) Workplace violence prevention.

b. Program and budget for resources, and provide training to comply with individual and unit responsibilities for improving and maintaining health and fitness.

c. Implement health surveillance requirements ensuring that Soldiers and civilian employees under their command who are enrolled in an Occupational Medicine Surveillance Program comply with the occupational medicine surveillance requirements including pre-placement, periodic, and outprocessing or termination medical evaluation (see DA Pam 40-11, chap 5, and FM 4-02.17, chap 9).

d. Provide leadership and personal example in improving and sustaining individual and unit health and fitness.

e. Ensure that contingency and operational plans include the appropriate elements of preventive medicine.

f. Minimize health risks using Army composite risk management principles (see FM 5-19).

g. Adhere to Federal, state, and host nation statutory and regulatory laws, directives, licenses, and guidance governing OEH in garrison and during training exercises. These statutes and regulations will also apply during military operational deployments and war unless specifically exempted by appropriate authority based on the tactical situation.

h. Ensure that contracts provide for adherence to occupational health laws and regulations.

2-27. Installation commanders and state and territory adjutants general

a. Installation commanders and state and territory adjutants general are responsible and accountable for providing a safe and healthy environment for all assigned and supported military personnel. They will also ensure that required preventive medicine programs and services are provided to all personnel under their command and all other military personnel they support, such as tenant organizations. Such preventive medicine support will be provided in coordination with the supporting medical commander and that commander's preventive medicine assets. Preventive medicine support of tenant organizations and other supported military personnel will be established through local installation or other type of support agreement. (See DA Pam 40-11, chaps 1-11 and apps B-G, for implementing guidance.)

b. Installation commanders are responsible for resourcing and implementing the preventive medicine components of installation infrastructure and services in coordination with the director of health services and the chief of preventive medicine services. Installation commanders provide the safe and healthy living and work environments and services such as drinking water, food, safe worksites, and recreational activities. Preventive medicine personnel provide the medical oversight and monitoring of installation infrastructure and services that may pose health threats. They provide the technical advice and assistance to installation commanders to minimize risks from such threats.

c. Installation occupational health programs and services that will include, but are not limited to the following:

(1) Safety and Occupational Health Program according to AR 385-10, chapter 4, and 29 CFR Part 1960.

(2) Ergonomics Program with an ergonomics subcommittee and an installation ergonomics officer according to DA Pam 40-21, chapters 1-7 and appendix B.

(3) Respiratory Protection Program according to AR 11-34, chapters 1-3.

(4) Hearing Conservation Program according to DA Pam 40-501, chapters 1-10.

(5) Vision Conservation and Readiness Program according to DA Pam 40-506, chapters 1-6 and appendixes B-H.

(6) Health Promotion Program according to AR 600-63, paragraph 1-19 and chapters 2-3.

(7) The Army Industrial Hygiene Program according to DA Pam 40-503, chapters 1-7 and appendixes B-D.

(8) The Army Radiation Safety Program according to AR 11-9, paragraph 1-4j, chapters 2-6 and appendixes A-C.

2-28. Unit and command surgeons

Unit and command surgeons, as the senior USAMEDD officers present for duty within a headquarters (other than medical), will—

a. Advise the command on all preventive medicine matters pertaining to the command.

b. Provide staff and technical oversight of all preventive medicine assets of the command.

c. Provide implementing guidance for field preventive medicine programs and services.

d. Ensure that medical events on the current Tri-Service Reportable Events list are reported through the RMES as soon as possible after the diagnosis has been made or within 48 hours.

e. Coordinate preventive medicine support provided to the command by installation medical assets with the medical asset commander or installation director of health services and the chief of preventive medicine services of the supporting USAMEDDCEN or USAMEDDAC.

2-29. Unit commanders and leaders

Unit commanders and leaders will—

a. Inform, motivate, train, and equip subordinates and work closely with Army preventive medicine personnel to defeat the threat of DNBI. Broad categories of DNBI include—

(1) Heat injuries caused by heat stress and insufficient water consumption.

- (2) Cold injuries caused by combinations of low temperatures, wind, and wetness.
- (3) Diseases and injuries caused by arthropods, other animals, and hazardous plants.
- (4) Diarrheal diseases caused by drinking contaminated water, eating contaminated foods, and not practicing good personal and unit sanitation and hygiene measures.
- (5) Diseases, trauma, or injuries caused by poor health or fitness or injuries caused by training or sports.
- (6) Occupational and environmental diseases and injuries caused by physical, chemical, biological, and radiological hazards.
- (7) Disease threats resulting from exposure at high altitudes.
- (8) Communicable diseases and sexually transmitted diseases.
- (9) Noise-induced hearing injury.
- b. Ensure compliance with preventive medicine guidance and the use of countermeasures.
- c. Promote combat and operational stress control programs and procedures.
- d. Ensure the establishment, manning, training, and equipping of unit FSTs at the company level, or obtain FST support from another unit, according to Army doctrine published in FM 4-02.17, chapters 1-2; FM 4-25.12, chapters 1-2 and appendixes A-D; and FM 8-55, paragraphs 11-1 through 11-6.
- e. Execute the unit leader responsibilities defined in FM 4-02.17. U.S. Army Reserve Component unit commanders and leaders may request guidance and support from the local Active Army RMC, using the RMC point of contact for Reserve Component support.
- f. Provide after-action reports after deployments and training exercises that include preventive medicine issues to the USAMEDDC&S as part of the Center for Army Lessons Learned Program (see AR 11-33).
- g. Record and report all pesticide applications, except arthropod skin and clothing repellent applications, according to the guidance in DA Pam 40-11, chapter 4.
- h. Ensure compliance with pre- and post-deployment surveillance procedures.

2-30. Managers and supervisors at all levels

- a. Army managers and supervisors at all levels will—
 - (1) Ensure that the health of all personnel under their supervision is sustained and protected in all Army activities through aggressive implementation of preventive medicine activities, to include—
 - (a) Training.
 - (b) Hazard control.
 - (c) Immunizations and chemoprophylaxis.
 - (d) Health risk and hazard communication.
 - (e) Worksite, OEH surveillance.
 - (2) Program and budget resources to—
 - (a) Correct workplace deficiencies and control hazards.
 - (b) Provide training to comply with individual and unit responsibilities according to FM 8-55, paragraphs 11-5 and 11-6, and FM 21-10/MCRP 4-11.1D, chapters 1-2 and appendix A.
 - (3) Implement health surveillance requirements, ensuring that personnel enrolled in an Occupational Medicine Surveillance Program comply with the occupational medicine surveillance requirements including pre-placement, periodic, and outprocessing or termination medical evaluations (see DA Pam 40-11, chap 5, and FM 4-02.17, chap 9).
 - (4) Provide leadership and personal example in improving and sustaining individual and unit health and fitness.
 - (5) Ensure that contingency and operational plans include the appropriate elements of preventive medicine.
 - (6) Minimize health risks using Army composite risk management principles (see FM 5-19).
 - (7) Adhere to Federal, state, and host nation statutory and regulatory laws, directives, licenses, and guidance governing OEH in garrison and during training exercises. These statutes and regulations will also apply during military operational deployments and war unless specifically exempted by appropriate authority based on the tactical situation.
 - (8) With respect to civilian employees—
 - (a) Ensure that essential elements of the job and potential health hazards are identified in the job description.
 - (b) Ensure that any requirements to undergo a medical examination; receive laboratory testing and immunization; and use protective clothing and equipment, including respiratory equipment, safety eye and foot wear, and hearing protection, are written in job descriptions and job announcements as conditions of employment.
 - (c) Ensure that employees comply with the pre-placement, periodic, and outprocessing medical surveillance requirements of their employment.
 - (d) Request an occupational health evaluation of personnel with an occupational illness or injury at the time of illness or injury and whenever new job restrictions are imposed or accommodations are required. Supervisors should refer employees who have a work-related injury or illness to the supporting occupational health services, or have the employees see their treating physicians, for periodic reevaluation of their ability to work until the employees return to full duty (see DOD 1400.25-M, subchap 810).

(e) Ensure that personnel enrolled in a Medical Surveillance Program complete a baseline, periodic, and outprocessing or termination medical evaluation.

(f) Provide to occupational health services a copy of the releasable portions of DOL Forms CA-1 (Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation), CA-2 (Federal Employee's Notice of Occupational Disease and Claim for Compensation), and CA-20 (Attending Physician's Report), if applicable.

(g) Refer all employees to occupational health services before they return to duty from any absence due to any illness or injury that could impair their job performance according to Equal Employment Opportunity Commission (EEOC) guidelines (see EEOC Notice Number 915.002).

(h) Refer food handlers and patient care personnel to occupational health services before they return to duty from any absence due to illness according to EEOC guidelines noted in paragraph (g), above.

(9) Be held personally accountable, by appropriate means, for preventive medicine compliance of their subordinates.

b. U.S. Army Reserve Component managers and supervisors may request guidance and support from the local Active Army RMC, using the appropriate chain of command and the RMC point of contact for Reserve Component support.

2-31. Civilian personnel or human resources managers

Local servicing civilian personnel support offices or human resources managers will take the following actions, subject to EEOC guidelines and U.S. Office of Personnel Management regulations, to assist medical personnel in implementing the Army Occupational Health and Safety Program:

a. Provide consultative assistance to managers and supervisors for their responsibilities described in paragraph 2-30.

b. Refer applicants for jobs with medical standards or physical requirements or that are part of a Medical Evaluation Program for preplacement physical examinations.

(1) Coordinate the scheduling of the exam with the employee, the supervisor, and the health clinic.

(2) Provide the examining medical officer the physical and psychological job requirements.

c. Ensure that all new personnel whose jobs have medical standards or physical requirements in process through the supporting occupational health services. New personnel whose jobs do not have medical standards or physical requirements may voluntarily in process through the supporting occupational health services.

d. During outprocessing or termination of employment—

(1) Assist management in ensuring that departing personnel enrolled in a Medical Surveillance Program complete an outprocessing or termination medical evaluation.

(2) Include occupational health services on all personnel outprocessing checklists for those personnel whose jobs have medical standards or physical requirements or are part of a Medical Evaluation Program.

(3) Offer voluntary outprocessing to those personnel whose jobs do not have medical standards or physical requirements or are not part of a Medical Evaluation Program.

e. Provide the supporting occupational health services a list of all local civilian personnel whose jobs have medical standards or physical requirements or are part of a Medical Evaluation Program and their job series codes within the supporting occupational health services' local areas of responsibility for use in medical surveillance planning and implementation.

2-32. Installation Federal Employee Compensation Act or Injury Compensation Program administrator

The installation Injury Compensation Program administrator, assisted by local or organizational personnel who are assigned injury compensation duties, will—

a. Provide consultative assistance to managers and supervisors for their responsibilities related to employee injury and illness compensation described in paragraph 2-30.

b. Advise and support the installation safety and occupational health advisory council, as established by AR 385-10, paragraph 2-1k, on injury compensation matters.

c. Make available to health care providers who treat employees with occupational injuries and illnesses the necessary forms for completion as well as job requirements and environmental conditions. Such forms will include DOL Forms CA-1, CA-2, CA-17 (Duty Status Report), and CA-20 or equivalent medical documentation.

d. Provide occupational health services a copy of the position description, the physical and environmental requirements of the position, and personnel-related questions for any fitness-for-duty medical examination recommended by management, in conjunction with the supporting civilian personnel or human resources office.

e. Refer personnel at the time of injury or illness, or when reasonably required, to occupational health services, or to their treating physicians, for a duty status determination when such personnel will be absent from work or have work limitations due to their work-related injuries or illnesses.

2-33. Military personnel officers

a. Military personnel officers for both TDA and TOE units will—

(1) Ensure all Soldier inprocessing and outprocessing checklists include occupational health services where such services are provided.

(2) Assist commanders in ensuring that Soldiers enrolled in an Occupational Medicine Surveillance Program comply with the occupational medicine surveillance requirements including a pre-placement and an outprocessing or termination medical evaluation.

(3) Provide a list of all Soldiers including their military occupational specialty codes to occupational health services, where such services are provided, for use in medical surveillance databases.

(4) Support the application of medical information management tools to document unit and individual Soldier medical readiness.

b. Military personnel officers at initial entry training installations will provide installation troop strength data weekly to the supporting medical commander.

c. U.S. Army Reserve unit personnel officers will contact the supporting Active Army RMC's Reserve Component support point of contact, through the appropriate chain of command, for guidance and assistance.

2-34. Army personnel

All Army personnel will—

a. Apply personal protective measures and use protective clothing and equipment when required.

b. Share the responsibility for ensuring a safe and healthy work environment by following administrative and engineering hazard controls.

c. Report unsafe conditions, hazardous exposures, and occupational injury or illness to their supervisors.

d. Report to the supporting occupational health services for medical examination or treatment for occupational injuries and illnesses as prescribed by established procedures.

Appendix A References

Section I

Required Publications

Except as noted below, Army regulations and DA pamphlets are available online from the U.S. Army Publishing Directorate Web site: <http://www.apd.army.mil/>. Field manuals are available online from the General Dennis J. Reimer Training and Doctrine Digital Library Web site: <http://www.train.army.mil/>. Technical bulletins, medical and USACHPPM technical guides are available online from the USACHPPM Web site: <http://chppm-www.apgea.army.mil>. DOD manuals, directives, and instructions are available online from the Washington Headquarters Services Web site: <http://www.dtic.mil/whs/directives>.

AR 11-9

The Army Radiation Safety Program. (Cited in para 2-27c(8).)

AR 11-34

The Army Respiratory Protection Program. (Cited in para 2-27c(3).)

AR 40-10

Health Hazard Assessment Program in Support of the Army Materiel Acquisition Decision Process. (Cited in para 2-8a(5).)

AR 70-1

Army Acquisition Policy. (Cited in paras 2-3a and 2-8a(5).)

AR 190-24/OPNAVINST 1620.2A/AFI 31-213/MCO 1620.2C/COMDTINST 1620.1D

Armed Forces Disciplinary Control Boards and Off-Installation Liaison and Operations. (Cited in para 2-18e.)

AR 200-1

Environmental Protection and Enhancement. (Cited in paras 2-3a and 2-8b(4).)

AR 210-14

The Army Installation Status Report Program. (Cited in para 2-18n(2).)

AR 385-10

The Army Safety Program. (Cited in paras 2-27c(1) and 2-32b.)

AR 385-16

System Safety Engineering and Management. (Cited in para 2-3a.)

AR 385-40

Accident Reporting and Records. (Cited in para 2-19b(2).)

AR 385-61

The Army Chemical Agent Safety Program. (Cited in para 2-8b(6).)

AR 385-69

Biological Defense Safety Program. (Cited in para 2-8b(6).)

AR 600-63

Army Health Promotion. (Cited in paras 1-7f(3) and 2-27c(6).)

AR 608-10

Child Development Services. (Cited in para 2-18h.)

DA Pam 40-11

Preventive Medicine. (Cited in paras 1-7, 1-7a(2), 1-7b(4), 1-7b(4)(c), 1-7c(2), 1-7d(2), 1-7d(3), 1-7e(3), 1-7f(2), 1-7f(4), 1-7g(2), 1-7g(3), 1-7h(2), 1-7i(2), 2-17a, 2-17d, 2-18b, 2-18l, 2-25c(1), 2-26c, 2-27a, 2-29g, and 2-30a(3).)

DA Pam 40-21

Ergonomics Program. (Cited in para 2-27c(2).)

DA Pam 40-501

Hearing Conservation Program. (Cited in para 2-27c(4).)

DA Pam 40-503

Industrial Hygiene Program. (Cited in para 2-27c(7).)

DA Pam 40-506

The Army Vision Conservation and Readiness Program. (Cited in para 2-27c(5).)

Executive Order 12196

Occupational and Safety Health Programs for Federal Employees. (Cited in para 1-5c.) (Available at <http://www.nara.gov/federal/register/index.html>.)

FM 4-02

Force Health Protection in A Global Environment. (Cited in paras 1-7b(3), 1-7b(4), and 2-19d.)

FM 4-02.16

Army Medical Information Management Tactics, Techniques, and Procedures. (Cited in para 1-7b(4)(d).)

FM 4-02.17

Preventive Medicine Services. (Cited in paras 1-7b(4), 1-7b(4)(b), 1-7b(4)(c), 2-26c, 2-29d, 2-29e, and 2-30a(3).)

FM 4-02.18

Veterinary Services Tactics, Techniques, and Procedures. (Cited in para 1-7b(4).)

FM 4-02.19

Dental Service Support In a Theater of Operations. (Cited in para 1-7b(4).)

FM 4-25.12

Unit Field Sanitation Team. (Cited in paras 1-7b(4), 1-7b(4)(a), 1-7b(4)(b), and 2-29d.)

FM 8-42

Combat Health Support in Stability Operations and Support Operations. (Cited in paras 2-17c and 2-19d.)

FM 8-51

Combat Stress Control in a Theater of Operations Tactics, Techniques, and Procedures. (Cited in para 1-7b(4).)

FM 8-55

Planning for Health Service Support. (Cited in paras 1-7b(4), 1-7b(4)(a), 2-29d, and 2-30a(2)(b).)

FM 21-10/MCRP 4-11.1D

Field Hygiene and Sanitation. (Cited in paras 1-7b(4)(a) and 2-30a(2)(b).)

FM 5-19

Composite Risk Management. (Cited in paras 2-26f and 2-30a(6).)

Public Law 91-596

Occupational Safety and Health Act of 1970, 84 Stat. 1590, as amended. (Cited in para 2-8b(8).) (Available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=OSHACT&p_id=2743.)

5 USC 8101-8193

Federal Employees' Compensation Act. (Cited in para 2-19v.) (Available at <http://uscode.house.gov/search/criteria.php> or <http://www.dol.gov/esa/regs/compliance/owcp/INDEXofResources.htm#bookmark2>.)

42 USC 201

Public Welfare, Department of Health and Human Services, Administrative and Miscellaneous Provisions. (Cited in paras 1-5o.) (Available at <http://uscode.house.gov/search/criteria.php>.)

29 CFR Part 1960

Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters. (Cited in para 2-27c(1).) (Available at <http://www.gpoaccess.gov/cfr/index.html>.)

45 CFR Parts 160, 162, and 164

Health Insurance Reform: Modifications to Electronic Data Transactions Standards and Code Sets. (Cited in para 1-5o.) (Available at <http://www.gpoaccess.gov/cfr/index.html>.)

Section II

Related Publications

A related publication is a source of additional information. The user does not have to read it to understand this publication.

AR 5-22

The Army Proponent System

AR 10-5

Headquarters, Department of the Army

AR 10-88

Field Operating Agencies, Office of Chief of Staff, Army

AR 11-2

Management Control

AR 11-33

Army Lessons Learned Program: System Development and Application

AR 40-1

Composition, Mission, and Functions of the Army Medical Department

AR 40-3

Medical, Dental, and Veterinary Care

AR 40-35

Dental Readiness and Community Oral Health Protection

AR 40-216

Neuropsychiatry and Mental Health

AR 40-656/NAVSUPINST 4355.10/MCO 10110.45

Veterinary Surveillance Inspection of Subsistence

AR 40-657/NAVSUP 4355.4H/MCO P10110.31H

Veterinary/Medical Food Safety, Quality Assurance, and Laboratory Service

AR 40-905/SECNAVINST 6401.1A/ARI 48-131

Veterinary Health Services

AR 70-45

Scientific and Technical Information Program

AR 200-2

Environmental Effects of Army Actions

AR 200-5

Pest Management

AR 350-10

Management of Army Individual Training Requirements and Resources

AR 381-11

Productions Requirements and Threat Intelligence Support to the U.S. Army

AR 600-9

The Army Weight Control Program

AR 600-60

Physical Performance Evaluation System

AR 600-85

Army Substance Abuse Program (ASAP)

AR 600-110

Identification, Surveillance, and Administration of Personnel Infected with Human Immunodeficiency Virus (HIV)

AR 602-2

Manpower and Personnel Integration (MANPRINT) in the System Acquisition Process

AR 608-18

The Army Family Advocacy Program

AR 623-105

Officer Evaluation Reporting System

AR 690-300

Employment (Civilian Personnel)

AR 700-48

Management of Equipment Contaminated with Depleted Uranium or Radioactive Commodities.

AR 700-135

Soldier Support in the Field

AR 700-136

Tactical Land Based Water Resources Management in Contingency Operations

DA Pam 40-578

Health Risk Assessment Guidance for the Installation Restoration Program and Formerly Used Defense Sites

DA Pam 385-40

Army Accident Investigation and Reporting

DFAS-IN Manual 37-100-FY

The Army Management Structure. (Available at <http://www.asafm.army.mil/secretariat/document/dfas37-100/dfas37-100.asp>)

DOD 1400.25-M

Department of Defense Civilian Personnel Manual

DOD 4500.9-R

Defense Transportation Regulation

DOD 6055.5-M

Occupational Medical Surveillance Manual

DODD 1000.3

Safety and Occupational Health Policy for the Department of Defense

DODD 1010.10

Health Promotion and Disease/Injury Prevention

DODD 4715.1

Environmental Security

DODD 5134.8

Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD(NCB))

DODD 5400.11

DOD Privacy Program

DODD 6000.12

Health Services Operations and Readiness

DODD 6050.16

DOD Policy for Establishing and Implementing Environmental Standards at Overseas Installations

DODD 6200.4

Force Health Protection (FHP)

DODD 6490.2

Comprehensive Health Surveillance

DODI 1322.24

Medical Readiness Training

DODI 1336.5

Automated Extracts of Active Duty Military Personnel Records

DODI 4150.7

DOD Pest Management Program

DODI 4715.7

Environmental Restoration Program

DODI 6050.5

DOD Hazard Communication Program

DODI 6055.1

DOD Safety and Occupational Health (SOH) Program

DODI 6055.5

Industrial Hygiene and Occupational Health

DODI 6055.7

Accident Investigation, Reporting, and Record Keeping

DODI 6055.8

Occupational Radiation Protection Program

DODI 6055.11

Protection of DOD Personnel from Exposure to Radiofrequency Radiation and Military Exempt Lasers

DODI 6055.12

DOD Hearing Conservation Program (HCP)

DODI 6060.2

Child Development Programs (CDPs)

DODI 6060.3

School-Age Care (SAC) Program

DODI 6205.2

Immunization Requirements

DODI 6205.4

Immunization of Other Than U.S. Forces (OTUSF) for Biological Warfare Defense

DODI 6490.03

Deployment Health

DOD Information Memorandum

Military and Veterans Health Coordinating Board (MVHCB) and Presidential Review Directive-5 (PRD-5). December 1999. (For information regarding this publication, contact the Assistant Secretary of the Army for Installations and Environment (ASA(I&E)), 110 Army Pentagon, Washington, DC 20310-0110.)

EEOC Notice Number 915.002

Enforcement Guidance: Disability-Related Inquiries and Medical Examinations of Employees Under the Americans With Disabilities Act (ADA). July 27, 2000. Equal Employment Opportunity Commission (EEOC). (Available at <http://www.eeoc.gov/policy/docs/guidance-inquiries.html>.)

Engineer Manual 385-1-1

Safety and Health Requirements Manual, USACE, latest edition. (Available at <http://www.usace.army.mil/inet/usace-docs/eng-manuals/em385-1-1/entire.pdf>.)

FM 3-11.34/MCWP 3-37.5/NTTP 3-11.23/AFTTP(I) 3-2.33

Multi-Service Procedures for Nuclear, Biological, and Chemical (NBC) Defense of Theater Fixed Sites, Ports, and Airfields

FM 3-100.4/MCRP 4-11B

Environmental Considerations in Military Operations

FM 4-02.33

Control of Communicable Diseases Manual

Force Health Protection Capstone Document

Available at <http://www.deploymentlink.osd.mil/pdfs/fhp2004.pdf>.

Joint Publication 1-0

Joint Doctrine for Personnel Support to Joint Operations. (Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp1_0.pdf.)

Joint Publication 1-02

Department of Defense Dictionary of Military and Associated Terms. (Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf.)

Joint Publication 4-02

Doctrine for Health Service Support in Joint Operations. (Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp4_02.pdf.)

Memorandum

Office of DASA (ESOH), 20 March 1998, subject: Agency for Toxic Substances and Disease Registry (ATSDR) Program Management Plan. (Available at <http://chppm-www.apgea.army.mil/atsdr/docs.aspx>.)

Memorandum of Understanding

The Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, and the U.S. Department of Defense, The Development of Toxicological Profiles for Hazardous Substances and Public Health Assessments and Related Activities at DOD Facilities, 22 November 2004. (Available at <http://chppm-www.apgea.army.mil/atsdr/Documents/MOUfinal21Nov04ATSDR.pdf> and <http://chppm-www.apgea.army.mil/atsdr/Documents/ATSDRMOU2004signaturepage.pdf>.)

Institute of Medicine Report

Noise and Military Service: Implications for Hearing Loss and Tinnitus. (2006). National Academy of Sciences. (Available at <http://www.nap.edu>.)

Institute of Medicine Report

Potential Radiation Exposure in Military Operations: Protecting the Soldier Before, During and After. (1999). National Academy of Sciences. (Available at <http://www.nap.edu>.)

Institute of Medicine Report

Protecting Those Who Serve: Strategies to Protect the Health of Deployed U.S. Forces. (2000). National Academy of Sciences. (Available at <http://www.nap.edu>.)

Presidential Review Directive 5

Planning for Health Preparedness For and Readjustment of the Military, Veterans, and Their Families After Future Deployments. (Available at <http://www.fas.org/irp/offdocs/prd-5-report.htm>.)

TB MED 530

Occupational and Environmental Health Food Sanitation

Unified Facilities Guide Specifications

Available at <http://www.hnd.usace.army.mil/techinfo/gspec.htm>.

USACHPPM Technical Guide 230

Chemical Exposure Guidelines for Deployed Military Personnel. (Available from the U.S. Army Center for Health Promotion and Preventive Medicine, ATTN: MCHB-TS-EES, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403 or <http://chppm-www.apgea.army.mil>.)

USACHPPM Reference Document 230

A Companion Document to USACHPPM Technical Guide 230, Chemical Exposure Guidelines for Deployed Military Personnel. (Available from the U.S. Army Center for Health Promotion and Preventive Medicine, ATTN: MCHB-TS-EES, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403 or <http://chppm-www.apgea.army.mil>.)

USACHPPM Technical Guide 248

Guide for Deployed Preventive Medicine Personnel on Health Hazard Risk Management. (Available from the U.S. Army Center for Health Promotion and Preventive Medicine, ATTN: MCHB-TS-EES, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403 or <http://chppm-www.apgea.army.mil>.)

31 USC 1535 and 1536

Economy Act

50 USC 1522

Conduct of chemical and biological defense program. (Available at <http://uscode.house.gov/download/pls/50C32.txt>)

Section III**Prescribed Forms**

This section contains no entries.

Section IV**Referenced Forms****DA Form 11-2-R**

Management Control Evaluation Certification Statement. (Available at <http://www.apd.army.mil/>)

DOL Form CA-1

Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation. (Available at <http://www.dol.gov/esa/regs/compliance/owcp/ca-1.pdf>.)

DOL Form CA-2

Notice of Occupational Disease and Claim for Compensation. (Available at <http://www.dol.gov/esa/regs/compliance/owcp/ca-2.pdf>.)

DOL Form CA-17

Duty Status Report. (Available at <http://www.dol.gov/esa/regs/compliance/owcp/ca-17.pdf>.)

DOL Form CA-20

Attending Physician's Report. (Available at <http://www.dol.gov/esa/regs/compliance/owcp/ca-20.pdf>.)

**Appendix B
Management Control Evaluation**

B-1. Function

The function covered by this evaluation is preventive medicine.

B-2. Purpose

The purpose of this evaluation is to assist commanders in evaluating the key management controls as outlined below (with medical personnel evaluating these key controls or resulting evaluation certified by some medical officer/official). This evaluation should be used at the following levels: Headquarters, Department of the Army, field operating agency, ACOMs, Army service component commands, direct reporting units, major subordinate commands, installations, and TOE units. It is not intended to cover all controls, but you must evaluate all controls applicable to your activity.

B-3. Instruction

Answers must be based on the actual testing of key management controls (for example, document analysis, direct observation, sampling, simulation, other). Answers that indicate deficiencies *must* be explained and corrective action indicated in supporting documentation. These key management controls must be formally evaluated at least once every 5 years. Certification that this evaluation has been conducted must be accomplished on DA Form 11-2-R (Management Control Evaluation Certification Statement).

B-4. Test Questions

- a. Are practices and procedures in place and operating to determine adherence to health standards established in pertinent Federal, state, local and host Government statutes and regulations and in Army regulations?
- b. Were sufficient resources requested to accomplish all responsibilities designated in this regulation? Where actual resources received were insufficient, were those resources applied to the highest priority areas? Was the adverse impact of the unfunded requirements communicated to higher headquarters?
- c. Is medical and OEH surveillance performed as required?
- d. Are Army personnel informed of all health threats and risks and appropriate countermeasures?
- e. Is accreditation and quality assurance for preventive medicine laboratory services monitored?
- f. Are health hazards of new equipment and materiel assessed?
- g. Are the same preventive medicine support services provided to all personnel (for example, military, civilian, contractor) deployed for military operations?
- h. Are there standard process outcome metrics applied to evaluate preventive medicine activities?
- i. Are commanders, supervisors, and preventive medicine staff provided basic, specialized, and sustainment training that will enable them to properly execute their preventive medicine leadership and staff responsibilities?
- j. Are Defense Health Program structure codes used for preventive medicine budget execution tracking and program analysis review?
- k. Are preventive medicine issues addressed through the DOTMLPF process?
- l. Are preventive medicine workloads documented?
- m. Are preventive medicine principles incorporated into Army officer and enlisted training manuals and Soldier common task training manuals?
- n. Are medical events reported through a military Medical Event Reporting System in compliance with state and local medical reporting requirements?

B-5. Supersession

This evaluation replaces the checklists (DA Circular 11-88-7) previously published for this regulation.

B-6. Comments

Help make this a better tool for evaluating management controls. Submit comments to the Deputy Functional Proponent for Preventive Medicine, ATTN: DASG-PPM-NC, 5109 Leesburg Pike, Suite 684, Falls Church, VA 22041-3258.

Glossary

Section I Abbreviations

AAE

Army Acquisition Executive

ACOM

Army Command

ASA(I&E)

Assistant Secretary of the Army (Installations and Environment)

ASA(M&RA)

Assistant Secretary of the Army (Manpower and Reserve Affairs)

ATSDR

Agency for Toxic Substances and Disease Registry

ATTN

attention

CBRN

chemical/biological/radiological/nuclear

CBRNE

chemical/biological/radiological/nuclear/explosives

CFR

Code of Federal Regulations

CONUS

continental U.S.

DA Pam

Department of the Army pamphlet

DFAS-IN

Defense Finance and Accounting Service—Indianapolis Center

DNBI

disease and non-battle injury

DODD

Department of Defense directive

DODI

Department of Defense instruction

DOEHRS

Defense Occupational and Environmental Health Readiness System

DOL

Department of Labor

DOTMLPF

doctrine, organizations, training, materiel, leadership and education, personnel, and facilities

EEOC

Equal Employment Opportunity Commission

eV
electron volt

FM
field manual

FST
field sanitation team

FY
fiscal year

HHA
health hazard assessment

MTF
military treatment facility

OCONUS
outside the continental U.S.

OEH
occupational and environmental health

OMA
operations and maintenance, Army

OSHA
Occupational Safety and Health Administration

OTSG
Office of The Surgeon General

RMC
regional medical command

RMES
Reportable Medical Events System

TDA
tables of distribution and allowances

TIM
toxic industrial material

TOE
tables of organization and equipment

TSG
The Surgeon General

USACHPPM
U.S. Army Center for Health Promotion and Preventive Medicine

USADENCOM
U.S. Army Dental Command

USAMC
U.S. Army Materiel Command

toxic materials), and occupational injury/illness (such as noise-induced hearing loss). Non-battle injuries include self-inflicted wounds and all injuries that occur during peacetime.

Ergonomics

The field of study that seeks to fit the job to the person, rather than the person to the job. This is achieved by the evaluation and design of workplaces, environments, jobs, tasks, equipment, and processes in relationship to human capabilities and interactions in the workplace.

Force Health Protection

The medical portion of Force Protection; all measures taken by commanders, leaders, individual Service members, and the Military Health System to promote, improve, conserve, or restore the mental and physical well-being of Service members across the range of military activities and operations. These measures enable the fielding of a healthy and fit force, prevention of injuries and illness, protection of the force from health hazards, and provision of excellent medical and rehabilitative care to those who become sick or injured anywhere in the world.

Garrison

The basic organizational structure for providing programs, services and management to an installation and its resident community. An Army garrison is a TDA organization that commands, controls, and manages Army installations. Garrison command is the execution arm of the Installation Management Agency. It delivers the majority of installation management services to both resident and nonresident organizations. The garrison's mission is linked to the installation's purpose. As the execution arm of the Installation Management Agency, the garrison's mission is to provide installation management programs and services for mission activity commanders, Soldiers, civilians, family members, and retirees.

Health hazard assessment

The application of biomedical knowledge and principles to document and quantitatively determine the health hazards of Army systems. This assessment identifies, evaluates, and recommends controls to reduce risks to the health and effectiveness of personnel who test, use, or service Army systems. This assessment includes—

- a. The evaluation of hazard severity, hazard probability, risk assessment, consequences, and operational constraints.
- b. The identification of required precautions and protective devices.
- c. Training requirements.

Health risk assessment

The identification and evaluation of a health hazard to determine the associated health risk (probability of occurrence and resulting outcome and severity) of potential exposure to hazard.

Health risk communication

The process of building and maintaining strategic partnerships that is the foundation for information exchange, dialogue, and collaborative problem solving among interested stakeholders about health and safety issues.

Hearing readiness, clinical, operational, and conservation services

The four elements that embody the leadership policies, strategies, and processes to prevent noise-induced hearing loss among military and civilian personnel. Together these elements constitute The Army Hearing Program. The hearing readiness element provides for audiometric monitoring and the tracking of individual and unit hearing readiness status for deployability. The clinical services element provides for treatment of hearing injury in garrison and deployed settings, as well as audiological diagnostic capabilities in fixed facilities. The operational services element focuses on preventing or mitigating noise-induced hearing loss during military operations while maintaining or enhancing the ability to communicate. This element includes risk communication, training, communication enhancement and hearing protection devices, sound-level monitoring, noise abatement control measures, and evaluation of effectiveness of countermeasures. The hearing conservation element focuses on protecting military and civilian personnel from hearing loss due to occupational/industrial noise exposures in fixed facilities.

Industrial hygiene

The science and art devoted to anticipation, recognition, evaluation, and control of those environmental factors or stresses, arising in or from the workplace, that may cause sickness, impaired health and well-being, or significant discomfort and inefficiency among workers.

Initial entry training

Training presented to new enlistees with no prior military service. It is designed to produce disciplined, motivated,

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Department of the Army
Pamphlet 40-503

Medical Services

Industrial Hygiene Program

Headquarters
Department of the Army
Washington, DC
30 October 2000

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SUMMARY of CHANGE

DA PAM 40-503
Industrial Hygiene Program

This new pamphlet--

- o Summarizes the authority documents that establish the industrial hygiene program (para 1-4).
- o Establishes the objectives and mission for the industrial hygiene program (paras 1-5 and 1-6).
- o Clarifies and delineates those standards (Occupational Safety and Health Administration, military-unique, or national consensus) applicable to the industrial hygiene program (para 1-8).
- o Outlines the functions needed to implement the industrial hygiene program (para 2-1).
- o Explains how and where the industrial hygiene program manager may obtain technical and managerial assistance (para 2-2 and table 2-1).
- o Outlines the available functional and technical resources needed to operate an industrial hygiene program (chap 3).
- o Describes the fundamental processes of industrial hygiene: health hazard anticipation, recognition, evaluation, and control (chap 4).
- o Explains the process of credentialing, privileging, supervising, and certification/licensing of industrial hygiene personnel (para 5-4).
- o Outlines the quality assurance aspects of the industrial hygiene program (chap 5).
- o Explains all types and requirements for recordkeeping in the industrial hygiene program (chap 6).
- o Outlines the role of industrial hygiene in other U.S. Army Medical Department-proponency programs (chap 7, sec I).
- o Outlines the role of the industrial hygiene program manager in U.S. Army Medical Department-supported programs (chap 7, sec II).
- o Explains the needed coordination for an effective industrial hygiene program (chap 7, sec III).
- o Lists the minimum sampling equipment requirements for an industrial hygiene program (app B).
- o Provides a sample industrial hygiene implementation plan (app C).
- o Identifies the risk assessment codes for health, safety, ergonomic, and noise hazards (app D).

Headquarters
Department of the Army
Washington, DC
30 October 2000

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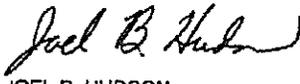
Medical Services

Industrial Hygiene Program

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

Official:


JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army

History. This printing publishes a new Department of the Army Pamphlet.

Summary. This pamphlet provides guidance for implementing the essential elements of the Army industrial hygiene program.

Applicability. This pamphlet applies to the Active Army, Army National Guard, and U.S. Army Reserve.

Proponent and exception authority. The proponent for this pamphlet is The Surgeon General (TSG). The Surgeon General has the authority to approve exceptions to this pamphlet. Only exceptions that are consistent with controlling law and regulation may be approved. The Surgeon General may delegate this authority in writing to a division chief within the

Office of The Surgeon General (OTSG) in the grade of colonel or the civilian grade equivalent.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to HQDA (DASG-HSZ), 5109 Leesburg Pike, Falls Church, VA 22041-3258.

Distribution. This publication is available in electronic media only (EMO), intended for command levels C, D, and E for Active Army, Army National Guard, and U.S. Army Reserve.

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Glossary

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Chapter 1 Introduction

1-1. Purpose

This pamphlet—

- a. Provides guidance for implementing the essential elements of the industrial hygiene (IH) program.
- b. Defines industrial hygienist's role in other Army programs.
- c. Describes the IH mission required by law, policy, and professional practice.

1-2. References

Required and related publications are listed in appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1-4. Summary of authority

The following documents summarize the line of authority that establishes the IH program.

a. Executive Order 12196, title 3, Code of Federal Regulations (3 CFR) required the Secretary of Labor to establish an occupational safety and health (OSH) program for Federal employees. The Department of Labor promulgated part 1960, title 29, Code of Federal Regulations (29 CFR 1960), which provides the regulatory requirements of this program for Federal employees.

(1) These documents implement Public Law 91-596, Occupational Safety and Health Act of 1970 and require the executive branches of government to comply with Occupational Safety and Health Administration (OSHA) standards.

(2) In some instances, state programs govern operations within the state, with Federal oversight. In these states, the state OSH personnel may enter Army facilities and enforce state OSH regulations. It is important to determine whether the operation is a concurrent jurisdiction or exclusive jurisdiction area.

(a) Federal rules apply in exclusive jurisdiction areas; therefore, state personnel are not typically authorized to inspect the area.

(b) State laws may apply in concurrent jurisdiction areas; therefore, state personnel are authorized to inspect Army or Army contractor operations for compliance with their state standards.

(c) For further information regarding specific jurisdictional relationships, contact the installation or major command Staff Judge Advocate office.

b. Department of Defense Directive (DODD) 1000.3 and Department of Defense Instructions (DODI) 6055.1 and 6055.5 provide general guidance and policies for the OSH program implementation and apply to military and civilian personnel.

c. AR 40-5 directs, establishes, and defines the Occupational Health (OH) program for the Department of the Army (DA).

d. AR 385-10 directs, establishes, and defines the Occupational Safety program for DA.

e. This DA Pamphlet (DA Pam) describes the IH element of the OSH program.

1-5. Program objectives

The IH program works cooperatively with other Army programs (such as, Safety) to—

a. Provide one of the medical elements of the force protection component of combat power that maintains the readiness and availability of Army personnel for operations.

b. Eliminate or control workplace health hazards to prevent occupational related illnesses, injuries, or deaths to soldiers and civilian workers.

c. Characterize workplace exposure to potential health hazards, which facilitates exposure-based medical surveillance and occupational healthcare.

d. Comply with OSHA and other applicable Federal and state laws and codified regulations. (See app A.)

e. Reduce costs associated with lost manhours, medical treatment and surveillance, and workers' compensation.

f. Integrate established IH principles and concepts into allied programs.

g. Perform IH functions in support of allied programs such as Safety, Chemical Surety, Hearing Conservation, Respiratory Protection, and environmental compliance with Environmental Protection Agency, Comprehensive Environmental Response Compensation Liability Act, Resource Conservation Recovery Act, SUPERFUND Amendments and Reauthorization Act III, asbestos control, and lead abatement.

