

Safety

FORT LEE SAFETY PROGRAM

Summary.

This regulation prescribes policies, procedures, and guidelines for implementation of the U.S. Army and Fort Lee Safety Programs.

Policy.

To pursue a vigorous safety and accident prevention program that will minimize accidental manpower and materiel losses thus providing more efficient use of resources. Decision makers at all levels will employ Composite Risk Management (CRM) approaches to effectively preclude unacceptable risk to the safety of personnel and property. Positive action will be taken to control these losses through the Composite Risk Management process, training, education, and aggressive leadership. Supervisors will enforce safety regulations and practices to maintain a safe and healthful workplace.

Applicability.

This regulation applies to all elements of this command including all Fort Lee directorates, tenant activities, Reserve Officer Training Corps (ROTC) schools, and U.S. Army Reserve and National Guard units supported by the Fort Lee Safety Program.

Distribution.

This publication is available on the Fort Lee Safety Office Home page as <http://www.lee.army.mil/safety/safety.office.aspx> and at the Safety SharePoint Portal <https://home.army.mil/sites/atl/flg/safety/SitePages/Home.aspx>.

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Blank Forms

- Fort Lee Form 385-3: Investigation of Injury/Illness
- Fort Lee Form 385-4: Arms Room Checklist
- Fort Lee Form 385-5: POV Inspection Checklist
- Fort Lee Form 385-7: Motorcycle/ATV Operator Agreement
- Fort Lee Form 385-8: Motorcycle Inspection Checklist
- Fort Lee Form 789: Safety and Health Deficiency Report
- Fort Lee Form 930: Job Hazard Analysis
- Fort Lee Form 937: Confined Space Entry Permit
- Fort Lee Form 937 cont: Personal Safety
- Fort Lee Form 1051: Record of Injury
- DA Form 285-AB: U.S. Army Abbreviated Ground Accident Report
- DA Form 4755: Employee Report of Alleged Unsafe or Unhealthful Working Conditions
- DA Form 7306: Worksheet for Telephonic Notification of Ground Accident
- DA Form 7566: Composite Risk Management Worksheet

Chapter 1

Safety Program Requirements and Responsibilities

1-1. Garrison Commander

Exercises overall staff responsibility for the Fort Lee Safety and Accident Prevention Programs. The Installation Director of Safety acts for the Garrison Commander in discharging this responsibility.

1-2. Installation Safety Office (ISO) will:

a. Provide installation safety policy and guidance for all activities and operations involving the planning, direction, review, coordination, and approval of accident prevention programs and adaptation of higher command directives, regulations, and suggestions to meet local conditions. Monitor safety program implementation to ensure that objectives are consistent with Occupational Safety and Health Administration (OSHA), National Fire Protection Association, (NFPA), Department of Defense, (DOD), Department of Army (DA), Installation Management Command (IMCOM) and Training and Doctrine Command (TRADOC) requirements.

b. Assist organizations in incorporating Composite Risk Management (CRM) into all operations.

c. Provide technical assistance on safety and occupational health matters.

d. Conduct safety and occupational health evaluations of facilities and organizational safety programs; make recommendations to correct deficiencies/ hazards; and follow up to ensure corrections are made.

e. Perform investigations of all significant accidents and incidents. Compile and analyze accident statistical data and prepare charts, tables, and reports. Analyze accident trends to identify accident causes, locate hazards and accidents peculiar to the activity, and develop possible countermeasures. Provide technical assistance in accident investigation and reporting to ensure accuracy and completeness.

f. Provide accident prevention material, promote safety awareness, and ensure high quality safety training for Civilian and military personnel at all levels.

g. Review plans/specifications for new construction and modifications. Recommend changes and additions to Directorate of Public Works (DPW) to ensure compliance with OSHA and NFPA requirements. Attend pre-construction meetings and final inspections.

h. Review operating procedures, manuals, directives, and other instructions to ensure the incorporation of safe practices and safe physical standards. These documents will be maintained in a unit Safety Notebook by each unit/activity and be reviewed by the Safety Officer conducting the annual inspection. Guidance for the unit Safety Notebook is at appendix C.

i. Review plans for proposed demonstrations and exhibits to ensure the safety of Army personnel and the public.

j. Maintain close liaison with other staff agencies, military services, and Federal and Civilian agencies in all relevant safety matters.

k. Implement and manage all aspects of the Army Safety Program for this installation as outlined in AR 385-10, The Army Safety Program.

l. Coordinate with Preventive Medicine Service (PMS), and Medical Department Activity (MEDDAC), to identify and abate existing or potential occupational health hazards in the workplace.

m. Convene the Safety and Occupational Health Advisory Council meetings semi-annually.

n. Conduct quarterly Collateral Duty Safety Officer Courses.

o. Chair and convene quarterly Privately Owned Vehicle (POV) Task Force meetings.

1-3. Directorate of Public Works (DPW) will:

a. Coordinate DA Form 4283, Facilities Engineering Work Request, with the Installation Safety Office to identify safety, health, and fire-related deficiencies.

b. Consolidate deficiencies, when correction exceeds local capability, into projects for Department of the Army funding.

c. Establish internal procedures to assure work requests identified by the Installation Safety Office as eminently dangerous are corrected without delay.

d. Provide the Installation Safety Office a quarterly printout indicating the outstanding status of all safety, health, and fire-related work orders.

e. Coordinates with the Installation Safety Office in the design, construction, and renovation of new or existing facilities, ensuring compliance with current OSHA standards, building, and NFPA codes. Informs the Installation Safety Office of preconstruction meetings and final inspections.

f. Provides necessary assistance to support the overall safety of the Command.

1-4. Directorate of Logistics (DOL) will:

Provide the Installation Safety Office with Standard Form 91, Operator's Report of Vehicle Accident.

1-5. Provost Marshal Office (PMO) will:

a. Support safety investigations to include providing a completed DA Form 3946, Military Police Traffic Accident Report, to the Installation Safety Office.

- b. Assist in correcting potential traffic hazards.
- c. Participate as a member of the POV Task Force.
- d. Provide the Installation Safety Office with a daily summary of accident information collected through Military Police (MP) channels, such as MP blotters and traffic accident reports.

1-6. Medical Department Activity (MEDDAC) will:

- a. Upon request from the Installation Safety Office, support accident investigations to include evaluations of human and environmental factors which contributed to the accident.
- b. Identify military patients treated for accidental injuries and occupational illnesses and provide the information to the Installation Safety Office.
- c. Inform the Installation Safety Office of potential and actual health hazards found.
- d. Provide the Installation Safety Office with the Safety copy of Fort Lee Form 1051, Record of Injury, on all personnel treated for occupationally related injuries or illnesses. A blank form is located at the back of this regulation.
- e. Assist the Installation Safety Office with the Ergonomics Program.

1-7. Civilian Personnel Advisory Center (CPAC) will:

- a. Establish administrative penalties for Civilian abuses of any of the required programs contained within this regulation.
- b. Consult with the Installation Safety Office in the negotiation of the safety aspects of employee organization contracts.
- c. Assure employee job descriptions identify hazards to which the employee may be exposed and the requirement for wearing personal protective equipment.
- d. Ensure union notification of any change in policy, practice, or working conditions provided by the Installation Safety Office.

1-8. Mission and Installation Contracting Command (MICC) will:

- a. Include safety provisions in commercial contracts when required by procurement directives.
- b. Ensure construction contractors are advised during pre-performance conferences that all accidents involving construction contractor employees must be reported promptly to the Contracting Officer.

c. Assist in the enforcement of construction contract safety requirements through close coordination with the Installation Safety Office, DPW inspectors, Contracting Officer's Representatives (COR), and contract administrators.

d. Ensure that DD Form 1348-6, non-NSN Requisition, or DA Form 3953, Purchase Request and Commitment, for all hazardous chemicals/materials include the required information in accordance with AR 700-141.

1-9. Contracting Safety

a. Contract activities will be conducted in a safe and healthful manner that minimizes accidents as well as impacts on Army operations and members of the public.

b. Contractors must comply with applicable Federal, State, and local codes and standards including safety and occupational health requirements as well as any additional specific requirements invoked by the contract.

c. Clauses outlining contractor safety requirements and responsibilities will be included in solicitations and contracts as prescribed by the Federal Acquisition Regulation (FAR), the Defense Federal Acquisition Regulation Supplement (DFARS), and the Engineer Federal Acquisition Regulation Supplement (EFARS). See DA Pam 385-10, Army Safety Program, Chapter 4, Contracting Safety.

d. In addition to clauses as required by FAR, DFARS, and EFARS, activities will develop performance work statements and contract instructions and conditions that outline contractor safety requirements and responsibilities based on a risk assessment of the work to be performed and activity/command unique requirements. Contracting officer representatives (CORs), requiring activity, in consultation with the Installation Safety Office, will develop additional and necessary clauses to mitigate risk.

e. Under the Safety and Occupational Act, all employers must comply with the OSHA standards and must exercise reasonable diligence to determine whether violations of those standards exist.

f. Contracting officers will consult with the Installation Safety Office to ensure that clauses for safety are included in solicitation and contracts as appropriate and necessary. Safety and occupational health SMEs will assist CORs with monitoring contract safety and occupational health compliance.

1-10. Commanders and Directors will:

a. Act as Safety Officer for their unit/directorate/activity.

b. Appoint on orders a Collateral Duty Safety Officer (E-5 and above or GS-9 or above) to accomplish assigned safety duties and responsibilities. Individuals must have at least 1 year retain ability in the position.

c. Publicize all channels for reporting unsafe and unhealthful working conditions, emphasizing personal responsibility for making such reports.

d. Establish procedures to ensure that personnel at all management supervisory levels, who have safety-related tasks associated with their jobs, are identified and that their duty assignments and job descriptions clearly reflect these responsibilities.

e. Include safe practices and physical standards in all directives, standing operating procedures (SOP) and training doctrine. Assure a comprehensive SOP, job hazard analysis (JHA), and composite risk assessment are prepared and readily available for each hazardous operation, such as range operations; vehicle operations; welding; tire changing; field training exercises (FTX) operations; battery charging and storage; bivouac areas; fuel storage/refueling operations; storage and handling of ammunition and explosives; loading, storing, and handling of chemicals; communications and electronics; spray painting; etc. SOPs will contain detailed operation procedures, emergency procedures, training received, and required inspections as well as other applicable information. A sample unit SOP is at appendix B.

f. Develop and implement a comprehensive accident prevention program encompassing all operations and activities under their control. Establish specific written safety goals for their organization. Operating procedures, manuals, directives, and other instructions will be kept in a unit Safety Notebook. Guidance for the Unit Safety Notebook is at appendix C. The Safety Notebook Table of Contents is at appendix D.

g. The Program Evaluation Metrics will be part of the annual/semi-annual Safety office inspection and maintained in the unit Safety Notebook. This matrix is a living document and therefore changes often. Up-to-date forms can be found on the Installation Safety Office webpage and SharePoint Portal, found at appendix A, section III. Directors/Commanders will assure all items on the Program Evaluation Metrics are completed, documented, and up-to-date. At the end of a fiscal year, a copy of the completed Program Evaluation Metrics will be forwarded to the Installation Safety Office.

h. Include safety objectives in all Civilian supervisor performance plans, and officer and enlisted evaluation reports. See figure 1-1.

i. Receive a safety orientation from the Installation Safety Office within 14 days of assignment to a unit or directorate.

j. Submit a copy of each unit directorate/activity publication implementing safety procedures. Examples are:

- (1) SOPs signed by current commander or director.
- (2) Orders appointing safety officers and safety committees.
- (3) Minutes of safety committee meetings.

Suggested Safety Objectives for Inclusion in Performance Standards

Include safety objectives in all Civilian supervisor performance standards, officer evaluation support forms, and the noncommissioned officer evaluation support system in accordance with AR 385-10 and this regulation. Directors and commanders will ensure compliance with this requirement.

1. Suggested Standards For Civilian Supervisors. Include safety standards as a sub-element of personnel management in Civilian supervisor performance plans. For some supervisors, safety may be a major job element. Safety as a major job element may also be appropriate in the performance standards of some non-supervisory employees, such as wage-grade employees, equipment operators, carpenters, etc., and certain GS employees such as firefighters and employees whose primary/secondary duties require operation of motor vehicles. Supervisors should contact the Civilian Personnel Advisory Center (CPAC) for assistance in the development of realistic performance standards.

2. Suggested Comments for Officer Evaluation Reports (OER) and Enlisted Evaluation Reports (EER).

a. Develop safety procedures so military and Civilian personnel assigned to Fort Lee can train and work without injury, death, or loss of equipment.

b. Ensure safe procedures are followed.

c. Conduct safety training emphasizing accident prevention.

d. Establish a command climate which ensures a safe working/living environment for Service Members and Civilian employees.

e. Ensure the use of Personal Protective Equipment when applicable.

f. Ensure employees report for mandatory medical examinations when applicable.