1-6. Program mission

Industrial hygiene is a component of the Army's health mission. Industrial hygienists use technical expertise to

anticipate, recognize, evaluate, and control workplace health hazards. They work with other disciplines to develop economical and pragmatic solutions to prevent occupational illness, injury, and death.

1-7. Program outline

a. Resources. Implementation of the IH program is contingent upon certain resources such as money, manpower, and materials. Chapter 3 describes these functional and technical program resources.

b. Elements. The essential elements of an IH program include:

- (1) Health hazard anticipation, recognition, evaluation, and control (chap 4).
- (2) Quality assurance (chap 5).
- (3) Recordkeeping (chap 6).
- (4) Worker education (chap 7).

c. Relationships. In addition to implementing the elements of the IH program, IH also supports and cooperates with other Army programs such as Safety, OH, and Environment to protect the health of the worker (chap 7).

1-8. Standards

Standards applicable to the DA OSH program are noted below. Industrial hygienists must use the information contained in 29 CFR 1910 and the documentation of other standards to evaluate employee exposure to hazardous chemical, biological, and physical agents. Where OSHA permissible exposure limits (PELs) exist, they must be used. The other standards described below, except for those published in U.S. Army Medical Department (AMEDD) policy documents, are subject to the application of professional IH judgment. The written record of the IH evaluation must contain the justifications for any deviations from the non-OSHA standards described below.

a. Occupational Safety and Health Administration standards. The OSHA standards are enforceable by law and apply to DA workplaces that are comparable to that of the private sector. The OSHA regulates health hazard exposures with PELs. Some standards such as those for lead, asbestos, and chemical hygiene mandate medical surveillance, controls, records, notification, and other actions, in addition to PELs.

b. National consensus standards. Consensus standards, such as those of the American Conference of Governmental Industrial Hygienists (ACGIH), should be applied to DA workplaces that are comparable to the private sector; however, they are not enforceable by law. The ACGIH uses threshold limit values (TLVs)TM to manage health hazard exposures. Because consensus standards do not have to undergo the full public comment and response process before use, they are usually more current and reflect the state-of-the-art in the scientific/medical application of health-based exposure standards. The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL.

c. Military-unique standards. The DA has many unique operations in research, munitions, and chemical demilitarization which neither OSHA nor ACGIH cover. To regulate these operations, DA develops military-unique standards such as DODI 6055.1.

d. Alternate standards. In those rare instances when neither OSHA, ACGIH, nor military-unique standards exist, DA endorses appropriate professional IH use of alternate standards such as those developed by the—

- (1) National Institute for Occupational Safety and Health.
- (2) U.S. Environmental Protection Agency.
- (3) U.S. Department of Transportation.
- (4) Chemical/substance manufacturer.
- (5) American Society of Heating, Refrigerating and Air Conditioning Engineer.
- (6) American National Standards Institute (ANSI).
- (7) Department of Housing and Urban Development for lead dust levels to be applied in the lead abatement program.

e. Threshold limit values. TLVTM is a registered trademark of the American Conference of Governmental Industrial Hygienists, Cincinnati, Ohio. Use of trademarked names does not imply endorsement by the U.S. Army but is intended only to assist in identification of a specific product.

Chapter 2 Implementation

2-1. Implementing functions

a. The Surgeon General (TSG) implements—

- (1) DA operational and administrative policies.
- (2) Personnel policies for IH professionals and technicians per AR 600-3 and provides guidance regarding career development, career programs, referral, and all personnel matters. (See Civilian Personnel Career Management, Army Civilian Training, Education and Development System (ACTEDS) Plan, Industrial Hygiene.)

- (3) Development of policy on credentialing and privileging.
- b. The Commander, U.S. Army Medical Command; Command Surgeons; Chief, U.S. Army Corps of Engineers; Director, U.S. Army National Guard; and the Commander, U.S. Army Reserve Command implement—
 - (1) Management of all aspects of command implementation of TSG's policies pertaining to the IH program.
 - (2) Quality assurance (QA) standards for operating IH programs described in chapter 5.
 - (3) Operation of a command IH credentialing/privileging system.
- c. The Commanders at all other levels must provide a safe and healthful workplace for all employees.
- d. The Installation Medical Authority (IMA) implements—
 - (1) Provision of IH services to all Department of Defense (DOD) civilian and military personnel in the geographical area of responsibility.
 - (2) Sufficient budget and personnel to accomplish the IH program objectives.
 - (3) Professional-level training for industrial hygienists and technicians. (See para 3-1b(3).)
 - (4) Adequate office, storage and laboratory space for the IH program. (See para 3-3.)
 - (5) Review and approval of the IH program document before publication. (See para 3-8.)
- e. The installation AMEDD industrial hygiene program manager (IHPM) (or equivalent U.S. Army Corps of Engineers, U.S. Army National Guard, and U.S. Army Reserve personnel) implements—
 - (1) Requests for technical and managerial assistance from the supporting activity when needed. (See para 2-2.)
 - (2) IH program staff of qualified, credentialed, and privileged personnel. (See para 3-1.)
 - (3) Proper training for IH personnel before performing duties. (See para 3-1b(3)(c).)
 - (4) Proper selection and ordering of survey equipment and supplies. (See para 3-2.)
 - (5) A prioritized budget plan and participates in the budgeting process. (See para 3-4.)
 - (6) Development, monitoring, and reporting performance indicators to show program effectiveness.
 - (7) IH personnel to—
 - (a) Maintain and use the Defense Occupational and Environmental Health Readiness System-Industrial Hygiene (DOEHRS-IH). (See para 3-7a.)
 - (b) Enter survey data in the DOEHRS-IH. (See para 4-7.)
 - (c) Enter health hazard evaluation data in the DOEHRS-IH per paragraph 4-11.
 - (8) Development and use of an industrial hygiene implementation plan (IHIP) to manage IH services that reflect priorities and resources. (See para 3-6.)
 - (9) The annual revision and publishing of the program document.
 - (10) The necessary reference materials for the IH program. (See para 3-8.)
 - (11) The development and coordination of installation regulations, supplements to ARs, or other applicable documents to define the IH program and delegate responsibility. (See para 3-8.)
 - (12) Evaluations of health hazards and operations per paragraphs 4-8 and 4-9.
 - (13) Assignment of health risk assessment codes (RACs) per paragraph 4-10 and appendix D.
 - (14) Recommendation of health hazard controls per paragraphs 4-15 and 4-16.
 - (15) Oversight of the credentialing, supervising, and licensing of the IH program staff per paragraph 5-4.
 - (16) A member of a QA committee to credential installation industrial hygienists to perform IH duties. (See para 5-4a(3).)
 - (17) Oversight of equipment calibration practices and the documentation of equipment calibrations. (See para 5-5.)
 - (18) Development of standing operating procedures (SOPs) for IH practices.
 - (19) Verification that IH data meet the legal requirements of OSHA per paragraph 5-7.
 - (20) Support of the design review process per paragraph 5-8.
 - (21) Assessment of the IH program annually per paragraph 5-9.
 - (22) The maintenance of IH records per chapter 6.
 - (23) Coordination with installation staff members to facilitate the IH program and to ensure the fulfillment of IH roles in other Army programs. (See chap 7.)
 - (24) Review of statements of work, requests for proposals, purchase orders, and support agreements to address OH/IH concerns. (See paras 7-28 and 7-29.)
 - (25) Coordination with the Safety Office to provide hazard communication (HAZCOM) training. (See paras 7-3, 7-7, and 7-19.)
- f. Supervisors implement practices and policies to ensure worker health and safety.
- g. All DA military and civilian personnel and contractor personnel working within government facilities are obligated to comply with OSHA standards by—
 - (1) Reporting unsafe or unhealthful working conditions as soon as possible to the supervisory chain or directly to the servicing safety office.
 - (2) Using engineering controls developed and installed to eliminate or mitigate potentially hazardous exposures.

- (3) Using issued personal protective equipment (PPE).
- (4) Adhering to provided OSH SOPs or guidelines.
- (5) Attending HAZCOM and other health hazard education training when scheduled.
- (6) Participating in workplace assessments by wearing personal sampling equipment.

2-2. Support for industrial hygiene services

The Regional Medical Commands, Medical Department Activity (MEDDAC) or health clinic IH staff located at the installation usually provides initial IH services. When the IH services required are beyond the technical capability or available resources of the local IH staff that support installations, the IHPM—

- a. Writes a memorandum to request services.
- b. Forwards the request through command channels (see AR 40-5, chap 1) to the subordinate command or to Commander, U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). Table 2-1 contains the supporting activities for all IH issues.

Table 2-1
Supporting activities for industrial hygiene issues

Organization	Address	Area Served
USACHPPM	Commanding General USACHPPM ATTN: MCHB-TS-O Aberdeen Proving Ground, MD 21010-5403	Worldwide support to laboratories listed below
USACHPPM-North	Commander USACHPPM-North ATTN: MCHB-AN-IH FT Meade, MD 20755-5225	Connecticut, Delaware, District of Columbia, Eastern Kentucky, Indiana, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia
USACHPPM-South	Commander USACHPPM-South ATTN: MCHB-AS-IH 1312 Cobb St. SW FT McPherson, Georgia 30330-1075	Alabama, Arkansas, Florida, Georgia, Western Kentucky, Louisiana, Mississippi, Oklahoma, Panama, Puerto Rico, South Carolina, Tennes- see, Central and Eastern Texas
USACHPPM-West	Commander USACHPPM-West ATTN: MCHB-AW-IH Box 339500 MS 115 FT Lewis, Washington 98433-9500	Alaska, Arizona, California, Colorado, Idaho, Illi- nois, Iowa, Kansas, Michigan, Minnesota, Mis- souri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oregon, South Dakota, West Tex- as, Utah, Washington, Wisconsin, and Wyoming
USACHPPM-Europe	Commander USACHPPM-Europe ATTN: MCHB-AE-MIH CMR 402 Landstuhl, Germany APO AE 09180	Europe, Africa, Middle East, and Western Asia
USACHPPM-Pacific	Commander USACHPPM-Pacific ATTN: MCHB-AJ-TOI Camp Zama Japan APO AP 96343-5006	Hawaii, Japan, Korea, Okinawa, Philippines, Thailand, and the other countries of the Far East

Chapter 3

Program Resources

Section I

Functional Resources

3-1. Manpower

a. *Staffing.* The quality of the individual professionals charged with managing and implementing DOD OSH policy ultimately determines the success of the IH program. The IHPM strives to operate with adequate numbers of credentialed and privileged staff by—

(1) Using the IHIP (para 3-6) to document program requirements, workload, and work backlog to estimate manpower requirements.

(2) Recruiting, developing, and maintaining industrial hygienists to fill all authorized professional positions.

(3) Encouraging professional certification of individuals seeking to acquire or maintain professional qualifications.

b. Qualifications of program personnel.

(1) Selection criteria for civilians.

(a) The Office of Personnel Management Handbook Quality Standards describes the qualifications for each civilian general schedule (GS) job series. (GS-690 is the industrial hygienist position, and GS-640 and 698 are the IH technician positions.)

(b) The Civilian Personnel Office (CPO) uses the current edition of the Federal Personnel Manual, Chapters 335 and 338 to identify the best qualified from among the minimally qualified candidates.

(2) Selection criteria for military personnel. DA PAM 611-21 describes the commissioned officer's qualifications according to the specialty skill identifier, and the qualifications of enlisted personnel according to military occupational specialty codes.

(3) Training.

(a) As a minimum, the IMA will support sufficient training as defined in the ACTEDS for civilian and military officers acting as industrial hygienists and technicians to acquire and maintain competency.

(b) Supervisors and employees will use the individual development plan and performance management system to schedule annual training to fulfill requirements. (See AR 690-400.)

(c) The IHPM requires that IH personnel receive proper training before performing duties when regulatory standards or the credentialing system (see para 5-4) require specific training.

(d) The IHPM ensures that all training received by IH personnel is documented.

3-2. Survey equipment

The specific industrial operations at an installation determine the type of survey equipment required. For guidance on selecting survey equipment contact Commanding General, USACHPPM, ATTN: MCHB-TS-OFS, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403. Appendix B lists equipment requirements. The IHPM may find buyer's guides helpful in selecting and ordering survey equipment.

3-3. Facilities

The IMA will provide adequate office, storage, laboratory space, and transportation for the IH program. Facilities must be of adequate quality and size and must be suitably located to allow the performance of IH functions. Laboratory space is necessary primarily for user-performed maintenance, function testing, calibration, and equipment storage. Laboratory requirements depend on the type of equipment used and procedures performed.

3-4. Funding

The IHPM has the responsibility of—

a. Preparing a prioritized budget based on personnel availability and programmed services. The budget should cover all appropriate areas including personnel costs, training, travel costs, equipment and supply needs, capital requirements (Medical Care Support Equipment Program), contracts (laboratory analysis, calibration, and/or maintenance), and administrative needs (printing or reproduction).

b. Submitting the budget plan through command channels during the normal budgeting process and participating in the budgeting process. Table 3-1 depicts a sample IH budget plan.

c. Considering supplemental means of funding the organizational budget. Installation commanders and tenant activities may fund IH efforts for travel duty, specialized training, specialized equipment, personnel costs (temporary, overhire, or authorized), or laboratory costs.

Section II

Technical Resources

3-5. Program document

a. The program document is a formal publication that—

(1) Broadly defines the IH program's mission in relation to the local commander's, U.S. Army Medical Command's (MEDCOM's) or equivalent, and Office of The Surgeon General's (OTSG's) missions.

(2) Describes how the program's goals and objectives will be implemented with existing resources.

b. The IHPM completes the program document and updates annually. The IHPM may include the IH program document as a chapter or appendix to the overall preventive medicine program document, if it exists.

c. The IMA reviews and approves the IH program document.

3-6. Industrial hygiene implementation plan

a. To implement the program document, the IHPM must develop an IHIP. The IHIP is a living document, which schedules IH activities for a rolling 1-year period. The IHPM uses it to manage the systematic accomplishment of the prioritized IH activities, but not limited to, service requirements. These requirements are determined by assessing customer needs, obtaining commander's safety and OH emphasis, and reviewing OSHA regulations.

b. The automated data manipulation and retrieval features of the DOEHRS-IH allow the IHPM to transfer the database to word processing and then to help construct the IHIP.

c. The IHIP should include, as a minimum, the—

- (1) List of potentially hazardous operations.
- (2) Health hazards present at each operation.
- (3) Priority action code (PAC) assigned to each health hazard.
- (4) Industrial hygiene evaluations necessary for each health hazard.
- (5) Worksites scheduled for evaluation.
- (6) Completed evaluations.
- (7) Amount of time needed to complete the evaluation.
- (8) Risk assessment codes assigned to the operation.

d. Additional items included in the IHIP may increase its utility. Such items may include—

- (1) A remarks section.
- (2) The air sampling media and flow rate.
- (3) A list of—
 - (a) Equipment needed for each evaluation.
 - (b) Personnel assigned to complete the evaluations.
 - (c) Meetings, committee representatives, and training.

3-7. Defense Occupational and Environmental Health Readiness System-Industrial Hygiene

The DOEHRS-IH is a computer software program that automates the data needed to operate the IH program efficiently; provides exposure-based occupational healthcare support; and provides a historical record.

a. *Mandatory use requirement.* The maintenance and use of the DOEHRS-IH is mandatory for all DA IH personnel who identify and evaluate OH hazards.

b. *General functions and capabilities.* The IH module of the DOEHRS-IH—

- (1) Facilitates accomplishment of the IH program mission by allowing the industrial hygienist to—
 - (a) Identify personnel potentially exposed to workplace health hazards.
 - (b) Prioritize the evaluation of health hazards.
 - (c) Monitor control implementation for health hazard abatement.
 - (d) Identify and record which health hazards (due to exposure potential, number exposed or legal requirements) should be the target of IH operations.
 - (e) Provide TSG and other command and staff elements (such as the safety office) with information on industrial operations, exposures, and engineering controls.
 - (f) Defend and justify resource requirements (that is, manpower, equipment, and training).
 - (g) Access sampling and monitoring information to develop an IHIP.
 - (h) Provide a cross-reference for the installation's Environmental or Safety Office to locate potentially hazardous chemicals and products.
 - (i) Maintain equipment calibration records.
- (2) Provides data to the medical information module of the DOEHRS for occupational healthcare personnel to determine medical surveillance and other healthcare needs.

c. *Future innovation.* The DOEHRS-IH is a dynamic system and other IH program elements will be integrated in the system as they evolve, based on end-user input. End users are encouraged to submit ideas for improvement to Commanding General, USACHPPM, ATTN: MCHB-TS-OIM, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403.

3-8. Installation documents, regulations, and supplements

The IHPM could develop installation-level SOPs to define IH activities or responsibilities such as air monitoring or noise surveys. Installation-level documents (regulations or SOPs) detail to the IHPM how the installation operates. These documents may contain references to the IH program and its services. Therefore, the IHPM should review installation regulations and supplements to ARs and other applicable documents for IH input.

**Table 3-1
Sample FYXX Industrial hygiene budget plan**

Item	Quantity	Cost per Item	Total
MEDDAC FUNDING			
1. Analytical laboratory service	100 samples	\$95	\$9,500
2. Attend American Industrial Hygiene Association (AIHA) conference	1 person	\$1,500	\$1,500
3. Detector tubes	10 boxes	\$35	\$350
4. Sample media	3 pkg filters	\$25	\$75
5. Sampling pumps	2	\$500	\$1,000
6. Filters for gas analyzers	2	\$300	\$600
7. Labor budget per staffing authority and overhead	2 Industrial Hygienists	\$70,000	\$140,000
		Subtotal	\$153,025
SUPPLEMENTAL FUNDING			
1. Laboratory costs for tenant	50 samples	\$95	\$4,750
2. Labor costs for sampling	150 hours	\$15	\$2,500
3. Local travel for tenant	200 miles	\$0.32	\$64
4. Special training	1 person	\$1,000	\$1,000
		Subtotal	\$8,314
UNFUNDED REQUIREMENTS			
1. Attend AIHA conference	1 person	\$1,500	\$1,500
2. Lead-Paint detector	1	\$2,500	\$2,500
3. Laser printer	1	\$1,500	\$1,500
4. Certified IH exam software	1	\$250	\$250
5. Publications	5	\$50	\$250
6. Unfunded labor costs	1 IH Technician	\$20,000	\$20,000
		Subtotal	\$26,000
		TOTAL	\$196,839

Chapter 4 Hazard Anticipation, Recognition, Evaluation, and Control

Section I Hazard Anticipation

4-1. Definition of industrial hygiene

a. The Army adopts the AIHA's and ACGIH's definition of IH. These organizations define IH as the science and art devoted to the anticipation, recognition, evaluation, and control of those environmental factors and stresses associated with work and work operations that may cause sickness, impaired health and well being, significant discomfort, and inefficiency among workers or among the citizens of the community.

b. This chapter describes the fundamental processes of IH: hazard anticipation, recognition, evaluation, and control.

4-2. Flow of actions

Figure 4-1 depicts the sequential flow of actions through the processes of hazard anticipation, recognition, evaluation, and control.

4-3. Background

Use all available sources of information (documents, design review, planning committees, worker interviews) to foresee if a new or modified work operation or process could pose a health threat.

Section II Hazard Recognition

4-4. Survey frequency and scope

a. Recognizing existing and potential hazards is a step towards improving health and safety in the workplace.

b. The 29 CFR 1960, AR 385-10, and AR 40-5 require the annual inspection of workplaces by OSH personnel who are qualified to recognize and evaluate hazards. The IHPM ensures that this annual workplace survey documents the IH aspects, such as—

(1) Chemical, physical, biological, and ergonomic hazards inherent to each activity. (See glossary.)

(2) Existing measures employed to control exposure to the hazard.

c. In situations where non-IH personnel have received appropriate training and privileging, such collateral duty personnel may perform the workplace survey and identify hazards under the pervue of a credentialed IH. The industrial hygienist, however, is ultimately responsible for the evaluation and recommendation of controls for the identified hazards.

4-5. Recording survey data

Industrial hygiene personnel record the survey information using guidance provided in the most current edition of the DOEHS-IH User's Manual. To obtain copies of the guide write to Commanding General, USACHPPM, ATTN: MCHB-TS-OIM, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403.

4-6. Assigning priority action codes

a. Once workplace hazards are recognized, IH personnel assign PACs to each hazard. The most current edition of the DOEHS-IH User's Manual describes the method for assigning PACs.

b. The IHPM uses the PACs to manage workload by scheduling evaluations of hazards. Give precedence to the worst-case health hazards. One operation may have several different hazards associated with it. Therefore, the IHPM must somehow prioritize these hazards for evaluation. The PACs are a method for this prioritization.

c. The IH personnel integrate the relative importance of the following criteria as the basis for each hazard's PAC assignment:

- (1) Regulatory requirements.
- (2) Toxicity.
- (3) Quantity.
- (4) Potential for entry and action of the toxic material to the body.
- (5) Frequency and duration of use.
- (6) Engineering and administrative controls employed.

4-7. Entering survey data in the DOEHS-IH

Once IH personnel survey the workplace and assign PACs, the IHPM must ensure that the survey data are entered in the installation's DOEHS-IH.

Section III Hazard Evaluation

4-8. Purpose and scope

a. Health hazard evaluations are the foundation on which the OH program is built. Health hazard assessments identify and quantify all potential and actual health hazards. A comprehensive health hazard assessment requires the IHPM to collect both qualitative and quantitative data. The IHPM uses this data to assess the effectiveness of protective equipment, administrative controls and engineering controls. Health hazard assessments also provide occupational medicine personnel with data to develop an effective medical surveillance program.

b. Following the IHIP's (or order of accomplishment) established priorities (PACs), the IHPM ensures that—

(1) Each operation performed on the installation is analyzed to evaluate and document all worker exposures, both potential and/or real. Documentation of exposures includes qualitative and quantitative assessment.

(2) A sampling strategy is developed that includes both recognized qualitative and quantitative protocols to provide statistically significant exposure data. Breathing zone, ventilation and noise measurements, and other appropriate hazard exposure measurements are performed and documented using the sampling strategy. (USACHPPM Technical Guide (TG) 141 provides instructions for sampling chemical contaminants, and DA PAM 40-501 and USACHPPM TG 181 provide instructions for sampling noise hazards.)

(3) Sampling results are subject to approved statistical analysis to determine data significance. Statistical analysis is used to determine data accuracy and precision and exposure trends. The IHPM must use statistical analysis to both develop sampling strategies and to analyze sample results.

(4) Statistical analysis is not a substitute for professional judgment but is an additional tool used by the IHPM to provide a better health hazard assessment. When exposure conclusions/decisions are obvious, such as during emergencies or when the data obviously indicates an overexposure and/or very low exposures, the application of statistical analysis is not warranted.

4-9. Frequency

Health hazard evaluation is a continuous process. Changes in operations over time may affect levels of exposure to chemical, physical, and biological agents. Therefore, the IHPM should ensure that operations are evaluated to build hazard level and exposure histories for each operation when—

a. The process changes.

- b. Personnel change.
- c. The work rate changes.
- d. Engineering controls degrade or are modified.
- e. Building and structural changes occur.

4-10. Assigning risk assessment codes

Based on the hazard evaluation, the IHPM has the responsibility of—

- a. Assigning either a health and/or a safety RAC (DODI 6055.1) based on the particular operation. (See app D.)
- b. Assigning a RAC to accurately reflect the magnitude of the risk.
- c. Using the sampling data to determine and document the assigned RACs.
- d. Forwarding the RACs to the local Safety Office for inclusion in the hazard abatement plan.

4-11. Entering evaluation data in the DOEHRs-IH

The IHPM enters the following evaluation data in the DOEHRs-IH:

- a. The RAC.
- b. All quantitative assessment data, even if exposure results are negative or below action levels. Data indicating that exposures are below exposure limits are as important as data indicating an overexposure.

4-12. Worker notification

Regardless of outcome, the IHPM notifies, in writing, the workplace supervisor of the assessment results. The supervisor in turn notifies the employees.

4-13. Applications for quantitative exposure data

A database of quantitative exposure data of worker exposure provides input to (see chap 7)—

a. *The OH program.* Quantitative measurements of exposure allow the medical practitioner to determine the appropriate type and frequency of medical surveillance testing needed to monitor and document the physical well being of the worker over the course of employment.

b. *The installation respiratory protection program (AR 11-34).* Quantitative exposure data allow for the proper selection of respiratory protective equipment (RPE). To ensure the recommended RPE remains appropriate for the intended use, continued periodic measurement of the contaminant's exposure levels is necessary.

c. *The installation hearing conservation program.* Quantitative measurements of noise levels allow for the proper selection of hearing protective devices. Continued measurements of noise hazardous operations are necessary to ensure that hearing protective devices are appropriate for the intended use (DA PAM 40-501 and USACHPPM TG 181).

d. *The installation civilian personnel office.* Quantitative assessments of specific workplace or occupational exposures can assist the personnel specialist in defining job requirements and managing the civilian resource conservation program (chap 7).

e. *The installation safety office.*

(1) Quantitative assessments of exposure and workplace conditions aid the installation safety office in promoting safe work practices and conditions.

(2) Quantitative measurements of exposure aid in managing the hazard abatement program by prioritizing—

(a) Funds for implementing hazard controls (see para 4-11).

(b) Work areas and operations for the implementation of hazard controls.

f. *The workplace supervisor.* Quantitative assessments of exposure and workplace conditions aid supervisors in correcting unsafe working conditions, enforcing safe work practices, and scheduling employees for HAZCOM and other training.

Section IV

Hazard Control

4-14. Introduction

When a chemical, physical, or biological hazard cannot be eliminated from the workplace, worker exposure can be controlled through engineering controls, administrative controls, and lastly, through PPE. The IHPM recommends the appropriate control, often consulting with area supervisors, facility engineers, safety, or other health professionals and monitors the implementation of the recommended controls.

4-15. Engineering controls

The implementation of engineering controls is the primary means of controlling worker exposure to the hazard. The type of engineering control and the status of that control should be entered in the DOEHRs-IH. Engineering controls may include—

- a. Substitution of processes or materials.
- b. Local exhaust ventilation.
- c. Barriers or structures that separate or isolate the worker(s) or the process.
- d. Redesign of the equipment or process.

4-16. Administrative controls

a. Administrative controls are a means of limiting worker exposure. Administrative controls may include—

(1) Rotating workers throughout the various tasks during the working day to limit exposure to any individual worker.

(2) Limiting the duration of an operation performed.

b. The 29 CFR 1910 prohibits the implementation of administrative controls solely to maintain the contaminant exposure of each worker below the PEL. The IHPM should consult specific OSHA standards prior to recommending administrative controls.

4-17. Personal protective equipment

The PPE is a secondary means to controlling exposure to a hazard under the following conditions:

a. When the implemented engineering controls will not sufficiently reduce or eliminate employee exposure.

b. When engineering controls are technologically unfeasible. (Note: Insufficient funding is not a valid reason for not implementing engineering controls.)

c. Before installing engineering controls.

ANTICIPATION

RECOGNITION

EVALUATION

CONTROL

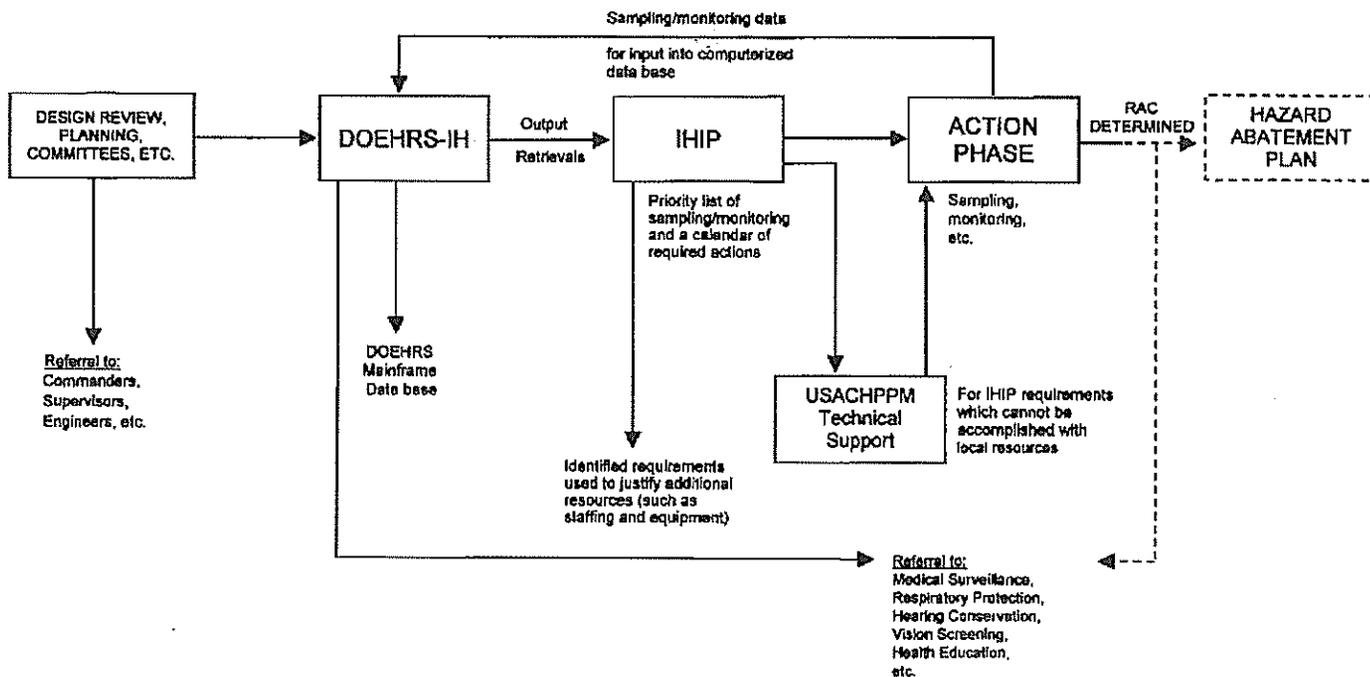


Figure 4-1. Flow of the Industrial Hygiene Program

Chapter 5 Quality Assurance

5-1. Scope

The MEDCOM depends on the major command IH staff officer and the local IHPM to implement QA measures, such as—

- a. Upholding the standards of conduct and code of ethics and maintaining certification/licensure for IH personnel.
- b. Credentialing, privileging, and supervising IH personnel (assuring that qualified individuals are performing program functions).
- c. Verifying equipment calibration to assure the accurate quantitative measurement of health hazards.
- d. Using accredited IH laboratories to verify accurate analysis of data.
- e. Verifying data that assures the accuracy and completeness of data prior to inclusion in the DOEHS-IH.
- f. Reviewing plans and designs to monitor the adequacy of engineering controls.
- g. Conducting self-audits and participating in external audits to assess the effectiveness of the IH program.

5-2. Standards of conduct

All IH personnel are personally responsible for adhering to the standards of conduct per DODD 5500.7.

5-3. Code of ethics

All IH personnel must adhere to the professional goals outlined by the AIHA, Membership Directory, Who's Who in Industrial Hygiene, most current edition. (See fig 5-1.)

5-4. Credentialing, privileging, supervising, and certification/licensing of industrial hygiene personnel

a. Credentialing/privileging.

(1) The practice of IH is directly related to the delivery of appropriate patient care services and employee health. The IH information pertaining to hazardous substance exposure, work practices, PPE, and engineering controls is essential for the occupational healthcare provider to—

- (a) Implement medical surveillance.
- (b) Prescribe job restrictions.
- (c) Provide employee health education.
- (d) Diagnose occupational illness and make treatment decisions based on exposure information.

(2) There are few Federal or state legal requirements governing the general practice of IH. The current Office of Personnel Management standards for a GS-690 industrial hygienist do not ensure referral of individuals who are qualified to competently practice the discipline to Army standards. However, competent quality services can be delivered if the industrial hygienist participates in a credentialing program to review formal education, training, and experience.

(3) The major command IH staff officers and local IHPMs using the general guidance in the Civilian Personnel Career Management, ACTEDS-IH will be able to administer an IH credentialing/privileging program.

b. *Supervision.* IH technicians and collateral duty personnel may perform IH operations. These operations must be monitored by a credentialed IH.

c. *Certification/licensing.* All IH personnel will also maintain current licensure and/or certification according to regulatory and professional requirements. The MEDCOM will support acquisition and maintenance of certification and licensing needed for credentialing of IH personnel.

5-5. Verification of equipment calibration

a. To obtain reliable quantitative data, equipment used requires operational and periodic calibration. Operational calibration is usually performed before and after the use of equipment. Periodic calibration is performed on very stable types of equipment at least annually or depending on equipment use and manufacturer recommendation.

b. The IHPM—

- (1) Ensures that the Army calibration system is practiced per AR 750-43.
- (2) Ensures that calibrations are based on a method traceable to a recognized authority, such as the National Institute of Standards and Technology.
- (3) Allows manufacturer and/or contract calibration facilities to calibrate equipment only if their methods meet traceability and calibration standards.
- (4) Ensures that complete records of calibrations are maintained per AR 25-400-2.

(5) Ensures that documented data and cross-reference values conform to nationally/internationally accepted QA practices.

(6) Ensures that a calibration SOP is developed incorporating manufacturer's instructions.

5-6. Industrial hygiene laboratories

The IHPM should use only those laboratories that meet AIHA accreditation. All IH and laboratory personnel must follow chain-of-custody procedures, because IH data are potentially subject to legal proceedings.

5-7. Data verification

The IH data are used for patient care decisions and legal proceedings, and the IHPM must—

a. Verify that the data entered in the DOEHS-IH are an accurate and complete record of the identification and evaluation of health hazards. Additional safeguards, such as chain-of-custody, may be necessary for IH data likely to be involved in legal proceedings, such as exposure sampling done after personal injury or death.

b. Review data obtained from other sources such as technicians, safety professionals, collateral duty personnel, and contractors before inclusion in the DOEHS-IH database.

5-8. Plans and design review

The design review process allows the IHPM to monitor the adequacy of proposed or modified OH engineering controls. The IHPM makes recommendations for corrections before implementing controls to avoid waste and delay in the design review process.

5-9. Program assessment

a. The IHPM will perform an annual self-audit of the IH program using guidance provided in USACHPPM TG 165. The results of this audit are used to recognize and target weaknesses and to make plans for improvement. The command industrial hygienist/staff officer may request audit results.

b. The USACHPPM provides external assessments of local programs per the request of the IHPM or the command industrial hygienist. For assistance on external assessments, contact Commanding General, USACHPPM, ATTN: MCHB-TS-OIM, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403.

c. Results of self-audits and external assessments are used to identify Army-wide IH program strengths and weaknesses and to target systemic problems for resolution.

PURPOSE:

This code provides standards of ethical conduct to be followed by industrial hygienists as they strive for the goals of protecting employees' health, improving the work environment, and advancing the quality of the profession. Industrial hygienists have the responsibility to practice their profession in an objective manner following recognized principles of IH, realizing that the lives, health, and welfare of individuals may be dependent upon their professional judgment.

RESPONSIBILITY TO PROFESSIONAL INDUSTRIAL HYGIENISTS:

1. Maintain the highest level of integrity and professional competence.
2. Be objective in the application of recognized scientific methods and interpretation of findings.
3. Promote IH as a professional discipline.
4. Disseminate scientific knowledge for the benefit of employees, society, and the profession.
5. Protect confidential information.
6. Avoid circumstances where compromise of professional judgment or conflict of interest may arise.

RESPONSIBILITY TO EMPLOYEES:

1. Recognize the primary responsibility of an industrial hygienist is to protect the health of employees.
2. Maintain an objective attitude toward the recognition, evaluation, and control of health hazards regardless of external influences, realizing the health and welfare of workers and others may depend upon the industrial hygienist's professional judgment.
3. Counsel employees regarding health hazards and the necessary precautions to avoid adverse health effects.

RESPONSIBILITY TO EMPLOYERS AND CLIENTS:

1. Act responsibly in the application of IH principles toward the attainment of healthful working environments.
2. Respect confidences, advise honestly, and report findings and recommendations accurately.
3. Manage and administer professional services to ensure maintenance of accurate records to provide documentation and accountability in support of findings and conclusions.
4. Hold responsibilities to the employer or client subservient to the ultimate responsibility of protecting the health of employees.

RESPONSIBILITY TO THE PUBLIC:

1. Report factually on IH matters of public concern.
2. State professional opinions founded on adequate knowledge and clearly identified as such.

Figure 5-1. Code of Ethics for the Professional Practice of Industrial Hygiene

Chapter 6 Recordkeeping

6-1. Introduction

The IH records are required to meet legal and professional requirements. The IHPM ensures the records are maintained per appropriate Federal regulations (such as 29 CFR 1910.1020, 1915, and 1960, and 40 CFR). Both automated and hard copy records are required.

6-2. DOEHS-IH records

The DOEHS-IH is an automated management information system and is the primary method for maintaining the following records:

- a. Demographic information on workplaces.
- b. Health hazard evaluations.
- c. Existing health hazard control methods.
- d. Recommendations for control implementation and improvement.
- e. Equipment calibration.

6-3. Hard copy records

In addition to records within the DOEHS-IH, some hard copy records must be maintained as they may be required to defend sampling strategies and results. These records include:

- a. Analytical laboratory results.
- b. Equipment calibration records.
- c. Survey officer records.

6-4. Survey files

The IHPM ensures that survey files are maintained per AR 25-400-2. Files may be maintained indefinitely to meet local or regulatory needs. The 29 CFR 1910.1020 specifies additional requirements for sampling data.

Chapter 7 Program Relationships

Section I

The Industrial Hygiene Program Manager's Role in Other Army Medical Department-Proponency Programs

7-1. Occupational medicine and nursing

a. The role of the IHPM in occupational medicine and nursing (AR 40-5) includes:

(1) Collecting data for the DOEHS-IH and transferring data to the Management Information Module per the most current edition of the DOEHS-IH User's Manual.

(2) Professional collaboration between occupational healthcare personnel to resolve specific instances of elevated medical surveillance results by addressing the worksite causes of exposure and entry and action of the particular health hazard generating the concern.

(3) Using the standard Army safety and occupational health inspection to generate comprehensive IH and OH surveys of worksites.

b. The USACHPPM develops and publishes approved OH training materials and can provide specialized training to assist supervisors in training workers about protective measures. Contact Commanding General, USACHPPM, ATTN: MCHB-TS-O, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403 for assistance.

7-2. Hearing conservation

The role of the IHPM in hearing conservation (DA PAM 40-501 and USACHPPM TG 181) includes:

- a. Identifying and evaluating noise hazardous areas and ensuring that areas are demarcated properly.
- b. Maintaining a current listing of noise hazardous areas.
- c. Recommending engineering controls and PPE for workers exposed to excessive noise levels.
- d. Assessing noise levels at workplaces and worker exposure to noise in the workplace.
- e. Providing the names of noise-exposed personnel and the magnitude of their noise exposure to—

- (1) Hearing conservation officer.
- (2) Unit commander or supervisor of the individual.

7-3. Vision conservation

a. The role of the IHPM in vision conservation (TB MED 506) includes:

(1) Documenting eye health hazards, eye protection required and used, the need for illumination, and further assessments during annual evaluations of the workplace.

(2) Recommending eye protection and engineering controls to eliminate or control eye health hazards.

b. Once the information described above is entered into the DOEHRS-IH, the IHPM can easily extract such information and forward it to the vision conservation program manager and Safety Manager. (See para 7-19.)

7-4. Ergonomics

a. Ergonomics is the science of designing the job and the workplace to fit the worker for purposes of reducing worker discomfort and illness due to repetitive motion or repetitive stress injury, thereby maintaining health and increasing productivity.

b. Illness due to repetitive motion or repetitive stress may include, but is not limited to, back strain, chronic low back pain, Raynaud Syndrome and carpal tunnel syndrome.

c. The role of the IHPM in ergonomics includes:

(1) Integrating ergonomic review in the recognition and evaluation phase of the DOEHRS-IH.

(2) Participating with OH and safety personnel and physical or occupational therapists (if available) in the evaluation of operations where ergonomic health hazards may exist.

(3) Incorporating worker input in the development of control recommendations for ergonomic health hazards.

(4) Serving on the installation ergonomics subcommittee. (See AR 40-5.)

(5) Considering work-related musculoskeletal disorders (WMDs) during routine worksite evaluations.

(6) Performing or assisting with in-depth ergonomic assessments as needed.

(7) Assisting in solving problems related to identified WMDs.

(8) Keeping accurate records of identified WMDs and high-risk work areas and solutions. The IH personnel should provide these records to the ergonomics subcommittee for review and tracking. The records will be stored in the DOEHRS-IH once this function is available in the software.

(9) Providing ergonomics training and education for military and civilian personnel. Persons tasked to provide training should obtain refresher ergonomics training to maintain expertise.

(10) Working with medical personnel in the identification of potential WMDs and advising medical personnel on ergonomic changes related to the workstation, tasks, and tools.

7-5. Medical radiation protection

a. The role of the IHPM in medical radiation protection (AR 40-5) includes identifying ionizing and non-ionizing radiation health hazards during annual evaluations and updates of worksites.

b. Once the information described above is entered in the DOEHRS-IH, the IHPM can easily extract such information and forward it to the radiation protection officer. Note: The film badge program that monitors personnel exposure and ionizing radiation is a separate entity and such information should not be duplicated in the DOEHRS-IH.

7-6. Medical treatment facility industrial hygiene

The role of the IHPM in medical treatment facility (MTF) IH includes:

a. Identifying, evaluating, and providing control recommendations for hospital unique exposures, such as waste anesthetic gases (TB MED 510), ethylene oxide, and the chemicals in clinical laboratories.

b. Providing information on the possible mechanism of the spread of infectious agents within MTF work environments. Generally this will involve assessing ventilation systems, evaluating work practices, and instituting engineering and PPE controls. Examples of potential exposure include healthcare and MTF worker exposure to tuberculosis and bloodborne pathogens. (The principles relating to ventilation, protective equipment, and other controls apply to infectious agents as well as chemical contaminants.)

Section II

The Industrial Hygiene Program Manager's Role in Army Medical Department-Supported Programs

7-7. Health hazard communication program (HAZCOM)

a. Of the six required elements of the installation-managed HAZCOM program, the IHPM assists in three: workplace evaluation, training, and the use of material safety data sheets (MSDSs).

(1) Workplace evaluations are a shared responsibility and for the purposes of HAZCOM such evaluations determine the chemicals and the workers to be covered by the program.

(2) The IHPM's participation in HAZCOM training is essential, because IH personnel normally have the most detailed knowledge of health effects related to specific workplace exposure, engineering controls, work practices to limit exposure, and the capabilities and limitations of PPE. The train-the-trainer approach makes efficient use of limited IH resources; however, some situations may require industrial hygienists to train groups of workers.

(3) The IHPM should be involved in the review of MSDSs for locally procured materials, when appropriate. Reviewing the MSDS allows industrial hygienists to—

- (a) Suggest the substitution of less toxic materials.
- (b) Recommend appropriate worksite engineering controls or PPE as appropriate.
- (c) Identify entirely unsuitable uses of chemicals.

b. The 29 CFR 1910.1200 and DODI 6050.5 require training of workers in the skills needed to perform duties in a safe and healthful manner. Training should include all aspects of the job, such as—

- (1) General operational procedures (laying a welding bead).
- (2) Special requirements (using a glass shade to see the welding bead).
- (3) General and specific potentially hazardous exposures and conditions inherent to the job.

c. The IHPMs involved with supervisor and worker health hazard training use various techniques to train workers and supervisors (whether soldier or civilian). These techniques vary according to the local situation. The IHPM may—

(1) Train a cadre of personnel who in turn train others. This technique, called train-the-trainer, is a means to stretching OH manpower and to assisting supervisors in meeting their HAZCOM responsibilities.

(2) Conduct classes at the workplace to train workers directly.

(3) Use the supervisor and worker contact time during the identification and evaluation of potential health hazards to train the operating unit personnel in the—

- (a) Specific physiological action of the suspect health hazards.
- (b) Correct procedures or controls that can mitigate or eliminate potential exposures.

7-8. Respiratory protection

The role of the IHPM in the installation-managed respiratory protection program (AR 11-34) includes:

a. Evaluating workplaces to determine whether workers require respiratory protection and to recommend types of respirators.

b. Providing assistance to the installation respiratory protection specialist by training the installation respirator specialist or technicians in the—

- (1) Capabilities and limitations of respirators.
- (2) Criteria for selecting the proper respirator.
- (3) Use and care of respirators.

7-9. Asbestos management

The role of the IHPM in Corps of Engineer-managed installation asbestos management (TB MED 513 and AR 200-1) includes:

a. Advising government-contracting officials on the preparation and review of contract specifications and proposals for asbestos abatement issues.

b. Providing technical input for the selection of proper methods for abating potential asbestos health hazards.

c. Serving as the principle advisor and consultant (competent person) (29 CFR 1926.1101) to the Asbestos Control Manager and for DA operations involving personnel, to include military and DA civilian, on the installation concerning asbestos abatement projects.

7-10. Standard Army safety and occupational health inspections.

a. AR 40-5, chapter 5 identifies IH responsibilities. The IH mission defined in AR 40-5 will meet the standard Army safety and occupational health inspections (SASOHI) requirements of AR 385-10.

b. The OSHA regulation concerning Federal employees (29 CFR 1960, AR 385-10, and AR 40-5) requires persons qualified through training and experience to identify and evaluate worksite health hazards and to operate monitoring equipment. (See para 4-4.) The industrial hygienist has responsibility for assessing health hazards in DA worksites that have potential chemical, physical or biological health hazards. The role of the IHPM in SASOHI includes:

(1) Performing field surveys to complete the annual SASOHI requirements for all workplaces, which have potentially hazardous chemical, physical, or biological exposures.

(2) Assigning health RACs to operations or chemical, physical, or biological health hazards for inclusion in installation prioritized abatement action plans.

(3) Providing the installation safety officer with DOEHS-IH information and results of field surveys.

7-11. Hazardous and medical wastes

a. The IHPM can assist in ensuring the safe handling and storage of hazardous and medical wastes generated at an installation. The IHPM should be aware of—

- (1) The potential health threats involved in the handling and storage of hazardous and medical wastes.
- (2) The potential for transmission of the human immunodeficiency virus and the hepatitis-B virus from blood products and articles saturated with blood to the hospital housekeeping and healthcare staff. The USACHPPM TG 190 provides guidance on bloodborne pathogens.
- (3) Operations generating potentially hazardous wastes.
- (4) Locations where hazardous waste is stored at the installation.
- (5) The reactivity of non-compatible substances.

b. The role of the IHPM in the handling, transporting, and storing hazardous and medical wastes includes:

- (1) Training employees about the proper work practices needed to reduce potential exposure.
- (2) Ensuring employees have and use appropriate PPE.
- (3) Promoting proper work practices.
- (4) Assisting hazardous waste remediation projects through review of site safety and health plans.

7-12. Indoor air quality

a. Indoor air pollution results from tightly sealed buildings and ventilation systems that provide inadequate fresh air. The reduction of fresh air combined with a myriad of pollutants from poorly maintained heating, ventilation and air conditioning systems, new furnishings, insulation materials, and cigarette smoke increases health-related complaints of workers.

b. The role of the IHPM in assessing indoor air quality includes:

- (1) Prioritizing the evaluation of operations where the potential for non-industrial indoor air pollution exists based on the PAC scheme in the DOEHS-IH.
- (2) Coordinating with the Directorate of Engineering under the auspices of design review to evaluate existing ventilation systems and to recommend improvements.

7-13. Civilian resource conservation program

a. The civilian resource conservation program is the installation commander's program geared towards reducing claims and costs to DA made under the Federal Employees Compensation Act. (At the installation level, the CPO Technical Services Office is usually responsible for administering the Federal Employees Compensation Act.)

b. The CPO routinely coordinates a review of these claims with the safety officer, a command legal representative, and the OH program manager. This claims review board—

- (1) Verifies the accuracy of the claims.
- (2) Identifies trends in types and location of injury and illness.
- (3) Ensures that questionable claims are controverted.
- (4) Identifies areas/workplaces that require additional IH support to prevent future accidents or illnesses.

c. The role of the IHPM in the civilian resource conservation program (CRCP) is to provide sampling data or information collected during site visits to the CRCP subcommittee of the occupational safety and health council. Such information may either support the claim or necessitate its controversion. If no data exists for the particular workplace, the CRCP subcommittee of the OSH council may request that the IHPM sample or survey the operation to provide necessary data.

7-14. Confined space entry

The role of the IHPM in installation-managed confined space entry (29 CFR 1910.146 and ANSI Z117.1-1989) includes:

- a. Assisting in the selection of RPE and other PPE for operations in confined spaces.
- b. Identifying confined spaces in the DOEHS-IH.
- c. Monitoring confined spaces, upon request, for the presence of chemical contaminants at potentially toxic levels (such as hydrogen sulfide, carbon monoxide, nuisance dusts, methane gas, and other contaminants). Alternatively, supervisors and workers who frequently enter confined spaces can be trained to operate monitoring equipment.
- d. Assisting in other duties associated with confined spaces, such as training.

7-15. Health hazard assessment program

a. The IH consultants at the OTSG, USACHPPM, and some installations participate in the health hazard assessment process for equipment identified for long-term procurement by the Army.

b. AR 40-10 delineates the role of IH in the health hazard assessment process for OTSG and USACHPPM. The role of installation IH assets is, however, less defined.

c. The industrial hygienists and environmental science personnel requested to participate in Manpower and Personnel Integration (MANPRINT) Joint Working Groups must contact Commanding General, USACHPPM, ATTN: MCHB-TS-OHH, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403 for guidance.

d. All requirement documents must be staffed with the U.S. Army Medical Department Center and School for input to the health hazard assessment process. The U.S. Army Medical Department Center and School, Combat and Doctrine Developer, is the first line reviewer of System MANPRINT Management Plans for nondevelopment item developmental and materiel changes. They provide health hazard input to System MANPRINT Management Plans, operation requirements document and mission needs statements.

e. The IHPM must schedule IH and environmental science personnel who perform health hazard assessments (HHAs) or support the MANPRINT process to attend the HHA and MANPRINT officer course. Contact Commanding General, USACHPPM, ATTN: MCHB-TS-OHH, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403 for course information and schedules.

7-16. Chemical surety program

a. The role of the IHPM in support of chemical surety program on installations is broad and should be tailored according to chemical agent operations performed at each site. The IHPM will work with the installation chemical officer to assist in providing a healthful environment for personnel working with chemical agent and munitions as well as for people in the surrounding community.

b. The U.S. Army Safety Center is developing documents that contain detailed aspects of IH involvement in chemical agent operations.

Section III

Coordination for Industrial Hygiene Program Effectiveness

7-17. Higher command and staff

The MEDDAC/medical center industrial hygienists have a relatively unique position with many of the installation's staff and operational personnel on many occupational and environmental health issues. Open and complete communication is necessary to have and maintain an effective IH program. Higher command and staff can provide clarification in policy or specific guidance for the IHPM. Local directives may specify procedures for communicating with commands and staff.

7-18. Commanders

a. Command support is essential for the success of the IH program. Therefore, the IHPM should—

(1) Keep the commander informed of the IH program staff's duties, abilities, and accomplishments.

(2) Ensure that the commander is aware of how the IH program reduces costs and prevents occupational illness and injury.

b. Implementation of an effective IH program depends on the cooperation of unit commanders and supervisors. The IHPM should provide support and guidance to these individuals to ensure that health hazard control measures are implemented.

7-19. Safety office

a. The IHPM can work in partnership with the installation or supporting safety office to provide an effective safety and OH program that includes—

(1) The recognition of workplace health hazards and the referral of suspected health hazards.

(2) Coordinating and implementing IH recommendations for abatement or control of health hazards.

(3) Ensuring compliance with IH recommendations and exposure requirements.

b. The installation safety office uses information provided by the IHPM to—

(1) Correctly identify and assess workplace hazards.

(2) Establish safety RACs for abatement priorities and funding of engineering controls to abate OSH violations.

c. The IHPM and the safety office can work together to provide effective training.

7-20. Occupational safety and health committee

The installation OSH committee can serve as a mechanism to market and emphasize the IH program and policies, since all installation staff offices and tenant activities are represented and all are responsible for the health and safety of their employees.

7-21. Public affairs officer

The IHPM should coordinate with the public affairs officer, who can—

a. Assist in promoting education and publishing training information through the post paper, weekly bulletin, and proponent branch publications.

b. Act as a liaison with outside agencies and communication avenues (newspapers, television, and radio) outside DOD for the marketing and advertising of IH accomplishments and capabilities.

7-22. Radiation protection officer

The IHPM should coordinate with the radiation protection officer to discover the location and use of ionizing and nonionizing radiation producing equipment and operations involving radioactive materials.

7-23. Director of public works

a. The IHPM requires the information and service provided by Director of Public Works and Director, Installation Support to effectively manage and implement the IH program. The Director of Public Works and Director, Installation Support—

(1) Control all real property, perform maintenance, and implement IH recommendations to control health hazards. This includes:

(a) Designing new facilities and modifying existing facilities.

(b) Managing the installation asbestos management program, the radon program, and waste disposal for the installations, including hazardous waste.

(2) Implement controls required to abate other OSH hazards.

b. The IHPM aids supervisors, the Director of Public Works, and other responsible parties in ensuring the effectiveness of health hazard controls by—

(1) Evaluating the effectiveness of new and existing controls (including ventilation systems).

(2) Participating in the design review process for proposed new systems and modifications of existing systems.

(3) Reviewing purchase requests for new types of PPE, especially RPE.

(4) Evaluating technology improvement projects for equipment, processes, and materials.

7-24. Environmental coordinator

The IHPM should coordinate with the environmental coordinator to provide technical assistance relating to human health effects, PPE requirements, and MSDS interpretations relating to the execution of solid and hazardous waste and air pollution and wastewater programs. (The environmental coordinator may be part of the engineering office or staff who is responsible for the management of all environmental programs.)

7-25. Pest management officer

a. The pest management officer can provide the IHPM with information concerning the location and use of pesticides.

b. The IHPM can provide the pest management officer with—

(1) The evaluation of potential pesticide exposure.

(2) The expertise in recommending and implementing engineering controls and PPE to reduce risk.

7-26. Civilian personnel officer

a. The IHPM can work with the civilian personnel officer, who can—

(1) Assist the IHPM with internal staffing (such as, recruiting) to ensure a fully qualified IH staff.

(2) Define specific requirements for job descriptions based on health hazard evaluation information. (For example, employees whose duties require a respirator must be clean-shaven.)

b. The IHPM can provide the civilian personnel officer with—

(1) Health information for job classifications.

(2) Health hazard evaluation information in support of Federal Employee Compensation Act claims.

c. The IHPM can assist in evaluating employees' claims for environmental differential pay/hazard differential pay.

7-27. Director of logistics

a. The Director of Logistics is the primary contact for installation activities when requesting the procurement of hazardous materials. Therefore, the IHPM's close coordination can prevent the acquisition/procurement of unnecessary hazardous materials by suggesting substitutions or providing early warning for needed controls.

b. The Director of Logistics is also responsible for requesting and ensuring receipt of MSDSs for hazardous materials, which provide chemical health hazard information for use during workplace health hazard information.

7-28. Director of contracting

The IHPM coordinates with Director of Contracting to—

a. Forward MSDSs to the IHPM for review.

b. Provide interpretation of MSDSs.

c. Provide IH input for any industrial base type of contract.

d. Review contract specifications for asbestos, lead abatement projects and/or hazardous waste removal or remediation. (See ARs 40-5, 385-10, and 200-1.)

7-29. Civilian industrial hygiene contractors

The provision of contracted IH services depends on specific contract wording. Therefore, the IHPM must use the contracting officer's representative to convey recommendations rather than specifying directions directly to the civilian contractor. Failure to coordinate with the civilian contractor through the contracting officer's representative may result in personal liability if the contractor follows your directives.

7-30. Unions and work councils

Coordination between the IHPM and unions and work councils is essential to facilitate worker acceptance of PPE, work practices, and control mechanisms.

7-31. Supervisors

The IHPM should coordinate with supervisors to ensure they have the appropriate information to assist in accomplishing the requirements of paragraph 2-1g.

7-32. Workers

The IHPM should coordinate with workers to ensure that they understand why controls or PPE are necessary for their health and that controls are effective only when they are properly used.

7-33. Childhood lead poisoning prevention program

a. The goal of the childhood lead poisoning prevention (CLPP) program is to minimize children's exposure to lead. This is accomplished by identifying and mitigating lead health hazards from all sources in a child's environment, including lead in paint, dust, soil and water. Implementation guidelines for the CLPP program are in Public Works TB 420-70-2. AR 420-70 contains the lead policy for Army facilities, and AR 200-1 contains the environmental lead policy. Public Works TB 420-70-2 defines the role of the IHPM in the CLPP program. The IHPM participates in a multi-disciplinary installation lead team, coordinating with other members to fulfill the AMEDD responsibilities of the program.

b. As part of the installation lead team, the AMEDD responsibilities include developing a coordinated strategy to implement medical case management and lead poisoning prevention by identification, exposure reduction, lead remediation activities, and coordination of installation support for all cases of childhood lead poisoning. The installation team also develops and implements comprehensive education programs regarding environmental lead exposures and lead poisoning directed at key professional groups, parents, the military community, and other target groups.

7-34. Personal protective equipment program

The role of the IHPM in the installation-managed PPE program (DODI 6055.1, encl 3) includes—

- a.* Evaluations of workplaces to determine appropriate PPE.
- b.* Making recommendations to area supervisors for appropriate PPE.
- c.* Training on appropriate use of PPE in health hazard communication training.

Appendix A References

Section I Required Publications

AR 40-5

Preventive Medicine. (Cited in paras 1-4c, 2-2b, 4-4b, 7-1a, 7-4c(4), 7-5a, 7-10a and b, and 7-28d.)

AR 200-1

Environmental Protection and Enhancement. (Cited in paras 7-9, 7-28d, and 7-33a.)

AR 385-10

The Army Safety Program. (Cited in paras 1-4d, 4-4b, 7-10a and b, and 7-28d.)

AR 690-400

Total Army Performance Evaluation System. (Cited in para 3-1b(3)(b).)

Unnumbered Publication

Army Civilian Training, Education and Development System Plan for Industrial Hygienist. (This publication is available from the Commander, U.S. Army Medical Department Center and School, AMEDD Personnel Proponent Directorate, ATTN: MCCS-DC, 1400 E. Grayson Street, Fort Sam Houston, TX 78234-6175.) (Cited in paras 2-1a(2), 3-1b(3)(a), and 5-4a(3).)

Section II

Related Publications

A related publication is merely a source of additional information. The user does not have to read it to understand this pamphlet.

ANSI Standard Z117.1-1989

Safety Requirements for Confined Spaces. (This publication is available from the American National Standards Institute, 11 W. 42nd Street, New York, NY 10036.)

AR 11-34

The Army Respiratory Protection Program

AR 25-400-2

The Modern Army Recordkeeping System (MARKS)

AR 40-10

Health Hazard Assessment Program in Support of the Army Materiel Acquisition Decision Process

AR 420-70

Buildings and Structures

AR 600-3

The Army Personnel Proponent System

AR 750-43

Army Test, Measurement and Diagnostic Equipment Program

DA PAM 40-501

Hearing Conservation Program

DA PAM 611-21

Military Occupational Classification and Structure

DODD 1000.3

Safety and Occupational Health Policy for the Department of Defense

DODD 5500.7

Standards of Conduct

DODI 6050.5

DoD Hazard Communication Program

DODI 6055.1

DoD Occupational Safety and Health Program

DODI 6055.5

Industrial Hygiene and Occupational Health

Federal Personnel Manual

U.S. Civil Service Commission

OPM Handbook Quality Standards

Qualification Standards Handbook for General Schedule Positions

Public Law 91-596

Occupational Safety and Health Act of 1970

Public Works TB 420-70-2

Installation Lead Hazard Management. (This publication is available from the U.S. Army Center for Public Works, 7701 Telegraph Road, Alexandria, VA 22315-3862.)

TB MED 506

Occupational and Environmental Health Occupational Vision

TB MED 510

Guidelines for the Control and Evaluation of Occupational Exposure to Waste Anesthetic Gases

TB MED 513

Occupational and Environmental Health Guidelines for the Evaluation and Control of Asbestos Exposure

Unnumbered Publication

American Industrial Hygiene Association Membership Directory, Who's Who in Industrial Hygiene, most current edition. (This publication is available from the American Industrial Hygiene Association, 1212 New York Avenue, NW, Suite 750, Washington, DC 20005.)

Unnumbered Publication

Industrial Hygiene News Buyer's Guide. (This publication is available from Industrial Hygiene News, 8650 Babcock Boulevard, Pittsburgh, PA 15237-5821.)

Unnumbered Publication

DOEHS-IH User's Manual. (This publication is available from the Commanding General, USACHPPM, ATTN: MCHB-TS-OIM, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403.)

USACHPPM Technical Guide 141

Industrial Hygiene Air Sampling and Bulk Sampling Instructions. (All USACHPPM Technical Guides are available from the Commanding General, USACHPPM, ATTN: MCHB-CS-IDD, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403.)

USACHPPM Technical Guide 165

Installation Industrial Hygiene Program Self-Assessment Guide

USACHPPM Technical Guide 181

Noise Dosimetry and Risk Assessment

USACHPPM Technical Guide 190

Guide to Managing Occupational Exposure to Bloodborne Pathogens

3 CFR

The President

29 CFR 1910

Occupational Safety and Health Standards

29 CFR 1910.146

Permit-Required Confined Spaces

29 CFR 1910.1020

Access to Employee Exposure and Medical Records

29 CFR 1910.1200

Hazard Communication

29 CFR 1915

Occupational Safety and Health Standards for Shipyard Employment

29 CFR 1926.1101

Asbestos

29 CFR 1960

Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters

40 CFR

Protection of the Environment

Section III

Prescribed Forms

This section contains no entries.

Section IV

Referenced Forms

This section contains no entries.

Appendix B Minimum Sampling Equipment Requirements

B-1. Sampling equipment

The sampling equipment listed in tables B-1 and B-2 provides an acceptable level of quality. The quantities are estimated for typical requirements; each IHPM will need to determine specific local requirements based on IH staffing levels and numbers/types of operations.

B-2. Source of information

The information contained in tables B-1 and B-2, as well as additional information, can be found in the current edition of Industrial Hygiene News Buyer's Guide. (See app A.)

**Table B-1
Sampling equipment**

Quantity	Description
2 ea	Sound Level Meter Sound Level Meter and Calibrator Kit with Carrying Case
2 ea	Air Velocity Meter
1 ea	Air Velocity Meter (Pitot Tube Kit)
1 ea	Light Meter, Cosine Corrected
1 ea	Calibrator, Mass Flow/Bubble Meter
1 ea	Wet Bulb Globe Temperature Index Kit
1 ea	Aspirator Bulb (for smoke tube)
1 bx	Smoke Tubes, 12/box Smoke Tubes, 10/box Smoke Tubes, 10/box
1 ea	Thermometer to 220 Degrees Fahrenheit
1 ea	Mercury Sniffer with Battery Charger
1 ea	Carbon Monoxide Monitor
1 ea	Certified Span Gas for Calibration of Carbon Monoxide Monitor
3 ea	Portable Personnel Air Samplers
1 ea	Low-Flow, Constant Flow Air Sampler (20 to 400 cubic centimeters/minute)
3 ea	Air Sampler Chargers
1 ea	Gas and Vapor Detector
1 bx	0.8 micrometer Cellulose Ester Filter 37 millimeter (mm), 100/box (with support pads)
1 dz	Midget Impingers, Spillproof with Protective Plastic Covering
1 bx	Type A Class Fiber Filters, 37 mm, 500/box
1 bx	5.0 micrometers Polyvinyl Chloride Filter, 37 mm, 100/box (with support pads)
2 ea	Cyclone Assembly, Complete
1 bx	Filter Backing Pads, 100/box
1 pk	50 Complete Filter Cassettes, Empty for 37 mm Filters with Spacer Rings
1 dz	Bulk Sample Containers
50 ea	Charcoal Tubes

Table B-1
Sampling equipment—Continued

Quantity	Description
4 bx	Carbon Monoxide Detector Tubes #1La
2 bx	Nitrogen Dioxide Detector Tubes #9L
1 bx	Trichloroethylene #132G
1 bx	Toluene Tube #122
1 bx	Xylene Tube #123
1 bx	Ozone Tube #18L
1 bx	Formaldehyde Tube #91L
1 bx	Ammonia Tube #3L
1 bx	Methyl Chloroform Tubes #135
1 dz	Midget Impingers, Complete
1 ea	Infrared Analyzer
1 ea	Tape Measure, 6 feet
1 ea	Tape Measure, 50 feet
1 ea	Flashlight
1 ea	Screwdriver Set
2 ea	Pistol Belts
1 ea	Masking Tape, 60 yard roll
1 dz	Hose Adapters for 1/4 inch Tubing (Female Luer to Male Luer Slip)
1 roll	1/4 inch ID Sampling Tubing, 50 foot roll
1 ea	Stop Watch

Table B-2
Supplemental sampling equipment

Quantity	Description
1 ea	Velometer®
1 ea	Tachometer, Photoelectric Handheld
1 ea	Combustible Gas and Oxygen Indicator (Combination)
4 ea	Air Sampling Pumps plus Chargers
2 ea	Volume Samplers
200 ea	Volume Filters
2 ea	Standard Impingers
2 ea	Large Fritted Impingers (Gas Washing Bottle) Plus Medium Volume Pump
4 ea	Cyclone Assemblies Complete
50 ea	Charcoal Tubes
1 ea	Mercury Sniffer with Battery (must specify)

Notes:

Velometer® is a registered trademark with the Anor Instrument Company, 7555 North Linder Avenue, Skokie, IL 60077.

Appendix C Industrial Hygiene Implementation Plan

C-1. Administrative functions

a. The IHPM or his or her designee usually performs administrative functions of an IHIP. Table C-1 shows a sample IHIP. The IHPM should—

- (1) Estimate the number of annual hours to complete or manage each function.
- (2) Assign a priority and review/completion date.
- (3) Designate the individual responsible for the function.

b. Two schemes follow which could be used for assigning priorities.

(1) Scheme A.

(a) Critical-regulated.

(b) Critical-not regulated.

(c) Noncritical-regulated.

(d) Noncritical-not regulated.

(2) Scheme B.

(a) 1 (High).

(b) 2 (Medium).

(c) 3 (Low).

c. Administrative functions include but in no way are limited to—

- (1) Preparing the annual IH budget.
- (2) Planning work schedules for technical and clerical staff.
- (3) Conducting human resource actions (staffing requests, interviews, performance appraisals and awards, and miscellaneous personnel issues).
- (4) Conducting professional staff training and preparing development plans.
- (5) Maintaining equipment resources and supplies (IH equipment, office and field consumables).
- (6) Serving on committees (committee meetings attended or technically supported upon request).
- (7) Marketing services/public relation's liaison.
- (8) Maintaining the DOEHS-IH system.
- (9) Conducting QA.
- (10) Performing command review and analysis.
- (11) Writing service support agreements and memorandums of understanding.
- (12) Developing and coordinating contracts.
- (13) Maintaining documents and records.
- (14) Preparing the annual IHIP.
- (15) Developing IH program policy and procedures.
- (16) Completing IH reports of survey.
- (17) Conducting design review.
- (18) Reviewing SOPs.
- (19) Providing interdisciplinary technical support to safety, engineering, occupational medicine, and environmental.
- (20) Conducting external program reviews and audits.
- (21) Performing internal program self-assessments.
- (22) Maintaining target suspenses, follow-up, special briefings and crisis management (that is, planning for the unknown).

C-2. Program functions

a. Program functions of an IHIP include policies and SOPs for which IH is the proponent or provides technical support. The IHPM should—

- (1) Estimate the number of annual hours to complete or manage each function.
- (2) Assign a priority and review/completion date.
- (3) Designate the individual responsible for the function.

b. Two schemes follow which could be used for assigning priorities.

(1) Scheme A.

(a) Critical-regulated.

(b) Critical-not regulated.

(c) Noncritical-regulated.

(d) Noncritical-not regulated.

(2) Scheme B.

- (a) 1 (High).
- (b) 2 (Medium).
- (c) 3 (Low).

c. Administration functions include but in no way are limited to—

- (1) Establishing the IH program policy.
- (2) Preparing the IHIP.
- (3) Preparing the IH survey prioritization.
- (4) Conducting the health hazard inventory.
- (5) Maintaining the DOEHRs-IH system.
- (6) Completing the IH report of survey.
- (7) Reviewing specifications, designs, and worksite SOPs.
- (8) Maintaining and calibrating equipment.
- (9) Developing the exposure-monitoring plan.
- (10) Monitoring respiratory protection and PPE.
- (11) Participating as necessary in the hearing conservation program.
- (12) Participating as necessary in the confined space entry program.
- (13) Participating as necessary with hazard communication training.
- (14) Developing the laboratory chemical hygiene plan.
- (15) Adhering to the community right-to-know.
- (16) Participating as necessary in the hazardous waste program.
- (17) Participating as necessary in the occupational vision program.
- (18) Conducting lead assessments.
- (19) Managing asbestos abatement.
- (20) Assisting the ergonomics program.
- (21) Conducting the indoor air quality program.
- (22) Providing information on reproductive health.
- (23) Supporting the toxic chemical agent program.
- (24) Assisting the radiation protection program.
- (25) Bloodborne pathogens.
- (26) Biological material and waste.
- (27) Pesticide management.
- (28) Illumination.
- (29) Medical surveillance program support and coordination.
- (30) The IH aspects of OSHA complaint investigations.
- (31) Epidemiological investigations.
- (32) The IH aspects of Federal Employees Compensation Act claims review.
- (33) The IH aspects of employee worksite hazard training.
- (34) The IH staff development plan.
- (35) Industrial and laboratory ventilation support plan.
- (36) Preoperational activities.
- (37) The IH aspects of worksite employee health and safety training.

**Table C-1
Sample Industrial hygiene implementation plan**

Survey Date	Priority	Bldg Location	IH Resource Assign.	Operation Description/ Admin/Prgm Function	# of Operations	HHI	Noise	Vent	Exposure Sampling (Type)	Training (Type)	Other (Specify)	Survey & Report Time (Hrs)
Jan 99	1	13	Sue	Vapor Degreasing	2	X		X	Solvent	Resp. Fit Test 6 Empls		10
Jan 99	1	13	Sue	Stenciling	2	X		X	Solvents		Employee Complaint Filed 12/12/98	20
Jan 99	1	N/A	John	Confined Space Policy	Multiple						Develop Draft	40
Jan 99	1	N/A	Sue	Laboratory SOP Review	4							40
Jan 99	1	N/A	John	Performance Review/Sue								6
Jan 99	1	N/A	Sue	Performance Review w/Supv.								2
Jan 99	1	N/A	John	Safety Committee Mtg.								6
Jan 99	1	Various	John/Sue	Various Support	Multiple						Unplanned/Emergency Complaint	40
Jan 99	2	13	Sue	Drying Operation	2	X	TBD	X	Dust & Vapors			10
Jan 99	2	13	Sue	Metal Sanding	6	X	TBD	X	Metallic Dust			40
Jan 99	2	RSS	John	Haz. Waste Storage	5	X		X				40
Jan 99	3	16	John	Welding	4	X	TBD	X	Metal Fumes/JV			20
Jan 99	3	N/A	Sue/John	DOEHRS-IH Data Input & System Maintenance	20							30
Total Hours Scheduled for January												304
Feb 99	1	16	Sue	Review Welding Shop SOPs	3							30
Feb 99	1	21	John	Plating	12	X		X	Acids/Metal Fumes			60
Feb 99	1	28	John	Plating	6	X		X	Acids/Metal Fumes			40
Feb 99	1	N/A	John	Confined Space Policy							Distribute and Review Comments	30
Feb 99	1	Various	John/Sue	Various Support	Multiple						Unplanned/Emergency Complaint	40

Table C-1
Sample industrial hygiene implementation plan—Continued

Survey Date	Priority	Bldg Location	IH Resource Ass'n.	Operation Description/ Admin/Prgm Function	# of Operations	HHI	Noise	Vent	Exposure Sampling (Type)	Training (Type)	Other (Specify)	Survey & Report Time (Hrs)
Feb 99	2	N/A	John	Medical Surveillance Mtg.								4
Feb 99	2	16	Sue	Dip Tank Cleaning	3	X		X	Acids			40
Feb 99	2	16	Sue	Spray Cleaning	2	X		X	Soivents			25
Feb 99	3	N/A	John	QA Review Equipment Calibration								5
Feb 99	3	N/A	Sue/ John	DOEHRS-IH Data Input & System Maintenance	25							30
Total Filed Survey Hours Scheduled for February												304

Appendix D

Risk Assessment Codes

D-1. Determining risk assessment codes

Risk assessment codes are used to evaluate four types of hazards: health, safety, ergonomic, and noise. The IHPM should use the most appropriate method and then forward the RAC to the installation Safety Manager for inclusion to the Installation Hazard Abatement Plan.

D-2. Method 1—health risk assessment code

Use the matrices and descriptive definitions below as a model to determine the RAC for health hazards.

a. Use the following procedures to assess points and to determine the health hazard severity category (HHSC). The HHSC reflects the magnitude of exposure to a single physical, chemical, or biological agent and the medical effects of exposure. Table D-1 contains the matrix for assessing exposure points (EP) for different exposure conditions. Table D-2 provides the matrix for assessing medical effects points.

b. Determine the HHSC by totaling the points assessed and then using guidance in table D-3.

c. Use the matrices in tables D-4 and D-5 to assess the duration of exposure and number of exposed personnel points. The total number of points will determine the illness probability category (IPC). The IPC is a function of the duration of exposure and the number of exposed personnel.

d. Determine the IPC for health hazards by totaling the points assessed and then use the guidance provided in table D-6.

e. Determine the RAC for health hazards by using the matrix in table D-7 to account for the HHSC and IPC.

D-3. Method 2—safety and ergonomic hazards risk assessment codes

a. The safety and ergonomic RACs show the degree of risk assessment by combining the elements of hazard severity and accident probability. The RACs will be used to establish priorities for corrective action to resolve identified hazards. The RACs are used to quantify risk to personnel. Use the matrix in table D-8 to determine the RAC. The lower the number assigned the higher the assessed risk. For example, a hazard severity of IV and an accident probability of C would give a safety and ergonomic RAC of 5. RACs 1 (critical) and 2 (serious) equal high-level risks. RAC 3 (moderate) equals a medium-level risk, and RACs 4 (minor) and 5 (negligible) equal low-level risks.

b. Hazard severity for safety and ergonomic RACs is an assessment of the worst potential consequence. This assessment of the expected consequence is defined by the degree of injury or occupational illness that could occur from exposure to the hazard. The hazard severity is classified by an uppercase Roman numeral and described as follows:

- (1) I—Death, permanent total disability or loss of facility or asset.
- (2) II—Permanent partial disability, temporary total disability in excess of 3 months or major property damage.
- (3) III—Minor injury, lost-workday injury or compensable injury or minor property damage.

(4) IV—Minimal threat to personnel or property, first aid, minor supportive medical treatment, but still a violation of a standard.

c. Accident probability refers to the likelihood that a safety and ergonomic hazard will occur. This probability is based on an assessment of such factors as location, exposure in terms of cycles or hours of operation, and effected population. Qualitative accident probability codes are assigned by a capital letter as explained in table D-9.

D-4. Method 3—noise risk assessment

a. The following procedures, adapted from DODI 6055.1, should be used to determine the RAC for a noise hazard:

(1) Determine the HHSC. The HHSC reflects the magnitude of exposure to noise and the medical effects of exposure.

(a) Assign EPs—a maximum of eight is possible—using different equations for steady-state or impulse noise. If exposure to steady-state and impulse noise occurs on the same day, or even simultaneously, use the greater of the points calculated for either exposure. Do not combine points for both exposures.

(b) For steady-state noise, convert the 8-hour time-weighted average sound level (TWA) to dose using the equation—

$$D = 100 \cdot 10^{\frac{TWA - 85}{10}}$$

Where—

D is the percent noise dose (a TWA of 85 A-weighted decibel is 100 percent dose).

TWA is the 8-hour weighted average noise exposure in A-weighted decibel.

Then—

$$EP = \frac{D}{100}$$

For impulse noise—

$$EP = \frac{N}{100} \cdot 10^{\frac{Lpk - 138}{5}}$$

(c) Where—

N is the number of impulse noise events per day.

Lpk is the peak noise level of the impulse in peak decibel.

(d) Assign six medical effects points, because the medical effect is permanent hearing loss.

(e) Find the sum of EP and medical effects points and determine the HHSC using table D-10. Note that the total will be no higher than 14 points.

(2) Determine the mishap probability category. This category reflects the probability of mishap and the number of personnel exposed to noise in the operation being assessed.

(a) Assign points for the consistency of exposure using table D-11.

(b) Assign points for the number of employees exposed to the operation using table D-12.

(c) Find the sum of the points for consistency of exposure and the points for the number of personnel exposed. Determine the mishap probability category using table D-13.

(3) Determine the RAC using table D-14.

b. Assigning a RAC reflects the extent and severity of a noise hazard based solely on an analysis of the noise environment. It does not reflect the effects of any hearing protection worn by the employees. The RACs do not account for hearing-protection devices because engineering controls and other means should be used to control noise exposures. Hearing protection should be considered only as a last resort or until engineering controls are implemented.

**Table D-1
Exposure points assessed**

Alternate Exposure Route	Exposure Conditions			
	< Action Level	Occasionally > Action Level, Always < Occupational Exposure Limit (OEL)	> Action Level < OEL	> OEL
No	0	3	5	7
Yes	1 - 2	4	6	9

**Table D-2
Medical effects points assessed**

Condition	Points
No medical effect (such as nuisance noise and nuisance odor)	0
Temporary reversible illness requiring supportive treatment (such as eye irritation and sore throat)	1 - 2
Temporary reversible illness with a variable but limited period of disability (such as metal fume fever)	3 - 4
Permanent, non-severe illness or loss of capacity (such as permanent hearing loss)	5 - 6
Permanent, severe, disabling, irreversible illness or death (such as asbestosis and lung cancer)	7 - 8

**Table D-3
Determining the health hazard severity category**

Total points (sum of exposure and medical effects points)	HHSC
13 - 17	I
9 - 12	II
5 - 8	III
0 - 4	IV

**Table D-4
Duration of exposure points assessed**

Type of Exposure	Exposure Duration		
	1 - 8 hours/week	> 8 hours/week, not continuous	Continuous
Irregular, Intermittent	1 - 2	4 - 6	N/A
Regular, periodic	2 - 3	5 - 7	8

**Table D-5
Number of exposed personnel points assessed**

Number of exposed workers	Points
< 5	1 - 2
5 - 9	3 - 4
10 - 49	5 - 6
> 49	7 - 8

**Table D-6
Determining the illness probability category**

Total assessed points	IPC
14 - 16	A
10 - 13	B
5 - 9	C
< 5	D

**Table D-7
Risk assessment codes for health hazards**

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

**Table D-8
Safety and ergonomic risk assessment codes**

Hazard severity	Accident probability			
	A	B	C	D
I	1	1	2	4
II	1	2	3	4
III	2	3	4	5
IV	4	4	5	5

**Table D-9
Accident probability codes**

Code	Description
A	Likely to occur immediately
B	Probably will occur in time
C	Possible to occur in time
D	Unlikely to occur

Table D-10
Health hazard severity category

Total Points (EP + medical effects points)	Category
7 - 14	II
< 7	III

Table D-11
Consistency of exposure points

Long-Term Consistency	1 Day/Week	Weekly Consistency 2 - 4 Days/Week	5 Days/Week
Not every week	2	5	8
Every week	3	6	8

Table D-12
Employee number points

Number of Exposed Personnel	Points
< 5	2
5 - 9	3 - 4
10 - 49	5 - 6
> 49	7 - 8

Table D-13
Mishap probability category

Total Points (Consistency + Number of Personnel)	Mishap Probability Code
14 - 16	A
10 - 13	B
5 - 9	C
< 5	D

Table D-14
Risk assessment codes

HHSC	Mishap Probability Code			
	A	B	C	D
I	1	1	2	3
II	1	2	3	4
III	2	3	4	5
IV	3	4	5	5

Appendix E Selected Bibliography

- a. American Conference of Governmental Industrial Hygienists. Documentation of the Threshold Limit Values. Cincinnati, Ohio: American Conference of Governmental Industrial Hygienists, current edition with annual supplements.
- b. American Conference of Governmental Industrial Hygienists, Committee of Industrial Ventilation. Industrial Ventilation - A Manual of Recommended Practice. Cincinnati, Ohio: American Conference of Governmental Industrial Hygienists, Committee of Industrial Ventilation, current edition.
- c. American Conference of Governmental Industrial Hygienists. TLVs™ Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment with Intended Changes. Cincinnati, Ohio: American Conference of Governmental Industrial Hygienists, published annually.
- d. American Industrial Hygiene Association Engineering Committee. Engineering Field Reference Manual. Fairfax, Virginia: American Industrial Hygiene Association Press, 1984.
- e. American Industrial Hygiene Association Journal. Baltimore, Maryland: Williams and Wilkins Co. American Industrial Hygiene Association.
- f. Brief, R.S. Basic Industrial Hygiene: A Training Manual. Fairfax, Virginia: American Industrial Hygiene Association Press, 1975.
- g. Chemical Hazards of the Workplace. Edited by N.H. Proctor, J.P. Hughes, and M.L. Fischman. Philadelphia, Pennsylvania: Lippincott, 3rd Ed., 1991.
- h. Hunter, D. The Diseases of Occupations. London, England: Hodder and Stoughton, 6th ed., 1978.
- i. Illuminating Engineering Society of North America. IESNA Lighting Handbook. New York, New York: Illuminating Engineering Society of North America, 8th Ed., 1993.
- j. National Institute for Occupational Safety and Health. NIOSH Pocket Guide to Chemical Hazards. Cincinnati, Ohio: U.S. Department of Health and Human Services (National Institute for Occupational Safety and Health), 1997.
- k. National Safety Council. Fundamentals of Industrial Hygiene. Itasca, Illinois: National Safety Council, current edition.
- l. Patty, F.A. Patty's Industrial Hygiene and Toxicology. New York: John Wiley & Sons, Volumes I, II, and III, 1998.
- m. Sax's Dangerous Properties of Industrial Materials. Edited by R.J. Lewis. New York, New York: Van Nostrand Reinhold, 8th Ed., 1992.
- n. U.S. Department of Health and Human Services (National Institute for Occupational Safety and Health). Occupational Diseases: A Guide to Their Recognition. DHHS (NIOSH) publication 77-181, Washington, DC: U.S. Department of Health and Human Services (National Institute for Occupational Safety and Health), revised edition, 1977.
- o. U.S. Department of Health and Human Services (National Institute for Occupational Safety and Health). Occupational Exposure Sampling Strategy Manual. DHHS (NIOSH) Publication No. 77-173, Washington, DC: U.S. Department of Health and Human Services (National Institute for Occupational Safety and Health), 1977.
- p. U.S. Department of Health and Human Services (National Institute for Occupational Safety and Health). The Industrial Environment - Its Evaluation and Control. Public Health Service Publication 614, Washington, DC: U.S. Department of Health and Human Services (National Institute for Occupational Safety and Health), 1973.