Figure 1-1. Suggested safety objectives for inclusion in performance standards

k. Identify and eliminate hazardous conditions, establish safe practices, and motivate and instruct personnel in safe performance on-duty and off-duty.

l. Ensure compliance with all appropriate provisions of this regulation and referenced safety and fire prevention regulations.

m. Require all officers, noncommissioned officers (NCO), and supervisors to actively supervise performance of subordinates to ensure compliance with safety requirements. Require rigorous enforcement of the use of required personal protective clothing and equipment (PPE).

- n. Ensure that safety officers receive training and develop skills necessary to ensure competence.
- o. Require timely reporting of accidents as required in DA PAM 385-40 and this regulation.
- p. Determine causes for each accident and take positive corrective action to preclude recurrence of a similar accident.
- q. Appoint a safety committee at major subordinate unit and directorate levels.
 - (1) Review for safety suggestions
 - (2) Review accident reports and recommend corrective measures to prevent recurrence.
 - (3) Review suspected unsafe or unhealthful working conditions and corrective measures.
 - (4) Promote safety education within the organization.
 - (5) Conduct periodic self-assessments in their areas of responsibility and coordinate with the organization's safety office.
- r. Ensure safety briefings are presented to all personnel prior to holidays.

1-11. Supervisors and operating personnel will:

- a. Ensure personnel perform all operations in the safest possible manner consistent with the mission by controlling unsafe acts or conditions that may be conducive to accidents.
- b. Ensure employees observe and comply with appropriate safety and occupational health regulations.
- c. Procure, and maintain sanitary working conditions, and require use of personal protective clothing and equipment (PPE), and devices reasonably necessary to protect employees.
- d. Report unsafe conditions in the workplace to the Installation Safety Office for assistance in correction. When DPW support will correct such deficiencies, prepare DA Form 4283, Facilities Engineering Work Request, and forward through Installation Safety Office to DPW Production Control.
- e. Promptly evaluate and take action as required to correct hazards reported by employees or identified through accident investigation. Reprisal action will not be initiated or supported against employees who identify hazards, raise safety concerns, or engage in authorized safety and occupational health activities.

f. Orient all newly assigned personnel concerning the hazards inherent in their job and work environment. Conduct regular training concerning specialized and general hazards in the workplace and methods for avoiding accidents.

g. Report all accidents promptly. Conduct comprehensive, factual investigations when on-duty injuries result in lost time.

1-12. Collateral Duty Safety Officers/NCOs will:

a. Attend the Collateral Duty Safety Officer/NCO Course and provide a copy of appointment orders to the Installation Safety Office.

b. Complete the online Combat Readiness/Safety Center's (CRC) Collateral Duty Safety Officer (CDSO) course and the Composite Risk Management Course. The Required Safety Training link is provided on the Installation Safety Office web page and SharePoint Portal.

c. Become familiar with Army safety regulations and requirements for the command, principles of accident prevention, and safety aspects included in SOPs, field manuals, technical manuals, etc.

d. Interpret safety policies and procedures for the commander, supervisors and subordinate safety personnel with assistance from the Installation Safety Office when needed.

e. Conduct low risk area safety inspections, such as offices and classrooms, at least annually using the Fort Lee Safety Checklist as a guide, giving particular attention to recurring and serious hazards, and to new or varied operations. Provide a copy of the deficiencies and corrective actions to the Installation Safety Office on Fort Lee Form 789, at the end of this regulation. The Fort Lee Safety Checklist is on the Installation Safety Office website and SharePoint Portal.

f. Coordinate with supervisors to provide technical assistance to eliminate or control unsafe behavior.

g. Provide prompt assistance with accident investigation and reporting. Review for completeness and accuracy of reports and evaluate adequacy of corrective actions.

h. Maintain safety records and analyze the unit's accident experience to determine accident patterns so preventive efforts may be effectively directed.

i. Provide the commander/director with periodic safety progress reports and information concerning accidents.

j. Provide assistance for commanders in conducting periodic briefings with supervisors, platoon leaders, and NCOs regarding the objectives of their safety program, methods of attaining these objectives, and the degree of success expected in achieving these objectives.

k. Arrange for the incorporation of safety practices in operating procedures, training publications, demonstrations, and exercises to ensure the safety of Army personnel and the public.

l. Determine the need and obtain material for safety training, promotions, and awards.

1-13. Employees will:

a. Comply with the U.S. Army and Fort Lee Safety Programs.

b. Observe rules and regulations relating to their personal job safety including the use of PPE furnished by the supervisor. Willful disregard of and/or failure to use safety equipment or devices may constitute grounds for disciplinary action.

c. Report unsafe conditions to immediate supervisors for correction.

d. Provide complete and unbiased information during accident investigation when required.

Chapter 2

Councils/Committees and Training Requirements

2-1. General

Training of personnel at all levels in concepts of accident prevention and coordination among individuals and activities, for the purpose of devising means to prevent accidents, are key elements of the total safety effort. The Installation Safety and Occupational Health Advisory Council is established to enhance the accident prevention program, unit safety committees, and training programs for personnel at various levels.

2-2. Safety and Occupational Health Advisory Council

As required by AR 385-10, the Installation Safety and Occupational Health Advisory Council is established and will meet semi-annually to review the accident experience of the command and suggest countermeasures for implementation. The council meeting will be chaired by the Garrison Commander. Membership will consist of the Combined Arms Support Command (CASCOM) Chief of Staff; directors of CASCOM, Garrison and Defense Commissary Agency (DeCA); commander of Kenner Army Health Clinic (KAHC); Army Logistics University (ALU) President; commandants or their designated official; union representatives; the Industrial Hygienist; the Occupational Health Physician; and Tenant Directors. The Director of Safety is responsible for planning meetings and providing council members with appropriate information. Each member of the council will be notified of the time and date of the meeting. Special meetings will be called when critical and urgent safety problems arise. The Installation Safety Office will forward a copy of the minutes to all council members.

2-3. Safety briefing

Directors/commanders will report to the Installation Safety Office for orientation within 14 days of assignment. All reserve unit safety officers participating in annual training at Fort Lee will receive a briefing by Installation Safety Office personnel.

2-4. Safety requirements

a. Commanders/supervisors will present a safety briefing to all newly assigned personnel upon arrival. Material covered will include the individual's rights and responsibilities specified by the Installation Occupational Safety and Health Program and information on the hazards in the area to include traffic, fire, water, firearms, ranges, hearing conservation, and hot and cold weather injury prevention.

b. Specialized on-the-job safety training of employees will be performed by the supervisor. This training will include, but not be limited to, precautions to prevent injuries from hazardous machinery and equipment, dangerous chemicals, and hazardous operations.

c. Civilian and military supervisors of Civilian personnel will receive additional safety training provided by the Installation Safety Office. This training will include information concerning part 29 Code of Federal Regulation (CFR) 1960, Occupational Safety and Health for Federal Employees, the current Executive Order 12196 concerning safety, relevant Occupational Safety and Health Standards, hazard reporting, abatement, accident reporting, employee rights and responsibilities, and other appropriate topics. The Commanders/Supervisors Safety Handbook is located in the Installation Safety Office and on the Installation Safety Office webpage, found at appendix A, section III.

d. A list of required safety training for all Service Members and Civilian employees required by the CRC is located on the Installation Safety Office webpage.

e. An Occupational Safety and Health Administration (OSHA) Poster, DD Form 2272, is available from Installation Safety Office and will be posted in each workplace in the location where personnel notices are usually placed. See figure 2-1. The Occupational Safety and Health Act of 1970, Executive Order 12196, and 29 CFR 1960 requires Federal agencies to establish programs to protect their personnel from job safety and occupational health hazards.

f. *Collateral Duty Safety Officer/NCO Meetings.* Regular meetings with safety officers and key personnel will be conducted by major organizations to provide safety officers at the next lower command with current safety guidance. Meetings conducted by major subordinate unit safety officers will be documented with a copy of the minutes forwarded to the Installation Safety Office. Internal elements of major subordinate units will conduct and document similar meetings within the organization.

g. *Holiday Safety Requirements.* Special safety orientations/seminars will be conducted by commanders prior to holiday weekends and block leave. Safety orientations/seminars will include as appropriate, identification of seasonal hazards associated with holiday driving, recreational activities, fatigue, the over-consumption of alcohol, and the effects of prescription medication and over-the-counter drugs. Private vehicle inspections to identify unsafe vehicles may be conducted at the discretion of commanders or assigned representative. To identify hazards associated with POV operations, use Fort Lee Form 385-5, POV Inspection Checklist, and Fort Lee Form 385-8, Motorcycle Inspection Checklist, both located at the end of this regulation. Assistance and holiday briefing guides are available at the Installation Safety Office.

 DEPARTMENT OF DEFENSE SAFETY AND OCCUPATIONAL HEALTH PROTECTION PROGRAM The Occupational Safety and Health Act of 1970, Executive Order 12196 and 29 CFR 1960 require the heads of Federal agencies to establish programs to protect their personnel from job safety and occupational health hazards.	
1. The Department of Defense (DoD) designated agency safety and occupational health official is the Assistant Secretary of Defense (Force Management and Personnel).	
2. The <u>United States Army</u> designated safety and occupational health official is: <i>(DoD Component)</i> <u>Dep for Environment, Safety & Health, OASA (IL&E)</u> , <u>Washington, D. C.</u> <i>(Title)</i> <i>(Address)</i>	
3. The <u>Fort Lee, Virginia</u> safety and occupational health designee is: <i>(Name of Installation/Facility)</i> <u>Fort Lee Installation Safety Office</u> , <u>Director of Safety</u> <i>(Name)</i> <i>(Title)</i>	
4. The <u>Fort Lee, Virginia</u> safety point of contact is: <i>(Name of Installation/Facility)</i> <u>Director of Safety</u> , <u>(804) 765-3132</u> <i>(Name)</i> <i>(Telephone Number)</i>	
5. The <u>Fort Lee, Virginia</u> occupational health point of contact is: <i>(Name of Installation/Facility)</i> <u>Chief of Preventive Medicine</u> , <u>(804) 734-9249</u> <i>(Name)</i> <i>(Telephone Number)</i>	
<u>Fort Lee, Virginia</u> <i>(Name of Installation/Facility)</i>	
HAS THE RESPONSIBILITY TO:	
1. COMPLY with the applicable Occupational Safety and Health Administration (OSHA)/DoD/DoD Component safety and occupational health standards. 2. SET UP PROCEDURES for submitting and responding to employee reports of unsafe and unhealthful working conditions. 3. ACQUIRE, MAINTAIN, AND REQUIRE the use of approved personal protective equipment and safety equipment. 4. INSPECT ALL WORKPLACES with participation by civilian employee representatives to identify potential hazards. 5. ESTABLISH PROCEDURES to assure that no worker is subject to restraint, interference, coercion, discrimination, or reprisal for exercising his/her rights under the DoD safety and occupational health program.	6. POST NOTICES of unsafe or unhealthful working conditions found during inspections. 7. ASSURE PROMPT ABATEMENT of hazardous conditions. Workers exposed to the conditions shall be informed of the abatement plan. Imminent danger corrections must be made immediately. 8. SET UP A MANAGEMENT INFORMATION SYSTEM to keep records of occupational accidents, injuries, illnesses and their causes; and to post annual summaries of injuries and illnesses for a minimum of 30 days at each installation/facility. 9. CONDUCT SAFETY AND OCCUPATIONAL HEALTH TRAINING for management, supervisors, workers and worker representatives.
DOD PERSONNEL HAVE THE RESPONSIBILITY TO:	
1. COMPLY with all applicable OSHA/DoD/DoD Component safety and occupational health standards. 2. COMPLY with <u>USACASCOM & Fort Lee</u> policies and directives relative to the safety and occupational health program. <i>(Name of Installation/Facility)</i>	3. USE personal protective equipment and safety equipment provided by your installation/facility. 4. REPORT hazardous conditions, injuries, illnesses, or other mishaps promptly to your supervisor or to the safety or occupational health point of contact for your installation/facility.
DOD PERSONNEL AND CIVILIAN EMPLOYEE REPRESENTATIVES HAVE THE RIGHT TO:	
1. HAVE ACCESS to applicable OSHA/DoD/DoD Component standards, installation/facility injury and illness statistics, and safety and occupational health program procedures. 2. COMMENT on alternate standards proposed by DoD/DoD Component. 3. REPORT AND REQUEST INSPECTIONS OF UNSAFE AND UNHEALTHFUL WORKING CONDITIONS to appropriate officials who include, in order of preference, the immediate supervisor, the safety or occupational health point of contact, the safety and occupational designee for your installation/facility, the installation/facility commander, the safety and occupational health designee	3. (Continued) for your DoD component, the safety and occupational designee for DoD, and the Secretary of Labor. However, the Secretary of Labor encourages personnel to use DoD procedures for reporting hazardous conditions as the most expeditious means to achieve abatement. The hazard report form provided by your installation/facility should be used for this purpose. Anonymity, when requested, is assured. 4. PARTICIPATE in the installation/facility safety and occupational health program. Civilian workers shall be authorized official time to participate in the activities provided by the DoD safety and occupational health program.
OTHER INFORMATION:	
1. When the safety or occupational health point of contact for your installation/facility is notified by a worker of a hazardous worksite condition, he/she will ensure an inspection of the worksite and he/she will report the results of the inspection in writing to the worker making the report. 2. Inspector General channels may be used to investigate complaints from either DoD civilian or military personnel concerning alleged acts of discrimination or reprisal due to participation in safety and occupational health activities. For DoD civilian personnel, allegations of reprisal may also be initiated by them	2. (Continued) in accordance with applicable appeal procedures, or administrative or negotiated grievance procedures. 3. For further information about the installation/facility safety and occupational health program, procedures, standards, committees, Federal laws, or other related matters, contact the safety or occupational health point of contact for your installation/facility as noted on this poster. 4. How well you carry out your safety and occupational health responsibilities will be an important factor in the success of the program.
DD FORM 2272, NOV 2000 PREVIOUS EDITION MAY BE USED.	
<div style="border: 1px solid black; padding: 2px; display: inline-block;">Reset</div> Adobe Professional T 0	

Figure 2-1. Sample DD Form 2272, DOD Safety and Occupational Health Protection Program

2-5. Bulletin boards

Each company/directorate/division branch will devote a portion of their bulletin board to prominently display safety and health materials. In addition to accident material being posted, safety posters will be strategically placed throughout the area. Posters are available at the Installation Safety Office. Posters and seasonal safety awareness information lose their effectiveness rapidly and should be updated and/or replaced frequently.

Chapter 3 Composite Risk Management (CRM)

3-1. General

a. CRM is a leadership responsibility. Commanders/supervisors at every level will employ CRM to effectively control safety and occupational health risks to missions, personnel, equipment, and the environment.

b. CRM is the best process for protecting the force. It is a tool to help leaders make sound decisions in a systematic, logical thought process to identify and control hazards. Through integration, leaders and individuals are empowered with the responsibility, authority, and accountability for CRM decisions at the most appropriate level.

3-2. Responsibilities

a. CRM is our most effective tool to protect the force by providing a systematic framework for identifying and controlling risks in all environments. Commanders will accept no risk unless the potential benefit outweighs the potential loss. The level of risk determines which commanders are responsible.

(1) *Extremely high risk* – CASCOM Commander, Commandants of Quartermaster, Ordnance or Transportation Schools, and DeCA Commander.

(2) *High risk* – Colonels, Commanders, Commandants or heads of separate organizations, or equivalent in the appropriate chain of command.

(3) *Moderate risk* – Lieutenant Colonels, Battalion Commanders/Department Directors, or equivalent in the appropriate chain of command.

(4) *Low risk* – Company Commanders, Division Chiefs, or equivalent in the appropriate chain of command.

b. All risk decisions will be based on the residual risk of an activity after applying appropriate control measures. However, CRM does not eliminate risk or the necessity for standards and will not be used to sanction or justify violating the law.

c. Commanders/directors will:

(1) Establish risk approval procedures within their organization ensuring that risk assessments for high risk and extremely high risk training and operations on the installation are forwarded to the Senior Commander or the Commandants of Quartermaster, Ordnance or Transportation Schools as appropriate.

(2) Complete written risk assessments of all training and operations for inherent risk or hazards using DA Form 7566, Composite Risk Management Work Sheet, which is located at the back of this regulation.

(3) Ensure countermeasures are developed and implemented to reduce risk.

(4) Ensure that risk assessments are reviewed prior to the start of training and operations to ensure conditions have not changed and to ensure that effective countermeasures are adhered to throughout the training and operation.

(5) Ensure personnel are trained and understand the CRM process as needed.

(6) Establish alternate risk approval procedures within deployable units for use when training and operations are conducted away from the installation.

d. The Installation Safety Office will:

(1) Provide technical assistance in analysis and preparation of risk assessments as needed for low and medium risk.

(2) Review and analyze risk assessments for all high risk operations and training and make recommendations to commanders/supervisors to reduce risk.

(3) Provide training support for CRM as needed. Refer personnel to the U.S. Army Combat Readiness/Safety Center (CRC) website at appendix A, section III, in the back of this regulation.

(4) Provide on-site training or operations inspections to ensure compliance with this regulation. Report findings to commander or director.

e. Supervisors will:

(1) Assess all training and operations for inherent risk or hazards.

(2) Conduct job hazard analysis in conjunction with employee.

(3) Complete written risk assessment prior to conducting training and operations for inherent risk or hazards.

(4) Train subordinates in CRM principles and techniques.

3-3. Composite Risk Management principles

Risk is the potential severity of a loss combined with the probability of an occurrence. The loss can be death, injury, property damage, or mission failure. CRM identifies risks associated with a particular operation and weighs those risks against the overall value to be gained. The four principles of CRM are:

- a. Accept no unnecessary risk.
- b. Accept risks when benefits outweigh costs.
- c. Make risk decisions at the proper level consistent with command policy.
- d. Manage risk in the concept and planning stages whenever possible.

3-4. Composite Risk Management process

The CRM process involves identifying and controlling hazards. The five steps represent a logical thought process from which users develop tools, techniques, and procedures for applying CRM in their areas of responsibility. It is a closed loop process applicable to any situation and environment.

- a. *Step 1.* Identify hazards to the force or mission. Consider all aspects of current and future situations, environment, and known historical problems.
- b. *Step 2.* Assess the risk to determine risk decisions. Develop the impact of each hazard in terms of potential loss and cost based on probability and severity. Ask these questions:
 - (1) What type of injury or equipment damage can be expected?
 - (2) What is the probability of an accident happening? An expected minor injury combined with an unlikely probability equals low risk. An expected fatality combined with a frequent probability equals extremely high risk.
- c. *Step 3.* Develop controls and make risk decisions. If you cannot eliminate the risk, you must control it without sacrificing essential mission values. Some risks can be controlled by modifying tasks, changing location or route, increasing supervision, wearing protective clothing, changing time of operation, etc. A leader must usually decide between selecting from available controls, stopping the mission because the risk is too great, or accepting risk because mission benefits outweigh potential loss.
- d. *Step 4.* Implement control measures. Put controls in place that eliminate the hazards or reduce their risks. Integrate procedures to control risks into plans, orders, SOPs, lesson plans, etc. Also ensure risk reduction measures are used during actual operations.
- e. *Step 5.* Supervise and evaluate. Enforce standards and controls, then evaluate the effectiveness of controls and adjust/update as needed. Make sure leaders know what controls are

in place and what standards are expected, then hold those in charge accountable for implementation from start to finish. This is where accident prevention actually occurs.

3-5. Risk assessment

The Army uses two similar hazard assessment matrices.

a. The following risk assessment matrix from AR 385-10 is used when a hazard is identified in a normal workplace that could be covered under the Occupational Safety and Health Act standards (table 3-1).

b. A risk assessment matrix from Army doctrine used for operational hazards is at table 3-2.

Chapter 4

Hazard Identification

4-1. General

The identification of unsafe practices and physical conditions through safety inspections is essential to a successful accident prevention program.

4-2. Inspections

To eliminate the cause of accidental injuries and property damage, safety inspections must be conducted at all levels. Minimum requirements are below:

a. During the performance of normal duties, all personnel will survey their operations, facilities, equipment, and procedures for safety hazards and initiate or recommend necessary action to eliminate any hazards

b. Installation Safety Office personnel will inspect worksite facilities at least annually; some areas such as maintenance shops, ranges, and motor pools will be inspected semi-annually. Collateral Duty Safety Officers will inspect office and classroom facilities. The Army safety standards applied will include: OSHA adopted standards, 29 CFR 1910, 1960, and 1926; National Fire Protection Association (NFPA) Standards; National Electric Code (NEC); DOD standards; DA, TRADOC, Installation Management Command (IMCOM); and local regulations. These inspections may be conducted with or without prior notification.

(1) A written report of deficiencies observed during the inspection will be provided to the commander/director citing hazard severity, safety management achievements and deficiencies, and recommended corrective actions. A copy of all surveys will be maintained by the Installation Safety Office. A Fort Lee Form 789, Safety and Health Deficiency Report, is located at the back of this regulation.

(2) The unit/activity inspected will respond to the Installation Safety Office in writing concerning corrective action taken on each deficiency within the time frame indicated on the inspection report, usually 30 calendar days. Follow up procedures should be established by the activity to ensure each deficiency is corrected. A record of uncorrected deficiencies should remain in an active file and reviewed periodically until all deficiencies are corrected.

Risk Assessment Matrix

E = Extremely High Risk H = High Risk M = Moderate Risk L = Low Risk			PROBABILITY				
			Frequent	Likely	Occasional	Seldom	Unlikely
			A	B	C	D	E
S E V E R I T Y	CATASTROPHIC	I	E	E	H	H	M
	CRITICAL	II	E	H	H	M	L
	MARGINAL	III	H	M	M	L	L
	NEGLIGIBLE	IV	M	L	L	L	L

Table 3-1. Risk Assessment Matrix

PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely

Frequent – Occurs very often, known to happen regularly.

Likely – Occurs several times, a common occurrence.

Occasional – Occurs sporadically, but is not uncommon.

Seldom – Remotely possible, could occur at some time.

Unlikely – Can assume it will not occur, but not impossible.

SEVERITY		
Catastrophic	I	Complete mission failure or the loss of ability to accomplish a mission. Death or permanent total disability. Loss of major or mission-critical systems or equipment. Major property or facility damage. Severe environmental damage. Mission-critical security failure. Unacceptable collateral damage.
Critical	II	Severely degraded mission capability or unit readiness. Permanent partial disability or temporary total disability exceeding three months time. Extensive major damage to equipment or systems. Significant damage to property or the environment. Security failure. Significant collateral damage.
Marginal	III	Degraded mission capability or unit readiness. Minor damage to equipment or systems, property, or the environment. Lost days due to injury or illness not exceeding three months. Minor damage to property or the environment.
Negligible	IV	Little or no adverse impact on mission capability. First aid or minor medical treatment. Slight equipment or system damage, but fully functional or serviceable. Little or no property or environmental damage.

Table 3-2. Risk assessment probability

4-3. Abatement plans

a. The establishment of abatement plans is provided in 29 CFR 1960, Occupational Safety and Health Programs for Federal Employees. These plans are required by DOD and DA for all violations with Risk Assessment Codes (RAC) 1 or 2 requiring more than 30 days to correct.

b. Violations often require abatement plans because preparing, processing, scheduling, and performing the work requires more than 30 days. For this reason, forward the DPW safety-related work orders to the Installation Safety Office. The Installation Safety Office will evaluate and assign a risk assessment code to the work order, forward it to DPW, and follow up until the hazard is corrected.

4-4. Recreational/athletic areas and activities

These areas and activities will be inspected at the beginning of each season.

4-5. Reports of unsafe or unhealthful working conditions

a. Handle reports of unsafe or unhealthful working conditions at the operational level whenever possible to ensure timely correction in the following order of priority:

- (1) Oral reports directly to the supervisor.
- (2) Reports through operational channels.
- (3) Phone calls or memos to the Installation Safety Office.
- (4) The Army Hazard Reporting System.

b. The Army Hazard Reporting System provides a route for personnel to bring complaints directly to the installation level, bypassing intermediate commands or supervisory elements.

(1) Reports of hazards should be submitted on DA Form 4755, Employee Report of Alleged Unsafe or Unhealthful Working Condition, located at the back of this regulation. Supervisors will ensure that copies of this form are available at the operating level.

(2) Reports will be submitted to the Installation Safety Office and will be investigated IAW DA Pam 385-40, Army Accident Investigations and Reporting. Reports of alleged unsafe and unhealthful working conditions which are not within the purview of the Installation Safety Office will be forwarded to the appropriate organization for response. Responses will be furnished to the Installation Safety Office within 10 working days.

(3) Both military and Civilian personnel will be protected from coercion, discrimination, or reprisals for participating in the Army Safety and Occupational Health Program and exercising lawful occupational safety and health rights.

(4) Persons submitting signed reports who request anonymity will not be revealed by the Director of Safety to anyone other than necessary staff members or other appropriate installation-level staff.