Glossary

Section I Abbreviations

ACGIH

American Conference of Governmental Industrial Hygienists

ACTEDS

Army civilian training, education and development system

AIHA

American Industrial Hygiene Association

AMEDD

Army Medical Department

ANSI

American National Standards Institute

CFR

Code of Federal Regulations

CLPP

childhood lead poisoning prevention program

CPO

Civilian Personnel Office

CRCP

civilian resource conservation program

DOD

Department of Defense

DODI

Department of Defense Instruction

DOEHRS-IH

Defense Occupational and Environmental Health Readiness System-Industrial Hygiene

EP

exposure points

HAZCOM

hazard communication

HHA

health hazard assessment

HHSC

Health hazard severity category

IH

industrial hygiene

IHIP

industrial hygiene implementation plan

IHPM

industrial hygiene program manager

IMA
installation medical authority

IPC
Illness probability category

MANPRINT
manpower and personnel integration

MEDCOM
U.S. Army Medical Command

MEDDAC
Medical Department Activity

mm
millimeter

MSDS
material safety data sheet

MTF
medical treatment facility

OEL
occupational exposure limit

OH
occupational health

OSH
occupational safety and health

OSHA
Occupational Safety and Health Administration

OTSG
Office of The Surgeon General

PAC
priority action code

PEL
permissible exposure limit

PPE
personal protective equipment

QA
quality assurance

RAC
risk assessment code

RPE
respiratory protective equipment

SASOHI
Standard Army Safety and Occupational Health Inspection

SOP

standing operating procedure

TG

technical guide

TLV

threshold limit value

TSG

The Surgeon General

TWA

8-hour time-weighted average sound level

USACHPPM

U.S. Army Center for Health Promotion and Preventive Medicine

WMD

work-related musculoskeletal disorder

Section II**Terms****Contractor**

A non-Federal employer engaged in performance of a DA contract, whether as prime contractor or subcontractor.

Credentials

The documents that constitute evidence of training, licensure, experience, and expertise of a practitioner.

DA personnel

a. Civilian. Includes General Schedule and Wage Grade employees (including National Guard and Reserve technicians), Merit Pay System employees, Nonappropriated Fund employees, and foreign nationals directly employed by DA.

b. Military personnel. Includes—

- (1) All military personnel on active duty.
- (2) Reserve or National Guard personnel on active duty or in drill status.
- (3) Service academy midshipmen or cadets.
- (4) Reserve Officer Training Corps cadets when engaged in directed training activities.
- (5) Foreign national military personnel assigned to DA.

Health hazard

An existing or likely condition, inherent to the operation or use of materiel, that can cause death, injury, acute or chronic illness, disability, and reduced job performance of personnel by exposure to—

- a.* Acoustical energy.
- b.* Biological substances.
- c.* Chemical substances.
- d.* Oxygen deficiency.
- e.* Radiation energy.
- f.* Shock.
- g.* Temperature extremes and humidity.
- h.* Trauma.
- i.* Vibration.

Industrial hygiene

The science and art devoted to the anticipation, recognition, evaluation, and control of those environmental factors or stresses, arising in or from the workplace, which may cause sickness, impaired health and well being, or significant discomfort and inefficiency among workers.

Industrial hygiene implementation plan

A priority list of evaluation requirements and a schedule for accomplishment of those evaluations.

Installation

A grouping of facilities, located in the continental U.S. or outside continental U.S., that support particular DA functions. Installations may be elements of a base including locations such as posts, camps, or stations.

Installation Medical Authority

The unit surgeon, command chief surgeon, MEDDAC and/or medical center commanders, and the Director of Health Services, or his or her representative responsible for provision of medical support at the unit, command, or installation concerned.

Privileging

The processing through credentials committee channels of those individuals given the authority and responsibility for making independent decisions to evaluate, initiate, alter, or terminate.

Risk assessment

A structured process to identify and assess hazards. An expression of potential harm, described in terms of hazard severity, accident probability, and exposure to hazard.

Workplace

a. Nonmilitary-unique workplace or operation. A DA military or civilian workplace or operation that is comparable generally to those of the private sector. Examples include facilities involved and work performed in the repair and overhaul of weapons, vessels, aircraft, or vehicles (except for equipment trials); construction; supply services; civil engineer or public works; medical services; and office work.

b. Military-unique workplace, operations, equipment, and systems. A DA military and civilian operation and workplace that is unique to the national defense mission. This includes combat and operation, testing, and maintenance of military-unique equipment and systems such as military weapons, ordnance, and tactical vehicles. It also includes operations such as peacekeeping missions; field maneuvers; combat training; military-unique Research, Development, Test, and Evaluation activities; and actions required under national defense contingency conditions.

c. DA contractor workplace. Any place including a reasonable access route to and from, where work has been, will be, or is being performed by contractor employees under a DA contract. "DA contractor workplace" does not include any area, structure, machine apparatus, device, equipment, or material therein with which the contractor employee is not required or reasonably expected to have contact; nor does it include any working condition for which OSHA jurisdiction has been preempted pursuant to section 4(b)(1) of Public Law 91-596.

Section III**Special Abbreviations and Terms**

This section contains no entries.

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Extract from *Department of the Army Pamphlet 40-503, Medical Services, Industrial Hygiene Program, dated 30 October 2000*, with emphasis added in underlined text:

"1-5. **Program objectives.** The IH program works cooperatively with other Army programs (such as, Safety) to—

- a. Provide one of the medical elements of the force protection component of combat power that maintains the readiness and availability of Army personnel for operations.
- b. Eliminate or control workplace health hazards to prevent occupational related illnesses, injuries, or deaths to soldiers and civilian workers.
- c. Characterize workplace exposure to potential health hazards, which facilitates exposure-based medical surveillance and occupational healthcare.
- d. Comply with OSHA and other applicable Federal and state laws and codified regulations. (See app A.)
- e. Reduce costs associated with lost manhours, medical treatment and surveillance, and workers' compensation.
- f. Integrate established IH principles and concepts into allied programs.
- g. Perform IH functions in support of allied programs such as Safety, Chemical Surety, Hearing Conservation, Respiratory Protection, and environmental compliance with Environmental Protection Agency, Comprehensive Environmental Response Compensation Liability Act, Resource Conservation Recovery Act, SUPERFUND Amendments and Reauthorization Act III, asbestos control, and lead abatement.

"1-6. **Program Mission.** Industrial hygiene is a component of the army's health mission. Industrial hygienists use technical expertise to anticipate, recognize, evaluate, and control workplace health hazards. They work with other disciplines to develop economical and pragmatic solutions to prevent occupational illness, injury, and death.

"Section II. Hazard Recognition.

"Technical Resources

"3-5. Program document

a. The program document is a formal publication that—

(1) Broadly defines the IH program's mission in relation to the local commander's, U.S. Army Medical Command's (MEDCOM's) or equivalent and office of the surgeon general's (OTSG's) missions.

(2) Describes how the program's goals and objectives will be implemented with existing resources.

B. The IHPM completes the program document and updates annually. The IHPM may include the IH program document as a chapter or appendix to the overall preventive medicine program document, if it exists.

c. The IMA reviews and approves the IH program document.

"3-6. Industrial hygiene implementation plan

a. To implement the program document, the IHPM must develop an IHIP. The IHIP is a living document, which schedules IH activities for a rolling 1-year period. The IHPM uses it to manage the systematic accomplishment of the prioritized IH activities, but not limited to, service requirements. These requirements are determined by assessing customer needs, obtaining commander's safety and oh emphasis, and reviewing OSHA regulations.

b. The automated data manipulation and retrieval features of the DOEHRs-IH allow the IHPM to transfer the database to word processing and then to help construct the IHIP.

C. The IHIP should include, as a minimum, the—

(1) list of potentially hazardous operations.

(2) health hazards present at each operation.

(3) priority action code (PAC) assigned to each health hazard.

(4) industrial hygiene evaluations necessary for each health hazard.

(5) worksites scheduled for evaluation.

(6) completed evaluations.

(7) amount of time needed to complete the evaluation.

(8) risk assessment codes assigned to the operation.

D. Additional items included in the IHIP may increase its utility. Such items may include—

(1) a remarks section.

(2) the air sampling media and flow rate.

(3) a list of—

(a) equipment needed for each evaluation.

(b) personnel assigned to complete the evaluations.

(c) meetings, committee representatives, and training.

"Chapter 4. Hazard Anticipation, Recognition, Evaluation, and Control Section I. Hazard Anticipation

4-1. Definition of industrial hygiene

a. The Army adopts the AIHA's and ACGIH's definition of IH. These organizations define IH as the science and art devoted to the anticipation, recognition, evaluation, and control of those environmental factors and stresses associated with work and work operations that may cause sickness, impaired health and well being, significant discomfort, and inefficiency among workers or among the citizens of the community.

b. This chapter describes the fundamental processes of IH: hazard anticipation, recognition, evaluation, and control.

4-2. Flow of actions

Figure 4-1 depicts the sequential flow of actions through the processes of hazard anticipation, recognition, evaluation, and control.

4-3. Background

Use all available sources of information (documents, design review, planning committees, worker interviews) to foresee if a new or modified work operation or process could pose a health threat.

"4-4. Survey frequency and scope

a. Recognizing existing and potential hazards is a step towards improving health and safety in the workplace.

b. The 29 CFR 1960, AR 385-10, and AR 40-5 require the annual inspection of workplaces by OSH personnel who are qualified to recognize and evaluate hazards. The IHPM ensures that this annual workplace survey documents the IH aspects, such as—

(1) Chemical, physical, biological, and ergonomic hazards inherent to each activity. (See glossary.)

(2) Existing measures employed to control exposure to the hazard.

C. In situations where non-IH personnel have received appropriate training and privileging, such collateral duty personnel may perform the workplace survey and identify hazards under the pervue of a credentialed IH. The industrial hygienist, however, is ultimately responsible for the evaluation and recommendation of controls for the identified hazards.

"Section III. Hazard Evaluation.

4-8. Purpose and scope

a. Health hazard evaluations are the foundation on which the oh program is built. Health hazard assessments identify and quantify all potential and actual health hazards. A comprehensive health hazard assessment requires the IHPM to collect both qualitative and quantitative data. The IHPM uses this data to assess the effectiveness of protective equipment, administrative controls and engineering controls. Health hazard assessments also provide occupational medicine personnel with data to develop an effective medical surveillance program.

b. Following the IHIP's (or order of accomplishment) established priorities (PACs), the IHPM ensures that—

(1) Each operation performed on the installation is analyzed to evaluate and document all worker exposures, both potential and/or real. Documentation of exposures includes qualitative and quantitative assessment.

(2) A sampling strategy is developed that includes both recognized qualitative and quantitative protocols to provide statistically significant exposure data. Breathing zone, ventilation and noise measurements, and other appropriate hazard exposure measurements are performed and documented using the sampling strategy. (USACHPPM Technical Guide (TG) 141 provides instructions for sampling chemical contaminants, and DA PAM 40-501 and USACHPPM TG 181 provide instructions for sampling noise hazards.)

(3) Sampling results are subject to approved statistical analysis to determine data significance. Statistical analysis is used to determine data accuracy and precision and exposure trends. The IHPM must use statistical analysis to both develop sampling strategies and to analyze sample results.

(4) Statistical analysis is not a substitute for professional judgment but is an additional tool used by the IHPM to provide a better health hazard assessment. When exposure conclusions/decisions

are obvious, such as during emergencies or when the data obviously indicates an overexposure and/or very low exposures, the application of statistical analysis is not warranted.

"Chapter 5. Quality Assurance.

"5-2. Standards of conduct. All IH personnel are personally responsible for adhering to the standards of conduct per DoDD 5500.7.

"5-4. Credentialing, privileging, supervising, and certification/licensing of industrial hygiene personnel.

"B. Supervision. IH technicians and collateral duty personnel may perform IH operations. These operations must be monitored by a credentialed IH.

"c. Certification/Licensing. All IH personnel will also maintain current licensure and/or certification according to regulatory and professional requirements. The MEDCOM will support acquisition and maintenance of certification and licensing needed for credentialing of IH personnel.

"5-9. Program Assessment.

"a. The IHPM will perform an annual self-audit of the IH program using guidance provided in USACHPPM TG 165.

The results of this audit are used to recognize and target weaknesses and to make plans for improvement. The command industrial hygienist/staff officer may request audit results.

"Section III

Coordination for Industrial Hygiene Program Effectiveness

"7-19. Safety Office

"a. The IHPM can work in partnership with the installation or supporting safety office to provide an effective safety and oh program that includes—

- (1) the recognition of workplace health hazards and the referral of suspected health hazards.
- (2) coordinating and implementing IH recommendations for abatement or control of health hazards.
- (3) ensuring compliance with IH recommendations and exposure requirements.

"b. The installation safety office uses information provided by the IHPM to—

- (1) correctly identify and assess workplace hazards.
- (2) establish safety racs for abatement priorities and funding of engineering controls to abate osh violations.

"c. The IHPM and the safety office can work together to provide effective training.

"Appendix C - Industrial Hygiene Implementation Plan

"C-1. Administrative functions

a. The IHPM or his or her designee usually performs administrative functions of an IHIP. Table C-1 shows a sample IHIP. The IHPM should—

- (1) Estimate the number of annual hours to complete or manage each function.
- (2) Assign a priority and review/completion date.
- (3) Designate the individual responsible for the function.

b. Two schemes follow which could be used for assigning priorities.

- (1) Scheme A.
 - (a) Critical-regulated.
 - (b) Critical-not regulated.
 - (c) Noncritical-regulated.
 - (d) Noncritical-not regulated.
- (2) Scheme B.
 - (a) 1 (High).
 - (b) 2 (Medium).
 - (c) 3 (Low).

c. Administrative functions include but in no way are limited to—

- (1) preparing the annual IH budget.
- (2) planning work schedules for technical and clerical staff.
- (3) conducting human resource actions (staffing requests, interviews, performance appraisals and awards, and miscellaneous personnel issues).
- (4) conducting professional staff training and preparing development plans.
- (5) maintaining equipment resources and supplies (IH equipment, office and field consumables).
- (6) serving on committees (committee meetings attended or technically supported upon request).
- (7) marketing services/public relation's liaison.
- (8) maintaining the DOEHRS-IH system.
- (9) conducting QA.
- (10) performing command review and analysis.
- (11) writing service support agreements and memorandums of understanding.
- (12) developing and coordinating contracts.
- (13) maintaining documents and records.
- (14) preparing the annual IHIP.
- (15) developing IH program policy and procedures.
- (16) completing IH reports of survey.
- (17) conducting design review.
- (18) reviewing sops.
- (19) providing interdisciplinary technical support to safety, engineering, occupational medicine, and environmental.
- (20) conducting external program reviews and audits.
- (21) performing internal program self-assessments.
- (22) maintaining target suspenses, follow-up, special briefings and crisis management (that is, planning for the unknown).

"C-2. Program functions

a. Program functions of an IHIP include policies and SOPs for which IH is the proponent or provides technical support. The IHPM should—

- (1) Estimate the number of annual hours to complete or manage each function.
- (2) Assign a priority and review/completion date.
- (3) Designate the individual responsible for the function.

b. Two schemes follow which could be used for assigning priorities.

- (1) Scheme A.
 - (a) Critical-regulated.
 - (b) Critical-not regulated.
 - (c) Noncritical-regulated.
 - (d) Noncritical-not regulated.
- (2) Scheme B.
 - (a) 1 (High).
 - (b) 2 (Medium).
 - (c) 3 (Low).

c. Administration functions include but in no way are limited to—

- (1) Establishing the IH program policy.
- (2) Preparing the IHIP.
- (3) Preparing the IH survey prioritization.
- (4) Conducting the health hazard inventory.
- (5) Maintaining the DOEHRS-IH system.
- (6) Completing the IH report of survey.
- (7) Reviewing specifications, designs, and worksite sops.
- (8) Maintaining and calibrating equipment.
- (9) Developing the exposure-monitoring plan.
- (10) Monitoring respiratory protection and ppe.
- (11) Participating as necessary in the hearing conservation program.
- (12) Participating as necessary in the confined space entry program.
- (13) Participating as necessary with hazard communication training.
- (14) Developing the laboratory chemical hygiene plan.
- (15) Adhering to the community right-to-know.
- (16) Participating as necessary in the hazardous waste program.
- (17) Participating as necessary in the occupational vision program.
- (18) Conducting lead assessments.
- (19) Managing asbestos abatement.
- (20) Assisting the ergonomics program.
- (21) Conducting the indoor air quality program.
- (22) Providing information on reproductive health.
- (23) Supporting the toxic chemical agent program.
- (24) Assisting the radiation protection program.
- (25) Bloodborne pathogens.
- (26) Biological material and waste.

- (27) Pesticide management.
- (28) Illumination.
- (29) Medical surveillance program support and coordination.
- (30) The IH aspects of osha complaint investigations.
- (31) Epidemiological investigations.
- (32) The IH aspects of federal employees compensation act claims review.
- (33) The IH aspects of employee worksite hazard training.
- (34) The IH staff development plan.
- (35) Industrial and laboratory ventilation support plan.
- (36) Preoperational activities.
- (37) The IH aspects of worksite employee health and safety training."

Extract from *United States Army Environmental Hygiene Agency (AEHA) (former name of CHPPM/PHC) Technical Guide (TG) 165, Aberdeen Proving Ground, MD 210 10-5422, Installation Industrial Hygiene Program Self-Assessment Guide*, with emphasis added in underlined text:

"Table 2-1

Industrial Hygiene Program Elements - Critical Program Element?

A. Written Documents

1. Policy Yes
2. Program Yes

B. Staff

1. Manpower Yes
2. Personnel Yes
3. Training No

C. IH Facilities, Equipment and References

1. Facilities Yes
2. Equipment Yes
3. References Yes

D. Health Hazard Recognition

1. Health Hazard Information Module (@HIM) Yes
2. Design/Process Review No
3. Worker Hazard Identification No

E. Health Hazard Evaluation

1. Industrial Hygiene Implementation Plan Yes
2. Air Sampling Yes

F. Health Hazard Control

1. Control Methods Yes
2. Respiratory Protection Yes*
3. Asbestos Management Yes*
4. Confined Space Entry Yes*
5. Heat Stress Yes*
6. Medical Surveillance Yes
7. Risk Assessment Code (RAC) and the Installation Hazard Abatement Plan Yes*
8. Hearing Conservation Yes
9. Occupational Vision Yes*
10. Radiation Protection yes*

G. Employee Education Yes

H. Records Yes

* If applicable

"PROGRAM ELEMENT D - HEALTH HAZARD RECOGNITION

1. STANDARDS

a. Compliant: Identification (recognition) of at least 85 percent of existing and potential health hazards has been completed and entered into the HHIM. Supervisory personnel are aware of the hazards.

b. Generally Compliant: Seventy percent or more of existing and potential health hazards have been identified and entered into the HHIM.

c. Noncompliant: Less than 70 percent of existing and potential health hazards have been identified and entered into the HHIM.

Note: this key element establishes and maintains the occupational health program inventory of occupational health hazards. The inventory process is used to recognize occupational health hazards prior to their evaluation and control. For the design/process review, IH personnel will review the physical plant process or operational modifications, as well as new concept, design, or construction projects to ensure occupational health aspects are appropriately addressed.

"PROGRAM ELEMENT E - HEALTH HAZARD EVALUATION

1. STANDARDS

a. Compliant: Eighty-five percent or more completion of the physical, chemical, and biological health hazards in the workplace have been evaluated.

Personnel exposed to these hazards are monitored regularly, and the IHIP has been completed.

b. Generally Compliant: Seventy percent or more of the physical, chemical, and biological health hazards have been evaluated. Personnel exposed to these hazards are monitored regularly and the IHIP is more than 70 percent complete.

c. Noncompliant: Less than 70 percent of the physical, chemical, and biological health hazards have been evaluated. Personnel exposed to these hazards are monitored sporadically or not at all, and the IHIP is less than 70 percent complete.

Note: potential occupational health hazards identified during the inventory process require evaluation to determine the degree of hazard severity. Air sampling and ventilation measurements are the most common means of evaluation. IH sampling will be collected in accordance with specified methods and analyzed by accredited laboratories. All samples will be handled to maintain a proper chain of custody."

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**UNITED STATES ARMY
ENVIRONMENTAL HYGIENE
AGENCY**

ABERDEEN PROVING GROUND, MD 2 10 10-5422

**A
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INSTALLATION INDUSTRIAL HYGIENE PROGRAM
SELF-ASSESSMENT GUIDE

Approved for public release; distribution unlimited. 1

Users of this technical guide are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to the Commander, U.S. Army Environmental Hygiene Agency, ATTN: HSHB-MO-D/Special Document Development Office, Aberdeen Proving Ground, MD 21010-5422.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY
ABERDEEN PROVING GROUND, MARYLAND 21010-5422



HSHB-MI-W

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USAEHA TECHNICAL GUIDE NO. 165

INSTALLATION INDUSTRIAL HYGIENE PROGRAM
SELF-ASSESSMENT GUIDE

Chapter 1
Industrial Hygiene Program Self--Assessment

1-1. Authority

- a. Memorandum, Office of the Assistant Secretary of the Army, 24 February 1988, subject: Occupational Health Program Audits.
- b. Memorandum, Office of The Surgeon General, DASG-PSP, 14 March 1988, subject: Occupational Health Program Audits.

1-2. Purpose

This technical guide (TG) provides industrial hygiene (IH) program managers with performance criteria for self-assessment of their Industrial Hygiene Program.

1-3. Objective

To improve management of an installation's Industrial Hygiene Program and its implementation and effectiveness by identifying strengths and targeting weaknesses found during self-assessment of operating records, facilities, operations, and practices.

1-4. Introduction

- a. IH is an essential element of both the Department of the Army (DA) Occupational Safety and Occupational Health Programs. IH is that science and art devoted to the recognition, evaluation, and control of those environmental factors and stresses associated with work and work operations that may cause sickness, impaired health and well being, or cause significant discomfort and inefficiency among workers or among citizens of the community. Without an effective Industrial Hygiene Program, the goals of the DA Occupational Safety and Occupational Health programs will not be achieved.

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b. During FY 88, the Deputy for Environment, Safety, and Occupational Health, Office of the Assistant Secretary of the Army (Installations and Logistics), issued annual Occupational Health Program goals. In response, the Office of The Surgeon General developed a number of prioritized objectives and several new initiatives. One of these initiatives was development and implementation of an Occupational Health Review Program. The Industrial Hygiene Program Review (IHPR) was developed as a direct result of this initiative.

c. IHPRs assist major Army commands (MACOMs), commanders, and installation IH program managers in identifying systemic deficiencies and establishing priorities for their Industrial Hygiene Program. The data gathered by such program reviews may be used to justify resource requirements during the program planning and budgeting process. In addition, the reviews apprise MACOMs and installations of the baseline status of their Industrial Hygiene programs and enhance exercise of good program stewardship and support.

d. The documents used to conduct the IHPRs are the Industrial Hygiene Evaluation Protocol Questionnaire (appendix A) and the Industrial Hygiene Program Evaluation Summary (appendix B).

(1) The questionnaire is the assessment tool which provides both installation program managers and U. S. Army Environmental Hygiene Agency (USAEHA) project officers with criteria for determining the status of Industrial Hygiene programs.

(2) The summary provides summary sheets for recording the overall estimate of program status. It provides commanders and program managers with a "snapshot in time" of the program including areas requiring command assistance.

e. Self-assessment of the installation Industrial Hygiene Program is an important part of the program review system.

(1) Self-assessments are done because-

(a) there are no universal, simple indicators of program status.

(b) MACOMs and DA cannot assess each program every year.

(c) self-assessments "power down" responsibility to installations.

(d) they prepare installations for external assessments.

(2) The questionnaire and summary in appendixes A and B provide a detailed guide of critical program areas using self--explanatory questions. The installation program manager can add material to deal with local conditions. The self-assessment helps installations identify program strengths and weaknesses and prepares the program manager to eliminate any problems found.

(3) Quality assurance (QA) can be accomplished either by both external assessments done by the MACOM or USAEHA or internal QA by unit auditors, inspector general, or disinterested officers.

(4) Benefits provided by this self-assessment process include--

- (a) Identifying standard program criteria.
- (b) Inducing program managers to make critical evaluations.
- (c) Triggering followup on pending corrective actions.
- (d) Providing spontaneous identification of annual performance goals.
- (e) Providing program continuity after personnel turnover.

(5) IMPORTANT: Do not use the self-assessment portion of the IHPR process to compare different facilities; each facility must act as its own baseline/control to gauge improvement.

(6) These self-assessments can be a useful tool for installation program managers. However, they will only be successful if the self-assessor makes an honest appraisal.

1-5. Explanation of abbreviations

Abbreviations used in this guide are explained in the glossary.

Chapter 2
Industrial Hygiene Evaluation Criteria

2-1. Standards

a. Compliant: All of the critical elements have been established and 85 percent of the other elements are being met.

b. Generally Compliant: One of the critical elements has not been established and 70 percent of the other elements are being met.

c. Noncompliant: Two or more of the critical elements have not been established or less than 70 percent of the other elements are being met.

2-2. Program elements

The program elements presented in the following table are identified in the questionnaire (appendix A).

Table 2-1
Industrial Hygiene Program Elements

Program Element.	Critical Element
A. Written Documents	
1. Policy	Yes
2. Program	Yes
B. Staff	
1. Manpower	Yes
2. Personnel	Yes
3. Training	No
C. IH Facilities, Equipment and References	
1. Facilities	Yes
2. Equipment	Yes
3. References	Yes
D. Health Hazard Recognition	
1. Health Hazard Information Module (HHIM)	Yes
2. Design/Process Review	No
3. Worker Hazard Identification	No
E. Health Hazard Evaluation	
1. Industrial Hygiene Implementation Plan	Yes
2. Air Sampling	Yes
F. Health Hazard Control	
1. Control Methods	Yes
2. Respiratory Protection	Yes*
3. Asbestos Management	Yes*
4. Confined Space Entry	Yes*
5. Heat Stress	Yes*
6. Medical Surveillance	Yes
7. Risk Assessment Code (RAC) and the Installation Hazard Abatement Plan	Yes*
8. Hearing Conservation	Yes
9. Occupational Vision	Yes*
10. Radiation Protection	Yes*
G. Employee Education	Yes
H. Records	Yes

* If applicable

APPENDIX A
INDUSTRIAL HYGIENE EVALUATION ,
PROTOCOL QUESTIONNAIRE

PROGRAM ELEMENT A - WRITTEN DOCUMENTS

1. STANDARDS

a. Compliant: The philosophy and goals of the Industrial Hygiene Program are completely expressed in a written policy document, and a program document has been prepared, staffed and approved. The policy has been recognized, accepted, and incorporated in the overall policies of the Occupational Health Program. A formal program document containing statements of mission, objectives, goals, and procedures has been published.

b. Generally Compliant: The philosophy and goals of the Industrial Hygiene Program have been drafted and staffed.

c. Noncompliant: The philosophy and goals of the Industrial Hygiene Program have not been drafted nor staffed.

NOTE 1. The authority for the Industrial Hygiene Program is established in AR 40-5 and AR 385-10. Supplements to these ARs are necessary to establish the program at the installation level. Program objectives and responsibilities are further defined in TB MED 503.

NOTE 2. In order to develop an effective installation Industrial Hygiene Program, the industrial hygienist must work with safety, occupational health, and other personnel to clarify and define relationships.

2. REFERENCES

AR 40-5, AH 385-10, and TB MED 503.

3. QUESTIONS

Questions for the critical elements listed below are presented on the following pages:

- a. Policy
- b. Program

CRITICAL ELEMENT A1 -- POLICY

- 1. Who is the installation's designated occupational safety and health (OSH) official? (AR 385-10, para 2-1)

Name	Position.
_____	_____

- 2. Where are the responsibilities of the industrial hygienist with respect to the installation's OSH program delineated? (AR 40-5, par-a 5-4; TB MED 503, chap 3)

Document(s): _____

- 3. What are the responsibilities of the industrial hygienist with respect to the installation's OSH program? (AR 40-5, para 5-4; TB MED 503, chap 3)

Responsibilities: _____

- 4. Which documents delineate the installation personnel responsibilities for the installation OSH program? (local regulation, supplements to AR's) (AR 385-10, para 2-2)

Document(s): _____

- 5. Is there a formal written policy for IH?

Y e s Document (give title and date): _____

Yes-Draft: ----- Document (give title and expected publication date): _____

No: -----

CRITICAL ELEMENT A2 -- PROGRAM

1. Is there a formal written program document for IH?

Yes: _____ Document (give title and date): _____

Yes-Draft: _____ Document (give title and expected publication date): _____

No: _____

2. Does the program document contain statements of mission, program objectives, goals, and procedures for implementation of each of the elements of the Industrial Hygiene Program?

Mission:	Yes: _____	No: _____
Program objectives:	Yes : _____	No: _____
Goals :	Yss: _____	No: _____
Procedures:	Yes : _____	No: _____

3. Does the program document reflect the present activities and requirements of the installation Industrial Hygiene Program?

Yes: _____ No : _____ Not Applicable: _____

4. Is the program document reviewed on a regular basis?

Yes:

Frequency: Regularly (give period (e.g., yearly)) _____
Irregularly: _____
When was the last review? month _____ year _____

No: _____

5. Has the writ-ten program document been approved and signed by management?

Yes, formally: _____
Yes, informally: _____
Not in any definite way: _____

- 6. Which activities or directorates have responsibilities for the installation OSH program? What are their responsibilities? (AR 385-10, para 1-4)

Activity/Directorate	Responsibility
-----	-----
-----	-----
-----	-----
-----	-----

- 7. Is there an installation Safety and Occupational Health (SOH) advisory council? (AR 385-10, para 2-1)

Yes : _____
 No: _____ (Skip questions 8 thru 14)

- 8. Is written documentation maintained of SOH advisory council meetings?

Yes : I----- No: ----_

- 9. Describe in what form(s) documentation is maintained?

Comment(s): -----

- 10. How often does the installation SOH advisory council meet? (AR 385-10, para Z-1)

Frequency (e.g., quarterly; yearly) -----
 When was the last meeting? Month: _____ Year : _____

- 11. What is the purpose and responsibilities of the installation SOH advisory council? (AR 385-10, para Z-1)

Purpose: -----

Responsibilities: -----

12. Who are the SOH advisory council members? (AR 385-10, para Z-1)

Name	Title/Representing
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

13. Who is the medical representative for occupational health matters? (AR 385-10, para Z-1)

Name	Title
_____	_____

14. Is the industrial hygienist a member of the SOH advisory council (or a technical representative for special matters when requested)?

Yes : _____
 No : _____
 Technical representative only: _____

15. Is there a working relationship between safety and IH? (e.g., routine meetings, cooperation)

Yes: _____ No: _____

16. Do IH personnel have contact with Directorate of Engineering and Housing (DEH) and Directorate of Industrial Operations (DIO)?

Yes : _____ No : _____

17. Do IH personnel have contact with the civilian personnel office (CPO)?

Yes : _____ No: _____

18. Do support agreements with tenant activities include IH support?

Yes : _____ No: _____

- 25. Does the installation have any Government-owned, contractor-operated (GOCO) activities?

Yes : _____ No: _____

If ' Yes, identify the contractor: _____

Describe, in general, the contractor operations the IA is responsible for supporting: _____

- 26. Do GOCO contracts contain provisions for IH support and health hazard abatement?

Yes : _____ No: _____

- 27. If Yes, are these provisions adequate?

Yes: _____ No: _____

- 28. Is an IH review required in the formulation of new GOCO contracts and in the renewal of existing GOCO contracts?

New contracts	Yes : _____	No: _____
Contract renewal	Yes: _____	No: _____

- 29. Are contracts containing occupational health/IH provisions reviewed by the IH prior to award'?

	Yes	No	
Statements of work:	_____	_____	
Proposal submissions:	_____	_____	
Other:	_____	_____	Discuss: _____

30. Is there a need for a support agreement between the installation and the U.S. Army medical center/U.S. Army medical department activity (MEDCEN/MEDDAC) which covers IH services?

Yes : _____ No: _____

31. If Yes, does the support agreement include all the IH services required by the installation along with a mechanism for requesting those services, and appropriate action for correction of health hazards?

Yes : _____ No: _____

32. Does the MEDCEN/MEDDAC provide IH support to other installations in their health services region?

Yes: _____ No: _____

33. If Yes, is the support contained in support agreements?

Yes : _____ No: _____

34. What documents (other than policy and program documents) delineate responsibilities for the Industrial Hygiene Program?

Document(s) : _____

35. Who has administrative responsibility for the Industrial Hygiene Program? (AH 40-5, para 1-4)

Name	Position
_____	_____

36. Who has technical responsibility for the Industrial Hygiene Program? (TB MED 503, para 1-5)

Name	Position
_____	_____

42. How many IH services have been provided by contract?

Number of contract services provided (scheduled) by USAEHA: _____
Number of contract services provided (scheduled) locally: _____

43. What type of service was provided? (e.g., HHIM update; baseline inventory; sample analysis; sampling survey)

Service: _____

44. What estimated percentage of personnel resources are allocated to supported activities? (e.g., DJO, DEH, MEDDAC, MEDCEN, Defense Logistics Agency (DLA))

Activity Supported	Percentage
_____	_____
_____	_____
_____	_____
_____	_____

PROGRAM ELEMENT B -- STAFF

1. STANDARDS

a. Compliant: The staff responsible for the direction and operation of the Industrial Hygiene Program is professionally qualified, adequate in number, and has sufficient time and authority to plan and execute 85 percent of the IH functions of the Occupational Health Program set forth in the written policy program.

b. Generally Compliant: The staff is at least 85 percent of authorized strength, is professionally qualified, and has sufficient time and authority to plan and execute 70 percent of the IH functions.

c. Noncompliant: The staff is not qualified, not adequate in number, nor has sufficient time and authority to execute at least 70 percent of the IH functions.

NOTE: The questions in this section are designed to determine if adequate personnel are available to fully implement the Industrial Hygiene Program and to provide background data on the personnel performing IH functions at the installation.

B. REFERENCES

AR 40-5, AR 385510, and TB MED 503.

C. QUESTIONS

Questions for the critical/noncritical elements listed below are presented on the following pages:

a. Manpower

b. Personnel

c. Training

CRITICAL ELEMENT B1 - MANPOWER

- 1. Are there IH positions listed on the current tables of distribution and allowances (TDA)?

Yes : ---- No: ----

- 2. How many recognized, authorized, and filled positions are there and what are the levels of the positions (GS grade)?

Recognized: _____ Authorized: ---- Filled: _____

Industrial Hygienist(s) and Technician(s) (Give name, position (e.g., supervisory IH, IH, IH technician); grade, length of time at the present position in years).

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____
- h. _____
- i. _____
- j. _____

- 3. Have previous manpower studies recognized the requirements?

Yes : ---- No: ----

- 4. If Yes, what are the requirements?

	Superv				Administrative		
	IH	IHs	IH	Tech	Steno/Clk	Typ/Clk/Temp	Other
Requirements:	----	----	---	---	___/___/___	___/___	---

- 5. If Yes, what are the dates of the last manpower study?

Month: _____ Year: --- None performed: - -

6. Have manpower requirements for fu3.1 implementation of the Industrial Hygiene Program been determined and documented?

Yes : No :

7. If Yes, how were the requirements determined?

State how determined: _____

8. Have manpower requirement documents been prepared and submitted?

Yes : _____ If Yes, give date: Month _____ Year _____
No:

9. Are -there any planned changes for IH manpower-?

Yes : If Yes, describe: _____
No: _____

10. IS IH manpower/workload data maintained?

Yes : _____ No:

11. How is the data maintained?

Document name: _____

12. Is IH workload data maintained separately from other preventive medicine service programs?

Yes : _____ No: _____

13. What portion of the industrial hygienist's/technician's time is spent within work areas? (include travel time)

Industrial hygienist/Technician	0-25%	26-50%	51-100%
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

14. What portion of the industrial hygienist's/technician's time is spent in IH office tasks? (e.g., report preparation, design review, equipment calibration)

Industrial hygienist/Technician	0-25%	26-50%	51-100%
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-I---	-----	-----

15. What portion of the industrial hygienist's/technician's time is spent on program administration?

Industrial hygienist/Technician	0-25%	26-50%	51-100%
-----	-----	-----	m---s--
-----	-----	-----	-----
-----	-----	-----	-w---m-
-----	-II-	-----	-----
-----	-----	-----	-m-o---

CRITICAL ELEMENT B2 -- PERSONNEL

1. Has the TH position(s) changed since being established (technician to professional)?

Yes: _____ No: _____

2. Has the industrial hygienist(s)/technician(s) received promotions?

Industrial hygienist/Technician	Yes	Date of promotion	No
-----	---	-----	---
-----	---	-----	---
-----	---	-----	---
-----	---	-----	---

3. Is the industrial hygienist working at the full performance level of the job?

Yes : _____ No: _____

4. What are the qualifications of the IH personnel (education, experience, certification)?

Industrial hygienist/ Technician	Education in (e.g., AA, BS, MS)	Experience			Certifications (e.g., IHIT, CIH)
		0-1 yr	1-5 yr	5+ yr	
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----

5. Has the MEDDAC/MEDCKN supported the certification of the IH?

Yes: _____ No: _____

6. Does the industrial hygienist(s)/technician(s) belong to any professional associations?

Industrial hygienist/Technician	Yes	No	Associations
			(e.g., AIHA, ACGXH, ACIH, AWS)
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

7. Is clerical support available?

Yes : ----- No: -----

8. Is clerical support adequate?

Yes : ----- No: -----

9. Is the clerical support specifically provided for IH, or as additional support from another organization or division?

Yes : ----- No: - - -

If Yes, clerical support from (Organization/division): _____
-----I-----

If Yes, percent of time dedicated to supporting the Industrial Hygiene Program:

Title of Clerical Personnel	0-25%	26-50%	51-100%
_____	---	-----	-----
_____	---	-----	-----

PROGRAM ELEMENT C - IH FACILITIES, EQUIPMENT, AND REFERENCES

1. STANDARDS

a. Compliant: The facilities are of adequate quality and size, and are suitably located to perform the functions of the Industrial Hygiene Program; and equipment and references are adequate in type and quantity to effectively carry out the functions of the Industrial Hygiene Program.

b. Generally Compliant: Either the facilities, equipment, or the references are adequate to support the functions of the Industrial Hygiene Program.

c. Noncompliant: Neither the facilities, equipment, nor the references are adequate to support the functions of the Industrial Hygiene Program.