(5) Reports that appear to involve immediate life-threatening situations will be investigated immediately by qualified safety and health officials.

(6) All other reports will be investigated by safety and health personnel. The originator, if known, will be notified of the results of the investigation in writing within 10 working days following receipt of the hazard report. Informal communication between the originator and the Installation Safety Office are encouraged.

(7) If the originator is dissatisfied with the response, he/she may appeal to the Senior Commander who will review the findings and take appropriate action.

(8) If the originator is dissatisfied with the Senior Commander's response, he/she may appeal to their higher headquarters; then further appeal to the Army designated Safety and Occupational Health Official; and finally the DOD designated Safety and Occupational Health Official if appeals are rejected at any point in the chain.

(9) Personnel are encouraged not to bypass review levels prescribed above.

(10) Personnel are advised that if an appeal is not acted upon within 20 workdays, they may appeal to the next higher level for review.

4-6. Job Hazard Analysis (JHA)

a. A JHA is a tool that supervisors/leaders use to identify safety hazards associated with each job task of a Service Member or Civilian employee and to find the best or most effective ways to avoid contact with the source of the hazard. Supervisors and safety professionals will use the JHA to find the level of risk associated with a given task.

b. First-line supervisors should prepare a JHA worksheet, Fort Lee Form 930, Job Hazard Analysis Worksheet, located at the back of this regulation. The first-line supervisor should know everything there is to know about their employees' jobs, and the best means of protecting them. They will be approved by the commander/director. After the initial JHA is done, it can be updated anytime.

c. A completed JHA can be attached to the SOP as the safety annex. This identifies the risks involved in the operation and provides safety guidance.

d. *Procedure.*

(1) JHAs should be completed by someone with a thorough knowledge of the particular job. Supervisors should personalize this JHA for each job within their realm of responsibility. A generic office worker JHA is provided at figure 4-1. If existing training manuals give step-by-

step procedures for specific tasks, supervisors do not need to prepare a JHA for those tasks unless the procedures do not adequately cover safety considerations.

(2) Performing a JHA is a 3-step process. The steps are:

(a) *Step 1.* In column 1 (left), list the steps of a given job task. Decide the depth of the JHA to be done. If you decide to analyze the basic steps only, remember to keep the step listing in that order. If you want an in-depth analysis, you should list every major and minor step in a task.

(b) *Step 2.* In column 2 (center), list the potential hazards as they relate to each job task. List the reason for the hazard existing. Examples are: flying debris which is an eye hazard, or sharp edges on mechanical shears which is a cutting hazard.

(c) *Step 3.* In column 3 (right), state the recommended procedure or action to follow while performing the specific job task without becoming involved in an accident. To be effective, your procedure or action should be practical and easy to do. Simple procedures or actions are: wear a face shield while operating grinder or use push stick/block when using table saw.

JOB HAZARD ANALYSIS	JOB: Administration	DATE:	Page <u>1</u> of <u>1</u> pages	<input checked="" type="checkbox"/> NEW <input type="checkbox"/> REVISED
Instructions on Reverse Side	Title of Person Who Does Job: All Employees When Performing Administrative Tasks	Supervisor:	Analyzed By:	
Organization:		Approved by Activity Director/Commander:		
Recommended Personal Protective Equipment:				
SEQUENCE OF BASIC JOB STEPS	POTENTIAL HAZARDS	RECOMMENDED ACTION OR PROCEDURE		
Sitting at Desk	-Back discomfort -Numbness in lower extremities	-Properly adjusted chair -Footrest, if legs dangle		
Operating a Computer	-Back Discomfort	-Properly adjusted chair -Proper posture		
	-Eye Strain	-Focus monitor -Reduce glare on monitor with screen or moving monitor		
		-Regular eye exams -Even illumination		
	-Neck/shoulder strain	-Arrange work station to eliminate extreme postures		
	-Arm/hand discomfort	-Proper keyboard placement -Perform mini-rest breaks or relief activities		
		-Provide wrist support -Avoid resting arms or wrists on sharp edges		
Moving office supplies/equipment	-Back strain	-Plan ahead. Use material handling equipment (dollies, chairs with wheels, etc.)		
	-Slips -Pinching	-Use buddy system -Ensure clear walkway	- Move small even loads - Lift with knees	

FT LEE Form 930, Jan 2011

Figure 4-1. Sample Fort Lee Form 930, Job Hazard Analysis

Chapter 5

Investigation and Reporting of Army Accidents

5-1. General

a. DA policy states that effective prevention programs be instituted Army-wide to eliminate hazards and prevent recurrence of Army accidents. For this reason, all Army accidents will be investigated. The primary purpose of investigating and reporting Army accidents is accident prevention.

b. All accidents are reportable to the Installation Safety Office. Investigation and accident reporting will be performed in accordance with AR 385-10, DA Pam 385-40, and this regulation.

c. *Army Accident.* An unplanned event or series of events that results in injury/illness to either Army or non-Army personnel, and/or damage to Army or non-Army property as a result of Army operations caused by the Army.

(1) *Class A Accident.* An Army accident with resulting total cost of property damage of \$2,000,000 or more; or an injury and/or occupational illness that result in a fatality or permanent total disability.

(2) *Class B Accident.* An Army accident with resulting total cost of property damage of \$500,000 or more but less than \$2,000,000; an injury and/or occupational illness that results in permanent partial disability; or when three or more personnel are hospitalized as inpatients as a result of a single occurrence.

(3) *Class C Accident.* An Army accident with resulting total cost of property damage of \$50,000 or more but less than \$500,000; or an injury and/or occupational illness that results in any lost time from work beyond the day or shift in which it occurred.

(4) *Class D Accident.* An Army accident with resulting total cost of property damage of \$2,000 or more but less than \$50,000; or an injury and/or occupational illness that results in restricted work activity beyond the day or shift in which it occurred; transfer to another job; medical treatment beyond first aid; needle stick injuries and cuts from sharps that are contaminated from another person's blood or other potentially infectious material; medical removal under medical surveillance; occupational hearing loss; or a work-related tuberculosis case.

d. *Reportable Accident.* All incidents that cause injury, illness, or property damage of any kind must be reported.

e. *Recordable Accident.* An accident that meets the minimum criteria stated in AR 385-10, DA Pam 385-40, and this regulation for Class A-D accidents.

(1) Recordable on-duty injury or occupational illness for Service Members or Civilians.

(a) Death.

(b) Restricted work or transfer to another job.

(c) Medical treatment beyond first aid.

(d) Loss of consciousness for any length of time.

(e) Significant injury or illness diagnosed by a licensed health care professional.

(f) Aggravation of injuries or illness sustained prior to military/civilian service by the current tenure of service.

(2) Recordable off-duty injury or occupational illness for Service Members only:

(a) Death.

(b) Days away from work or training.

(c) Restricted work or transfer to another job.

f. *On-Duty Status for Service Members or Civilians.* The following explanations should be used in determining duty status. These criteria are for accident reporting purposes only and have no relation to compensability or line of duty determination.

(1) Physically present at any location where they are to perform their officially assigned work, to include those activities incident to normal work activities that occur on Army installations, such as lunch or coffee breaks used for the purpose intended.

(2) Being transported by Army, commercial conveyance, or POV for the purpose of performing officially assigned work, to include reimbursable travel in privately owned motor vehicles for temporary duty. This excludes driving to and from work.

(3) Participation in compulsory sports or physical training activities, or other organizational sponsored events.

g. *Off-Duty Status for Service Members only.* This applies to military personnel who are not in an on-duty status, whether on or off Army installations.

(1) Personal time.

(2) Official leave.

(3) Traveling before and after official duties; to/from official duty or Temporary Duty (TDY) station.

(4) Voluntary installation team sports.

(5) TDY at no cost to the government.

(6) Lunch or rest break engaged in activities unrelated to eating or resting.

5-2. Military and Civilian accidents and injuries

The commander or supervisor directly responsible for the operation, materiel, or person(s) involved in an accident will ensure:

a. All accidents are investigated to obtain the facts and circumstances.

b. The appropriate report is prepared in accordance with instructions in referenced regulations, the CRC “AGAR Use and Preparation Guide,” and this regulation. These reports will be forwarded to the Installation Safety Office not later than 14 calendar days following the date of the accident. Reports will be reviewed at each level of the unit, directorate, or activity chain of command. Forms and instructions are available on the CRC and Installation Safety Office websites and SharePoint Portal located in appendix A, section III.

(1) Fort Lee Form 1051, Record of Injury.

(2) DA Form 285-AB, Abbreviated Ground Accident Report (AGAR).

(3) DA Form 285, Technical Report of U.S. Army Ground Report, for on-duty fatality accidents.

(4) DA Form 7306, Worksheet for Telephonic Notification of Ground Accidents.

c. *On-duty accidents.* The following are minimum requirements for reporting military and civilian on-duty injuries/fatalities:

(1) For an emergency during duty or non-duty hours, dial 911.

(2) For any Class A and B accident, the commander/supervisor who first becomes aware of the accident will, through their existing chain of command, immediately notify the Fort Lee Installation Operations Center (IOC) at 734-1584. The IOC will notify the Installation Safety Director. For the initial reporting requirements use the Worksheet for Telephonic Notification of Ground Accident, DA Form 7306-R, located on the CRC and Installation Safety Office websites and at the back of this regulation. Forward the DA Form 7306-R to the Installation Safety Office as soon as possible on the day of the incident. The Installation Safety Office will notify the Combat Readiness/Safety Center. In addition, the Installation Safety Office will notify OSHA, 800-321-6742 for Civilian injuries. Immediate telephonic notification of accidents will be followed by a Centralized Accident Investigation or an Installation-level

Accident Investigation. Procedures outlined in AR 385-10 and DA Pam 385-40 will be used in the event an investigation board is required. The unit to which the Service Member/Civilian employee or equipment is assigned will follow-up by submitting a completed US Army Accident Report, DA Form 285, to the Installation Safety Office.

(3) For any Class C and D accident, the supervisor who has firsthand knowledge of the incident will complete Section 1 of the Record of Injury form, Fort Lee Form 1051, and instruct the Service Member/Civilian employee to take the form to the treating medical provider, and return with the form after the treating medical provider indicates duty status on the bottom of the form: number of days off or restricted duty, or return to full duty. The unit to which the Service Member/Civilian employee or equipment is assigned will submit a completed Abbreviated Ground Accident Report (AGAR), DA Form 285-AB, through the chain-of-command to the Installation Safety Office within 14 calendar days of the incident. In the case of a first aid injury with no lost time or restrictions, the Fort Lee Form 1051 is sufficient for accident reporting to the Installation Safety Office.

d. *Off-duty military only.* Units will submit a fully completed DA Form 285-AB for reporting military off-duty injuries that result in fatalities, days away from work or training, or restricted work or transfer to another job.

(1) Fatal injuries of off-duty military personnel will be reported immediately through the IOC to the Installation Safety Director, to be forwarded through the appropriate channels.

(2) POV accidents will include information on vehicle type involved, use of safety belts/helmets, drug or alcohol use, and driver training completed.

5-3 ReportIt

ReportIt is an alternate reporting system for military and civilian injuries which electronically sends an AGAR directly to the CRC.

a. ReportIt is a centralized mechanism for collecting injury, illness, and loss reports to help the Army meet its applicable regulatory requirements and effectively manage its safety and occupational health program.

b. The U.S. Army Combat Readiness/Safety Center supports the Army by collecting, storing, analyzing, and disseminating actionable information to assist leaders, Soldiers, Families, and Civilians in preserving and protecting our Army's resources. The ReportIt system will fully accommodate the data elements required by DoD and meet command-specific functionality.

c. ReportIt only accepts AKO email addresses.

d. To access ReportIt, go to the CRC website in appendix A, section III. Tutorials, worksheets, and user guides are available on the home page. Likewise, an AGAR can be filled directly onto the form.

e. Typing information directly onto an AGAR form in ReportIt is the easiest way to submit the injury report.

f. Forward a copy to the Installation Safety Office at lee.safety.s1.reporting@us.army.mil.

5-4. Civilian Workers' Compensation Claims

Filing a workers' compensation claim only applies to on-duty injuries/illness and is not mandatory; it is the employee's choice whether or not to file a claim. The employee has 3 years to file a claim from the date of injury or from the date the employee first becomes aware that the injury is work-related.

a. When a civilian employee receives an on-the-job injury or occupational illness, the supervisor will encourage the employee to report to Occupational Health Clinic, with a Fort Lee Form 1051, for assessment of the injury. Once the injury is assessed, the employee may choose treatment from the Occupational Health Clinic or a private medical provider.

b. If the employee wants to file a workers' compensation claim, the supervisor and employee will use electronic filing through the Office of Workers' Compensation's Electronic Data Interface (EDI) web-based system to expedite the filing process and assignment of a claim number. The website is found at appendix A, section III. In order for the employee to receive Continuation of Pay (COP), the CA-1 form must be filed within 30 days of the incident, with medical documentation which states the employee cannot work regular or light duty. CA-2s are not eligible for COP. Call Fort Riley, KS, Army Benefits Center, Civilian Injury Compensation Branch (ABC-C-IBC), 1-866-792-7620, for information and assistance.

5-5. Non-reportable occupational illnesses and injuries

a. *Non-occupational diseases.* Injuries associated with non-occupational diseases where the disease itself, not the injury, is the proximate cause of the lost time; for example, a minor cut suffered by a hemophiliac which results in time away from work due to the disease response to the cut.

b. *Self-Inflicted Injuries.* Suicides, suicide attempts, or voluntary self-inflicted injuries, such as Russian Roulette.

c. *Criminal assault.* Injuries that result from initiating criminal activity where the intent was to inflict injury. These include cases of assault, rape, murder, and offenses under Article 118 UCMJ with the exception of negligent homicide, voluntary manslaughter, and attempt to commit any of these offenses.

d. *Prior-service injuries.* Injuries sustained before entry into military service or civilian employment unless they are specifically aggravated by current tenure of service.

e. *Strains.* Strains from simple, natural, nonviolent body positions or actions, such as coughing or sneezing.

f. *Hospitalization.* Hospitalization of a person solely for observation/administration purposes and subsequent release.

g. *Adverse reaction.* Adverse bodily reactions resulting directly from the use of alcohol or other drugs not administered by or under the direction of a competent medical authority.

Chapter 6

Army Motor Vehicle/Privatey Owned Vehicle Accident Prevention Program

6-1. General

a. Privately owned vehicle (POV) accidents are consistently the number one killer of Army Service Members. While commanders/supervisors do not control POV operators similar to those operating Army motor vehicles (AMV), numerous areas of influence may be used to reduce manpower losses. The POV and AMV Accident Prevention Program is provided for use in developing and implementing effective prevention and accident avoidance strategies.

b. Fort Lee has established a POV Task Force to address POV safety concerns. The POV Task Force members are the Installation Safety Office, DPW, PMO, Army Substance Abuse Program (ASAP), Public Affairs Office (PAO), and Staff Judge Advocate (SJA). The Installation Safety Office will convene the meetings quarterly.

6-2. Responsibilities

The commander/supervisor is ultimately responsible for the implementation of effective AMV and POV accident prevention efforts within their commands.

a. Unit and activity commanders will select, train, and license AMV drivers IAW DoDI 6055.4, ARs 385-10, 600-55 and 190-5, and local policy.

b. The Installation Safety Office (ISO) will:

- (1) Provide staff oversight of the motor vehicle accident prevention program.
- (2) Maintain and disseminate motor vehicle safety awareness material.
- (3) Collect motor vehicle accident data and analyze data to identify accident trends and develop countermeasures.
- (4) Administer the Army Traffic Safety Training Program.
- (5) Chair and convene the POV Task Force meetings quarterly.

c. The Provost Marshal Office (PMO) will:

- (1) Monitor speed limits and issue authorized citations for speeders.

- (2) Provide POV accident data to the Installation Safety Office.
- (3) Periodically conduct seatbelt checks to determine installation compliance rates.
- (4) Conduct child safety seats inspections for the installation.
- (5) Attend POV Task Force Meetings.

d. The Army Substance Abuse Program (ASAP) will:

- (1) Maintain and disseminate alcohol and drug safety awareness material.
- (2) Attend POV Task Force meetings.

e. First line supervisors will:

(1) Ensure all operators of Army motor or General Services Administration (GSA) vehicles successfully complete the CRC Accident Avoidance Training or equivalent every 4 years.

(2) Conduct/schedule driver training for assigned personnel.

(3) Ensure that all newly assigned military personnel complete personal information sheets including individual driving history, and commander's interview within 30 days of arrival.

(4) Use the "Next Accident" scenario from the POV Risk Management Toolbox on the CRC website found at appendix A, section III, to assess the risk level of newly assigned personnel or to identify the at risk driver.

(5) Following every fatal or serious injury POV accident, commanders will conduct an assessment of the accident with the involved Service Member's chain of command to determine what happened, why it happened, and how it could have been prevented.

f. Installation Transportation Officer will require operators to show to the dispatcher Fort Lee Form 1082, Accident Avoidance Training Card, or other valid means of accident avoidance training before dispatching the vehicle.

6-3. Motor vehicle training

Army Accident Avoidance training is a proven means by which to raise safety awareness, change driver attitude/behavior, and improve driver skill. As a minimum the following training will be provided to appropriate personnel as needed at no cost to the individual Service Member or Civilian employee.

a. Army Accident Avoidance training. All military/Civilian operators of AMV or General Services Administration (GSA) vehicle must successfully complete the online CRC Army

Accident Avoidance Course or equivalent and have a refresher course every 4 years thereafter. Website for this training is found at appendix A, section III. AKO access is required.

b. Motorcycle safety. All Service Members operating a motorcycle, moped, or scooter will successfully complete the required Motorcycle Safety Foundation (MSF) Beginners Rider Course and the Experienced Rider Course. Website for this training is at the US Traffic Safety Training Program Registration, found at appendix A, section III. (Click “Continue to this website.”)

c. Remedial driver training. Drivers in military and/or GSA vehicles who have at-fault traffic accidents, commit a serious driving offense, misuse government vehicles, or are cited by police on or off post and found guilty of moving violations will attend remedial driver’s training. Training consists of review of local hazards, intermediate drivers training, impact of laws, drinking and driving, speeding, cell phone distraction and seat belt polices.

d. Pre-holiday/special hazard driver awareness training. Supervisors will ensure every assigned Service Member and Civilian employee will be given special training or orientations/briefings before any 3-day weekend. The training must include a review of local driving laws/regulations, motor vehicle safety inspections, the effects of fatigue or alcohol on a driver’s capabilities, and review of any local driving hazards. Commanders will ensure POVs of all military personnel are given a safety inspection prior to holidays as required by AR 385-10, at a minimum of every 6 months. POV safety inspections are also required prior to a Service Member taking leave or pass if driving over 250 miles to his/her destination. Fort Lee Form 385-5, POV Inspection Checklist is at the back of this regulation.

e. Tactical vehicle and bus driver training. Driver training must be conducted by the unit in accordance with AR 600-55 and AR 385-10. The appropriate training circular in the TC 21-305-XX series will be the minimum standard for driver training programs. Bus driver training will be conducted by Transportation Motor Pool (TMP).

6-4. Equipment operator’s qualification record

Include the following information as a minimum on DA Form 348, Equipment Operator’s Qualification Record:

- a. Accident Avoidance training and date.
- b. Safety awards.
- c. AMV accidents.
- d. Civilian and military traffic points and citations.
- e. Operator's training completed.

6-5. POV accident prevention

Most Army personnel killed or injured in POV accidents are involved in single vehicle accidents at night as a result of excessive speed, alcohol/drugs, or fatigue. POV accidents most often occur off-duty and off post, outside the presence of Army supervision. Commanders, however, can influence Service Member behavior. Positive leadership, motivation, and guidance given to POV operators before they leave Army control is a proven means of accident prevention. Commanders will ensure their POV safety and accident prevention programs include the following:

a. *Command emphasis.* Positive leadership at all levels is imperative. Leader emphasis on POV safety must be unrelenting. Junior officers and NCOs must know their responsibility in POV accident prevention and their authority to intervene or take action to deal with the "at risk" driver.

b. *Discipline.* Junior leaders work with their Service Members daily and should readily identify those Service Members who may be at risk. Negative behavior, such as traffic offenses, alcohol abuse, misconduct, and poor performance are indicators of potential POV accident victims. Once identified, the "at risk" Service Members will be counseled, motivated, or disciplined to modify the behavior that places them at risk.

c. *Composite Risk Management (CRM).* Use CRM to identify hazards associated with POV operations using Fort Lee Form 385-5, POV Inspection Checklist, located at the end of this regulation. Assess the hazards, make decisions to control them, implement those controls, and then supervise execution. Use CRM for POV operations; commander, leader and individual assessments; and the POV Risk Management Toolbox. These programs provide a comprehensive set of tools and controls that have proved successful throughout the Army.

6-6. Safety belts

a. All personnel operating or riding as a passenger in an Army motor or GSA vehicle will wear manufacturer-installed safety belts whether on or off the installation. Individuals will not ride in seats from which manufacturer-installed occupant restraints have been removed, rendered inoperative, or broken. The vehicle operator will inform passengers of the safety belt use requirement. The senior occupant is responsible for ensuring enforcement. When it is not clear who the senior occupant is in the case of Civilian employees, the driver is responsible for ensuring enforcement.

b. All personnel, including visitors, will use a restraint system while driving or riding on the installation in a privately owned or Government-owned/leased vehicle with manufacturer-installed restraint systems.

c. Normally, vehicle occupancy is limited to the number of manufacturer-installed occupant restraints in the vehicle or the technical manual specifications for vehicle occupancy. Normally, all bus passengers will have a seat. Occasionally, buses operating on the installation may have standing passengers if they stand behind the beginning of the first row of seats. No standing passengers are allowed when buses travel off post.

6-7. Motorcycle operations. Service Members operating motorcycles, three-wheelers, ATVs, mopeds, and/or scooters that can go 35 mph and higher must be licensed, insured by the appropriate state civilian authority, and their vehicles must be registered with PMO.

a. All motorcycles and mopeds operated on military installations will have their headlights turned on at all times.

b. Left and right rear-view mirrors must be on the handlebar or fairing.

c. Using headphones or earphones while riding a motorcycle or moped on Army installation roads and streets is prohibited.

d. *Training.* In accordance with Army Regulation 385-10, The Army Safety Program, motorcycle training is mandatory for all Service Members who ride a motorcycle on or off of the installation. Commanders and leaders will identify all Service Members who ride motorcycles and track their training according to the primary type of motorcycle ridden. To register for these classes, go to U.S. Army Traffic Safety Training Program Registration System (AIRS) at https://apps.imcom.army.mil/AIRS/usg_disclaimer.aspx.

(1) All military motorcycle riders must complete the Basic Rider Course (BRC) prior to operating a motorcycle. This is a one-time requirement.

(2) All military motorcycle riders must complete advance motorcycle training consisting of the Experienced Rider Course (ERC) and/or the Military Sport Bike Rider Course (MSRC) based on type of motorcycle ridden. Motorcycle riders are encouraged to take advance motorcycle rider training 60 days after the BRC, but must complete training within 12 months.

(3) Motorcycle Refresher Training (MRT) is mandatory for military motorcycle riders who have been deployed for more than 180 days. The MRT will be conducted on the individual's own motorcycle to confirm ability to safely handle their motorcycle. Training may be conducted at the unit level preferably by a motorcycle rider. The MRT guide is available from the US Army Combat Readiness/Safety Center, <https://safety.army.mil/>. Ranges are not required for this training.

(4) Motorcycle Sustainment Training is to continue the life-long learning process. The training, which cannot be waived, is required every three years following a major geographic change or change in motorcycle, and the completion of the ERC or MSRC. Military motorcycle riders may accomplish sustainment training at their own expense.

(5) Family members, Civilians, and contract personnel who are properly licensed and insured shall not be required to receive Army-sponsored motorcycle training or show proof of motorcycle training to operate a motorcycle on the installation.

e. *Personal Protective Equipment.* Commanders will ensure all military motorcycle operators wear appropriate Personal Protective Equipment (PPE) while riding motorcycles, three-wheelers, ATVs, mopeds, and/or scooters.

(1) *Helmets.* Helmets shall be certified to meet Federal Motor Vehicle Safety Standard No. 218, United Nations Economic Commission for Europe Standard 22-05, British Standard 6658, or Snell Standard M2005. All helmets shall be properly fastened under the chin.

(2) *Eye Protection.* Eye protection must meet or exceed American National Standard Institute Standard Z87.1-2003 for impact and shatter resistance including goggles, wraparound glasses, or a full-face shield.

(3) *Foot Protection.* Foot protection includes sturdy over-the-ankle footwear that provides protection for the feet and ankles.

(4) *Protective Clothing.* Protective clothing includes long-sleeved shirt or jacket, long trousers, and full-fingered gloves or mittens made from leather or other abrasion-resistant material. Motorcycle jackets and pants constructed of abrasion-resistant materials such as leather, Kevlar, or Cordura and containing impact-absorbing padding are strongly encouraged. Riders are also encouraged to select PPE that incorporates fluorescent colors and retro-reflective material.