NOTE: Questions in this section address the adequacy of facilities and equipment used in supporting the Industrial Hygiene Program. Adequate facilities and equipment are essential to correctly evaluate hazards and base recommendations concerning potential occupational health hazards.

2. REFERENCES

AR 40-5 and TB MED 503.

3. QUESTIONS

Questions for the critical elements listed below are presented on the following pages:

- a. Facilities
- b. Equipment
- c. References

CRITICAL ELEMENT C1 - FACILITIES

1. Is office space adequate?

Yes: _____ No: _____

Number of square feet provided total: _____

Number of square feet per person: _____

2. Is laboratory space adequate for storage, calibration, and repair of equipment?

Yes : _____ No : _____

Number of square feet provided: _____

3. Is government transportation provided for surveys?

Yes : _____ No: _____ Use POV: _____

CRITICAL ELEMENT C2 - EQUIPMENT

1. Is sufficient IH equipment available for the program?

Yes : ---- No: ----

2. Have requests for equipment been submitted and approved?

Yes : --- No: -----

3. Do IH personnel experience difficulty in obtaining necessary equipment?

Yes: ----- No: -----

4. Are medical care support equipment (MEDCASE) items programmed for replacement on a 5-year cycle?

Yes : A--- No: -----

5. Minimum Essential IH Equipment (Extracted from TB MED 503)

Quantity	Description	Yes	No	N/A
2 ea	Air Velocity Meter	---	---	---
1 ea	Air Velocity Meter (Pitot Tube Kit-Pilot Tube - Manometer - Gauges)	---	---	---
1 ea	Calibrator; Mass Flow/Bubble Meter	---	---	---
1 ea	WBGT Index Kit	---	---	---
1 ea	Aspirator Bulb (for smoke tube)	---	---	---
1 bx	Smoke Tubes	---	---	---
1 ea	Thermometer to 220 degree F	---	---	---
1 ea	Mercury Sniffer with Battery Charger	---	---	---
1 ea	Carbon Monoxide Monitor	---	---	---
1 ea	Certified Span Gas for Calibration of CO Monitor	---	---	---
3 ea	Portable Personnel Air Samplers with Charger for each	---	---	---
1 ea	Low-Flow, Constant-Flow Air Sampler (20 to 400 cc/min) with Charger	---	---	---
1 ea	Gas and Vapor Detector	---	---	---
1 bx	0.8um Cellulose Ester Filter 37mm, 100/bx (support pads included)	---	---	---
1 dz	Midget Impingers, Spillproof with Protective Plastic Covering	---	---	---
1 bx	Type A Glass Fiber Filters 37mm, 500/box	---	---	---

Quantity	Description	Yes	No	N/A
2 ea	Cyclone Assembly, Complete	---	---	---
1 bx	Filter Backing Pads, 100/box	---	---	---
1 pk	50 complete filter cassettes, empty for 37mm Filters with Spacer Rings	---	---	---
1 dz	Bulk Sample Containers	---	---	---
50 ea	Charcoal Tubes	---	---	---
4 bx	Carbon Monoxide Detector Tubes	---	---	---
2 bx	Nitrogen Dioxide Detector Tubes	---	---	---
1 bx	Trichloroethylene Detector Tubes	---	---	---
1 bx	Toluene Detector Tubes	---	---	---
1 bx	Xylene Detector Tubes	---	---	---
1 bx	Ozone Detector Tubes	---	---	---
1 bx	Formaldehyde Detector Tubes	---	---	---
1 bx	Ammonia Detector Tubes	---	---	---
1 bx	Methyl Chloroform Detector Tubes	---	---	---
1 ea	Infrared Analyzer	---	---	---
1 ea	Tape Measure, 6 feet	---	---	---
1 ea	Tape Measure, 50 feet	---	---	---
1 ea	Flashlight	---	---	---
1 ea	Screwdriver Set	---	---	---
2 ea	Pistol Belts	---	---	---
1 ea	60 yd roll Masking Tape	---	---	---
1 dz	Hose adapters for tubing	---	---	---
1 rl	1/4-in. ID Sampling Tubing (50 feet)	---	---	---
1 ea	Stop Watch	---	---	---

6. Supplemental Sampling Equipment (Extracted from TB MED 503)

Quantity	Description	Yes	No	N/A
1 ea	Alnor Velometer	---	---	I--
1 ea	Tachometer (Photoelectric handheld)	---	---	---
1 ea	Combustible Gas & Oxygen Indicator	---	---	---
4 ea	Air Sampling Pumps plus Chargers	---	---	---
2 ea	High Volume Samplers	---	---	---
200 ea	Filters for High Volume Samplers	---	---	---
2 ea	Large Fritted Impingers	---	---	---

7. Is there an equipment calibration program? (AR 750-25)

Yes: _____ No: _____

If Yes, how often is equipment calibrated? _____

If Yes, where is equipment sent? _____

Comment(s): _____

8. Are calibration records maintained?

Yes: _____ No: _____

9. Are the calibration records adequate?

Yes: _____ No: _____

10. Do IH personnel experience difficulty with operation or calibration of equipment? (Have personnel demonstrate)

Yes : _____ No : ---I--

11. Are calibration procedures traceable to the National Bureau of Standards (NBS)?

Yes: _____ No: _____

12. Is equipment maintained appropriately?

Yes : _____ No: _____

13. Who maintains the equipment?

Name	Title	Organization
_____	_____	_____
_____	- - I - - - - -	_____

CRITICAL ELEMENT C3 -- REFERENCES*

1. What organizational references are available for the program (not personally owned references)?

a. Required References

	Yes	No	N/A
AR 40-5, Preventive Medicine	---	---	---
AR 50-6, Chemical Surety	---	---	---
AR 385-10, The Army Safety Program	---	---	---
DLAM 6055.1, DLA Safety and Health Manual			---
TB MED 501, Hearing Conservation, with Change 1	---	---	---
TB MED 502, Respiratory Protection Program	---	---	---
TB MED 503, The Army Industrial Hygiene Program	---	---	---
TB MED 506, Occupational Vision			---
TB MED 507, Prevention, Treatment, and Control of Heat Injury	---	---	---

* REQUISITIONING PUBLICATIONS

When requisitioning publications, use DA Form 17 (Requisition for Publications and Blank Forms) and DA Form 17-1 (Requisition for Publications and Blank Forms (Continuation Sheet)) per AR 25-30, chapter 12. These DA forms are available through normal publication supply channels.

TYPE:	POC
DA Publications (ARs, DA Pams, TB MEDs, etc.)	Your installation stockroom and overseas centers
USAEHA TGs	Write to: Commander, USAEHA, ATTN: HSHH--C1-O, Aberdeen Proving Ground, MD 21010-5422

	Yes	No	N/A
TB MED 509, Spirometry in Occupational Health Surveillance	---	---	---
TB MED 510, Interim Guidelines for the Evaluation and Control of Occupational Exposure to Waste Anesthetic Gases	---	---	---
TB MED 513, Guidelines for the Evaluation and Control of Asbestos Exposure	---	---	---
TB MED 521, Management and Control of Diagnostic X-Ray, Therapeutic X-Ray, and Gamma-Beam Equipment	---	---	---
TB MED 575, Swimming Pools and Bathing Facilities	---	---	---
TB MED 577, Sanitary Control and Surveillance of Field Water Supplies	---	---	---
Title 29, Code of Federal Regulations, 1986 rev, Part 1910, Occupational Safety and Health Standards	---	---	---
Industrial Ventilation, A Manual of Recommended Practice. Lansing, MI: American Conference of Governmental Industrial Hygienists, Committee of Industrial Ventilation, current edition	---	---	---
Threshold Limit Values (TLVs) and Biological Exposure Indices (Current Year), American Conference of Governmental Industrial Hygienists, Cincinnati, Ohio	---	---	---
Documentation of the Threshold Limit Values, Cincinnati, OH: American Conference of Governmental Industrial Hygienists, current edition with annual supplements	---	---	---
USAEHA TG No. 141, Industrial Hygiene Sampling Instructions	---	---	---
USAEHA TG No. 144, Guidelines for Controlling Health Hazards in Painting Operations	---	---	---
USAEHA TG No. 170, Hearing Conservation	---	---	---

b. Optional References

	Yes	No	Need
AR 11-XX, The Army Respiratory Protection Program (to be published) (Use USAEHA TG 171 until AR 11-XX is published.)	---	---	---
AR 25-400-2, Modern Army Recordkeeping System (MARKS)	---	---	---
AR 40-14, Control and Recording Procedures for Exposure to Ionizing Radiation and Radioactive Materials	---	---	---
AR 40-46, Control of Health Hazards from Lasers and Other High Intensity Optical Sources			
AR 40-66, Medical Record and Quality Assurance Administration	---	---	---
AR 200-L, Environmental Protection and Enhance- ment	---	---	---
AR 385-11, Ionizing Radiation Protection (Licensing, Control, Transportation, Disposal, and Radiation Safety)			---
AR 385-32, Protective Clothing and Equipment	---	---	---
AR 385-40, Accident Reporting and Records, with Interim Change 101	---	---	---
AR 420-10, Management of Installation Directorates of Engineering and Housing and Personnel	---	---	---
AR 700-68, Storage and Handling of Compressed Gases and Gas Cylinders	---	---	---
AR 750-25, Army Test, Measurement, Diagnostic Equipment Calibration and Repair Support Program	---	---	---
Executive Order 12196, Occupational Safety and Health Programs for Federal Employees	---	---	---
TB MED 523, Control of Hazards to Health from Microwave and Radiofrequency Radiation and Ultrasound	---	---	---

	Yes	No	Need
TB MED 524, Control of Hazards to Health from Laser Radiation	---	---	---
TB MED 525, Ionizing Radiation Used in Medicine	---	---	---
Title 29, Code of Federal Regulations, 1986 rev, Part 1904, Recording and Reporting Occupational Injuries and Illnesses	---	--	---
Title 29, Code of Federal Regulations, 1986 rev, Section 1926.58, Asbestos, tremolite, anthophyllite, and actinolite	---	--	--
Title 29, Code of Federal Regulations, 1984 rev, Part 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters	--	---	---
Title 40, Code of Federal Regulations, 1986 rev, Part 763, Asbestos	---	---	--
HSC Supplement 1 to AR 40-5, Preventive Medicine	--	---	---
HSC Supplement 1 to AR 385-10, The Army Safety Program	-	-	-
HSC Regulation 10-1, Organization and Function Policy	--	---	--
Public Law 91-596, Occupational Safety and Health Act of 1970	---	---	---
DA Pamphlet 40-8, Special Safety and Health Standard for the Evaluation and Control of Occupational Exposure to Agent GB with change 1	---	---	---
DA Pamphlet 385-3, Protective Clothing and Equipment	---	---	---
DoD Manual 6055.5-M, Occupational Health Surveillance Manual	---	--	---
Message, HQDA, DAPE-ZA, 0623502 Jun 86, subject: Policy on Controlling Smoking	---	---	---

	Yes	No	Need
ETL 1110-3-344, Interior Mechanical Design Conditions for Army and Air Force Medical Facilities	---	---	---
ETL 1110-3-366, Exhaust Systems for Ethylene Oxide Sterilizer System	---	---	---
TM 5-810-1, Mechanical Design: Heating, Ventilating, and Air Conditioning	---	---	---
TM 5-838-2, Army Health Facility Design	---	---	---
TM 9-237, Operator's Manual for Welding Theory and Application	---	---	---
TM 43-0139, Fainting Instructions for Army Materiel	---	---	---
American National Standards Institute (ANSI) Standard Z88.2-1980, Practices for Respiratory Protection	---	---	---
ANSI Standard Z358.1-1981, Emergency Eyewash and Shower Equipment	---	---	---
TJSAEHA TG No. 028, Handling and Decontamination Guide for Elemental Mercury	---	---	---
USAEHA TG No. 143, Evaluation and Control of Occupational Exposure to Ethylene Oxide in Health Care Facilities	--		
USAEHA TG No. 153, Guidelines for Controlling Potential Health Hazards from Radiofrequency Radiation	---	---	---
USAEHA TG No. 169, Occupational Health Guidelines for the Evaluation and Control of Occupational Exposure to Nerve Agents GA, GB, GD, and VX	---	---	---
USAEHA TG No. 171, The Army Respiratory Protection- Program	---	---	---
Compressed Gas Association, Handbook of Compressed Gases, Van Nostrand Reinhold Company, New York, 1981	---	---	---

	Yes	No	Need
Documentation of Industrial Hygiene Air Sampling Procedures for USAEHA TG No. 141, Industrial Hygiene Sampling Instructions	---	---	---
ASHRAE Standard, Ventilation for Acceptable Indoor Air Quality, 62-1981, The American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., Atlanta, Georgia	---	---	---
NIOSH Publication No. 81-123, Occupational Health Guidelines for Chemical Hazards	---	---	---
NIOSH Publication No. 84-100, NIOSH Manual of Analytical Methods, current edition	---	---	---
NIOSH Publication No. 85-114, Pocket Guide to Chemical Hazards	---	---	---
NIOSH Publication No. 87-102, NIOSH Certified Equipment List as of October 1, 1986	---	---	---
Ltr, 385-84-1, HQDA, 31 December 1984, subject: Policy, Responsibilities and Procedures for Inspection and Evaluation of U. S. Army Indoor Firing Ranges	---	---	---
Ltr, HQDA, DASGPSP, 1 March 1985, subject: Laboratory Hood Performance Test Procedures	---	---	---
Ltr, HQDA, DASG-PSP-0, 14 July 1987, subject: Protective Eyewear for the Soldier	---	---	---
Handbook of Noise Measurement. Concord, MA: General Radio, current edition	---	---	---
IES Lighting Handbook. New York: Illuminating Engineering Society, latest edition	---	---	---
The Industrial Environment - Its Evaluation and Control. Washington, D.C.: Superintendent of Documents, Government Printing Office (GPO) 017-000-00396-4, 1973	---	---	---
Industrial Hygiene Field Operations Manual. Washington, D.C.: Superintendent of Documents, GPO	---	---	---

	Yes	No	Need
Occupational Diseases: A Guide to Their Recognition. Washington, D.C.: Superintendent of Documents, GPO 017-033-00266-5, revised edition, 1977	---	---	---
Patty's Industrial Hygiene and Toxicology. New York: Joe Wiley & Sons, Volumes I-V, current edition	--	---	---
Proctor, Nick H. and Hughes, James P., Chemical Hazards of the Workplace. Philadelphia: J.B. Lippincott Company, 1978.	---	---	---
Sax, N. Irving. Dangerous Properties of Industrial Materials. New York: Van Nostrand Reinhold Co, current edition	---	---	---
American Industrial Hygiene Association Journal. Akron, OH: American Industrial Hygiene Association	---	---	---
Applied Industrial Hygiene. Cincinnati, OH: American Conference of Governmental Industrial Hygiene	---	---	---
Basic Industrial Hygiene: A Training Manual. Akron, OH: American Industrial Hygiene Association, 1980	---	---	---
Hunter, Donald. The Diseases of Occupation. Boston, MA: Little, Brown, 1975	--	---	---
Fundamentals of Industrial Hygiene. Chicago, IL: National Safety Council, current edition	---	---	---
Engineering Field Reference Manual. Akron, OH: American Industrial Hygiene Association	-	---	---
Comment(s): _____			

2. Are these references adequate for evaluating hazardous operations found at the installation?

Yes : ----- 'No : ----

PROGRAM ELEMENT D - HEALTH HAZARD RECOGNITION

1. STANDARDS

a. Compliant: Identification (recognition) of at least 85 percent of existing and potential health hazards has been completed and entered into the HHIM. Supervisory personnel are aware of the hazards.

b. Generally Compliant: Seventy percent or more of existing and potential health hazards have been identified and entered into the HHIM.

c. Noncompliant: Less than 70 percent of existing and potential health hazards have been identified and entered into the HHIM.

NOTE: This key element establishes and maintains the Occupational Health Program inventory of occupational health hazards. The inventory process is used to recognize occupational health hazards prior to their evaluation and control. For the Design/Process Review, IH personnel will review the physical plant process or operational modifications, as well as new concept, design, or construction projects to ensure occupational health aspects are appropriately addressed.

2. REFERENCES

AR 40-5; AR 385-10; AR 420-10; and TB MED 503, paras 3-2b -and g.

3. QUESTIONS

Questions for the critical/noncritical elements listed below are presented on the following pages:

- a. Health Hazard Information Module (HHIM)
- b. Design/Process Review
- c. Worker Hazard Identification

 CRITICAL ELEMENT D1 - HEALTH HAZARD INFORMATION MODULE (HHIM)

NOTE: To evaluate questions 1 through 5, use a table of random numbers to select an unbiased sample of operations and HHIM sheets for first hand evaluation. Sample size should range between 2 and 10 percent. Obtain printouts of HHIM forms from the installation personnel. It is advisable not to touch the installation's computer equipment or manipulate data files.

1. What percentage of the health hazard inventory has been completed?

0-25% 26-50% 51-75% 76--100%

2. What percentage of the identified hazards have been evaluated?

0-25% 26-50% 51-75% 76-100%

3. If the HHIM is incomplete, has the workload required to complete this task been identified and scheduled on the Industrial Hygiene Implementation Plan (IHIP)?

Yes: ----- No: -----

4. If the HHIM is incomplete, has assistance from a support agency or outside contractor been solicited?

Yes : _____ No: _____

If Yes, give month: _____ and year: _____

5. Is the information contained in the HHIM:

Accurate? Yes : _____ No: _____

Complete? Yes : ----- No: _____

Current (i.e., < 1 year old)? Yes : No : -----

6. Is the information contained in the HHIM provided to or available to other personnel working in the Occupational Health Program?

	Yes	No
Occupational health physician	-----	-----
Occupational health nurse	-----	-----
Optometrist	-----	-----
Audiologist	-----	-----
Radiation Protection Officer (RPO)	-----	-----
Safety	-----	-----
Other: -----m	-----	-----
-----	-----	-----
-----	-----	-----

7. Is the HHIM used to determine and schedule medical surveillance?

Yes : ----- No: -----

8. Is the information contained in the HHIM used as a source for:

	Yes	No
Documentation of IH equipment requirements?	-----	-----
Budget and staffing resource requirements?	-----	-----
Annual IHIP development?	-----	-----

9. Is information gathered during routine sampling, monitoring and evaluation activities used to supplement and update the HHIM?

Yes : ----- No: -----

10. Who maintains the installation hazardous chemical inventory?

Individual's name	Directorate/Activity
-----	-----

11. How often is the HHIM updated? (e.g., weekly, monthly, semiannually, annually, 25 percent a quarter)

Percentage updated (e.g., 10 percent of forms or operations/month)

0-10%	-----	Weekly:	-----
11-25%	-----	Monthly:	-----
26-40%	-----	Quarterly:	-----
41-50%	-----	Semiannually:	-----
51-75%	-----	Annually:	-----
76-90%	-----	Not at all:	-----
91-100%	-----		

NONCRITICAL ELEMENT D2 -- DESIGN/PROCESS REVIEW

- 1. Has a Memorandum of Understanding (MOU) been developed between the IMA and the DEH to formalize the medical/technical design/process review?

Yes : _____ No: _____

- 2. If Yes, what are the responsibilities for the IH/OSH review?

Responsibilities: _____

- 3. Is the MOU adequate?

Yes : _____ No: _____

- 4. Have IH personnel received training or have background course work sufficient to ensure adequate technical review of design projects?

Yes : _____ No: _____

Date	Training Course Title	Location
_____	_____	_____
_____	_____	_____
_____	_____	_____

NOTE: If background course work was part of degree(s) requirements, include comment on relationship between working as an IH and the course(s)/degree acquired.

Comment(s): _____

5. Is there a medical representative on the Installation Planning and Review Board?

Yes: _____ No: _____

Name

Title

6. Are there highly technical or unusual designs that should be referred to supporting activities for review assistance?

Yes: _____ No: _____

7. Do records show that design reviews have been accomplished?

Yes : _____ No: _____

8. Are reviews:

Formal, written: _____ Informal: _____ Other, specify: _____

Comment(s): _____

9. Are special approvals or standing operating procedures (SOPs) required for specific toxic materials? (e.g., carcinogens, carbon tetrachloride, carbon disulfide, toluene diisocyanate, beryllium)

Yes: _____ No: _____

If Yes, example: _____

NONCRITICAL ELEMENT D3 - WORKER HAZARD IDENTIFICATION

NOTE: Reports of hazardous conditions by Army personnel are important in detecting hazards that cause accidents or affect health. Reporting unsafe or unhealthful conditions in the workplace is a legal right of all federal employees. Reports may be signed or unsigned and complainant may request anonymity. Originator(s), if known, will be notified in writing within 10 working days following receipt of a hazard report of the results of any investigation. Interim responses may be supplied to the originator if the 10-day suspense cannot be met. References for this specific section are 29 CFR 1910, 29 CFR 1960, and AR 385-10, para 4-4.

1. Is there a mechanism established for workers to report hazardous conditions?

Yes : ---- No: - - -

2. Who is the installation official assigned to receive and act on these reports?

Name of official

Title

Organization

PROGRAM ELEMENT E -- HEALTH HAZARD EVALUATION

1. STANDARDS

a. Compliant: Eighty-five percent or more completion of the physical, chemical, and biological health hazards in the workplace have been evaluated. Personnel exposed to these hazards are monitored regularly, and the IHIP has been completed.

b. Generally Compliant: Seventy percent or more of the physical, chemical, and biological health hazards have been evaluated. Personnel exposed to these hazards are monitored regularly and the IHIP is more than 70 percent complete.

c. Noncompliant: Less than 70 percent of the physical, chemical, and biological health hazards have been evaluated. Personnel exposed to these hazards are monitored sporadically or not at all, and the IHIP is less than 70 percent complete.

NOTE: Potential occupational health hazards identified during the inventory process require evaluation to determine the degree of hazard severity. Air sampling and ventilation measurements are the most common means of evaluation. IH sampling will be collected in accordance with specified methods and analyzed by accredited laboratories. All samples will be handled to maintain a proper chain of custody.

2. REFERENCES

TB MED 503, para 3-2d

3. QUESTIONS

Questions for the critical elements listed below are presented on the following pages:

a. Industrial Hygiene Implementation Plan (IHIP)

b. Air Sampling

CRITICAL ELEMENT E1 - INDUSTRIAL HYGIENE IMPLEMENTATION PLAN (IHIP)

1. Is there an IHIP document?

Yes : ----- (if Yes, continue)

No: ----- (if No, skip to critical element E2)

2. Does the IHIP realistically reflect the ongoing and anticipated workload for IH services at the installation?

Yes : ----- No: -----

3. What tenant activities, subposts, and other installations does the IHIP cover? (May be listed as appendixes to the IHIP or as separate IHIP's) (e.g., Camp Doughboy, Anywhere Idaho, Idaho ARNG).

None: -----

Tenant activities:

Organization	MACOM
-----	-----
-----	-----

Subposts:

Name	Location	MACOM
-----	-----	-----
-----	-----	-----
-----	-----	-----

Other installations:

Name	Location	MACOM
-----	-----	-----
-----	-----	-----
-----	-----	-----

4. Are all program services identified by priority?

Yes : ----- No: -----

5. If Yes, are the priorities valid?

Yes: _____ No: _____

5. Are all tasks listed in the IHIP, even those that cannot be accomplished due to lack of manpower? (e.g., calibration; air and ventilation sampling; report preparation)

Completely (90-100X): _____
Partially (25-89%): _____
Not at all (0-2476): _____

7. When is the IHIP reevaluated or updated?

Monthly: _____
Quarterly: _____
Semiannually: _____
Annually: _____
Other: _____
Not at all: _____

8. What supporting activities providing IH support are listed? (e.g., MEDDAC, MEDCRN, USAEHA, or outside contractors)

None: _____
MEDCEN: _____
MEDDAC: _____
USAEHA: _____
Contractor: _____ (Give company name) _____
Other: _____

9. How do the IH personnel use the IHIP?

Satisfy the DA requirement only: _____
Planning: _____
Programming: _____
Manpower: _____
Budgeting: _____
Other: _____

CRITICAL ELEMENT E2 - AIR SAMPLING

1. Is periodic air sampling being accomplished as scheduled in the IHIP?

Yes: _____ No: _____

2. Are air sampling and ventilation verifications performed in accordance with USA-EHA guidance?

Yes: _____ No: _____

3. Are routine ventilation monitoring/verification and other inspections of workplaces being accomplished as scheduled in the IHIP?

Yes: _____ No: _____

4. Have all work areas with a potential for exposure received an initial determination of exposure level?

Yes : _____ No : _____

5. In accordance with what documents are IH samples collected?

USA-EHA TG 141: _____ (give date)
NIOSH Methods: _____
Other: _____

6. Are samples maintained in accordance with a chain-of-custody?

Yes: _____ No: _____

7. What laboratory(ies) analyzes the IH samples?

Table with 2 columns: Laboratory name, Location. Includes dashed lines for text entry.

8. Are the laboratory(ies) which analyzes samples accredited by:

	Yes	No
American Industrial Hygiene Association (AIHA):		II---
Environmental Protection Agency (EPA):	_____	-----
National Institute for Occupational Safety and Health (NIOSH):	-----	-----
National Bureau of Standards (NBS):	--A-	-----
Other: _____	-----	-----

9. If Yes, what is the laboratory(ies) accreditation number(s), if applicable?

Laboratory	Number(s)
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

10. If Yes, what type of analyses is the laboratory(ies) accreditation for?

Laboratory	Substance/class (e.g., metals, asbestos, organic vapors)		
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PROGRAM ELEMENT F - HEALTH HAZARD CONTROL

1. STANDARDS

a. Compliant: Eighty-five percent or more of applicable elements have been established with written, staffed, and approved documents; and the elements have been implemented.

b. Generally Compliant: Seventy percent or more of the elements have been established with written, staffed, and approved documents; and the elements have been implemented.

c. Noncompliant: Less than 70 percent of the elements have been established with written, staffed, and approved documents; and the elements have been implemented,

NOTE : A program will be developed for the effective control of health hazards. It will include measures for existing and proposed operations such as ventilation, enclosures, personal protective equipment (WE), and confined space entry.

2. REFERENCES

29 CFR 1910, AR 40-5, AR 385-10, and TB MED 503.

3. QUESTIONS

Questions for the critical elements listed below are presented on the following pages:

- a. Control Methods
- b. Respiratory Protection
- c. Asbestos Management
- d. Confined Space Entry
- e. Heat Stress
- f. Medical Surveillance
- g. Risk Assessment Code (RAC) and the Installation Hazard Abatement Plan
- h. Hearing Conservation
- i. Occupational Vision
- j. Radiation Protection

CRITICAL ELEMENT F1 - CONTROL METHODS

1. Are IH personnel notified of proposed new operations or changes in operations?

100-75% 74-50% <50% Never
 ----- ----- -----I- -----

2. Do IH personnel provide recommendations for control of potential health hazards generated by new operations or changes in operations when notified?

100-75% 74-50% <50% Never
 ----- ----- ----- -----

3. Do the IH personnel conduct evaluations after operations are changed or created?

100-75% 74-50% <50% Never
 ----- ----- ----- -----

4. Do IH personnel use sampling data and measurements to recommend specific control measures?

100-75% 74-50% <50% Never
 ----- ----- ----- -----

5. Are ventilation systems routinely evaluated/tested by IH personnel?

Yes : ----- No: - - - -

6. If Yes, what systems are evaluated and at what frequency is the evaluation performed?

	Yes	No	Frequency (e.g., quarterly; annually; as problems occur)
Open surface tanks:	_____	_____	_____
Vapor degreasers:	_____	_____	_____
Paint spray booths:	_____	_____	_____
Battery shops:	_____	_____	_____
Chemical lab hoods:	_____	_____	_____
Vehicle exhaust ext:	_____	_____	_____
Welding exhaust hoods:	_____	_____	_____
Abrasive blasting equip:	_____	_____	_____
Asbestos vacuums:	_____	_____	_____
Woodworking equip exh:	II---	---	_____
Confined space:	_____	_____	_____
Other: - - - - -	_____	_____	_____

7. Does the DEB perform regular maintenance and inspection of ventilation systems?

Yes : _____ No: _____

8. If Yes, is there documentation of the inspection and maintenance perform&d?

Yes : _____ No: _____

CRITICAL ELEMENT F2 (if applicable) - RESPIRATORY PROTECTION

NOTE: IH involvement in the Respiratory Protection Program (RPP) will vary from installation to installation. It is essential that the responsibilities for the program be clearly defined in local publication. References for this specific section are 29 CFR 1910.134; AR 11-XX/USAEHA TG No. 171; TB MED 502; and TB MED 503, para 3-2h.

1. Is there a written RPP?

Yes : ---- No: ----

Document title

Date

2. Review the local RPP. Does the program follow the guidance provided in 29 CFR 1910.134, TB MED 502, and AR 11-XX/USAEHA TG No. 171?

Yes : _____ N o _____:

3. What are the responsibilities of Safety, the Fire Department, and the industrial hygienist in the RPP?

Safety: ----- s - m - - - - - _____ - - - - -
 _____ - - - - -

F i r e D e p a r t m e n t : _____ - - - - - _____ - - - - -
 _____ - - - - -

Industrial hygienist: _____ - - - - - _____ - - - - -

Other: _____ - - - - - _____ - - - - -

4. Who is the official charged to oversee the RPP?

Name

Title

Organization

_____ - - - - - _____ - - - - - _____ - - - - -

5. Are all RPP responsibilities clearly outlined?

Yes : ----- No: -----

If No, list element(s) missing:

6. Is there one person (per installation or major subactivity responsible for the day-to-day operation of the RPP?

Yes : ----- No: -----

Name	Title
-----	-----

7. Are warning signs posted in areas requiring respiratory protection?

Yes : ----- No: -----

8. Are respirators properly selected?

Yes: ----- No: -----

9. Is air-supplied respiratory protection provided where appropriate?

Yes : ----- No: -----

10. Is the air provided in air-supplied systems evaluated to determine that it meets Grade D breathing air specifications?

Yes : ----- No: -----

11. Do IH personnel reevaluate respiratory hazards to ensure that the respiratory protection provided is adequate?

Yes : ----- No: -----

12. Who determines whether employees are medically qualified to wear a respirator?

Name	Title	Organization
-----	-----	-----

13. Who conducts fit testing?

Name	Title	Organization
-----	-----	-----

14. What protocol is used for the fit testing?

Document title	Date
-----	I - -----

15. Is there a current list of areas which require respiratory protection?

Yes : I - No: -----

16. Has the need for respirators in these areas been determined?

Yes: _____ No: _____ Partially: - - -

17. Who conducts training of respirator users?

Name	Title	Organization
-----	-----	-----

18. How are personnel identified for inclusion into the RPP?

Comment(s): _____

19. Is there an established procedure for the issuance, maintenance, and cleaning of respiratory protection equipment, either centralized or decentralized?

Yes : - - - No: - - -

If Yes, reference procedure and any document(s) or SOP(s) containing the guidance:

20. What organizations can use self-contained breathing apparatuses in responding to emergencies? (e.g., fire department to fires; DEH to potential transformer leaks involving polychlorinated biphenyls (PCB))

Organization	Purpose
_____	_____
-----	-----
_____	_____
_____	_____

21. Are optical inserts provided for workers who are required to wear full facepiece respirators?

Yes : ----- No: -----

CRITICAL ELEMENT F3 (if applicable) - ASBESTOS MANAGEMENT

NOTE: An Asbestos Management Program will not be applicable to all installations. The objective of the program is to identify all locations of asbestos and the types of asbestos present; to evaluate the incidental and potential occupational exposures to asbestos; and to control exposures through administrative controls, engineering controls, and/or PPE equipment. The industrial hygienist will provide considerable guidance for effective program execution. References for this specific section are 29 CFR 1910.1001, 29 CFR 1926.58, AR 200-1, and TB MED 513.

1. Who has overall responsibility for the program (other than the commander)?

Name	Title	Organization
_____	_____	_____

2. Has an asbestos management team been established to implement the program?

Yes : - - - No: _____

3. If Yes, who are the committee members?

	Name	Title	Organization
Commander's Rep:	_____	_____	-----w-----P----
Safety Rep:	_____	_____	_____
Ind Hygienist:	_____	_____	_____
DEH Rep:	_____	_____	_____
DRMO Rep:	_____	_____	-----m m-----
Judge Advoc. Rep:	_____	_____	-----P I-----
Union(s) Rep:	_____	_____	_____
Other Rep:	_____	_____	_____

4. Has a local document been developed which delineates responsibilities for the program and states the purpose and objectives?

Yes : - - - No: _____

Document title	Date
_____	_____

5. What are the IH responsibilities for the program?

Responsibilities: _____

6. What is the status of the identification, evaluation, and control stages of the program?

Comment(s): _____

7. What is the status of the installation's special operations and maintenance program regarding:

IH tasks: _____

DEH and custodial training: _____

8. Are there procedures to ensure that IH reviews or oversees asbestos abatement activities?

Yes : ----- No: -----

9. Who is designated at the installation to perform the duties of the competent person for asbestos abatement activities in accordance with 29 CFR 1926.58?

Name	Title	Organization
_____	_____	_____

10. Is the competent person accredited by the State or through the EPA in accordance with 40 CFR 763?

Yes : _____ No: - - -

If Yes, accreditation agency(ies):

11. Indicate the daily duties the competent person performs at the asbestos abatement project:

Duties	Yes	No
Ensure proper enclosure setup	_____	_____
Ensure enclosure integrity	--I--	- -
Control enclosure entry/exit	_____	_____
Supervise exposure monitoring	_____	- -
Ensure proper protective clothing is available	- - -	_____
Ensure approved respirators are available	_____	- -
Ensure worker training has been conducted	- - -	_____
Ensure workers are certified	_____	_____
Ensure hygiene facilities are used	_____	_____
Ensure proper work practices	_____	_____
Ensure engineering controls are functional	_____	_____
Ensure approved decon procedures	_____	_____

12. Is there an inventory of buildings which contain asbestos-containing materials? (This may be kept by DEH in the building files.)

Yes : _____ No: _____

13. Is there an inventory of industrial operations which use asbestos?

Yes: _____ No: _____

14. Is sampling used as a determining factor in deciding on removal of asbestos?

Yes: _____ No: _____

CRITICAL ELEMENT F4 (if applicable) - CONFINED SPACE ENTRY

1. Is there a written confined space entry program for the installation?

Yes : _____ (if Yes, continue with questions 2 thru 9 below)
No: - _____ (if No, skip to critical element F5)

2. If Yes, who is the administrator for the confined space entry program?

Name Title Organization

3. If Yes, does the confined space entry program include a documented entry permit system?

Yes: |----- No: -----

4. If Yes, what individual(s)/organization(s) is/are responsible for testing the environment in a potential confined space prior to workers being allowed to enter into the confined space?

Name Organization None

5. Is monitoring equipment calibrated before and after use to a NBS reference?

Yes : _----- No: -----

6. Are calibration records maintained?

Yes : _____ No: -----

7. Are oxygen measurements taken?

Yes : _____ No: -----

If Yes, list equipment used:

Equipment Name Manufacturer

8. Are explosive vapor/gas measurements taken?

Yes : ----- No: -----

If Yes, list equipment used:

Equipment Name	Manufacturer
-----	-----
-----	-----
-----	-----

9. Are toxic gas/vapor measurements taken?

Yes : ----- No: -----

If Yes, list equipment used:

Equipment Name	Manufacturer
-----	-----
-----	-----
-----	-----

CRITICAL ELEMENT F5 (if applicable) - HEAT STRESS

1. Is there a formal heat stress program?

Yes: _____ No: _____

2. If Yes, is there a formal written document for heat stress?

Yes: _____ No: _____

3. If Yes, who is the official charged with administering the heat stress program?

Name	Title	Organization
------	-------	--------------

4. What responsibility does the IH have in the heat stress program?

Comment(s): _____

CRITICAL ELEMENT F6 - MEDICAL SURVEILLANCE

NOTE: Preplacement, preassignment, and periodic job-related medical surveillance will be provided to employees potentially exposed to health hazards in the work environment or who are assigned to positions requiring specific standards of physical fitness. Termination evaluations are required for employees potentially exposed to certain hazards. References for this specific section are DOD 6055.5-M, NIOSH 81-123, and AR 40-5.

1. Is IH input used in selecting medical surveillance?

Yes : - - - No: - - -

2. Is the HHIM data base used in selecting medical surveillance?

Yes : _____ No: _____

CRITICAL ELEMENT F7 (if applicable) - RISK ASSESSMENT CODE (RAC) AND THE
INSTALLATION HAZARD ABATEMENT PLAN

NOTE: All operations, exposures, and deficient control measures that create potential for adverse health effects are assigned a RAC. Identified health hazards with RACs are submitted for inclusion into the installation hazard abatement plan by written report to the installation safety manager. References for this specific section are AR 385-10 and TB MED 503, para 3-2e.

- 1. Are RACs used in the installation hazard abatement program?

Yes: _____ No: _____

- 2. Who is responsible for determining RACs for health related hazards?

Name Title Organization

- 3. What guidance/document(s) is used for determining RACs for identified health hazards?

Guidance/document(s): _____

- 4. Are RACs assigned to identified health hazards and included in the installation hazard abatement plan?

Yes : _____ No: _____

- 5. What is the procedure for inclusion of RACs in the installation hazard abatement plan?

Comment(s): _____

- 6. Do health-related RACs receive funding for corrective action?

Yes: _____ No: _____

- 7. What are the sources of funding?

Sources: _____

8. Are there any health-related **RACs** on the current installation hazard abatement plan?

Yes: _____ No: _____

9. Are **RACs** used in **IH** reports to aid the installation in prioritizing hazard abatement funding in the installation hazard abatement program?

Yes: _____ No: _____

10. Does the OSB representative include the **IH RACs** in the hazard abatement plan as provided by the **IH**, or does the OSH representative alter the **RACs**?

Yes: _____ No: _____

Comment (s): _____

CRITICAL ELEMENT F8 - HEARING CONSERVATION

NOTE: IH input to the Hearing Conservation Program (HCP) usually involves redording noise measurements, recommending engineering controls for noise reduction, education of personnel exposed to high--noise levels, and maintaining a list of designated high-noise areas. References for this specific section are AR 40-5 and TB MED 501.

1: Review the written HCP. Does the local HCP regulation or supplement to AR 40-5 delineate the HCP responsibilities?

Yes : _____ No: _____

2. Who is the official charged with administering the HCP?

Name	Title	Organization
_____	_____	_____

3. How often are noise surveys conducted?

Q u a r t e r l y : _____
 Semiannually: _____
 Annually: _____
 Never: _____
 As need be: _____

4. Are noise survey data maintained?

Yes : _____ No: _____

5. Where are the data maintained?

	Yes	NO
IH files:	_____	_____
Medical records:	_____	_____
HHIM:	_____	_____
HEARS:	_____	_____
No records maintained:	_____	_____
Other:	_____	_____

6. Is there a current list of noise-hazardous areas?

Yes: _____ No: _____

7. Are DD Form 2214 (Noise Survey), DD Form 2215 (Reference Audiogram), and DD Form 2216 (Hearing Conservation Data) maintained?

Yes: ----- No: -----

8. Are personnel exposed to noise-hazardous areas identified and included in the HCP?

Yes : ----- No: -----

9. Do personnel employed in noise-hazardous areas receive periodic instruction regarding the permanent nature of noise induced hearing loss, personal protective measures, and the HCP?