(5) *Tactical Motorcycles and ATV Rider Protection.* The PPE for government-owned motorcycle and ATV operators during off-road operations should also include knee and shin guards and padded gloves.

f. *Documentation and Licensing.* Commanders will develop and/or update in-processing and rear detachment procedures to ensure compliance with all aspects of this regulation when receiving and in-processing new Service Members. Commanders must complete the required interviews and related documentation in accordance with component requirements. Commanders will ensure that the motorcycle operator reads and understands the content of Fort Lee Form 385-7, Motorcycle/ATV Operator Agreement, which is located at the end of this regulation, and signs the agreement. Commanders will ensure that the Travel Risk Planning System (TRiPS) Tool, found at the U.S. Army Combat Readiness/ Safety Center website <https://safety.army.mil/>, is utilized prior to a motorcycle, moped, or scooter being used while on leave, pass, TDY or PCS outside the local area as determined by the commander. To identify hazards use Fort Lee Form 385-8, Motorcycle Inspection Checklist, located at the end of this regulation. At a minimum, this inspection is required every 6 months.

g. *Mentorship programs.* Commanders will support and promote unit level motorcycle mentorship programs. Mentors will be selected based on their motorcycle experience and maturity. Mentoring new riders fosters skill development and reinforces safe riding practices. The benefits of pairing novice riders with experienced riders cannot be understated. These skills, when combined with wearing the proper personal protective equipment and this regulation will maximize safety while operating motorcycles either on or off post.

Chapter 7

Hazard Communication Program

7-1. General

a. This chapter establishes the Fort Lee Hazard Communication (HAZCOM) Program, to include the Globally Harmonized System, in compliance with OSHA Hazard Communication Standard (HCS), 29 Code Federal Regulation (CFR) 1910.1200, and AR 385-10. It provides for:

(1) Safe handling and use of hazardous chemicals, including the three categories of hazards: physical, health, and environmental.

(2) Identification of operations and activities where hazardous chemicals are used or stored.

(3) Labeling of hazardous chemicals or materials.

(4) Safe storage and disposition of hazardous chemicals.

(5) Acquisition, accessibility, and review of Safety Data Sheets (SDS).

(6) Training personnel on the requirements of the HCS and safe handling and use of hazardous chemicals.

b. The SDS provides information to the user pertaining to the hazards of a substance. Included are 16 section formats listing the potential for fire, explosion, corrosiveness and reactivity; the known health effects of exposure; primary routes of entry and symptoms of overexposure; precautions for safe use, handling, engineering controls, work practices, and personal protective equipment. Other information includes first aid and emergency procedures for spill/fire and proper disposal.

7-2. Responsibilities

a. The Installation Safety Office (ISO) will:

(1) Coordinate the Fort Lee Hazard Communication Program.

(2) Assist with determining which hazardous chemicals/materials and personnel will be covered by the program based upon evaluations made during surveys by the Unit/Tenant HAZCOM Coordinator, ISO, Preventive Medicine Service (PMS) and the Army Logistic Hazardous Materials Management Program (HMMP) managed by the Fort Lee Hazardous Materials Control Center (HMCC).

(3) Request inventories of the hazardous chemicals in stock, on procurement and currently in use as required for the unit/activities, and assist the HMCC to maintain a Centralized Hazardous Chemical Inventory (CHCI). Inventory data shall include building, chemical name, SDS, quantity, national stock number (NSN), manufacturer, inspection date, and POC.

(4) Coordinate with HMMP, PMS, Fire and Emergency Services (FES) and Environmental Management Office (EMO) to provide assistance to units/activities as needed.

(5) Assist the HMMP to maintain a centralized SDS library for the installation which is cross-referenced by the CHCI and ensure units/activities are provided the guidance to obtain a required SDS.

(6) Conduct the DOD Federal Hazard Communication “Train the Trainer” Course for the personnel, E-5 and above, designated by their commanders/directors to provide unit/tenant level training. Course materials can be used by the Trainers to train unit/tenant personnel.

(7) Provide assistance to commanders, directors, and activity chiefs in developing their hazardous chemical SOPs as needed.

b. Preventive Medicine Services (PMS) will:

(1) Complete and revise the Health Hazard Information Module (HHIM) as provided by AR 40-5.

(2) Evaluate health aspects of hazardous chemicals in use by units/activities during periodic surveys.

(3) Provide guidance to personnel regarding specific chemical hazards, protective equipment, work practices, and engineering controls.

(4) Conduct workplace air samples when needed to determine whether or not installation of mechanical ventilation systems, issuance of respirators to personnel, or substitution of chemicals is warranted.

(5) Perform health screenings of personnel routinely exposed to hazardous chemicals/materials at their workplace.

(6) Provide assistance to commanders, directors, and activity chiefs in developing their hazardous chemical SOPs as needed.

c. Mission and Installation Contracting Command (MICC) will:

(1) Insert Federal Acquisition Regulation (FAR) Clause 52.223-3 in all solicitations and contracts for local purchase of nonstandard hazardous material items.

(2) Include in all service/construction contracts a requirement that contracts provide the HMCC an inventory of all chemicals to be used, SDSs and their storage location prior to beginning work.

(3) Inform service/construction contractors of any possible chemical hazards to which their employees may be exposed while working on the installation.

(4) Follow requirements of the Hazardous Materials Management Program, AR 710-7, section 3.f.

d. Provost Marshal will receive calls concerning chemical accident/spills and forward calls to FES to respond.

e. Fire and Emergency Services (FES) will:

(1) Respond to emergencies.

(2) Act as accident scene coordinator for all chemical accident/spills IAW the Fort Lee Red Plan.

(3) Ensure emergency response personnel receive ongoing training in chemical accident/spill response.

f. Environmental Management Office (EMO) will:

(1) Be proponent for the Fort Lee Oil and Hazardous Substance (OHS) Spill Prevention and Response Plan, and the HMMP.

(2) Ensure the plans are updated as necessary.

(3) Evaluate environmental aspects of hazardous chemicals in use by units/activities during periodic HMMP surveys and provide feedback to the units/tenant regarding problems or deficiencies noted.

(4) Provide guidance to chemical users concerning methods of spill control.

(5) Assist units/activities regarding proper procedures for disposal of hazardous waste through the HMCC.

(6) Provide assistance to commanders, directors, and activity chiefs in developing their hazardous chemical SOPs as needed.

g. Commanders, directors, and activity chiefs will:

(1) Develop SOPs which address policies and procedures for training, use, handling, disposal, and protective clothing and equipment requirements for hazardous chemicals and ensure supervisory and subordinate personnel adhere to them. A Job Hazard Analysis (JHA), Fort Lee Form 930, will be prepared for each hazardous chemical used by the unit/tenant. The SDS for each chemical will be used to properly prepare the JHA. Training of units/Tenants will include the JHA. Fort Lee Form 930 can be found at the end of this regulation.

(2) Maintain an inventory of all hazardous chemicals used and/or stored within their areas of responsibility and ensure the inventory is cross referenced by SDSs. The inventory will be updated as necessary, whenever a new hazardous chemical is added to the work area/process or a hazardous chemical is removed from the work area or process, and a copy of the inventory will be provided to the ISO annually at the end of the fiscal year.

(3) Ensure supervisory personnel make the inventory available to all personnel of each work shift for reference and review copies of the installation Hazard Communication Program, unit/activity hazardous chemical SOP; spill contingency plan, chemical inventory, and SDSs.

(4) Ensure supervisory personnel provide safety orientation training to incoming personnel and to all personnel when a new chemical is added. Training will include an explanation of hazards associated with chemicals in unlabeled pipes as necessary.

(5) Screen all requests for materials generated by their organization to ensure only necessary materials are ordered and minimal quantities of materials are kept on hand in accordance with the HMMP and HMCC.

(6) Ensure all personnel working with or potentially exposed to hazardous chemicals in their work environments receive training on the HCS and safe handling and use of hazardous chemicals. Additional training will be provided for affected personnel whenever a new hazard is introduced into their workplace. The HCS required training will be documented with DD Form 1556, Request, Authorization, Agreement, Certification of Training and Reimbursement. The statement "Do not destroy. Retain this record for the duration of employment/enlistment plus 30 years" will be annotated in block 18 of the form. The form shall be incorporated into the Service Member's official military personnel folder or Civilian employee's official personnel folder. The Installation Safety Office, PMS, and EMO will provide assistance to units/activities conducting hazardous chemical training as needed. Training will emphasize the following elements:

(a) A summary of the CASCOM/GHS standard and this written regulation.

(b) Hazardous chemical properties including visual appearance and order, and methods which can be used to detect the presence or release of hazardous chemicals.

(c) Physical and health hazards associated with the potential exposure to the workplace chemicals.

(d) Procedures to protect against hazards, such as, personal protective equipment, work practices, and emergency procedures.

(e) Hazardous chemical leak and spill procedures.

(f) Where SDSs are located, how to understand their content, and how employees may obtain and use appropriate hazard information.

(7) Ensure that hazardous chemicals are properly labeled. Labels should list the product identifier, supplier identifier, chemical identity, hazard pictograms, signal words Danger or Warning, hazard statements, and precautionary information. The SDS should be referenced to verify label information. Items received with commercial labels which meet hazard communication standards will not be relabeled. Warning information, whether provided by the manufacturer or locally produced, will not be defaced or removed from a container of hazardous chemicals.

(8) Abide by all requirements of the Hazardous Materials Management Program.

h. Employees will:

(1) Adhere to all applicable SOPs, directives, SDSs, and regulations regarding the safe handling and use of hazardous chemicals.

(2) Utilize available engineering controls and protective clothing and equipment to eliminate or protect against hazards of the workplace and maintain protective clothing and equipment in good repair.

(3) Report for health screenings and tests as required.

(4) Attend training sessions, as directed, in order to become informed of the hazards associated with the materials being used or handled in the workplace.

Chapter 8

Lockout/Tagout

8-1. General

Lockout/Tagout procedures are designed to prevent accidents and injuries caused by the accidental release of hazardous energy. The lockout/tagout standard covers servicing and maintaining equipment where unexpected energization of equipment could injure employees. Energy sources include: electrical, mechanical, pneumatic, fluids and gases, hydraulic, thermal, and water under the pressure of gravity. Isolation of these energy sources might include repair and replacement work, renovation work and modifications or other adjustments to power equipment. Hazardous energy problems include: accidental start-ups, electrical shock, and disabling injuries and death.

8-2. Responsibilities

a. Installation Safety Office will:

(1) Serve as principle staff adviser and technical consultant.

(2) Conduct periodic inspections to ensure each activity is in compliance with this regulation and other Army and Federal policies governing lockout/tagout of machines, equipment, or electrical panels.

b. Activity commanders/directors will:

(1) Ensure lockout/tagout SOPs are developed, established, and implemented in each workplace as required, ensuring that consultation and bargaining obligations with the local union are met prior to implementation.

(2) Ensure authorized personnel responsible for performing lockout/tagout procedures are identified in activity SOPs, such as supervisors, line supervisors, operators, maintenance personnel.

(3) Ensure all machinery and equipment are listed in each section's lockout/tagout SOP.

c. Supervisors will:

(1) Establish lockout/tagout SOP isolating equipment/machinery at the energy source.

(2) Train affected employees in the purpose and use of the lockout/tagout procedures upon orientation and conduct annual refresher training. Document training sessions, to include individuals' signatures.

(3) Train authorized employees in performing lockout/tagout procedures.

(4) Ensure authorized employees perform lockout/tagout procedures as required.

(5) List all machinery and equipment in the lockout/tagout SOP.

(6) Obtain required lockout/tagout devices to isolate equipment/machinery in workplace.

(7) Assign required lockout/tagout devices to authorized personnel.

8-3. Requirements

a. Directors, commanders, and supervisors responsible for machinery and equipment will establish a lockout/tagout SOP. See figure 8-1 for a sample SOP. Procedures will be developed for each type of equipment.

b. Employees shall be instructed in the safety significance of the lockout/tagout procedure. Each new or transferred-affected employee and other employees whose work operations are or may be in the area shall be instructed in the purpose and use of the lockout or tagout procedure of affected employees, such as operators of equipment.

c. Authorized personnel, such as line supervisors and maintenance personnel, shall be trained on the lockout/tagout procedures to isolate energy from the machinery and equipment.

d. Inventory of equipment that requires lockout/tagout procedures shall be included in lockout/tagout SOP.

e. Leaders/supervisors/commanders will ensure that subordinates are required to lockout and tag the main source of power before any maintenance, inspection, cleaning, or contact with machinery, equipment or systems that have potential to cause injury or death.

f. The lockout will be by means of padlocks, blank flanges, and padlock with chains, or similar devices that physically prevent reactivation of a main power source.

g. Individuals required to use locks and tags will be issued a personal lock and key. To eliminate the chance of unauthorized lock removal, duplicate keys will not be provided.

LOCKOUT/TAGOUT STANDARD OPERATING PROCEDURE

1. Purpose. To establish procedures for lockout/tagout to safely isolate equipment and machinery in accordance with Fort Lee policy and 29 CFR 1910.147.

2. Responsibilities.

a. Supervisor. List supervisors' responsibilities.

b. Affected employees. Identify affected employees; carpenters, mechanics, plumbers, craft shop customers, and list responsibilities.

c. Authorized employees. Identify authorized employees and list responsibilities.

NOTE: Affected employees and authorized employees maybe the same person. Also, supervisors and authorized employees may be the same person.

3. Policy. Lockout/tagout procedures will be used on the following machinery/equipment whenever adjusting, servicing, or performing maintenance. List machinery or equipment; band saws, mortising machine, drill press, table saw, grinders, lathes, presses, shapers, etc.

4. Procedures. List general procedures in this section. When more than one type of machinery/equipment is operated, list procedures for each type in the appendix of the SOP.

Figure 8-1. Sample lockout/tagout standard operating procedure

h. The lockout device will be accompanied by a “Danger” tag that has the installer’s full name, shop, telephone number, and date of installation.

i. In any instance where physical lockout of the main power source is not possible, a “watch stander” must be located at the control device during work efforts.

8-4. Procedures

a. Make a survey to locate and identify all isolating devices to be certain which switches, valves or other energy-isolating devices apply to the equipment to be locked or tagged out. More than one energy source, electrical, mechanical, or others, may be involved.

b. Sequence of lockout or tagout system.

(1) Notify all affected employees that a lockout or tagout system is going to be utilized and the reason why. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards thereof.

(2) If the machine or equipment is operating, shut it down by normal stopping procedure, such as depress stop button, open toggle switch, etc.

(3) Operate the switch, valve, or other energy-isolating devices so that the equipment is isolated from its energy source. Stored energy, such as in springs, elevated, machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, and etc.

(4) Lockout and/or tagout the energy-isolating devices with assigned individual lock or tags.

(5) After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. Caution: Return operating controls to “neutral” or “off” after the test.

(6) The equipment is now locked or tagged out.

c. Restoring machines or equipment to normal production operations.

(1) After the servicing and/or maintenance are complete and equipment is ready for normal production operations, check the area around the machines or equipment to ensure that no one is exposed.

(2) After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout or tagout devices. Operate the energy-isolating devices to restore energy to the machine or equipment.

d. *Procedure involving more than one person.* In the preceding steps, if more than one individual is required to lockout or tagout equipment, each shall place their own personal lockout device or tagout device on the energy-isolating device. When an energy-isolating device cannot accept multiple locks or tags, a multiple lockout or tagout device (hasp) may be used. If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use their own lock to secure the box or cabinet which allows the use of multiple locks to secure it. As each person no longer needs to maintain their lockout protection, that person will remove their lock from the box or cabinet.

e. *Basic rules for using lockout or tagout system procedure.* All equipment shall be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device where it is locked or tagged out.

Chapter 9

Personal Protective Equipment Program

9-1. General

a. OSHA standards require that employers assess the workplace to determine if hazards are present which necessitate the use of PPE and clothing. Personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers shall be provided, used, and maintained in a sanitary and reliable condition.

b. All personnel required to wear PPE must do so when exposed to noise, foot, eye, head, hand, or breathing hazards. Personnel must report to all scheduled medical examinations, evaluations, and treatments as well as health education briefings concerning the hazards they may encounter in their job assignment. Personnel must ensure their PPE is cleaned, maintained, and stored in the proper manner.

c. Supervisors/commanders will provide proper personal protective clothing and equipment for employees.

d. Supervisors/commanders must prepare a Fort Lee Form 930, Job Hazard Analysis (JHA), for each job they supervise. The JHA will identify the hazard and the appropriate PPE. Unit SDSs will assist in identifying proper PPE for hazardous chemicals.

9-2. Eye injury prevention

a. The prevention of ocular injury is better than its treatment for injury by any known medical or surgical means. When the Installation Safety Office has classified an operation or activity as an eye hazardous, the use of eye protection is mandatory. Supervisors and commanders may approve additional operations and activities when job duties bring personnel into eye hazardous areas.

b. *Responsibilities.*

(1) The Installation Safety Office (ISO) will:

(a) Designate and label specific areas where the use of eye protection is required.

(b) Promote compliance by providing training on the effects of poor illumination, eye injury prevention, and the proper use, care, and storage of personal protection.

(c) Conduct surveys to ensure compliance with the Occupational Eye Protection Program, monitor use of eye protection and inform supervisors of personnel who knowingly violate this program.

(2) Commanders and supervisors will:

(a) Identify personnel exposed to eye hazards and ensure Service Members/employees properly use and are provided with eye protection.

(b) Ensure personnel are provided with and properly use eye protection while in eye hazardous areas.

(c) Ensure adequate illumination is provided in the workplace.

(d) Ensure contact lenses are not used without proper protection in dusty conditions, such as under a protective mask, during exposure to eye hazardous chemicals or air contaminants and not worn when using a respirator.

(e) Initiate disciplinary action on personnel who knowingly and repeatedly violate the provisions of this policy.

(f) Inspect and test eye lavage weekly. They must be flushed a minimum of 3 minutes weekly to eliminate the potential of eye infection during emergency use.

(g) Provide visitors entering eye hazardous areas with proper eye protection.

(3) The employee will: Give the eye glasses prescription from the private optometrist to his/her supervisor for purchase with activity funds.

(4) Activity Purchase Card Holder will purchase the employee's safety glasses from any vendor which the activity uses. Order forms for prescription eyewear will state: "Polycarbonate lenses only" since they are mandated. Permanently fixed side shields for all safety glasses are highly recommended but not mandated. If permanently fixed side shields are requested, it should be specified on the order form. Any patient requiring multi-focal will be given the choice of a straight line bi-focal, tri-focal, or equivalent. Progressive are no longer provided. Personnel will be limited to one pair of prescription glasses annually unless the glasses are broken as a result of an occupational operation or the corrective lens prescription changes.

9-3. Foot injury prevention

a. Employees working in identified, foot-hazardous positions will be provided appropriate foot protection. All foot protection will meet American Society of Testing Materials (ASTM) standards, ASTM F2413, 2005. Employees are authorized one pair of safety shoes annually, unless shoes are unserviceable or work process requires multiple types of protection.

b. Responsibilities.

(1) The Installation Safety Office will:

(a) Monitor activity foot injury prevention programs.

(b) Establish limit on safety shoe cost and review the set limit at least every 2 years.

(2) Commanders and supervisors will determine which positions have foot-hazardous tasks. Use the job hazard analysis process to determine the nature of the shoe required, such as, insulated shoe or boot, water resistant, electrical hazard, etc.

(3) Purchase cardholders will purchase appropriate type shoe within a \$150 limit. Fire and Emergency Services (FES) personnel and other employees in high-risk areas, where generic safety shoes do not provide protection from their duties, are exempt from the \$150 limit.

9-4. Hearing Conservation Program

a. Noise levels from equipment such as lawnmowers, weed eaters, weapons, power generators, combat vehicles, construction equipment, and helicopters, etc., are of such high intensity that they can cause permanent damage. Permanent hearing loss is frequently not recognized by the individual until it interferes with the ability to understand the speech of others and requires people to repeat phrases. Noise-induced hearing loss is a painless, bloodless, and sightless disability. Unprotected ears exposed to loud noises are particularly deafened so they cannot readily detect sounds essential to a Service Member's survival in a combat situation. Hearing losses may also require a permanent change of profile which frequently excludes an individual from working in his or her primary MOS or job assignment. However, an effective Hearing Conservation Program is the tool to prevent hearing loss.

b. Responsibilities.

(1) MEDDAC will:

(a) Conduct annual inspections and surveys to determine the existence of noise-hazardous areas.

(b) Report failure to comply with this regulation through command channels.

(c) Provide a list of noise hazardous areas to Civilian Personnel Advisory Center (CPAC) and the Installation Safety Office for their respective aspects of the program.

(d) Inform supervisors and commanders of new noise hazardous areas at the time of determination.

(e) Evaluate all noise hazards and make suitable recommendations for their control, correction, and/or elimination.

(f) Ensure personnel working in noise hazardous areas receive audiometric evaluations annually. Coordinate/schedule all necessary audiometric evaluations; also, ensure individuals' health records are annotated accordingly. Prepare FL Form 1051, Record of Injury, on any significant threshold shift of 20 dB or more in either ear.

(g) Properly fit hearing protective devices.

(h) Notify supervisors/employees/CPAC when evaluation indicates a hearing loss exists or will be aggravated by noise exposure.

(i) Assist in hearing conservation education.

(2) CPAC will:

(a) Ensure applicants for jobs in noise hazardous areas receive pre-placement or pre-transfer audiometric evaluations.

(b) Assist the responsible organization in taking appropriate personnel placement action when notified by PMS that an individual has sustained a hearing loss which will be aggravated by continued hazardous noise exposure.

(c) Notify the PMS of personnel changes in noise hazardous areas.

(3) The Installation Safety Office will:

(a) Coordinate with PMS to determine the existence of noise hazardous areas and control the entrance into these areas by posting color-coded warning signs and identify noise hazardous equipment with labels. Refer to PMS those areas that may require noise assessment when identified through regular safety inspections.

(b) Notify responsible supervisors and unit commanders of noise hazardous areas and equipment within their area of responsibility.

(c) Monitor the use of hearing protective devices to assure compliance with established regulations.

(4) Directorate of Public Works (DPW) will: Implement engineering controls to reduce hazardous noise levels whenever feasible. Personal protective equipment will not be an authorized substitute for effective engineering controls.

(5) Commanders will:

(a) Ensure military working in noise hazardous areas are provided audiometric evaluation and hearing protection such as earmuffs and/or earplugs.

(b) Ensure personnel under their command who enter noise hazardous areas wear hearing protection.

(c) Ensure earplugs and earplug carrying cases are part of the duty uniform for all military personnel.

(d) Ensure designated noise hazards within their command have signs visibly.

(6) Supervisors of Civilian employees will:

(a) Notify PMS of suspected noise hazards in their shops or area.

(b) Ensure personnel working in a noise hazardous environment wear their hearing protection and receive an annual audiogram, and provide visitors entering noise hazardous areas with proper hearing protection.

(c) In conjunction with CPAC, supervisors take appropriate action in personnel placement when notified by PMS of results of medical examinations, evaluations, and surveys.

(d) Refer personnel under their jurisdiction to the appropriate medical facility for hearing problems or complaints associated with wearing hearing protection.

(e) Provide visitors entering noise hazardous areas with proper hearing protection. Earmuffs are preferred.

9-5. Respiratory Protection Program

The provision of adequate respiratory protection for personnel working in operations which release potentially toxic or nuisance contaminants into the air is a command responsibility. This protection may include the provisions of general or local exhaust ventilation sufficient to reduce the concentrations of toxic contaminants below the current threshold limit values of the American Conference of Government Industrial Hygienists or the provision of special respiratory protective devices.

a. Respiratory Protective Equipment (RPE) assures uncontaminated respirable air to the user. Respirators are approved devices designed to provide the wearer with the respiratory protection against inhalation of contaminated atmosphere and, for some devices, oxygen-deficient atmosphere. Approved respirators are tested and listed as satisfactory by the National

Institute for Occupational Safety and Health (NIOSH) or the Mining Safety and Health Administration (MSHA). This does not include the use of apparatus intended to protect the atmosphere or ambient air from contamination, such as use of surgical masks in a surgical suite.

(1) *Air purifying respirators* - atmospheric dependent, particulate removing, mechanical filter.

(2) *Atmosphere supplying respirators* - hose-type atmospheric supplying: hose mask, air line respirator, continuous-flow type, and demand type.

(3) *Self-Contained Breathing Apparatus (SCBA)* – re-circulating type, demand type, pressure-demand combination.

b. Respirators will be considered as an acceptable method of protecting the health of the employee under the following circumstances:

(1) Immediately Dangerous to Life or Health (IDLH) are conditions that pose an immediate threat of severe exposure to contaminants that are likely to have adverse delayed effects on health, which include oxygen deficient atmosphere.

(2) The identification and evaluation of the operation where respiratory protection is required and the correct respirator use for those operations.

(3) When no engineering or work practice controls can be used to adequately control the hazard.

(4) During interim periods while engineering controls are being researched, designed, or installed to eliminate the hazard.

(5) During emergencies.