Yes: - - - No: -----

Comment(s), if needed: _____

10. What is the relationship between the IH personnel and the audiologist?

Comment(s): _____

11. Are warning signs posted in noise-hazardous areas?

Yes : - - - No: - - -

CRITICAL ELEMENT F9 (if applicable) - OCCUPATIONAL VISION

NOTE: IH input to the Occupational Vision Program may be very limited. IH responsibilities will vary from installation to installation but could include ensuring that eye-hazardous areas are posted, guards are present on machinery when required, and PPE is worn. References for this specific section are AR 40-5, AR 385-10, TB MED 503, and TB MED 506.

- 1. Is there a local supplement to AR 40-5 and/or AR 385-10 pertaining to the Occupational Vision Program that is current?

Yes : ----- No: -----

- 2. Is the supplement well written, comprehensive, and assigning areas of responsibility?

Yes : ----- No: -----

Comment(s), if needed: -----

- 3. Who has responsibility for the program? (Other than the commander)

Table with 3 columns: Name, Title, Organization

- 4. Do IH personnel have input to the program?

Yes : ----- No: -----

If Yes, by what mechanism?: -----

- 5. Are eye-hazardous areas identified during annual HHIM updates?

Yes : ----- No: -----

- 6. If Yes, are these areas included in the Occupational Vision Program?

Yes: ----- No: -----

- 7. Is there a current list of all eye-hazardous areas?

Yes : ----- No: -----

8. Who is provided the list?

Name	Title	Organization
_____	-v-----s-----	-----

9. Who maintains the list?

Name	Title	Organization
-----	-----	-----

10. Is the occupational health section provided the list on a routine basis?

Yes : _____ N o _____:

11. Are warning signs posted in eye-hazardous areas?

Yea: N _____ o _____:

CRITICAL ELEMENT F10 (if applicable) - RADIATION PROTECTION

NOTE: Radiation protection is a part of classical IH, however, on many installations the commander has designated a RPO to manage the Radiation Protection Program. IH input may be very limited; however, all responsibilities should be outlined in local regulation. References for this specific section are AR 40-14, AR 40-46, AR 385-11, TB MED 521, TB MED 523, TB MED 524, TB MED 525, and USAEHA TG 153.

1. Does the installation have ionizing or nonionizing radiation sources?

Yes : _____ No: _____

2. Is an RPO designated by the installation commander for the installation Radiation Protection Program?

Yes : _____ No: _____

3. Who is the RPO?

Name	Title	Organization
_____	_____	_____

4. Is coordination/involvement required of the industrial hygienist with the RFO?

Yes : - - - No: - - - -

If Yes, by what mechanism?: _____

PROGRAM ELEMENT G - EMPLOYEE EDUCATION (Critical Element)

1. STANDARDS

a. Compliant: There is a written and implemented program of education and orientation of new employees and the existing workforce to acquaint them with potential hazards in the work environment. This program also informs the employees of possible problems as process changes are made or new products are introduced into the work environment, and more than 85 percent of the employees have been informed.

b. Generally Compliant: There is a program of education and orientation, and more than 70 percent of the employees have been informed.

c. Noncompliant: There is no program; or there is a program, and less than 70 percent of the employees have been informed.

NOTE : Installation staff and supervisors are jointly responsible for correlating a worker orientation and education program dealing with the nature of the hazards in the workplace, preventive measures, and proper operation of process and control equipment to prevent injury and illness. Responsibilities must be formally established for appropriate staff, supervisors, employees, and employee representatives.

2. REFERENCES

29 CFR 1910.1200, AR 40-5, AR 385-10, and TB MED 503.

3. QUESTIONS

Questions for this critical element are presented on the following pages.

1. Is there a written hazard communication program?

Yes : No:

Document title

Date

.....
.....

2. Who is the official charged with administering the hazard communication program?

Name

Title

Organization

.....

3. What are the responsibilities for installation personnel in this program?

Comment(s):
.....
.....

4. What are the responsibilities of IH personnel?

Comment(s):
.....
..... a I.....

5. In what classes do IH personnel participate?

Comment(s):
.....
.....

6. Is there any IH/OSH input in the new supervisor/employee orientation training program conducted by CPO?

Yes : No:

Comment(s):
.....
.....

7. Are supervisors advised of their responsibilities under hazard communication concerning applicable programs and employee education?

	Yes	No
Routinely:	-----	-----
Occasionally:		
Seldom:	- - -	- - -
Never:	-----	-----

8. Are these responsibilities delineated in new supervisors education?

Yes : ----- No: - - - -

9. Are pamphlets, bulletins, and local news media used to circulate OSH information?

Yes : ----- No: _____

10. Is the DOD Hazardous Material Information System (HMIS) used in developing worker education?

Yes : ----- N o ____ :

11. Are employees specifically informed about hazards of their jobs?

	Yes	No
<u>R o u t i n e l y</u> :	- - -	
Occasionally:	-----	-----
Seldom:	- - -	-----
Never :	- - -	- - -

12. Are employees oriented to the potential health hazards and preventive measures of their work by:

	Yes	No
Supervisors:	- -	- -
<u>O r i e n t a t i o n s e s s i o n s</u> :		
Printed material:	- -	- -
<u>No orientation training</u> :		

Other (specify): - - - - _____

13. What percent of the employees have been informed of potential health hazards and preventive measures?

0-25%

26-50%

51-75%

76-100%

14. Are Material Safety Data Sheets (MSDS) available in each work area?

Yes : _____ No: _____

15. Is the DOD HMIS available in the workplace?

Yes : _____ No: _____

PROGRAM ELEMENT **H** -- RECORDS (Critical Element)

1. STANDARDS

a. Compliant: Eighty-five percent or more of applicable records are being maintained, and employees are notified of their potential hazards and exposures.

b. Generally Compliant: Seventy percent or more of the applicable records are being maintained, and employees are notified of their potential hazards and exposures.

c. Noncompliant: Less than 70 percent of the applicable records are being maintained, or employees are not notified of their potential hazards and exposures.

NOTE: Records are kept of all IH activities to include training presented, health hazard inventories, evaluations of hazards, existing health hazard control measures, and recommendations for improvements. Records must be kept current, legible, and in such form as to be intelligible and useful.

2. REFERENCES

29 CFR 1910.20; AR **25-400-2**; and TB MED 503, **para 3-2f**.

3. QUESTIONS

Questions for this critical element are presented on the following pages.

APPENDIX B
INDUSTRIAL HYGIENE PROGRAM EVALUATION SUMMARY

IH FINDINGS AND DISCUSSION

Element/Standard*	Compliance			Requirements
	Compliant	Generally Compliant	Non-compliant	
<p>a. Overall Industrial Hygiene Program</p> <p>Compliant - All critical elements have been established, and 85% of other elements have been met.</p> <p>Generally Compliant - One critical element has not been established, and 70% of other elements have been met.</p> <p>Noncompliant - Two or more critical elements have not been established, or less than 70% of other elements have not been met.</p>				AR 40-5, paras 54 and 5-20 TB MED 503, para 3-2

REMARKS

<p>b. Written Documents (Critical)</p> <p>Compliant - Written policy and program documents have been prepared, staffed, and approved. Policy has been recognized, accepted, and incorporated in the overall policies of the Occupational Health Program. A formal Program Document containing statements of mission, objectives, goals, and procedures has been published.</p> <p>Generally Compliant - Philosophy and goals of the IH Program have been drafted and staffed.</p> <p>Noncompliant - The philosophy and goals of the IH Program have not been drafted nor staffed.</p>				AR 40-5, paras 5-4a(5)(a), 5-41(1), and 5-20 TB MED 503, paras 3-1 and 3-2a AR 385-10, para 2-2
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REMARKS:

* Refer to IH Evaluation Protocol Questionnaire for details regarding the program elements: Critical Elements have standards listed; Noncritical Elements are listed by name only.

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Element/Standard#	Compliance				Requirements
	Compliant	Generally Compliant	Non-compliant	NA	
<p>c. Staff:</p> <p>(1) Manpower and Personnel (Critical)</p> <p>Compliant - Staff is professionally qualified, adequate in number, and has sufficient time and authority to plan and execute 85% of the IH functions of the OH program set forth in the written policy program,</p> <p>Generally Compliant - Staff is at least 85% of authorized strength, is professionally qualified, and has sufficient time and authority to plan and execute at least 70% of the IH functions.</p> <p>Noncompliant - Staff is not qualified, not adequate in number, nor has sufficient time and authority to execute at least 70% of the IH functions,</p> <p>(2) Training - (Noncritical)</p>					<p>AR 40-5, paras 1-4f(1), g(2), and h(1)(a) and (b) TB MED 303, pare 3-3a</p>
REMARKS:					
<p>d. IH Facilities, Equipment, and References (Critical)</p> <p>Compliant - Facilities are of adequate quality and size and are suitably located to perform the functions of the IH program; and equipment and referencea are adequate in type and quantity to effectively carry out the functions of the IH program.</p> <p>Generally Compliant - Either the facilities, equipment, or the references are adequate to support the functions of the IH program.</p> <p>Noncompliant - Neither the facilities, equipment, nor the ref-erences are adequate to support the functions of the IH program.</p>					<p>AR 40-5, paras 1-4g(2), and h(I)(b), (c) and (d) TB MED 603, paras 3-3b, c, and d</p>
REMARKS:					

* Refer to IH Evaluation Protocol Questionnaire for details regarding the program elements: Critical Elements have standards listed; Noncritical Elements are listed by name only.

Element/Standard*	Compliance			Requirements
	Compliant	Generally Compliant	Non-compliant	
<p>e. Health Hazard Recognition</p> <p>(1) HHIM (Critical)</p> <p>Compliant - Identification (recognition) of at least 85% of existing and potential health hazards has been completed and entered into the HHIM. Supervisory personnel are aware of the hazards.</p> <p>Generally Compliant - Seventy percent or more of existing and potential health hazards have been identified and entered into the HHIM.</p> <p>Noncompliant - Less than 70% of existing and potential health hazards have been identified and entered into the HHIM.</p> <p>(2) Design/process review (Noncritical)</p> <p>(3) Worker hazard identification (Noncritical)</p>				<p>AR 40-5, para 5-20b TB MED 503, paras 3-2b and g AR 385-10, para 4-4</p>

REMARKS:

<p>f. Health Hazard Evaluation (Critical)</p> <p>Compliant - Eighty-five percent or more completion of the physical, chemical, and biological health hazards in the work-place have been evaluated. Personnel exposed to these hazards are monitored regularly, and the IHIP has been completed.</p> <p>Generally compliant - Seventy percent or more of the physical, chemical, and biological health hazards have been evaluated. Personnel exposed to these hazards are monitored regularly, and the IHIP is more than 70% complete.</p> <p>Noncompliant - less than 70% of the physical, chemical, and biological health hazards have been evaluated. Personnel exposed to these hazards are monitored sporadically or not at all, and the IHIP is less than 70% complete.</p>				<p>AR 40-5, para 5-20d TB MED 503, para 3-2d</p>
--	--	--	--	---

REMARKS:

* Refer to **IH** Evaluation Protocol Questionnaire for details regarding the program elements: **Critical Elements** have standards listed; **Noncritical Elements** are listed by name only.

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Element/Standard*	Compliance				Requirements
	Compliant	Generally Compliant	Non-compliant	NA	
<p>g. Health Hazard Control (Critical)+</p> <p>Compliant - Eighty-five percent or more of applicable elements have been established with written, staffed, and approved documents; and the elements have been implemented.</p> <p>Generally compliant - Seventy percent or more of the elements have been established with written, staffed, and approved documents; and the elements have been implemented.</p> <p>Noncompliant - Less than 70% of the elements have been established with written, staffed, and approved documents; and the elements have been implemented.</p>					AR 40-5, paras 5-20e and g TB MED 503, paras 3-2e and g, 4-3c, and 4-4

REMARKS:

<p>h. Employee Education (Critical)</p> <p>Compliant - There is a written and implemented program of education and orientation of new employees and the existing workforce to acquaint them with potential hazards in the work environment. This program also informs the employees of possible problems as process changes are made or new products are introduced into the work environment, and more than 85% of the employees have been informed.</p> <p>Generally compliant - There is a program of education and orientation, and more than 70% of the employees have been informed.</p> <p>Noncompliant - There is no program; or there is a program, and less than 70% of the employees have been informed.</p>					AR 40-5, para 5-20f TB MED 603, para 3-2f
--	--	--	--	--	--

REMARKS:

* Refer to IH Evaluation Protocol Questionnaire for details regarding the program elements: Critical Elements have standards listed; Noncritical Elements are listed by name only.

+ Some elements listed in the IH Evaluation Protocol Questionnaire may not be part of an installation's IH program.

Element/Standard*	Compliance				Requirements
	Compliant	Generally Compliant	Non-compliant	NA	
i. Records (Critical) Compliant - Eighty-five percent or more of applicable records are being maintained, and employees are notified of their potential hazards and exposures. Generally compliant - Seventy percent or more of the applicable records are being maintained, and employees are notified of their potential hazards and exposures. Noncompliant - Less than 70% of the applicable records are being maintained, or employees are not notified of their potential hazards and exposures.					AR 40-5, para 5-20f TD MED 503, para 3-2f

REMARKS:

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* Refer to IH Evaluation Protocol Questionnaire for details regarding the program elements: Critical Elements have standards listed; Noncritical Elements are listed by name only.

GLOSSARY

Abbreviations

ACGIH

American Conference of Governmental Industrial Hygienists

AIHA

American Industrial Hygiene Association

ANSI

American National Standards Institute

ARNG

Army National Guard

CFR

Code of Federal Regulations

CPO

Civilian Personnel Office

DA

Department of the Army

DEH

Directorate of Engineering and Housing

DIO

Directorate of Industrial Operations

DLA

Defense Logistics Agency

DoD

Department of Defense

DRMO

Defense Reutilization and Marketing Office

EPA

Environmental Protection Agency

GOCO

Government-owned, contractor operated

GPO
Government Printing Office

HCP
Hearing Conservation Program

HEARS
Hearing Evaluation Automated Registry System

HHIM
Health Hazard Information Module

HMIS
Hazardous Material Information System

IH
industrial hygiene

IHIP
Industrial Hygiene Implementation Plan

IHPR
Industrial Hygiene Program Review

MACOM
major Army command

MEDCASE
medical care support equipment

MEDCEN
U. S. Army medical center

MEDDAC
U. S. Army medical department activity

MOTJ
memorandum of understanding

MSDS
Material Safety Data Sheets

NBS
National Bureau of Standards

NIOSH
National Institute for Occupational Safety and Health

OSH
occupational safety and health

PCB
polychlorinated biphenyl

P E L
permissible exposure limit

PPE
personal protective equipment

QA
quality assurance

RAC
risk assessment code

ROTC
Reserve Officers' Training Corps

RPO
radiation protection officer

RPP
respiratory protection program

SOH
safety and occupational health

SOP
standing operating procedure

TDA
tables of distribution and allowances

TG
technical guide

TLV
threshold limit values

USAEHA
U. S. Army Environmental Hygiene Agency

USAR
U. S. Army Reserve



GG

As requested, I am providing the following information to address particular issues that required additional clarification or explanation of matters discussed in the Report of Investigation and accompanying Army narrative Report.

1. **IH Program Organization.** The overarching responsibility of the Preventive Medicine department at any military treatment facility (MTF) is to provide preventive medicine services to support installation commanders in preventing disease and injury throughout the MTF's health services support area. This would include conducting comprehensive, coordinated military health surveillance activities such as medical surveillance and occupational and environmental health (OEH) surveillance for Army personnel. Included as a subset of OEH is Industrial Hygiene (IH), which is defined as, "The science and art devoted to anticipation, recognition, evaluation, and control of those environmental factors or stresses, arising in or from the workplace, that may cause sickness, impaired health and well-being, or significant discomfort and inefficiency among workers." See, AR 40-5, Glossary. IH is a generic term for industrial hygiene, but can be used in the upper case sense, as in the "Army IH Program."

The U.S. Army has organized its industrial hygiene and safety functions through two separate and very different chains of command. IH is a medical function, while safety is an installation staff function. Therefore, an installation industrial hygienist generally works for a tenant organization, in this case MAHC, with his/her chain of Command rising to the level of The Surgeon General of the Army, while the Fort Leavenworth Safety Office ultimately reports to the Training and Doctrine Command's Commanding General.

Distinction between the PM, IH, and OSHA/Safety. OSHA stands for the Occupational Safety and Health Administration, an organization within the U.S. Department of Labor. It can also stand for the Occupational Safety and Health Act, which promulgated OSHA, the organization. IH is merely a generic term for industrial hygiene, but can be used in the upper case sense, as in the "Army IH Program". As a hybrid program in the Army, it fits into two hierarchical schemes: Safety and Medical. On the Safety side, the Army Safety and Occupation Health (S&OH) Program (please note that "health" is limited to "occupational health", but safety is not so limited, and includes traffic safety, safety at home, etc.) includes the Army Occupational Health Program, to which the Army Industrial Hygiene Program is subsidiary. On the Medical side, IH generally falls under either Occupational Health or Environmental Health; both these programs are subsidiary to Preventive Medicine. At MAHC, the IH Program, Manager works for the C, Environmental Health; at other MEDDACs the IHPM might work for Chief, OH, or directly under the Chief, Preventive Medicine.

Individuals may be heard to say, "the Army OSH Program", or, "the Army OSHA Program", but these are misnomers. Properly, it is, "the Army S&OH Program" and is the umbrella under which the Safety, OH, and IH Programs fall.

On the Safety side, the Army Safety and Occupation Health (S&OH) Program (please note that "health" is limited to "occupational health", but safety is not so limited, and includes traffic safety, safety at home, etc.) includes the Army Occupational Health Program, to which the Army Industrial Hygiene Program is subsidiary.

On the Medical side, as noted above, IH generally falls under either Occupational Health or Environmental Health; both these programs are subsidiary to Preventive Medicine. At MAHC, the IH Program Manager (IPHM) works for the Chief, Environmental Health; at other MEDDACs the IHPM might work for the Chief, Occupational Health (OH), or directly under the Chief, Preventive Medicine.

2. Difference between Safety and IH. Safety issues involve (generally, but not necessarily, acute) occupational injuries and IH issues involve (again generally, but not necessarily, chronic) occupational illnesses, but the distinction is far from clear-cut. Some aspects of occupational safety and health, such as ergonomics, do not fit neatly into either category; generally they are arbitrarily assigned to one or the other. The Army, for example, has designated the Chemical Hygiene Program as a Safety Function; most organizations consider it health.

Some issues are very clear-cut, however, including those cited during the Fort Leavenworth OSHA inspection. Machine guarding, trip and fall hazards, energy (electrical) hazards, and life safety (fire) issues are all clearly safety concerns.

3. Role of IH in an OSHA Inspection. OSHA stands for the Occupational Safety and Health Administration, an organization within the U.S. Department of Labor. It can also stand for the Occupational Safety and Health Act, which promulgated OSHA, the organization. Allegations to OSHA regarding regulatory violations are, by their nature, regarded as confidential. This is to prevent retaliation against those making the complaint. The OSHA inspection at Fort Leavenworth is the typical method employed to address a complaint about a Federal facility. It is important to note that none of the OSHA citations the Fort Leavenworth received regard IH issues; the 'Serious' violations apply to safety and fire problems, such as machine guarding, fire extinguishers, and energy hazards, while the 'Other' citations are administrative, mainly referring to lack of paper documentation. Therefore, the OSHA inspection makes no findings regarding industrial hygiene that would support the allegation of a potential for a substantial and specific danger to the public health and safety.

It is also important to note that the installation Safety Director is the designated OSH official for the purposes of interacting with OSHA. The whistleblower had no assigned duties in this regard. To elaborate, every Army installation has named its Safety Director as OSHA's designated OSH official (required by AR 385-10). This means that for any official interaction with OSHA, the Safety Director (in Fort Leavenworth's case, Ms. Bowser) is the official "voice" of the installation; whatever the Safety Director says, writes, responds, etc., to OSHA is the official reply. Although, during an OSHA inspection, the IH might be interviewed, his/her responses would be viewed as informational only; anything the Safety Director says would take precedence. So,

although the whistleblower may have been invited to and attended the OSHA inspection's closing conference (OSHA terminology for "exit brief"), where the findings are discussed with installation management, his role would have been advisory, at most, but more likely merely as an observer. Also, please recall that the whistleblower did not work for Fort Leavenworth; he worked for one of its tenants; this removes him even further from any Fort Leavenworth/OSHA interaction. In conclusion, from an IH perspective, there was NO potential for a substantial and specific danger to the public health and safety, as alleged.

4. Documents Governing the Army IH Program. Six statutory and regulatory authority references, presented in descending hierarchy, from Executive Order to Technical Guide (TG), drive the Army Safety and Occupational Health (S&OH), Preventive Medicine (PM), Occupational Health (OH), and Industrial Health (IH) programs. These initiatives, when established and implemented IAW the governing documents, ensure that the Fort Leavenworth IH program, as well as all Army IH Programs, is effective, based on a robust series of assessments and testing requirements.

- a. Executive Order 12196, Occupational Safety and Health Programs for Federal Employees, February 26, 1980
- b. Title 29: Labor, Part 1960-Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters
- c. Department of Defense Instruction, (DoDI) 6055.1, DoD Safety and Occupational Health (SOH) Program, 19 August 1998
- d. Department of the Army Pamphlet 40-503, Medical Services, Industrial Hygiene Program, 30 October 2000
- e. AR 40-5, Preventive Medicine, 25 May 2007
- f. United States Army Environmental Hygiene Agency (AEHA) (former name of CHPPM/PHC) Technical Guide (TG) 165, Aberdeen Proving Ground, MD 21010-5422, Installation Industrial Hygiene Program Self-Assessment Guide

Location of required IH Program Elements. Please note that the actual required elements of an Army Installation IH Program are listed in TG 165, United States Army Environmental Hygiene Agency, Installation Industrial Hygiene Program Self-Assessment Guide (Table 2-1, page 2-2; and pages A-31 thru A-36) and AR 40-5, Preventive Medicine, 25 May 2007 (para 1-7, page 3; para 1-7d, pages 5-6; paras 2-16 and 2-16q, page 11; para 2-17, page 11; para 2-17g, page 12; para 2-18, page 12; paras 2-18n and 2-18n3, page 13), respectively. The TG is more detailed, but it is old (1988). The AR is current, but the elements are more general, mainly derived from the OH Program, of which the IH Program is part. While accurate in their intent, regulations are, by design, very broad and contain little or no detail regarding the day-to-day workings of an Army Installation IH Program. The "nuts and bolts" are contained in the TG.

5. **Use of COE IH.** Federal regulation requires that, "In order to provide essential specialized expertise, agency heads shall authorize safety and health personnel to utilize such expertise from whatever source available, including but not limited to other agencies, professional groups, consultants, universities, labor organizations, and safety and health committees" (Title 29: Labor, PART 1960—Basic Program Elements For Federal Employee Occupational Safety and Health Programs and Related Matters Subpart B—Administration, § 1960.8, Agency Responsibilities). In accordance with this mandate, MAHC management called in two subject matter experts, Scott Bentley, CIH, from MAHC's parent organization, Great Plains Regional Medical Command, and Daniel Mitchell, CIH, from the US Army Corps of Engineers' Kansas City District. MAHC used the CoE Kansas City District Office because:

- a. They had a CIH on staff.
- b. They are local, only about a half hour or so away by car.
- c. They were affordable in terms of what MAHC had to spend.
- d. They were responsive and willing to do the work.
- e. As an Army organization, they were familiar to MAHC management.

MAHC management could have called in a subject matter expert from almost any other entity, the University of Kansas, for example, or the local American Industrial Hygiene Association group; the COE group seemed to best fit the bill.

Mr. Mitchell's role included providing a program assessment, providing one-on-one mentoring (with the goal of improving technical competence) to the whistleblower, providing field oversight of building assessments, walk-throughs and inspections, and providing technical oversight during sampling activities, as well as interpretation of analytical results.

6. **Terminology Definitions.** Some terminology used in the industrial hygiene field may be considered mystifying to outsiders. The following definitions and descriptions are aimed at clearing up any confusion that may be associated with their use in this document:

- a. **Time-Weighted Average (TWA).** A technique of data manipulation used to compare collected analytical results with applicable standards. For example, if an individual is exposed to 20 parts per million (ppm) benzene vapor for 4 hours and 10 ppm for the other 4 hours of an 8-hour shift, the TWA for the individual that entire shift is 15 ppm. This value can then be compared to the applicable 8-hour standard for benzene exposure. From the American Conference of Governmental Industrial Hygienists' *2006 Threshold Limit Values for Chemical Substances and Physical Agents*: "The TWA is a concentration for a conventional 8-hour workday and a 40-hour workweek, to which it is believed that nearly all workers may be repeatedly exposed, day after day, for a working lifetime without adverse effect."

b. Walk-Through (or, Preliminary) Industrial Hygiene Survey. Industrial Hygiene is often described as "The recognition, evaluation, and control of occupational health hazards". "Walk-through" is shorthand for a preliminary survey of a building or facility. It is the recognition phase of the process, where the industrial hygienist decides which operations require further evaluation, and by what means. From *Patty's Industrial Hygiene and Toxicology, 4th Ed, Volume I*: "The preliminary or observational industrial hygiene survey is usually the immediate forerunner of a survey employing technical instruments. In this survey, experience and familiarity with industrial hygiene processes is a *must* (emphasis original). This survey is of paramount importance, especially when familiarizing oneself with a new plant or workplace; it is done for the purpose of selecting locations in a plant where exposures or hazards are later to be evaluated by analytical studies, to determine whether additional control is necessary. During this survey pertinent data should be collected, such as the number of male and female workers employed at various operations or processes; safety and systems management practices, emergency response programs, and medical services; availability of accident and illness records; the different type of operations conducted; raw materials, processing aids, products, and recognized by-products; measures employed for dust, fume, and vapor or gas control; and methods of solid, liquid, or gas waste disposal."

c. Real-Time Monitoring with Direct-Reading Instrumentation. These are sampling devices that provide real-time data. For example, a carbon monoxide (CO) monitor provides instantaneous readouts of what CO level exists at any moment at a given location. These instantaneous data points can be integrated to provide exposure levels for an hour, a shift, an entire day, or any other defined time period. A description from *Annals of Occupational Hygiene*, 2007 51(8):679-691, "Comparison of Portable, Real-Time Dust Monitors Sampling Actively, with Size-Selective Adaptors, and Passively", by Andrew Thorpe and Peter T. Walsh: "Real-time (direct-reading) dust monitors are used by occupational hygienists for many different applications such as walk-through surveys, background sampling, site dust measurements, assessment of the effectiveness of dust control systems and measurement of indoor air quality. They are also used as part of an exposure visualization system to identify high levels of dust generated by poor work practice, in the investigation of dust control techniques, and to generate hygiene training information. The main advantage of (real-time) dust monitors is that they give an instantaneous measure of airborne dust concentration, thereby reducing considerably the time and effort associated with standard gravimetric methods."

d. Spot Testing: Similar to what is provided by direct-read instrumentation, but may also be collected by more primitive means, such as a swipe test, using swabs, or wipes designed just for such activity. Often used for surface sampling, such as settled lead dust in a firing range. This results in a "spot check" for the amount of contaminant present at a specific location. Description of spot-testing for lead from *Protecting Workers Exposed to Lead-based Paint Hazards, A Report to Congress*, DHHS (NIOSH) Publication No. 98-112, January 1997, Chapter 5, Methods to Sample and Analyze Environmental Lead: "Lead in workplace surface dust can be collected by (the spot-

testing methods of) wipe sampling and vacuum sampling techniques. Most of these methods were originally developed to measure lead poisoning risks to children in homes. Wipe sampling, which determines surface lead loading (microgram [μg] lead per unit area), is the method currently preferred by HUD for determining surface lead concentrations as part of residential lead risk assessments. Wipe sampling requires systematically wiping a measured surface area (or the area within a sampling template) with a pre-wetted wipe. Some widely available commercial hand wipes are suitable for this purpose. Wipes used should have low background lead contamination and be of constituents that can be readily processed in the laboratory. Wipe sampling is also used for assessing dermal lead exposures, especially lead dust on hands."

7. IHPD & IHIP, Lack thereof. Installation IHPMs are required to establish and implement two critical documents: a program document (IHPD) (DA Pam 40-503, para 3-5b, page 5), and an implementation plan (IHIP) (DA Pam 40-503, para 3-6a, page 6). The program document includes a mission statement, goals and objectives, and procedures for accomplishing same. The IHIP is a living document, generally contained in an Excel spreadsheet, which schedules IH activities for a "rolling 1-year period". The IHPM uses it to manage systematic accomplishment of prioritized IH activities. These requirements are determined by assessing customer needs, obtaining the Commander's emphasis, and reviewing OSHA and Army regulations. At a minimum, the IHIP should include a list of potentially hazardous operations, health hazards present at each operation, priority action code (PAC) assigned to each health hazard, industrial hygiene evaluations necessary for each health hazard, completed evaluations, and risk assessment codes assigned to the operation.

At Fort Leavenworth, there was neither an IHPD nor an IHIP after 2007. Producing these two documents was one of the tasks that the whistleblower failed to carry out. LT Derivan established the "IH Project Priority List" to substitute an at least rudimentary document for the non-existent current IHIP. This finding is documented by the following:

a. MFR, US Army MEDDAC, Fort Leavenworth, MCXN-PM, 5 February 2007 (s/b 2008), subject: Questions. Essentially a list of questions from the whistleblower to his management regarding tasks which the whistleblower was assigned. It also cites and contains the IH portion of the 2007 PM program document (MEDDACs often roll up all the PM programs into one document; in this case the IHPD was contained in the PMPD as Chapter 6).

b. MFR, US Army MEDDAC, Fort Leavenworth, MCXN-PM, 3 March 2008, subject: Response to Questions Pertaining to the Industrial Hygiene Program Document and Industrial Hygiene Implementation Plan. LT Derivan attempts to respond to the whistleblower's MFR, above, describing what he wants in the new IHPD and IHIP, as well as explain why these updates are required.

c. End of Month Report, February 2008. The whistleblower attempts to explain why he did not carry out the assigned task of writing an IHPD and an IHIP for 2008.



GLENN T. BERCKMAN

Certified Industrial Hygienist No. 3086

Certified Safety Professional No. 16096

Investigating Officer



DEPARTMENT OF THE ARMY
U.S. ARMY MEDICAL DEPARTMENT ACTIVITY
550 POPE AVENUE
FORT LEAVENWORTH KS 66027-2332

REPLY TO
ATTENTION OF

MCXN-PM (40-5f)

5 February 2007

MEMORANDUM For Record

SUBJECT: Questions

1. Requirement to update Industrial Hygiene Program Document.

a. "document to reflect current program practices to meet criteria established in DA Pamphlet 40-503 and current MEDCOM guidance."

b. DA Pam 40-503, paragraph 3-5 Program document. "Broadly defines the IH program's mission; describes how the program's goals and objectives will be implemented with existing resources."

c. I have received no current MEDCOM guidance.

d. The program document is in fact the Chief of Preventive Medicine's Program Document, not a stand-a-lone IH Program Document. LTC Jefferson wrote on 3 January 2007:

SUBJECT: Preventive Medicine Program Document FY2007

6. *Industrial Hygiene.*

a. *Industrial Hygiene is the science and art devoted to the recognition, evaluation, and control of those environmental factors and stresses associated with work and work operations. The practice of IH is a health mission. The Industrial Hygienist does not simply collect data to compare against OSHA regulations for compliance. The IH defines healthy work practices after analysis of exposure data in relation to human health effects of physical hazards.*

b. *The IH program serves the eligible DOD worker population that is made up of Fort Leavenworth, 2 AMC ammunition plants, and Reserve and National Guard units. The IH program aims to:*

(1) Provide one medical component of force protection that maintains the readiness and availability of Army personnel for operations.

(2) Eliminate or control workplace hazards to prevent illness and injury to soldiers, inmates, and civilian workers.

(3) Characterize workplace exposure to potential hazards that facilitates exposure-based medical surveillance and occupational healthcare.

5 February 2007

(4) Comply with Department of Labor (DOL)-OSHA and other federal and state laws and regulations.

(5) Reduce costs associated with lost man-hours, medical treatment and surveillance, and compensation.

c. Service is provided by a civilian Industrial Hygienist with the assistance of Environmental Health personnel (when staffing allows). Programs and activities will occur based upon available staffing and resources.

PREVENTIVE MEDICINE PROGRAM DOCUMENT FY07

PROGRAM – INDUSTRIAL HYGIENE

<u>FOCUS</u>	<u>OBJECTIVES</u>	<u>PRIORITY</u>
<i>A. Industrial Hygiene Implementation Plan</i>		
1. Air Monitoring	Monitor for accreditation and highest risk operations.	I
2. Ventilation Measurement	Measure adequacy of workplace controls.	I
3. Confined Space Review	Survey Confined Spaces	I
4. IAQ	Assess non-industrial indoor air pollution.	II
5. Ergonomics	Perform in-depth ergonomic assessments as requested by Post Safety and FECA Committee.	II
6. Respiratory Protection	Determine worker need for respiratory protection.	I
7. Design Review	Review statements of work, request proposals, purchase orders, and support agreements to address IH concerns.	I
8. Hearing Conservation	Determine worker need for hearing protection.	II
a. Noise Hazards ID	Identify and evaluate noise hazardous areas.	III

5 February 2007

<u>FOCUS</u>	<u>OBJECTIVES</u>	<u>PRIORITY</u>
b. Noise Dosimetry	Conduct noise dosimetry to measure worker exposure.	III
9. Lead Based Paint Risk Assessment	Survey lead work areas to measure worker exposure.	III
a. Lead Housing Inspection	Conduct HUD lead housing inspections.	III
b. Elevated Blood Lead (EBL) Risk Assessment	Conduct EBL Risk Assessment for Lead poisoned children	I
10. Asbestos Management	Perform and advise on monitoring and controls for asbestos worker exposure.	I
11. Vision Conservation	Identify and evaluate eye hazardous areas.	III
a. Illumination Surveys	Conduct illumination surveys as requested.	III
12. Radiation Protection	Identify ionizing and non-ionizing radiation health hazards.	III

e. Am I to change the C, PM's Program Document?

f. What am I to take as the IH program's priorities, mission, and goals?

1) According to Individual Performance Standards I am to: a) Customer Service; b) IH Assessment that are not surveys but only document chemicals, layout, biological concerns, ergonomic and perform only a visual (photo) index of work place; c) Reporting; d) Program Management – updating program document, change IHIP into living document, set up DOEHRS IH, and do IHISR; and e) Equipment Maintenance and Calibration.

2) According to DA PAM 40-503 I am to:

- Mission: IH use technical expertise to anticipate, recognize, evaluate; and control workplace health hazards. They work with other disciplines to develop economical and pragmatic solutions to prevent occupational illness, injury, and death.

5 February 2007

- Anticipation Chapter 4, "IH as the science and art devoted to the anticipation, recognition, evaluation, and control of those environmental factors and stresses associated with work and work operations that may cause sickness, impaired health and well being, significant discomfort, and inefficiency among workers or among the citizens of the community."

- Recognition Chapter 4:

a) Require annual inspections of workplaces that document "Chemical, physical, biological, and ergonomic hazards" and document "existing measures employed to control exposure to the hazard." (paragraph 4-4 and 4-9)

b) Recording survey data (paragraph 4-5)

c) Assigning priority action codes (paragraph 4-6)

d) Entering survey data in the DOEHRS-IH (paragraph 4-7 and 4-11)

- Evaluation Chapter 4:

a) Comprehensive health hazard assessment IHPM to collect both qualitative and quantitative data. The IHPM uses this data to assess the effectiveness of protective equipment, administrative controls and engineering controls. HHA also provide occupational medicine personnel with data to develop an effective medical surveillance program. (paragraph 4-8)

b) Assigning risk assessment codes (paragraph 4-10)

c) Worker notification (paragraph 4-12)

d) Apply quantitative exposure data (paragraph 4-13)

- Control Chapter 4:

a) Engineering controls (paragraph 4-15)

b) Administrative controls (paragraph 4-16)

c) personal protective equipment (paragraph 4-17)

- Quality Assurance Chapter 5:

a) Credentialing, privileging, supervising, and certification/licensing of IH personnel (paragraph 5-4)

5 February 2007

- b) Verification of equipment calibration (paragraph 5-5)
 - c) Industrial hygiene laboratories (paragraph 5-6)
 - d) Data verification (paragraph 5-7)
 - e) Plans and design review (paragraph 5-8)
- Recordkeeping (Chapter 6):
- Other Program Items (Chapter 7):
- a) With Occupational medicine and nursing to collect data; for professional collaboration for medical surveillance; and to generate comprehensive IH & OH surveys of worksites. (paragraph 7-1)
 - b) Hearing conservation to ID and evaluating noise hazardous areas; to maintain current listing of noise hazardous areas; to recommend engineering and PPE; to assess noise levels at workplace and worker exposure; and to provide names and magnitude of noise exposure. (paragraph 7-2)
 - c) Vision conservation to document eye hazards, eye protection required and used, and need for illumination in workplaces; to recommend eye protection and engineering controls. (paragraph 7-3)
 - d) Ergonomics to integrating ergonomic review in DOEHRS-IH; to evaluating of operations; incorporate worker input in recommendations; to serve on installation ergonomic subcommittee; to perform in-depth ergonomic assessments as needed; to provide training. (paragraph 7-4)
 - e) Medical radiation protection (paragraph 7-6)
 - f) Medical treatment facility IH to evaluating hospital unique exposures; and to infection control committee. (paragraph 7-6)
 - g) Health hazard communication program (paragraph 7-7)
 - h) Respiratory protection to comply with AR 11-34 (do fit testing); to determine exposures to determine what RP is needed; to train. (paragraph 7-8)

MCXN-PM (40-5f)
SUBJECT: Questions

5 February 2007

i) Asbestos management to review contracts; to provide technical input on methods used; and to serve as competent person. (paragraph 7-9)

j) Standard Army safety and occupational health inspections (paragraph 7-10)

k) Hazardous and medical wastes (paragraph 7-11)

l) Indoor air quality (paragraph 7-12)

m) Civilian resource conservation program (paragraph 7-13)

n) Confined space entry (paragraph 7-14)

o) Health hazard assessment program (paragraph 7-15)

p) Coordination for effectiveness (paragraph 7-17 to 7-32)

q) Childhood lead poisoning prevention program (paragraph 7-33)

r) Personal protective equipment program (paragraph 7-34)

3) According to LTC Jefferson, C, PM in the PM Program Document; I am to do:

- Priority 1s:

a) Elevated Blood Lead (EBL) Risk Assessment by conducting EBL Risk Assessment for Lead poisoned children.

b) Asbestos Management by performing and advising on monitoring and controls for asbestos worker exposure.

c) Air Monitoring by testing for accreditation-required units (MEDDAC and USDB) and highest risk operations.

d) Ventilation Measurement by measuring adequacy of workplace controls.

e) Respiratory Protection by determining workers that need for respiratory protection and by performing quantitative fit testing and by teaching qualitative fit testing.

MCXN-PM (40-5f)
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f) Design Review by reviewing statements of work, request proposals, purchase orders, and support agreements to address IH concerns.

g) Confined Space Review.

- Priority 2s:

a) Indoor Air Quality (IAQ) by assessing non-industrial indoor air pollution.

b) Hearing Conservation by determining workers that have a need for hearing protection and by identifying and evaluating noise hazardous areas.

c) Ergonomics by performing in-depth ergonomic assessments as requested by Post Safety, Medical, or FECA Committee.

- Priority 3s:

a) Noise Hazards to be identified.

b) Noise Dosimetry by conduct noise dosimetry to measure workers' exposures.

c) Lead Based Paint Risk Assessment by doing survey lead work areas to measure worker exposure.

d) Lead Based Paint Risk Assessment by conducting HUD lead housing inspections.

e) Vision Conservation by identifying and evaluating eye hazardous areas.

f) Vision Conservation by conducting illumination surveys as requested.

g) Radiation Protection by identifying ionizing and non-ionizing radiation health hazards

4) According to the Installation Status Report, I am to do:

- Ergonomic Surveys of total buildings

- Measuring inhalation exposures of all workers "provide worksite characterizations as to occupational exposures to radiological, biological or chemical hazards.

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- Doing Noise Dosimetry for their Time Weighted Averages: < 85 dBA; >= 85 to 103 dBA; >= 103 to 108 dBA; > 108 dBA
- Measure impulse noise exposures
- Conduct exposure assessments of total buildings

5) According to the Industrial Hygiene Program Status Report, I am to do:

- Conduct basic characterizations by buildings
- Conduct basic Ergonomic Assessments by buildings
- Conduct Exposure Assessment by buildings
- Measure inhalation exposures by buildings
- Measure steady-state noise exposures by buildings
- Measure impulse noise by buildings
- Document the implementation of recommendations made by IH for inhalation exposures
- Document the implementation of recommendations made by IH for noise exposures
- Document the implementation of recommendations made by IH for ergonomic exposures

6) According to my Job description; I am to do:

Duties:

- a) Plans and Executes on-site studies and surveys covering a full range of Occupational operations at Fort Leavenworth, USDB, and Fort Leavenworth Health Services area. 20%
- Coordinates and schedules surveys with the appropriate activity
- Collects or supervise the collection of various samples which may involve exposure to a variety of potential hazards requiring the use of PPE
- Prepares detailed technical reports of all surveys and studies to include recommendations for correcting deficiencies to ensure compliance with standards,
- Provides assistance to facility managers and personnel in the implementation of such recommendations.

MCXN-PM (40-5f)
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- b) Serves as a consultant in the field on industrial hygiene. 20%
- Provides consultations for all facilities and commands
 - Serves as a member of Occupational Safety and Health related committees.
 - Makes on-site visits for explicit purposes as required
 - Coordinates such consultations with command, Safety, PM
 - Coordinates with USAEHA, Occ Health MDs, and union
 - Obtains technical assistance from regional and national offices as required
- c) Reviews design plans and specifications for equipment and construction or modification of facilities to ensure compliance with applicable IH standards, codes, and regulations. 10%
- Prepares technical reports for each design review detailing hazards anticipated and presenting recommendations for control or elimination of such hazard
 - Coordinates such reviews with representatives as required
- d) Develops field protocols for conduct of special studies and investigations including recommendations on staffing, instrumentation, methods, etc. 5%
- Keep abreast of new developments in the field through review of professional publications, in service training, conferences, etc.
- e) Provides on the job training for IH Technicians and other personnel assigned to PM staff. 5%
- Reviews and evaluates the IH work performed by PMS personnel.
 - Plans and implements a training and development program
 - Determines and coordinates provisions with PMS supply for materials and equipment required for accomplishment of assignments
 - Provides technical guidance as required
- f) *Provides administrative and technical safety support to MEDDAC/DENTAC, conducts safety inspection for compliance with regulatory standards.* 40%
- Performs industrial hygiene sampling of MEDDAC and DENTAC facilities
- [This italic portion was removed in 1992 after establishing MEDDAC safety program and successfully passing JCAHO. It was made a GS 12 MEDDAC Safety position.]
- g) Performs other duties as assigned

h) Job Duty add ons:

- 1- Maintains and insures equipment serviced and calibrated
 - Coordinates with TMDE, MEDDAC Log, DPW/DOL
 - Coordinates with MEDDAC Log with service contractors
 - coordinates with Contract Officer on service contract

- 2- Budget
 - Ensure all needed supplies are present for work
 - Become checkbook holder
 - Order and receive equipment and supplies from PBO
 - Order and receive supplies from Logistics
 - Order supplies using DMMIS Computer system
 - Coordinate and manage the 797 Pharmacy Environmental Testing Services and Supply Contract by doing establish contract & justification, place orders, prepare monthly sampling items, supervise monthly testing and shipments, and payment of contractor.
 - Use and maintain WAWF computer program as a Receiver and Acceptor
 - Be CEEP equipment coordinator
 - Be hand receipt holder for IH Equipment

- 3- Survey to eliminate or control workplace hazards to prevent illness or injury
 - Characterize workplace exposures to facilitate exposure based medical surveillance
 - Comply with OSHA, EPA, State, and DOD

- 4- Monitor:
 - Toxic Chemicals
 - Hazardous materials
 - Asbestos
This requires a KS license and EPA's 40 hr with annual 8 hr refresher training as an Asbestos Supervisor and Asbestos Inspector for each.
 - Noise
This requires straight noise measurement, octave band analysis, and noise dosimetry.
 - Ventilation
 - Lead
This requires a KS license and EPA's 40 hr with annual 8 hr refresher training as a Lead Supervisor, Lead Inspector, and Lead Risk Assessor for each.
 - Ergonomics
 - Confined Space
This requires a confined space hazards evaluation and classification of the over 2,700 permit required spaces.
 - Environmental Pollution

MCCN-PM (40-5f)
SUBJECT: Questions

5 February 2007

-- Indoor Air Quality

This requires the temp, RH and Carbon Dioxide monitoring.

This requires biological monitoring.

-- Radiation

-- Other Potential Exposures

5- Perform 350 operations surveys per year

6- Maximize resources

7- Consultation to Emergency Response

-- Maintain the Smith's NBC detector

8- Plan, coordinate and conduct monitoring for Carbon Monoxide, Formaldehyde, WAG and Nitrous Oxide.

9- Do 5 training sections

10- Manage and conduct quantitative fit test program. Fit test 50 workers. This requires training and certification from Portacount.

11- Establish and maintain a IH Implementation Plan (IHIP)

-- Write SOPs

-- Write End of Month Reports of work done

-- Do MEDDAC Quality Improvement indicators and reporting

New in 2007

12- Maintain an IH weekly survey/work log

13- Maintain and dispatch TMP vehicle (dispatch done every 2 weeks).

14- Don't e-mail files of 3MD or greater to supervisor

5 February 2007

2. Requirement to update Industrial Hygiene Implementation Plan

a. According to DA Pam 40-503 Paragraph 3-6. **Industrial hygiene implementation plan**

a. To implement the program document, the IHPM must develop an IHIP. The IHIP is a living document, which schedules IH activities for a rolling 1-year period. The IHPM uses it to manage the systematic accomplishment of the prioritized IH activities, but not limited to, service requirements. These requirements are determined by assessing customer needs, obtaining commander's safety and OH emphasis, and reviewing OSHA regulations.

b. The automated data manipulation and retrieval features of the DOEHRs-IH allow the IHPM to transfer the database to word processing and then to help construct the IHIP.

c. The IHIP should include, as a minimum, the—

- (1) List of potentially hazardous operations.
- (2) Health hazards present at each operation.
- (3) Priority action code (PAC) assigned to each health hazard.
- (4) Industrial hygiene evaluations necessary for each health hazard.
- (5) Worksites scheduled for evaluation.
- (6) Completed evaluations.
- (7) Amount of time needed to complete the evaluation.
- (8) Risk assessment codes assigned to the operation.

d. Additional items included in the IHIP may increase its utility. Such items may include—

- (1) A remarks section.
- (2) The air sampling media and flow rate.
- (3) A list of—
 - (a) Equipment needed for each evaluation.
 - (b) Personnel assigned to complete the evaluations.
 - (c) Meetings, committee representatives, and training.

Sample industrial hygiene implementation plan has the following headings.

Survey Priority Bldg IH Operation # of HHI Noise Vent Exposure Training Other Survey &
Date Location Resource Description/ Operations Sampling (Type) (Specify) Report Time
Assign. Admin/Prgm (Type) (Hrs) Function

b. An IHIP at Fort Leavenworth has been in-place for years IAW MEDCOM guidance. It follows the DA Pam 40-503 example.

c. Requirement to update was given with no guidance. Karl Gibson requested an example of this "living document", but LT Derivan has provided no examples of what one of these looks like.

d. Please provide an example of what is wanted in this new IHIP.

MCXN-PM (40-5f)
SUBJECT: Questions

5 February 2007

3. Requirement to do Priority action code (PAC).

a. According to DA Pam 40-503

Paragraph 4-6. Assigning priority action codes

a. Once workplace hazards are recognized, IH personnel assign PACs to each hazard. The most current edition of the DOEHRS-IH User's Manual describes the method for assigning PACs.

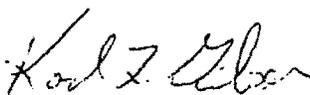
b. The IHPM uses the PACs to manage workload by scheduling evaluations of hazards. Give precedence to the worst-case health hazards. One operation may have several different hazards associated with it. Therefore, the IHPM must somehow prioritize these hazards for evaluation. The PACs are a method for this prioritization.

c. The IH personnel integrate the relative importance of the following criteria as the basis for each hazard's PAC assignment:

- (1) Regulatory requirements.
- (2) Toxicity.
- (3) Quantity.
- (4) Potential for entry and action of the toxic material to the body.
- (5) Frequency and duration of use.
- (6) Engineering and administrative controls employed.

b. Neither my current DOEHRS-IH User's Manual nor does the on-line Manual has anything that describes the method for assigning PACs.

c. Please provide this information.



Karl Gibson
IH Program Manager
USA MEDDAC

Received By ILT DERIVAN

Date 20 FEB 2008



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY MEDICAL DEPARTMENT ACTIVITY
550 POPE AVENUE
FORT LEAVENWORTH KS 66027-2332

MCXN-PM

03 March 2008

MEMORANDUM FOR RECORD

SUBJECT: Response to Questions Pertaining to the Industrial Hygiene Program Document and Industrial Hygiene Implementation Plan

1. On 20 FEB 2008 Karl Gibson submitted an MFR of questions pertaining to his Individual Performance Standards. The following are the responses to these questions.
2. Question 1: "Am I to change the C, PM's Program Document?" (page 3, 1.e)
 - a. As is referenced in the MFR of questions, the requirement is to update the Industrial Hygiene Program Document (IHPD). It is expected that you update this document as you might update the Standard Operating Procedures you have for the different Industrial Hygiene (IH) methods you employ. Read through the 2007 IHPD and determine if there are parts that need to be updated due to a change of practice or method.
 - b. Since the IHPD is incorporated into the Chief of Preventive Medicine's (C, PM) Program Document, submit your recommended updates to the C, PM through your supervisor. You may find that you do not have any recommended updates, and if that is the case, it's fine. The important point is that the IHPD is reviewed and updated.
3. Question 2: "What am I to take as the IH program's priorities, mission, and goals?" (page 3, 1.f)
 - a. You were given a "Priority List of IH Projects" on 01 FEB 2008. These are the first buildings for which you are to perform IH hazard assessment surveys, in order of their rank on the list. While performing these surveys, any hazards that you note will be contended with based on the priority it is assigned in the IHPD.
 - b. The IH program's mission has not changed. Therefore, the paragraph from DA PAM 40-503 quoted in the MFR of questions is still valid.
 - c. The IH program's goals are listed in the IHPD. Unless you recommend modifications to the IHPD and they are accepted by the C, PM, the goals have not changed.
4. Question 3: "Please provide an example of what is wanted in this new IHIP."
 - a. An example of a viable IHIP was provided for you on 21 FEB 2008 as the Microsoft Excel worksheet entitled "Copy of IHIP 1.XLS."

5. Question 4: "Please provide this information." (page 13, 3.c) with reference to assigning Priority Action Codes (PACs) for the Defense Occupational and Environmental Health Readiness System (DOEHRS).

a. After speaking with DOEHRS-IH contact personnel for the purposes of formulating an answer to this question, it was determined that DA PAM 40-503 (published 30 OCT 2000), with reference to PACs, is outdated.

b. The DOEHRS-IH no longer employs PACs. Instead, Risk Assessment Codes (RACs) – described in Chapter 20 of the DOEHRS-IH Student Guide – and Exposure Assessment Priorities (EAPs) – described in Chapter 21 of the DOEHRS-IH Student Guide – are used.

c. You can find the latest version of the DOEHRS-IH Student Guide (v1.0.8.0) on the PM shared "J Drive" in the folder entitled "DOEHRS-IH Student Guide 1.0.8.0."

6. The POC for this MFR is the undersigned at ext 4-6533.

Jacob J. Derivan

JACOB J. DERIVAN
1LT, MS
Environmental Science Officer

Received By: *Karl Z. Johnson*

Date: *3 Mar 08*

IH Numbers END OF MONTH REPORT (FY2008)

IH work for February 2008

IH Shop walk through of workplaces	Operations – Processes Walked Through	Updated IHIP
BLDG 77	9 Operations Named	On 22 Feb 2008
BLDG 43	1 Operation Named	On 22 Feb 2008
BLDG 53	1 Operation Named	On 22 Feb 2008

IH hazard assessment on buildings on Fort Leavenworth IAW "IH Project priority List": (a) Document all chemicals used (b) Interview = or > 30% of occupants to determine need for testing (c) Document physical layout of building (include fire exits, storage of chemicals, and supplies (d) Document any biological concerns within each building (e) A visual inspection of work place to determine other potential hazards (do photo index of surveyed buildings) (f) Document each ergonomic hazards inherent to each activity (g) All above information will be placed in DOEHS-IH by the end of each month surveyed. (h) No sampling or measurement of hazards will be conducted.	Operations – Processes Assessed	What needs to be Surveyed?
	None Allowed	0

Location of Survey	Operations Surveyed	Repeat Operations Surveyed
	None Allowed	0
Bldg 343 Pharm. Compounding for Feb	21	
Totals	21	0

Number of Design Reviews done: 0 (# of pages or items read and review for completeness.)

Area	Findings	Recommendations	What has

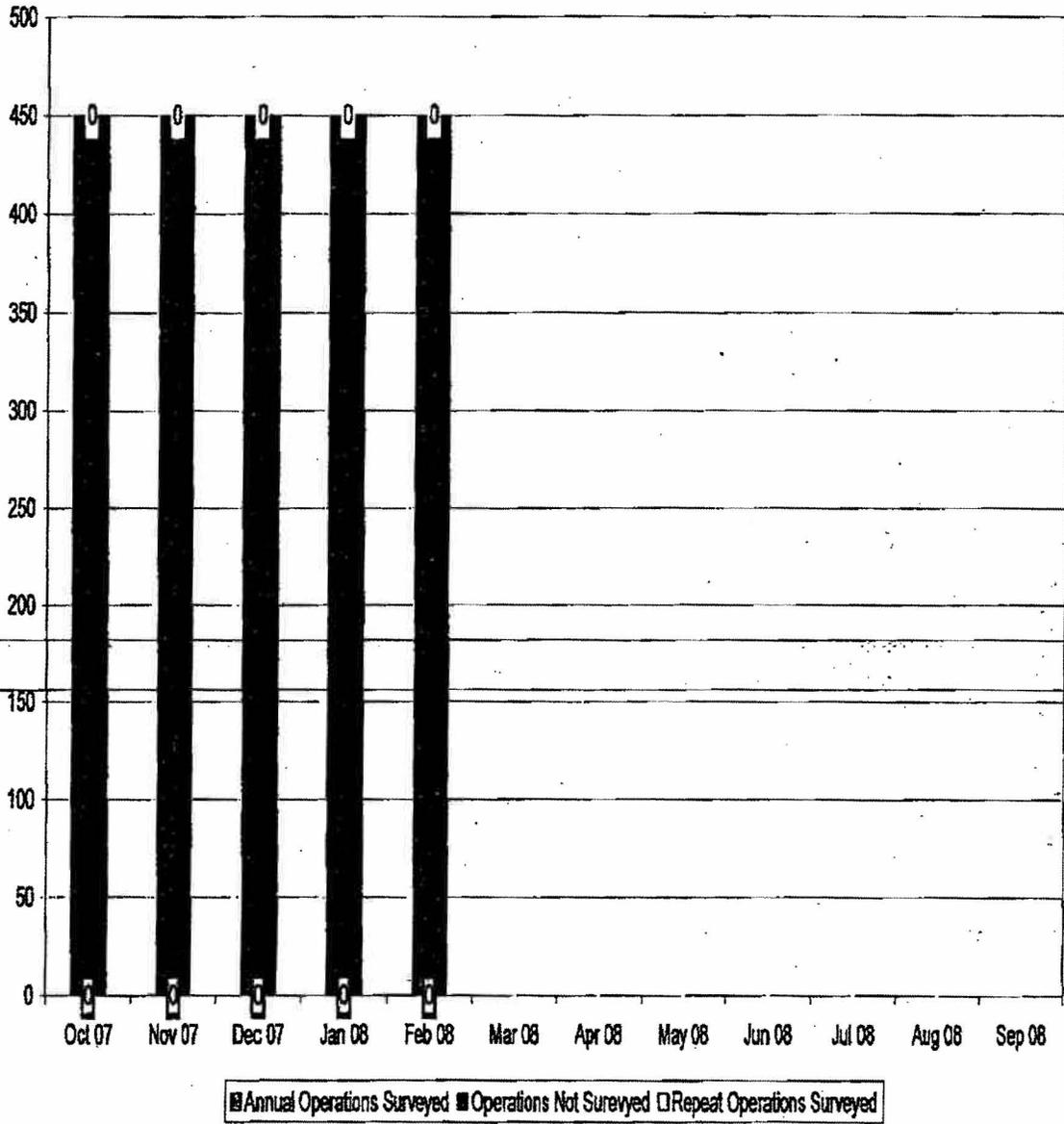
Note: Design Review surveys are done to ensure that new constructions projects control hazards and meet standards.

On 26 Feb 2008, David Murdock of DOL/DPW has dropped of the design for review
Title: Bldg 65 Latrine Addition. They want all comments prior to March 3, 2008. It was provided to LT Derivan on 26 Feb 2008. No permission was given.

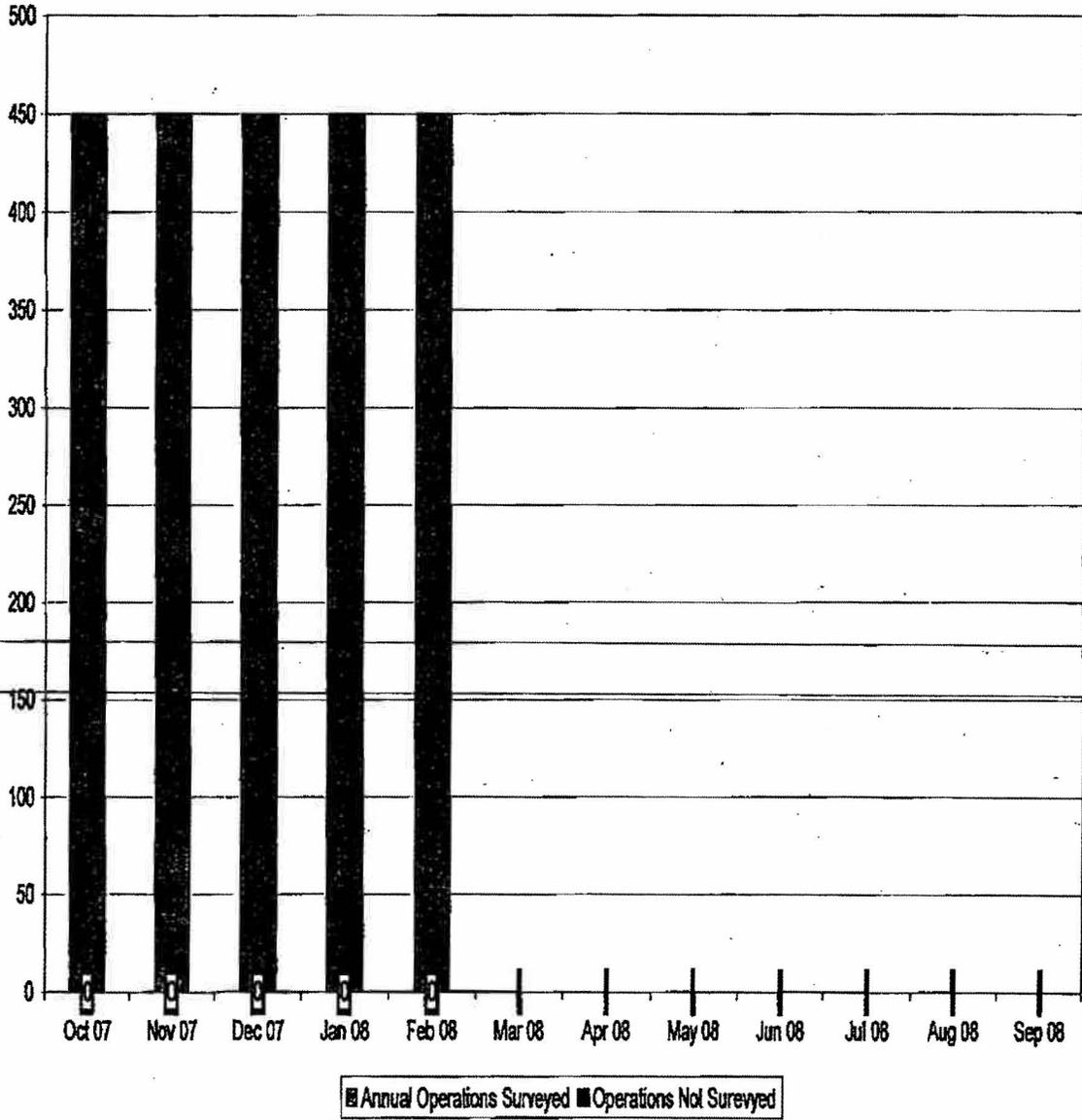
Training Sessions Provided

Type of Training	#classes/# of Attendees/location
Hearing Conservation	1/30/ MPC for CAC Safety
797 Pharmacy Hood Testing	1/1/ MAHC

IH required Surveys Done, Not Done, and Repeated Surveys for FY2008



IH required Surveys that were Done vs. Not Done for FY2008



IH Work Log for 4-8 Feb 2008

4 February 2008: Did time sheet. Was at BLDG 194 with SJA on records. Dispatch vehicle and turn paper work to Ms. Hixson. Did DOEHRS data input. Requested permission to take records from Hoge to Bldg 194 as SJA requested for 5 February 2008.

5 February 2008: Resent request permission to take records from Hoge to Bldg 194 as SJA requested for 5 February 2008. LTC Jefferson for them to be taken over at 1400 hrs. I delayed my official time to deliver records. There is an issue between SJA and Records on allowing non-government persons to look or have access to records. I briefed LTC Jefferson on issue. I worked on Program Document. DOEHRS-IH would not allow access into the system all morning and tried in the afternoon, but could not enter site.

6 February 2008: Delayed entry and off.

7 February 2008: I had four hours off. Sent emails. I picked up equipment and entered into DOEHRS-IH. I Ordered for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing.

8 February 2008: Off.

~~IH Work Log for 11-15 Feb 2008~~

On 11 February 2008, I worked on the class that I am doing for Safety. From 1200 - 1600 hrs I was on Official Time.

On 12 February 2008, At or about 0710 hrs on 12 February 2008, when I, Karl Gibson, arrived at my office – room E3-1325 in Hoge Annex, Fort Leavenworth, KS – I found the door open. I know that the door was secure when I left for my official time on 11 February 2008. I request guidance from LT Derivan on what I should do since I have hand receipted items in this area and records in my office and someone left it unsecured. I believe it is part of the harassment that management is doing because I am applying my rights as an employee and union steward. I looked for items that may be missing. My computer had cables that were not connected. I submitted work order. IMD worked and I got all cables plugged back in. I am missing a personal notebook and my six-sided folder from my desk drawers. LT Derivan wrote Tuesday night an e-mail: "This is a little reminder to all PM staff in Hoge Annex to please ensure the office doors are secured when you vacate the building. If you are the last one to leave our office area (i.e. at lunch or for the night) please take a look down the hall to ensure that the doors of our other offices that empty into the hall are secured as well." SGT Aaron requested use of TMP on Tuesday for range ammo. LT Derivan gave permission. I worked on class that I am doing for Safety. I watched the BLS video for my refresher on Wednesday. I picked up current inventory from Logistics to I could complete my required 100% inventory.

On 13 February 2008, I did training. Renewed BLS and computer based training was done. I was at the theater Sexual Assault Prevention training. I contacted MP Desk at 1000 hrs to report missing items. CPL Hensley came and we did report. At 1130 hrs, LT Derivan came into my office to show they had 'found' my six sided folder with LTC Jefferson. Order for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing As per Contract No. W81K00-07-P-0913, I need to order 4 BAP with A005 analysis, 4 Air-o-cell with A002 analysis, and 1 endotoxic cassette with A007 analysis for February 2008. (\$43. supply cost PO# 2008-9 and \$426.00 analysis cost PO# 2008-10) Please send them overnight. I also provided with Dianna Yates (913) 684- 6742 or Tina Baker (913) 684 - 6720 on the past invoices. I included them on the e-mail so you can also try this way as well. This is a repeat from last week since the POC I had and sent order to no longer works for Aerotech labs.

On 14 February 2008 at or about 0710 hrs, when I, Karl Gibson, arrived at my office -- room E3-1325 in Hoge Annex, Fort Leavenworth, KS -- I found my personal notebook on my day-timer desk calendar. My personal notebook could not have been there the day before, because I had written things in my calendar up to 4:00 pm on the 13th. I took pictures. I went to Munson and started the 100% inventory. I contacted the Provost Marshall's office to inform CPL Hensley on the finding. I spoke to SFC Eastwood and he informed me that CPL Hensley was not available. I informed he who I was, what had happened (see above). I asked that he pass this information to CPL Hensley. He said he would. I spoke to Rich Purkett because of my concerns about a balometer had not returned from TMDE in May 2007. I came back to my office and did inventory. I called TMDE at Fort Riley and spoke to Mike. I provided the Serial Number, Name, and ECN number. He said he would talk to Kathy Felix. I returned to Munson and Log downloaded data for inventory. I spoke again to Rich and Diane Yates. They said they would wait until 19 February 2008 to see what was up with TMDE and SSG Bouie would be back. At 1:15 PM, having not heard from CPL Hensley -- I went over to BLDG 320 Provost Marshall's Building and entered the DA Police offices. I spoke to CPT Dawson. He informed me that CPL Hensley was off and would not be back to work until Tuesday, 19 February 14, 2008. I explained why I was there (see above) and showed him the pictures. CPT Dawson said he would leave a message for CPL Hensley and if they needed to contact me they would. I offered he the pictures, but he declined.

On 15 February 2008, I worked on questions for upcoming Mr. Bentley Visit.

Due Outs:

1. Med Maintenance in Munson has asked to borrow one of my noise level meters and octave band analyzer as they have done in past. They are to pick up Friday (25 January 2008) before 0800. They did not show up. On Friday 15 Feb., they came and said they would come on 20 Feb to pick up equipment.

2. Records: Asked LT Derivan what we needed to do to retrieve the HHIM files prior to 1992 and the HHIM file 1992-1996 that are kept at CHPPM. Requested HHIM records from the DOEHS-IH help desk, talked to Steve Henry and received Ticket # 13661230. E-mailed Wisniewski, Kevin Mr USACHPPM and other staff on the request so information could be obtained. Asked how the pictures on my H drive files (found in Bell Hall and USDB files) were to be copied. At LT Derivan's direction I went to IMD and they copied files from my H drive for lawsuit Subpoena records. I picked up CD with the needed H-Drive files that Dianne L. Knowles in IMD had accessed and copied. I provided this CD to LT Derivan. Local requested records have arrived and I met with SJA on Monday at 0800 hrs to pull required files. On Tuesday, after LTC Jefferson gave permission, I delivered records. Still have no update on HHIM files as of 7 February 2008.

3. SSG Bouie, I e-mailed him after our talk,

a) In May 2007 at the TMDE picked up my equipment that they service and calibrate - I am still missing two pieces of equipment. A Balometer, ECN: 000824, SN: 8372 has not returned. An Industrial Scientific Charger for TMX 412 ECN: B8327, SN: 9607142-099.

b) Teresa McMillen was checking but I had not heard back from her before she retired.

c) In November 2007 at the TMDE picked up my equipment that they service and calibrate - They returned the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 with not calibrating it. (Two Dry Cal Calibrators have not returned either, but it is still early for TMDE.)

d) I asked the he please check on these items and get back with me. I repeated the request on 7 February 2008.

4. The CAC Safety Department is requesting IH assistance in giving a training to the Additional Duty Safety Officer on February 21, 2008 at 1300 hours at the Main Post Chapel's Activity Room. I would like you to speak on either one of these topics: Noise/Vibration, Lighting, Repetitive Motion and/or Equipment Design. Your assistance to the Safety Department would be greatly appreciated. I received on 30 January 2008 and forwarded to LT Derivan on the same day.

5. On 12 February 2008, SGT Aaron requested use of TMP on Tuesday for range ammo. LT Derivan gave permission. After SGT Aaron wrote "SFC Bledsoe, you can pick-up the TMP on Friday, but it must be dispatched on Tuesday morning for the week. Mr. Gibson is the one who dispatches the vehicle. He can pick up TMP Tuesday morning at 0730 for dispatching and be ready for you to use for the range. I thought that we can leave the TMP key, since the vehicle will be parked at MAHC, at the AAOD/AOD desk for him to pick-up Tuesday morning, unless you have another plan on how to tackle this matter. I am on cell if you have any questions at 408-375-1385." Waiting to hear where vehicle will be parked and where I need to pick up key to dispatch on Tuesday.

6. Order for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing As per Contract No. W81K00-07-P-0913, I need to order 4 BAP with A005 analysis, 4 Air-o-cell with A002 analysis, and 1 endotoxic cassette with A007 analysis for February 2008. (\$43. supply cost PO# 2008-9 and \$426.00 analysis cost PO# 2008-10) Please send them overnight. I also provided with Dianna Yates (913) 684- 6742 or Tina Baker (913) 684 - 6720 on the past invoices. I included them on the e-mail so you can also try this way as well. This is a repeat from last week since the POC I had and sent order to no longer works for Aerotech labs.

IH Work Log for 19-22 Feb 2008

On 18 February 2007, Holiday, Day off.

On 19 February 2007, I dispatched vehicle and submitted paperwork. Had vehicle ready for range use at 0830 hrs as agreed to. They picked up at 0915 hrs. I submitted my timesheet. I worked on Hearing Conservation class: including getting CD from IMD, copies, coordinate equipment use. [PM laptop top and projector was with SGT Aaron's POV.] I had official time from 1400-1600 hrs.

On 20 February 2007, I tried CD in laptop, but had problems. I contacted IMD and took over to Gary to fix. I picked it up at 1230 hours.

The Mr. Bentley visit started at 0850 hrs on 20 February 2008. I provided Mr. Bentley and LT Derivan copies of my MFR Subject: Questions dated 5 Feb 2007. The purpose of the visit is to work on Program Document and new IHIP. Issues of the visit:

1. Establishing a IH Program Document. I explained that it was the C, PM's program Document, not mine. Only the C, PM can change it. I was told I am the expert and I was to write a new Program Document for PM. I asked: If I was the C, PM? Am I to do her job? What are the new command priorities? How am I to produce something NEW with no example or direction from the command? I was told "Just do it". I asked how can I just do it if you can't show me what is a priority? LT Derivan stated that he had given me a list 6 weeks ago. I stated that I received this so called list of just 26 buildings on the afternoon of 1 Feb 2008 and nothing on it but rank # and Building #. I asked - What does this mean? I received no response.

2. Doing/ changing IH Implementation Plan. I asked what was wrong with 2007's? They did not like, they want it to be written, supervisor and command approved, but living and changing. I repeatedly asked for an example of what they are talking about and they refused to show an example. I asked how I could schedule and plan anything if the command can't give me their goals, mission, and priorities. I received no answer. I asked what I was allowed to do for these surveys. Could I do sampling? Could I do air

monitoring? Could I do ventilation? I was told if in IHIP and command approved. What about biological samples? Do you know the current command policy is? I said I had not seen any policy. I was told that anything I wanted to do in a survey would need to be written in IHIP and approved.

3. It was decided that Mr. Bentley would walk me through what they wanted me to do. He asked for the case file for Bldg 77. I have no such item. (This is an Air Force requirement, but not Army.) I pointed out that in the program document of FY 2007, that filing was not a priority. I was requested to print off survey documents. I asked H or J drive documents? Mr. Bentley only wanted J drive documents. I asked 1LT Derivan what about surveys that have been done, but not 'finished' that he and LTC Jefferson are holding. 1LT Derivan said "these documents are where they want them." I printed off the J drive documents and provided to Mr. Bentley.

4. At 1250 hours, Mr. Bentley and I went to the Bldg 77 unannounced. We did a walk through of the Building. We talked to 5 people. We agreed that the following shops were in the building: Emergency Operations Center; Information System Processing (Military Review); Office DPTM; Print Plant (Defense Printing); Televideo Center; Devices; Warehouse; Office AARTS; TSC Art/Graphics. Several items have changed since the last survey and became digital.

5. At 1445 hours, Mr. Bentley and LTC Jefferson and Karl Gibson met. We briefed that changes have occurred in the work places in Bldg 77, even since Mr. Bentley's July 2007 visit to DAPS. Mr. Bentley stated that he was going to show me what kind of IHIP they wanted. I was asked then since there were changes, did I think the April 2007 report was valid? I said yes, since it represented conditions on the survey days. They claimed to understand and agreed with me. Mr. Bentley thinks the file system needs to change and files to be done by building. At 1500 hours Mr. Bentley and LTC Jefferson went into a private meeting until after I left work at 1600 hrs.

On 21 February 2008, I prepared clarification questions for Mr. Bentley. At 0930 hrs, Mr. Bentley arrived at PM. I asked questions and both LT Derivan and Mr. Bentley agreed with the process as I asked. I will be writing a SOP when I get a chance. From 1030 to 1130 hours Mr. Bentley and I worked on IHIP 2008. LT Derivan approved the format and what IHIP looked like. From 1200 hrs I set up class at MPC and gave class, and then torn down classroom. I turned in equipment to PM at Munson. I worked on "IHIP 2008".

On 22 February 2008, I picked up Quest equipment from calibration. At 0830 hrs, Mr. Bentley arrived and was with LTC Jefferson. I contacted the number for Bldg 43 that LT Derivan gave me. It turned out to be Bldg 53. At 0845 hrs, Mr. Bentley, LT Derivan and me went to Bldg 53 and toured. At about 0945 hrs, Mr. Bentley, LT Derivan and me went to Bldg 43 and toured. At 1015 hrs, Mr. Bentley and LT Derivan went to the out briefing for the visit, but Karl Gibson was not allowed to go. Karl Gibson went back to

3. SSG Bouie, I e-mailed him after our talk,

a) In May 2007 at the TMDE picked up my equipment that they service and calibrate - I am still missing two pieces of equipment. A Balometer, ECN: 000824, SN: 8372 has not returned. An Industrial Scientific Charger for TMX 412 ECN: B8327, SN: 9607142-099.

b) Teresa McMillen was checking but I had not heard back from her before she retired.

c) In November 2007 at the TMDE picked up my equipment that they service and calibrate - They returned the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 with not calibrating it. (Two Dry Cal Calibrators have not returned either, but it is still early for TMDE.)

d) I asked the he please check on these items and get back with me. I repeated the request on 7 February 2008.

E) Two Dry Cal Calibrators returned and I entered into DOEHRS-IH.

F) I met SSG Bouie and asked he to again handle the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 because TMDE sent it back with not calibrating it. He picked it up from Mr. Mapes and said he would send it back to TMDE with a note. I asked that he keep me informed.

F) Issue with A Balometer, ECN: 000824, Model No. 8372 SN: 55040226 has not returned. I notified LT Derivan and Rich Purchett/Dainne Yates of missing item as I did my 100% inventory. Rich and Dianne advised to contact TMDE again. I called and e-mailed TMDE, Fort Riley. According to an e-mail on 19 Feb 2008, TMDE documents that it left Redstone on 11 June 2007. I emailed Log and LT Derivan on the 19th. I re-emailed on 22 Feb 2008.

4. CLOSED The CAC Safety Department is requesting IH assistance in giving a training to the Additional Duty Safety Officer on February 21, 2008 at 1300 hours at the Main Post Chapel's Activity Room. I would like you to speak on either one of these topics: Noise/Vibration, Lighting, Repetitive Motion and/or Equipment Design. Your assistance to the Safety Department would be greatly appreciated. I received on 30 January 2008 and forwarded to LT Derivan on the same day. I trained on Hearing Conservation and class was a success. (LT Derivan and Mr. Bentley were present to observe training. Received only positive feedback from class.)

5. CLOSED On 12 February 2008, SGT Aaron requested use of TMP on Tuesday for range ammo. LT Derivan gave permission. After SGT Aaron wrote "SFC Bledsoe, you can pick-up the TMP on Friday, but it must be dispatched on Tuesday morning for the week. Mr. Gibson is the one who dispatches the vehicle. He can pick up TMP Tuesday morning at 0730 for dispatching and be ready for you to use for the range. I thought that

we can leave the TMP key, since the vehicle will be parked at MAHC, at the AAOD/AOD desk for him to pick-up Tuesday morning, unless you have another plan on how to tackle this matter. I am on cell if you have any questions at 408-375-1385." Waiting to hear where vehicle will be parked and where I need to pick up key to dispatch on Tuesday. The vehicle returned with no problems.

6. Order for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing As per Contract No. W81K00-07-P-0913, I need to order 4 BAP with A005 analysis, 4 Air-o-cell with A002 analysis, and 1 endotoxic cassette with A007 analysis for February 2008. (\$43. supply cost PO# 2008-9 and \$426.00 analysis cost PO# 2008-10) Please send them overnight. I also provided with Dianna Yates (913) 684- 6742 or Tina Baker (913) 684 - 6720 on the past invoices. I included them on the e-mail so you can also try this way as well. This is a repeat from last week since the POC I had and sent order to no longer works for Aerotech labs.

7. Write a SOP on IHIP - Assessment - Survey process.

IH Work Log for 25-29 Feb 2008

On 25 February, Prepared samples, calibrated and did 797 Pharmacy Hood testing with showing SGT Aaron how to do the work. The HHIM CD was delivered and I provided it to LT Derivan for Subpoena. I verified quest equipment that had returned from contract calibration. I found that all quest equipment was present and I notified Supervisor and LOG to inform WAWF. I spoke to Log on Balometer issue. Spent rest of morning and afternoon preparing MFR of events for possible Report of Survey. Provided to Supervisor to review. LT Derivan approved. Had 30 day counseling with LT Derivan.

On 26 February, Copy MFR and deliver to Jill, (PM Sec.) and Rich Purkett (C, LOG) on Balometer issue. Worked on IH Program document even with no guidance or example from supervisor. I had official time from 1400-1600 hrs.

On 27 February, I worked on IH Program document. I had official time from 1200-1600 hrs.

On 28 February, I was off.

On 29 February, I was notified by LOG that Balometer had been found and I was ready to sign hand receipt. I prepared leave forms for Doctor's Appt. and other March leaves. I worked on IH Program document. I picked up equipment and signed hand receipt. I was off from 2-4 pm. I e-mailed work log and hand provided a copy of the "Record of Operational Calibration" and March leave forms.

Due Outs:

1. Med Maintenance in Munson has asked to borrow one of my noise level meters and octave band analyzer as they have done in past. They are to pick up Friday (25 January 2008) before 0800. They did not show up. On Friday 15 Feb., they came and said they would come on 20 Feb to pick up equipment. They did not show up until 27 February 2008. Soldier signed for equipment, I provided him training on how to operate, calibrate, and testing requirements for the noise level meter and octave band analyzer. Waiting return of equipment.

2. Records: Asked LT Derivan what we needed to do to retrieve the HHIM files prior to 1992 and the HHIM file 1992-1996 that are kept at CHPPM. Requested HHIM records from the DOEHRS-IH help desk, talked to Steve Henry and received Ticket # 13661230. E-mailed Wisniewski, Kevin Mr USACHPPM and other staff on the request so information could be obtained. Asked how the pictures on my H drive files (found in Bell Hall and USDB files) were to be copied. At LT Derivan's direction I went to IMD and they copied files from my H drive for lawsuit Subpoena records. I picked up CD with the needed H-Drive files that Dianne L. Knowles in IMD had accessed and copied. I provided this CD to LT Derivan. Local requested records have arrived and I met with SJA on Monday at 0800 hrs to pull required files. On Tuesday, after LTC Jefferson gave permission, I delivered records. Still have no update on HHIM files as of 7 February 2008. The Old work order Ticket Number is 13661230. Wisniewski, Kevin Mr USACHPPM said that was not good enough and need new ticket. So I requested a new trouble ticket and it has been logged for this issue. Ticket number is 13694565. On 21 February 2008 I received an e-mail from Angina, Ratna, "On February 19, 2008, you opened DOEHRS Help Desk Ticket # 13694565, Requesting access to Fort Leavenworth Legacy Program office in DOEHRS. The DOEHRS application provides functionality to request access to a new Program Office. In the Resources section of the left navigation of the DOEHRS application, there is an option called "My Profile". Select the option and scroll to the bottom of the page. There is a section at the bottom of the page called "Other Tools" which includes a "Request Access to new Program Office" link. Use this link to request access to Fort Leavenworth Legacy Program office. At this time, your ticket is being closed. Your ticket can be re-opened in the future if you need continued support. You can do that by calling MHS Help Desk at 1-800-600-9332, then 4, 4, 7 or by sending an email message with the ticket number to 'help@mhs-helpdesk.com'." On 21 February 2008, I accessed the DOEHRS-IH, followed and submitted this request. On 25 February, The HHIM CD was delivered and I provided it to LT Derivan for Subpoena. I asked him status of hard copy records and asked when I needed to get them back. LT Derivan stated he would get back to me on these questions.

3. CLOSED Balometer part in the week of 25-29 February. SSG Bouie, I e-mailed him after our talk,

a) In May 2007 at the TMDE picked up my equipment that they service and calibrate - I am still missing two pieces of equipment. A Balometer, ECN: 000824, SN: 8372 has not returned. An Industrial Scientific Charger for TMX 412 ECN: B8327, SN: 9607142-099.

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d) I asked the he please check on these items and get back with me. I repeated the request on 7 February 2008.

E) Two Dry Cal Calibrators returned and I entered into DOEHRS-III.

F) I met SSG Bouie and asked he to again handle the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 because TMDE sent it back with not calibrating it. He picked it up from Mr. Mapes and said he would send it back to TMDE with a note. I asked that he keep me informed.

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h) On 25 February, I spoke to Log on Balometer issue. Spent rest of morning and afternoon preparing MFR of events for possible Report of Survey. Provided to Supervisor to review. LT Derivan approved. On 26 February I made copies of MFR and deliver to Jill, (PM Sec.) and Rich Purkett (C, LOG) on Balometer issue.

i) On 29 February, I received e-mail from Rich Purkett that the Balometer had been found and shipped back to Munson. I spoke to SSG Bouie and he has not yet contact or send Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 to TMDE.

4. CLOSED in the week of 18-22 February.

5. CLOSED in the week of 18-22 February.

6. Order for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing As per Contract No. W81K00-07-P-0913, I need to order 4 BAP with A005 analysis, 4 Air-o-cell with A002 analysis, and 1 endotoxic cassette with A007 analysis for February 2008. (\$43. supply cost PO# 2008-9 and \$426.00 analysis cost PO# 2008-10) Please send them overnight. I also provided with Dianna Yates (913) 684- 6742 or Tina Baker (913) 684 - 6720 on the past invoices. I included them on the e-mail so you can also try this way as well. This is a repeat from last week since the POC I had and sent order to no longer works for Aerotech labs.

7. Write a SOP on IHIP - Assessment - Survey process.

8. Due to Karl Gibson:

- a) Karl Gibson's questions and material promised at 15 January 2008 counseling.
- b) Memo dated 5 February 2008 Subject: Questions.
- c) Memo dated 15 February 2008 Additional Questions concerning the IPS in Feb 2008

9. Gary Glynn request to LT Derivan, "I will need to call CHPPM to get the Site ID, Site Name and registration key to complete the installation. Do you have a phone number for the CHPPM help desk?" I received this request on 29 February 2008 and provided on 29 February 2008.

10. On 26 Feb 2008, David Murdock of DOL/DPW has dropped of the design for review Title: Bldg 65 Latrine Addition. They want all comments prior to March 3, 2008. It was provided to LT Derivan on 26 Feb 2008.

IH Numbers END OF MONTH REPORT (FY2008)

IH work for February 2008

IH Shop walk through of workplaces	Operations – Processes Walked Through	Updated IHIP
BLDG 77	9 Operations Named	On 22 Feb 2008
BLDG 43	1 Operation Named	On 22 Feb 2008
BLDG 53	1 Operation Named	On 22 Feb 2008

IH hazard assessment on buildings on Fort Leavenworth IAW "IH Project priority List": (a) Document all chemicals used (b) Interview = or > 30% of occupants to determine need for testing (c) Document physical layout of building (include fire exits, storage of chemicals, and supplies) (d) Document any biological concerns within each building (e) A visual inspection of work place to determine other potential hazards (do photo index of surveyed buildings)	Operations – Processes Assessed	What needs to be Surveyed?
(f) Document each ergonomic hazards inherent to each activity (g) All above information will be placed in DOEHS-IH by the end of each month surveyed. (h) No sampling or measurement of hazards will be conducted.		
	None Allowed	0

Location of Survey	Operations Surveyed	Repeat Operations Surveyed
	None Allowed	0
Bldg 343 Pharm. Compounding for Feb	21	
Totals	21	0

Number of Design Reviews done: 0 (# of pages or items read and review for completeness.)

Area	Findings	Recommendations	What has

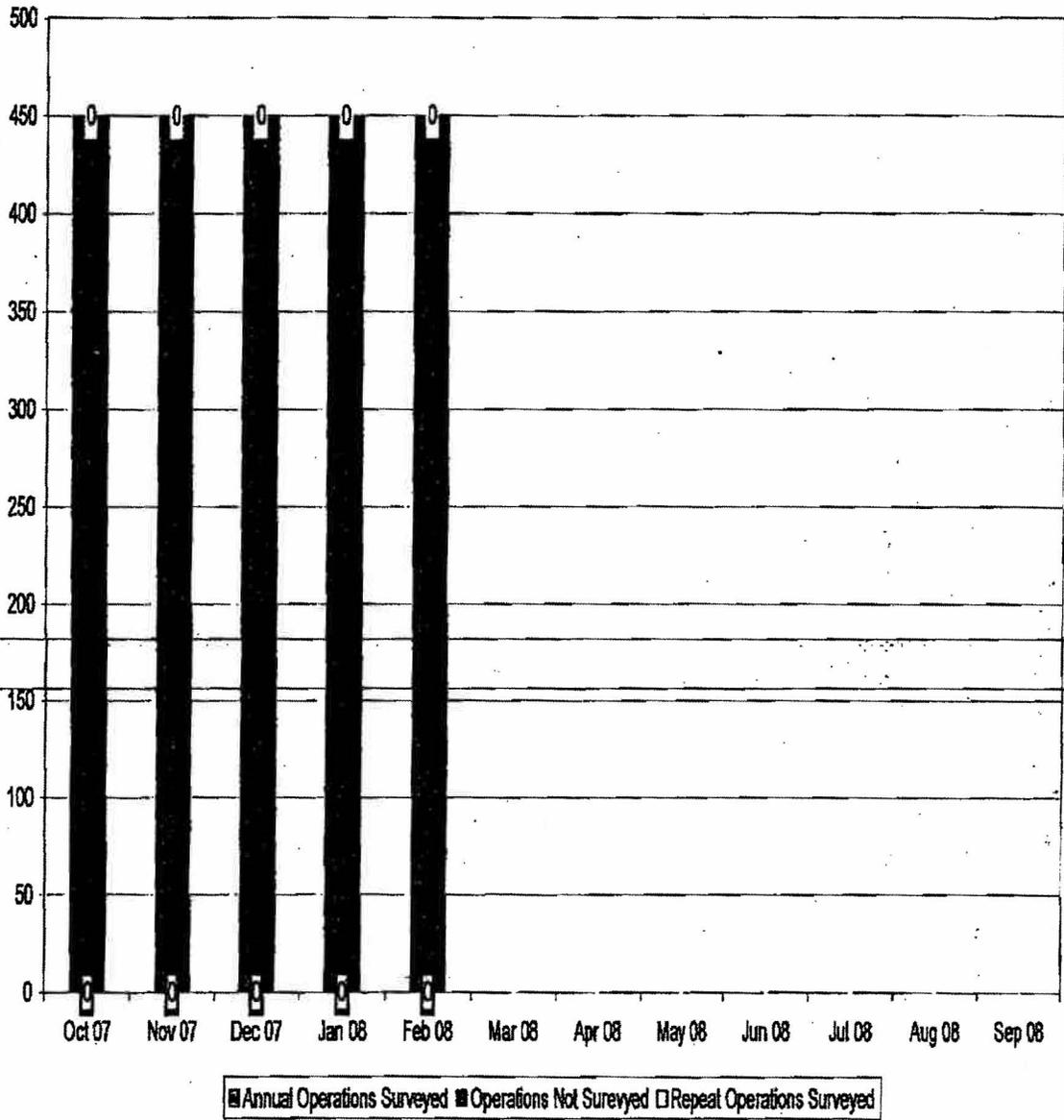
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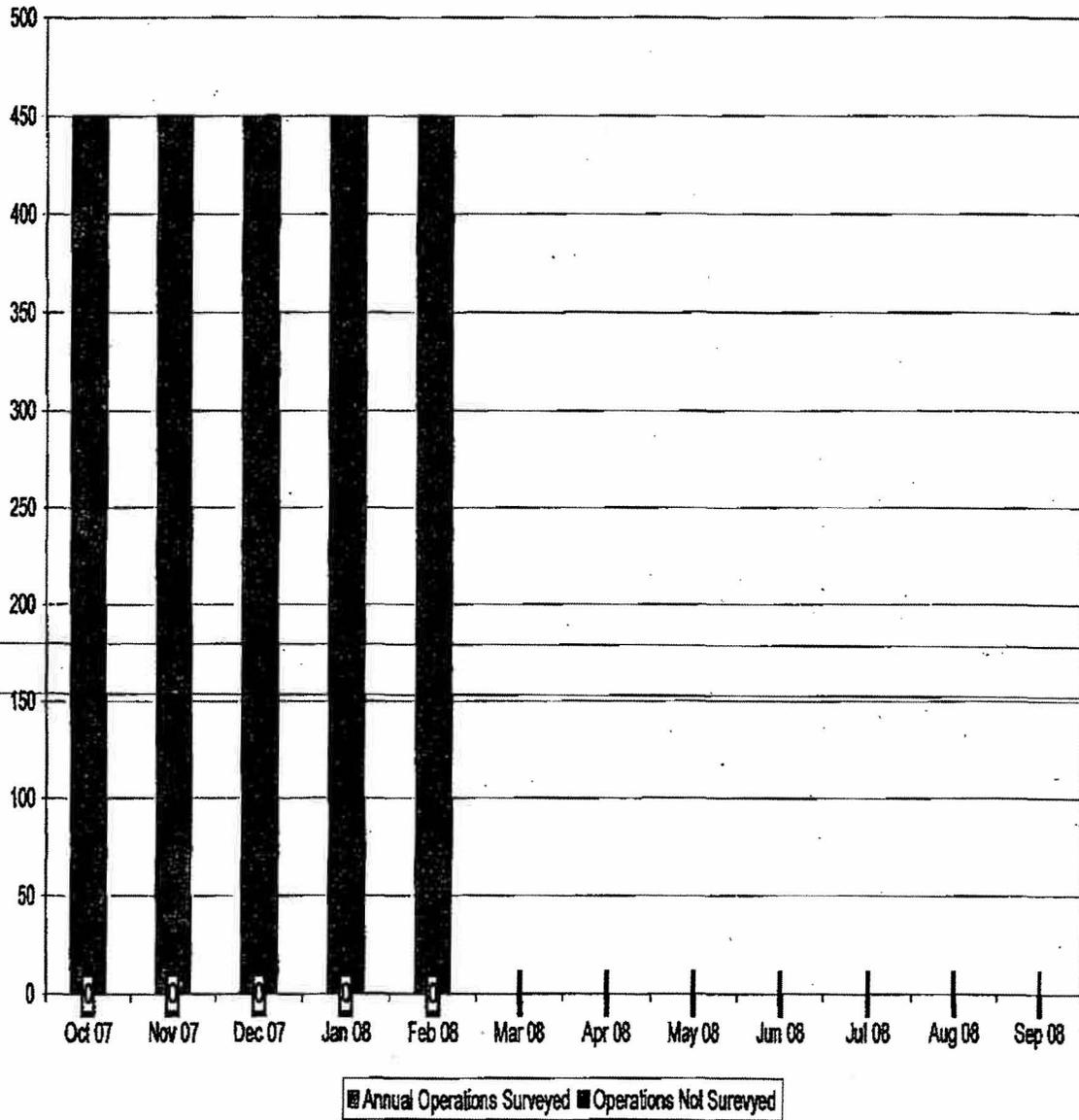
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IH required Surveys that were Done vs. Not Done for FY2008



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7 February 2008: I had four hours off. Sent emails. I picked up equipment and entered into DOEHRS-IH. I Ordered for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing.

8 February 2008: Off.

IH Work Log for 11-15 Feb 2008

On 11 February 2008, I worked on the class that I am doing for Safety. From 1200 - 1600 hrs I was on Official Time.

On 12 February 2008, At or about 0710 hrs on 12 February 2008, when I, Karl Gibson, arrived at my office - room E3-1325 in Hoge Annex, Fort Leavenworth, KS - I found the door open. I know that the door was secure when I left for my official time on 11 February 2008. I request guidance from LT Derivan on what I should do since I have hand receipted items in this area and records in my office and someone left it unsecured. I believe it is part of the harassment that management is doing because I am applying my rights as an employee and union steward. I looked for items that may be missing. My computer had cables that were not connected. I submitted work order. IMD worked and I got all cables plugged back in. I am missing a personal notebook and my six-sided folder from my desk drawers. LT Derivan wrote Tuesday night an e-mail: "This is a little reminder to all PM staff in Hoge Annex to please ensure the office doors are secured when you vacate the building. If you are the last one to leave our office area (i.e. at lunch or for the night) please take a look down the hall to ensure that the doors of our other offices that empty into the hall are secured as well." SGT Aaron requested use of TMP on Tuesday for range ammo. LT Derivan gave permission. I worked on class that I am doing for Safety. I watched the BLS video for my refresher on Wednesday. I picked up current inventory from Logistics to I could complete my required 100% inventory.

On 13 February 2008, I did training. Renewed BLS and computer based training was done. I was at the theater Sexual Assult Prevention training. I contacted MP Desk at 1000 hrs to report missing items. CPL Hensley came and we did report. At 1130 hrs, LT Derivan can unto my office to show they had 'found' my six sided folder with LTC Jefferson. Order for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing As per Contract No. W81K00-07-P-0913, I need to order 4 BAP with A005 analysis, 4 Air-o-cell with A002 analysis, and 1 endotoxic cassette with A007 analysis for February 2008. (\$43. supply cost PO# 2008-9 and \$426.00 analysis cost PO# 2008-10) Please send them overnight. I also provided with Dianna Yates (913) 684- 6742 or Tina Baker (913) 684 - 6720 on the past invoices. I included them on the e-mail so you can also try this way as well. This is a repeat from last week since the POC I had and sent order to no longer works for Aerotech labs.

On 14 February 2008 at or about 0710 hrs, when I, Karl Gibson, arrived at my office – room E3-1325 in Hoge Annex, Fort Leavenworth, KS – I found my personal notebook on my day-timer desk calendar. My personal notebook could not have been there the day before, because I had written things in my calendar up to 4:00 pm on the 13th. I took pictures. I went to Munson and started the 100% inventory. I contacted the Provost Marshall's office to inform CPL Hensley on the finding. I spoke to SFC Eastwood and he informed me that CPL Hensley was not available. I informed he who I was, what had happened (see above). I asked that he pass this information to CPL Hensley. He said he would. I spoke to Rich Purkett because of my concerns about a balometer had not returned from TMDE in May 2007. I came back to my office and did inventory. I called TMDE I Fort Riley and spoke to Mike. I provided the Serial Number, Name, and ECN number. He said he would talk to Kathy Felix. I returned to Munson and Log downloaded data for inventory. I spoke again to Rich and Diane Yates. They said they would wait until 19 February 2008 to see what was up with TMDE and SSG Bouie would be back. At 1:15 PM, having not heard from CPL Hensley – I went over to BLDG 320 Provost Marshall's Building and entered the DA Police offices. I spoke to CPT Dawson. He informed me that CPL Hensley was off and would not be back to work until Tuesday, 19 February 14, 2008. I explained why I was there (see above) and showed him the pictures. CPT Dawson said he would leave a message for CPL Hensley and if they needed to contact me they would. I offered he the pictures, but he declined.

On 15 February 2008, I worked on questions for upcoming Mr. Bentley Visit.

Due Outs:

1. Med Maintenance in Munson has asked to borrow one of my noise level meters and octave band analyzer as they have done in past. They are to pick up Friday (25 January 2008) before 0800. They did not show up. On Friday 15 Feb., they came and said they would come on 20 Feb to pick up equipment.

2. Records: Asked LT Derivan what we needed to do to retrieve the HHIM files prior to 1992 and the HHIM file 1992-1996 that are kept at CHPPM. Requested HHIM records from the DOEHRs-IH help desk, talked to Steve Henry and received Ticket # 13661230. E-mailed Wisniewski, Kevin Mr USACHPPM and other staff on the request so information could be obtained. Asked how the pictures on my H drive files (found in Bell Hall and USDB files) were to be copied. At LT Derivan's direction I went to IMD and they copied files from my H drive for lawsuit Subpoena records. I picked up CD with the needed H-Drive files that Dianne L. Knowles in IMD had accessed and copied. I provided this CD to LT Derivan. Local requested records have arrived and I met with SJA on Monday at 0800 hrs to pull required files. On Tuesday, after LTC Jefferson gave permission, I delivered records. Still have no update on HHIM files as of 7 February 2008.

3. SSG Bouie, I e-mailed him after our talk,

a) In May 2007 at the TMDE picked up my equipment that they service and calibrate - I am still missing two pieces of equipment. A Balometer, ECN: 000824, SN: 8372 has not returned. An Industrial Scientific Charger for TMX 412 ECN: B8327, SN: 9607142-099.

b) Teresa McMillen was checking but I had not heard back from her before she retired.

c) In November 2007 at the TMDE picked up my equipment that they service and calibrate - They returned the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 with not calibrating it. (Two Dry Cal Calibrators have not returned either, but it is still early for TMDE.)

d) I asked the he please check on these items and get back with me. I repeated the request on 7 February 2008.

4. The CAC Safety Department is requesting IH assistance in giving a training to the Additional Duty Safety Officer on February 21, 2008 at 1300 hours at the Main Post Chapel's Activity Room. I would like you to speak on either one of these topics: Noise/Vibration, Lighting, Repetitive Motion and/or Equipment Design. Your assistance to the Safety Department would be greatly appreciated. I received on 30 January 2008 and forwarded to LT Derivan on the same day.

5. On 12 February 2008, SGT Aaron requested use of TMP on Tuesday for range ammo. LT Derivan gave permission. After SGT Aaron wrote "SFC Bledsoe, you can pick-up the TMP on Friday, but it must be dispatched on Tuesday morning for the week. Mr. Gibson is the one who dispatches the vehicle. He can pick up TMP Tuesday morning at 0730 for dispatching and be ready for you to use for the range. I thought that we can leave the TMP key, since the vehicle will be parked at MAHC, at the AAOD/AOD desk for him to pick-up Tuesday morning, unless you have another plan on how to tackle this matter. I am on cell if you have any questions at 408-375-1385." Waiting to hear where vehicle will be parked and where I need to pick up key to dispatch on Tuesday.

6. Order for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing As per Contract No. W81K00-07-P-0913, I need to order 4 BAP with A005 analysis, 4 Air-o-cell with A002 analysis, and 1 endotoxic cassette with A007 analysis for February 2008. (\$43. supply cost PO# 2008-9 and \$426.00 analysis cost PO# 2008-10) Please send them overnight. I also provided with Dianna Yates (913) 684- 6742 or Tina Baker (913) 684 - 6720 on the past invoices. I included them on the e-mail so you can also try this way as well. This is a repeat from last week since the POC I had and sent order to no longer works for Aerotech labs.

IH Work Log for 19-22 Feb 2008

On 18 February 2007, Holiday, Day off.

On 19 February 2007, I dispatched vehicle and submitted paperwork. Had vehicle ready for range use at 0830 hrs as agreed to. They picked up at 0915 hrs. I submitted my timesheet. I worked on Hearing Conservation class: including getting CD from IMD, copies, coordinate equipment use. [PM laptop top and projector was with SGT Aaron's POV.] I had official time from 1400-1600 hrs.

On 20 February 2007, I tried CD in laptop, but had problems. I contacted IMD and took over to Gary to fix. I picked it up at 1230 hours.

The Mr. Bentley visit started at 0850 hrs on 20 February 2008. I provided Mr. Bentley and LT Derivan copies of my MFR Subject: Questions dated 5 Feb 2007. The purpose of the visit is to work on Program Document and new IHIP. Issues of the visit:

1. Establishing a IH Program Document. I explained that it was the C, PM's program Document, not mine. Only the C, PM can change it. I was told I am the expert and I was to write a new Program Document for PM. I asked: If I was the C, PM? Am I to do her job? What are the new command priorities? How am I to produce something NEW with no example or direction from the command? I was told "Just do it". I asked how can I just do it if you can't show me what is a priority? LT Derivan stated that he had given me a list 6 weeks ago. I stated that I received this so called list of just 26 buildings on the afternoon of 1 Feb 2008 and nothing on it but rank # and Building #. I asked - What does this mean? I received no response.

2. Doing/ changing IH Implementation Plan. I asked what was wrong with 2007's? They did not like, they want it to be written, supervisor and command approved, but living and changing. I repeatedly asked for an example of what they are talking about and they refused to show an example. I asked how I could schedule and plan anything if the command can't give me their goals, mission, and priorities. I received no answer. I asked what I was allowed to do for these surveys. Could I do sampling? Could I do air

monitoring? Could I do ventilation? I was told if in IHIP and command approved. What about biological samples? Do you know the current command policy is? I said I had not seen any policy. I was told that anything I wanted to do in a survey would need to be written in IHIP and approved.

3. It was decided that Mr. Bentley would walk me through what they wanted me to do. He asked for the case file for Bldg 77. I have no such item. (This is an Air Force requirement, but not Army.) I pointed out that in the program document of FY 2007, that filing was not a priority. I was requested to print off survey documents. I asked H or J drive documents? Mr. Bentley only wanted J drive documents. I asked 1LT Derivan what about surveys that have been done, but not 'finished' that he and LTC Jefferson are holding. 1LT Derivan said "these documents are where they want them." I printed off the J drive documents and provided to Mr. Bentley.

4. At 1250 hours, Mr. Bentley and I went to the Bldg 77 unannounced. We did a walk through of the Building. We talked to 5 people. We agreed that the following shops were in the building: Emergency Operations Center; Information System Processing (Military Review); Office DPTM; Print Plant (Defense Printing); Televideo Center; Devices; Warehouse; Office AARTS; TSC Art/Graphics. Several items have changed since the last survey and became digital.

5. At 1445 hours, Mr. Bentley and LTC Jefferson and Karl Gibson met. We briefed that changes have occurred in the work places in Bldg 77, even since Mr. Bentley's July 2007 visit to DAPS. Mr. Bentley stated that he was going to show me what kind of IHIP they wanted. I was asked then since there were changes, did I think the April 2007 report was valid? I said yes, since it represented conditions on the survey days. They claimed to understand and agreed with me. Mr. Bentley thinks the file system needs to change and files to be done by building. At 1500 hours Mr. Bentley and LTC Jefferson went into a private meeting until after I left work at 1600 hrs.

On 21 February 2008, I prepared clarification questions for Mr. Bentley. At 0930 hrs, Mr. Bentley arrived at PM. I asked questions and both LT Derivan and Mr. Bentley agreed with the process as I asked. I will be writing a SOP when I get a chance. From 1030 to 1130 hours Mr. Bentley and I worked on IHIP 2008. LT Derivan approved the format and what IHIP looked like. From 1200 hrs I set up class at MPC and gave class, and then torn down classroom. I turned in equipment to PM at Munson. I worked on "IHIP 2008".

On 22 February 2008, I picked up Quest equipment from calibration. At 0830 hrs, Mr. Bentley arrived and was with LTC Jefferson. I contacted the number for Bldg 43 that LT Derivan gave me. It turned out to be Bldg 53. At 0845 hrs, Mr. Bentley, LT Derivan and me went to Bldg 53 and toured. At about 0945 hrs, Mr. Bentley, LT Derivan and me went to Bldg 43 and toured. At 1015 hrs, Mr. Bentley and LT Derivan went to the out briefing for the visit, but Karl Gibson was not allowed to go. Karl Gibson went back to

Hoge and worked on "IHIP 2008". Arranged with SGT Aaron to train on Pharmacy 797 testing for Monday, 25 February 2008 at 9 AM.

Enclosed:

Memo dated 5 February 2007 Subject: Questions. I provided to LT Derivan and Mr. Bentley, but did not get a signed Received from them. Most questions were not answered during visit.

Sent:

IHIP 2008 as of 22 Feb 2008

Calibration Log for IH Equipment as of 11 February 2008

Additional Questions concerning the IPS in Feb 2008

Due Outs:

1. Med Maintenance in Munson has asked to borrow one of my noise level meters and octave band analyzer as they have done in past. They are to pick up Friday (25 January 2008) before 0800. They did not show up. On Friday 15 Feb., they came and said they would come on 20 Feb to pick up equipment. They did not show up.

2. Records: Asked LT Derivan what we needed to do to retrieve the HHIM files prior to 1992 and the HHIM file 1992-1996 that are kept at CHPPM. Requested HHIM records from the DOEHRS-IH help desk, talked to Steve Henry and received Ticket # 13661230. E-mailed Wisniewski, Kevin Mr USACHPPM and other staff on the request so information could be obtained. Asked how the pictures on my H drive files (found in Bell Hall and USDB files) were to be copied. At LT Derivan's direction I went to IMD and they copied files from my H drive for lawsuit Subpoena records. I picked up CD with the needed H-Drive files that Dianne L. Knowles in IMD had accessed and copied. I provided this CD to LT Derivan. Local requested records have arrived and I met with SJA on Monday at 0800 hrs to pull required files. On Tuesday, after LTC Jefferson gave permission, I delivered records. Still have no update on HHIM files as of 7 February 2008. The Old work order Ticket Number is 13661230. Wisniewski, Kevin Mr USACHPPM said that was not good enough and need new ticket. So I requested a new trouble ticket and it has been logged for this issue. Ticket number is 13694565. On 21 February 2008 I received an e-mail from Angina, Ratna, "On February 19, 2008, you opened DOEHRS Help Desk Ticket # 13694565, Requesting access to Fort Leavenworth Legacy Program office in DOEHRS. The DOEHRS application provides functionality to request access to a new Program Office. In the Resources section of the left navigation of the DOEHRS application, there is an option called "My Profile". Select the option and scroll to the bottom of the page. There is a section at the bottom of the page called "Other Tools" which includes a "Request Access to new Program Office" link. Use this link to request access to Fort Leavenworth Legacy Program office. At this time, your ticket is being closed. Your ticket can be re-opened in the future if you need continued support. You can do that by calling MHS Help Desk at 1-800-600-9332, then 4, 4, 7 or by sending an email message with the ticket number to 'help@mhs-helpdesk.com'." On 21 February 2008, I accessed the DOEHRS-IH, followed and submitted this request.

3. SSG Bouie, I e-mailed him after our talk,

a) In May 2007 at the TMDE picked up my equipment that they service and calibrate - I am still missing two pieces of equipment. A Balometer, ECN: 000824, SN: 8372 has not returned. An Industrial Scientific Charger for TMX 412 ECN: B8327, SN: 9607142-099.

b) Teresa McMillen was checking but I had not heard back from her before she retired.

c) In November 2007 at the TMDE picked up my equipment that they service and calibrate - They returned the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 with not calibrating it. (Two Dry Cal Calibrators have not returned either, but it is still early for TMDE.)

d) I asked the he please check on these items and get back with me. I repeated the request on 7 February 2008.

E) Two Dry Cal Calibrators returned and I entered into DOEHRS-IH.

F) I met SSG Bouie and asked he to again handle the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 because TMDE sent it back with not calibrating it. He picked it up from Mr. Mapes and said he would send it back to TMDE with a note. I asked that he keep me informed.

F) Issue with A Balometer, ECN: 000824, Model No. 8372 SN: 55040226 has not returned. I notified LT Derivan and Rich Purchett/Dainne Yates of missing item as I did my 100% inventory. Rich and Dianne advised to contact TMDE again. I called and e-mailed TMDE, Fort Riley. According to an e-mail on 19 Feb 2008, TMDE documents that it left Redstone on 11 June 2007. I emailed Log and LT Derivan on the 19th. I re-emailed on 22 Feb 2008.

4. CLOSED The CAC Safety Department is requesting IH assistance in giving a training to the Additional Duty Safety Officer on February 21, 2008 at 1300 hours at the Main Post Chapel's Activity Room. I would like you to speak on either one of these topics: Noise/Vibration, Lighting, Repetitive Motion and/or Equipment Design. Your assistance to the Safety Department would be greatly appreciated. I received on 30 January 2008 and forwarded to LT Derivan on the same day. I trained on Hearing Conservation and class was a success. (LT Derivan and Mr. Bentley were present to observe training. Received only positive feedback from class.)

5. CLOSED On 12 February 2008, SGT Aaron requested use of TMP on Tuesday for range ammo. LT Derivan gave permission. After SGT Aaron wrote "SFC Bledsoe, you can pick-up the TMP on Friday, but it must be dispatched on Tuesday morning for the week. Mr. Gibson is the one who dispatches the vehicle. He can pick up TMP Tuesday morning at 0730 for dispatching and be ready for you to use for the range. I thought that

we can leave the TMP key, since the vehicle will be parked at MAHC, at the AAOD/AOD desk for him to pick-up Tuesday morning, unless you have another plan on how to tackle this matter. I am on cell if you have any questions at 408-375-1385." Waiting to hear where vehicle will be parked and where I need to pick up key to dispatch on Tuesday. The vehicle returned with no problems.

6. Order for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing As per Contract No. W81K00-07-P-0913, I need to order 4 BAP with A005 analysis, 4 Air-o-cell with A002 analysis, and 1 endotoxic cassette with A007 analysis for February 2008. (\$43. supply cost PO# 2008-9 and \$426.00 analysis cost PO# 2008-10) Please send them overnight. I also provided with Dianna Yates (913) 684- 6742 or Tina Baker (913) 684 - 6720 on the past invoices. I included them on the e-mail so you can also try this way as well. This is a repeat from last week since the POC I had and sent order to no longer works for Aerotech labs.

7. Write a SOP on IHIP - Assessment - Survey process.

IH Work Log for 25-29 Feb 2008

On 25 February, Prepared samples, calibrated and did 797 Pharmacy Hood testing with showing SGT Aaron how to do the work. The HHIM CD was delivered and I provided it to LT Derivan for Subpoena. I verified quest equipment that had returned from contract calibration. I found that all quest equipment was present and I notified Supervisor and LOG to inform WAWF. I spoke to Log on Balometer issue. Spent rest of morning and afternoon preparing MFR of events for possible Report of Survey. Provided to Supervisor to review. LT Derivan approved. Had 30 day counseling with LT Derivan.

On 26 February, Copy MFR and deliver to Jill, (PM Sec.) and Rich Purkett (C, LOG) on Balometer issue. Worked on IH Program document even with no guidance or example from supervisor. I had official time from 1400-1600 hrs.

On 27 February, I worked on IH Program document. I had official time from 1200-1600 hrs.

On 28 February, I was off.

On 29 February, I was notified by LOG that Balometer had been found and I was ready to sign hand receipt. I prepared leave forms for Doctor's Appt. and other March leaves. I worked on IH Program document. I picked up equipment and signed hand receipt. I was off from 2-4 pm. I e-mailed work log and hand provided a copy of the "Record of Operational Calibration" and March leave forms.

Due Outs:

1. Med Maintenance in Munson has asked to borrow one of my noise level meters and octave band analyzer as they have done in past. They are to pick up Friday (25 January 2008) before 0800. They did not show up. On Friday 15 Feb., they came and said they would come on 20 Feb to pick up equipment. They did not show up until 27 February 2008. Soldier signed for equipment, I provided him training on how to operate, calibrate, and testing requirements for the noise level meter and octave band analyzer. Waiting return of equipment.

2. Records: Asked LT Derivan what we needed to do to retrieve the HHIM files prior to 1992 and the HHIM file 1992-1996 that are kept at CHPPM. Requested HHIM records from the DOEHRs-IH help desk, talked to Steve Henry and received Ticket # 13661230. E-mailed Wisniewski, Kevin Mr USACHPPM and other staff on the request so information could be obtained. Asked how the pictures on my H drive files (found in Bell Hall and USDB files) were to be copied. At LT Derivan's direction I went to IMD and they copied files from my H drive for lawsuit Subpoena records. I picked up CD with the needed H-Drive files that Dianne L. Knowles in IMD had accessed and copied. I provided this CD to LT Derivan. Local requested records have arrived and I met with SJA on Monday at 0800 hrs to pull required files. On Tuesday, after LTC Jefferson gave permission, I delivered records. Still have no update on HHIM files as of 7 February 2008. The Old work order Ticket Number is 13661230. Wisniewski, Kevin Mr USACHPPM said that was not good enough and need new ticket. So I requested a new trouble ticket and it has been logged for this issue. Ticket number is 13694565. On 21 February 2008 I received an e-mail from Angina, Ratna, "On February 19, 2008, you opened DOEHRs Help Desk Ticket # 13694565, Requesting access to Fort Leavenworth Legacy Program office in DOEHRs. The DOEHRs application provides functionality to request access to a new Program Office. In the Resources section of the left navigation of the DOEHRs application, there is an option called "My Profile". Select the option and scroll to the bottom of the page. There is a section at the bottom of the page called "Other Tools" which includes a "Request Access to new Program Office" link. Use this link to request access to Fort Leavenworth Legacy Program office. At this time, your ticket is being closed. Your ticket can be re-opened in the future if you need continued support. You can do that by calling MHS Help Desk at 1-800-600-9332, then 4, 4, 7 or by sending an email message with the ticket number to 'help@mhs-helpdesk.com'." On 21 February 2008, I accessed the DOEHRs-IH, followed and submitted this request. On 25 February, The HHIM CD was delivered and I provided it to LT Derivan for Subpoena. I asked him status of hard copy records and asked when I needed to get them back. LT Derivan stated he would get back to me on these questions.

3. CLOSED Balometer part in the week of 25-29 February. SSG Bouie, I e-mailed him after our talk,

a) In May 2007 at the TMDE picked up my equipment that they service and calibrate - I am still missing two pieces of equipment. A Balometer, ECN: 000824, SN: 8372 has not returned. An Industrial Scientific Charger for TMX 412 ECN: B8327, SN: 9607142-099.

b) Teresa McMillen was checking but I had not heard back from her before she retired.

c) In November 2007 at the TMDE picked up my equipment that they service and calibrate - They returned the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 with not calibrating it. (Two Dry Cal Calibrators have not returned either, but it is still early for TMDE.)

d) I asked the he please check on these items and get back with me. I repeated the request on 7 February 2008.

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F) I met SSG Bouie and asked he to again handle the Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 because TMDE sent it back with not calibrating it. He picked it up from Mr. Mapes and said he would send it back to TMDE with a note. I asked that he keep me informed.

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h) On 25 February, I spoke to Log on Balometer issue. Spent rest of morning and afternoon preparing MFR of events for possible Report of Survey. Provided to Supervisor to review. LT Derivan approved. On 26 February I made copies of MFR and deliver to Jill, (PM Sec.) and Rich Purkett (C, LOG) on Balometer issue.

i) On 29 February, I received e-mail from Rich Purkett that the Balometer had been found and shipped back to Munson. I spoke to SSG Bouie and he has not yet contact or send Gilibrator Universal Pump Calibrator kit ECN: B7814, SN: 4462 to TMDE.

4. CLOSED in the week of 18-22 February.

5. CLOSED in the week of 18-22 February.

6. Order for Supplies for February 2008 for Fort Leavenworth 797 Pharmacy Testing As per Contract No. W81K00-07-P-0913, I need to order 4 BAP with A005 analysis, 4 Air-o-cell with A002 analysis, and 1 endotoxic cassette with A007 analysis for February 2008. (\$43. supply cost PO# 2008-9 and \$426.00 analysis cost PO# 2008-10) Please send them overnight. I also provided with Dianna Yates (913) 684- 6742 or Tina Baker (913) 684 - 6720 on the past invoices. I included them on the e-mail so you can also try this way as well. This is a repeat from last week since the POC I had and sent order to no longer works for Aerotech labs.

7. Write a SOP on IHIP - Assessment - Survey process.

8. Due to Karl Gibson:

- a) Karl Gibson's questions and material promised at 15 January 2008 counseling.
- b) Memo dated 5 February 2008 Subject: Questions.
- c) Memo dated 15 February 2008 Additional Questions concerning the IPS in Feb 2008

9. Gary Glynn request to LT Derivan, "I will need to call CHPPM to get the Site ID, Site Name and registration key to complete the installation. Do you have a phone number for the CHPPM help desk?" I received this request on 29 February 2008 and provided on 29 February 2008.

10. On 26 Feb 2008, David Murdock of DOL/DPW has dropped of the design for review Title: Bldg 65 Latrine Addition. They want all comments prior to March 3, 2008. It was provided to LT Derivan on 26 Feb 2008.

HH

NOTIFICATION OF PERSONNEL ACTION

1. Name (Last, First, Middle) SON, KARL L.		2. Social Security Number [REDACTED]	3. Date of Birth [REDACTED]	4. Effective Date 07-31-2009
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FIRST ACTION		SECOND ACTION		
5-A. Code 330	5-B. Nature of Action Removal	6-A. Code	6-B. Nature of Action	
5-C. Code V6J	5-D. Legal Authority 5 U.S.C. 75 Postappt	6-C. Code	6-D. Legal Authority	
5-E. Code	5-F. Legal Authority	6-E. Code	6-F. Legal Authority	

7. FROM: Position Title and Number INDUSTRIAL HYGIENIST 88475 - 238971						15. TO: Position Title and Number					
8. Pay Plan GS	9. Occ. Code 0690	10. Grade/Level 11	11. Step/Rate 10	12. Total Salary \$73,329.00	13. Pay Basis PA	16. Pay Plan	17. Occ. Code	18. Grade/Level	19. Step/Rate	20. Total Salary/Award	21. Pay Basis
12A. Basic Pay \$64,403.00	12B. Locality Adj. \$8,926.00	12C. Adj. Basic Pay \$73,329.00		12D. Other Pay		20A. Basic Pay	20B. Locality Adj.	20C. Adj. Basic Pay		20D. Other Pay	
14. Name and Location of Position's Organization USA MED DEPT ACTV, FT LEAVENWORTH PRFY MED SVC IND HYG SEC IGC FORT LEAVENWORTH KS 66027						22. Name and Location of Position's Organization					

EMPLOYEE DATA					
23. Veterans Preference 1 - None 2 - 5 Point 3 - 10 Point (Disability) 4 - 10 Point (Compassable)			24. Tenure 0 - None 1 - Permanent 2 - Conditional 3 - Indefinite		
25. Agency Use			26. Veterans Preference for RIF <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
27. FEGLI C0 Basic only			28. Annuitant Indicator 9 Not Applicable		
29. Retirement Plan FERS and FICA			30. Service Comp. Date (Leave) 01-22-1987		
31. Work Schedule F Full-Time			32. Part-Time Hours Per Biweekly Pay Period		

POSITION DATA					
34. Position Occupied 1 - Competitive Service 2 - Excepted Service 3 - SES General 4 - SES Career Reserved			35. FLSA Category E - Except N - Non-exempt		
36. Appropriation Code 847705			37. Bargaining Unit Status AR2844		
38. Duty Station Code 201823103					
39. Duty Station (City - County - State or Overseas Location) FORT LEAVENWORTH / LEAVENWORTH / KANSAS					

40. Agency Data FT	41. PON# OA	42.	43.	44. TDA DATA MC/W2P4AA/0744/001
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45. Remarks

Forwarding address: 1003 N. 4th Street, Lansing, KS 66043.

RPA # 09JUL8EX000000681189.

SF 2819 was provided. Life insurance coverage is extended for 31 days during which you are eligible to convert to an individual policy (nongroup contract).

Health benefits coverage is extended for 31 days during which you are eligible to convert to an individual policy (nongroup contract).

Not entitled to severance pay.

Lump-sum payment to be made for any unused annual leave.

Reason(s) for removal: 1) Failure to Comply with a policy or directive; 2) Careless or negligent performance of duties; 3) Failure to provide accurate information on an official report..

Employing Department or Agency Army Medical Command (ARMC)		50. Signature/Authentication and Title of Approving Official Fracyllyn F. Tomei AUTHORIZING OFFICIAL	
Agency Code MC	48. Personnel Office ID 2228	49. Approval Date 08-06-2009	