(6) When required by other Federal regulations or operating license.

c. Respirator uses:

(1) *Intermittent use of respiratory protective equipment*. Operations performed less than 1 hour a day for 1 day a week.

(2) *Permanent use of respiratory protection equipment*. Operations performed greater than 1 hour a day for 1 day a week.

d. *Engineering controls*. In the controls of those occupational diseases caused by breathing air contaminated with harmful dust, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination measures. This shall be accomplished as far as feasible by accepted engineering control measures; for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less

toxic materials. When effective engineering controls are not feasible or while they are being instituted, appropriate respirators approved by the Installation Safety Office shall be used.

e. *Tactical protective gas masks.* This regulation does not regulate the wearing and use of tactical protective gas masks and equipment; however, protective gas masks will never be used in lieu of approved respirators.

f. *Responsibilities.*

(1) The Installation Safety Office will:

(a) Appoint an Installation Respirator Specialist IAW AR 11-34.

(b) Be responsible for implementing the Respiratory Protection Program.

(c) Ensure directorates/activities requiring employees to wear RPE appoint a respirator specialist.

(d) Request the Industrial Hygienist to perform surveys where personnel without respiratory protection are working in an atmosphere suspected to be hazardous to health.

(e) Designate, in coordination with the Industrial Hygienist, the type of RPE to be purchased and used.

(f) Provide guidance to supervisors in the preparation of an SOP on respirator use in their particular work areas.

(g) Approve SOPs prepared for respirator use before they are published.

(h) Approve or disapprove routine entry into an immediately dangerous to life or health (IDLH) environment, to include confined spaces.

(i) Conduct regular inspections of work areas to assure compliance and continued effectiveness of the Respiratory Protection Program.

(j) Assure proper corrective action is taken on deficiencies which are detected in the Respiratory Protective Program.

(k) Conduct random inspections to determine if RPE is properly selected, used, cleaned, maintained, stored, and disposed of.

(l) Conduct random inspections to ensure respirator specialists maintain records of monthly inspections conducted on emergency use respirators and SCBA.

(m) Assist respirator specialists in performing annual training and fit testing for employees requiring RPE IAW AR 11-34.

(2) Preventive Medicine Service (PMS) will:

(a) Assist in reviewing the respiratory protection program periodically and conduct on-site evaluations to ensure compliance IAW prescribed directives and provide the Installation Safety Office a copy of the findings. Site evaluations will include: Verifying that personnel have been medically approved to wear respirator protection and that it is documented; verifying that personnel are wearing appropriate respirator which has the appropriate protection factor; ensuring proper documentation is maintained to show breathing air systems have been tested for air quality; and verifying that personnel are appropriately trained and fit tested IAW the fit test protocol applicable to the contaminant in the applicable standards.

(b) Ensure that recommendations are provided to the responsible activity director for the purpose of corrective action.

(c) Provide the Installation Safety Office and CPAC with a list identifying job operations in which RPE is required. The list will include location of the operation, number of personnel required to use respiratory equipment, type of respiratory equipment required, and intended use of equipment, such as permanent, temporary, intermittent, or emergency.

(d) Provide work areas with the proper procedures for selecting respirators. Prior to assignment of respiratory protection device, ensure personnel receive qualitative fit testing to ensure an effective face piece to face seal.

(e) Provide training and guidance to respirator specialists IAW AR 11-34.

(f) Determine if workers assigned to tasks requiring the use of respirators are physically able to perform work while wearing prescribed respiratory protection.

(g) Perform as required periodic medical surveillance of individuals working in areas requiring the use of RPE.

(h) Assist respirator specialists in performing annual training and fit testing for employees requiring RPE IAW AR 11-34.

(3) Civilian Personnel Advisory Center (CPAC) will:

(a) Refer personnel being considered for employment in the areas of operations requiring the use of RPE to the Occupational Health Clinic for a pre-employment physical examination.

(b) Reassign employees presently working in the areas calling for respiratory equipment who are unable to wear the required protection properly as determined by the Occupational Health Clinic.

(4) DPW will:

(a) Install and maintain breathing air systems capable of providing Grade D, normal atmospheric breathing air where required.

(b) Maintain compressed air breathing system alarms in an operable manner.

(c) Implement a schedule of routine maintenance for servicing and inspecting airline purification panels and changing filters and cartridges as necessary.

(5) Fire and Emergency Services will: Provide training for firefighters using RPE and respirator specialists in coordination with the Installation Safety Office and Preventive Medicine Service as outlined in AR 11-34. Training will include:

(a) Handling, use, and maintenance of respirators.

(b) Respirator selection based on the contaminant in the atmosphere and the appropriate protection factor to include the approval of Industrial Hygienist of a selected respirator and cartridge.

(c) Records management.

(d) Medical and safety aspects of the program.

(e) Fitting and testing of respirators.

(f) Coordinate with respirator specialist to inspect monthly the emergency use respirators and SCBA.

(g) Be available for emergency situations where an SCBA would be required to enter a contaminated atmosphere.

(6) Activity Supervisors, as needed, will:

(a) Ensure a respirator specialist is appointed IAW AR 11-34 and this regulation.

(b) Ensure that proper RPE is utilized by the employees where required and that employees adhere to the instructions relative to the proper use and maintenance requirements of the RPE.

(c) Ensure users receive initial and periodic medical monitoring as recommended by the Occupational Health Physician.

(d) Ensure facilities for cleaning, maintenance, and proper storage of equipment are provided.

(e) Ensure workers are individually fit tested by respirator specialists.

- (f) Ensure users are supplied appropriate RPE as specified by the Industrial Hygienist.
 - (g) Enforce the required exchange of RPE.
 - (h) Ensure personnel trained on RPE is documented and kept current by the respiratory specialist.
 - (i) Ensure compressed air cylinders are tested and maintained IAW 29 CFR 1910.134.
 - (j) Ensure breathing air will meet at least the requirements of the specification for grade D breathing air as described in ANSI/ Compressed Gas Association Specification G-7.1-per 29 CFR 1910.134.
 - (k) Ensure respirators are maintained IAW manufacturer instructions. Respirators used by more than one person shall be thoroughly cleaned and disinfected after each use.
- (7) Respirator Specialists will:
- (a) Train or ensure that the annual training of employees required to wear RPE meets the requirements of AR 11-34.
 - (b) Perform required fit testing when issuing respirators and annually thereafter or as defined by AR 11-34 or by the CFR for the particular contaminant. Fit testing will not be done until personnel have been medically approved by the Occupational Health Physician.
 - (c) Repair respirators using only designated parts per training and authorization or return to an authorized factory.
 - (d) Establish procedures for monitoring the breathing air quality for air supplied respirators and perform quality assurance evaluations IAW AR 11-34 at least annually for oil-less compressors; at least quarterly for other compressors to be used for Grade D air.
 - (e) Function as the central focal point for the maintenance of records for your activity/directorate IAW AR 11-34.
 - (f) Issue respirators and respirator user cards after determining that all requirements for medical evaluations, training, and fit testing are met.
 - (g) Maintain necessary inventory levels of respirators, accessories, and spare parts.
 - (h) Dispose of respirators per TB Med 502.
- (8) Respiratory equipment users will:
- (a) Wear the equipment IAW this regulation without variance.

(b) Inspect the respirator before each use. The inspection will include the visual parts of the headbands, mask, and valves for deterioration. Ensure the respirators have no holes, cracks, leaks, or other obvious defects. Perform leak tests as instructed.

(c) Notify immediate supervisor if it is suspected that RPE is needed or that the respirator is defective.

(d) Adhere to instructions governing the proper use, maintenance, and storage practices of the respirator.

(e) Store the respirators under the conditions that will protect them against dust, sunlight, deformation, and the concentration of contaminants and environmental conditions.

g. Supervisors/commanders will maintain written records on personnel trained and dates of training for at least the duration of employment of each covered Civilian or military worker as specified because of a specific contaminant exposure IAW AR 25-400-2 and TB Med 502 in the individual's personnel file. Respirator specialists will provide users with annual training to include:

(1) An explanation of the respirator hazard and what happens if the respirator is not properly used.

(2) Why respirators are needed for protection.

(3) Reasons for selection of a particular type of respirator.

(4) Capabilities and limitations of the selected respirator.

(5) How to don, wear, check for fit, and operate the respirator.

(6) How to recognize and handle emergency situations.

h. *Interchange of components.* Components of respirators will under no circumstance be interchanged or mixed with the different manufacturers of components, such as MSA face shield with Wilson headbands, etc. Design configurations of manufacturers do not permit mixing of components and may actually permit the entrance of contaminants.

i. *Storage of respirators.* Respirators placed at stations and work areas for emergency use will be stored in easily accessible compartments built for that purpose and clearly marked to indicate the contents. Routinely used respirators may be stored in plastic bags; however, respirators will not be stored in such places as lockers or tool boxes unless they are in containers or cartons.

j. *Inspection of respirators.* Respirator equipment users will inspect each respirator and SCBA routinely before and after each use. A respirator or SCBA that is not routinely used but kept ready for emergency use shall be inspected after each use and at least monthly to assure

that it is in satisfactory working condition. Respirator inspection shall include a check of tightness of connections and the condition of the face piece, headbands, valves, connecting tube, and canisters. Rubber or elastomer parts shall be inspected for pliability and signs of deterioration. Stretching and manipulating rubber or elastomer parts with a massaging action will keep them pliable and flexible and prevent them from taking a "set" during storage. A record shall be kept of inspection dates and findings for respirators maintained for emergency use.

Chapter 10 Confined Space Entry

10-1. General

a. There are confined spaces in industrial workplaces, many of which pose unique problems due to their contents and/or configuration. Some spaces pose entrapment hazards for entrants, while others restrict air circulation so that hazardous atmospheres may accumulate quickly. Confinement itself can increase the risk of injury or death by making employees work closer to hazards than they would otherwise.

b. This regulation and OSHA standard 29 CFR 1910.146 provides minimum safety requirements to be followed while entering, exiting, and working in confined spaces.

c. Also refer to Chapter 9, Personal Protective Equipment and Chapter 8, Lockout/Tagout Procedures, when working in confined spaces.

10-2. Responsibilities

a. Installation Safety Office will:

(1) Establish and administer a comprehensive confined space entry program.

(2) In coordination with DPW, identify areas on the installation which are considered to be confined spaces.

(3) Identify and maintain a current list of confined spaces on the installation. Provide the updated list of confined spaces annual to the Fire and Emergency Services.

(4) Identify and maintain a current list of permit-required confined spaces of the installation.

(5) Provide guidance to supervisors/entry supervisors in the preparation of SOPs on confined space entry.

(6) Review directorate/activity SOPs prepared for confined entry before they are published.

b. DPW will:

(1) In coordination with the Installation Safety Office, identify areas on the installation considered to be confined spaces.

(2) Identify and maintain a current list of confined spaces on the installation.

(3) Maintain a file on entry supervisors appointed by the directorate.

(4) Ensure contractors have supporting documents on training certification and their workers' medical records.

(5) Ensure the contractor has a valid company's permit form, approved gas monitoring equipment, communication, retrieval devices/equipment, personal protection equipment, signs, barricades, and any other OSHA required tools/equipment prior to the start of work.

(6) Review the contractor's Accident Prevention Plan and provide a copy to the Installation Safety Office.

(7) Ensure the contractor contacts FES prior to entering a permit-required confined space.

c. Preventive Medicine Service will:

(1) In coordination with the Installation Safety Office, identify confined spaces on the installation.

(2) Provide guidance to supervisors/entry supervisors in the preparation of confined space entry SOPs.

(3) Conduct on-site evaluations of confined space entry operations and permits periodically to ensure compliance IAW prescribed directives and provide the Installation Safety Office with a copy of results.

(4) Assist with confined space entry and respirator training when needed.

(5) Determine if workers assigned to enter confined spaces are physically able to perform their duties.

(6) Perform medical surveillance on employees required to enter permit-required confined spaces at least annually.

d. Civilian Personnel Advisory Center will: Refer personnel being considered for employment who may be required to enter confined spaces to the Occupational Health Clinic for pre-placement physical examinations.

e. Fire and Emergency Services Division will:

- (1) Perform entry rescue/practice annually.
- (2) Issue the hot-work permits and provide instruction for safe work.
- (3) Be on standby when employees are performing hot work in confined spaces.

f. Directors/commanders with employees who may be required to enter confined spaces will:

- (1) Appoint, in writing, entry supervisors and submit appointment orders to the Installation Safety Office.
- (2) Ensure the number of entry supervisors appointed is sufficient to meet operation needs.
- (3) Train entry supervisors on confined space entry procedures and the proper selection, issue, calibration, maintenance, and care of instruments required to perform such duties.
- (4) Provide entry supervisors with proper monitoring equipment.
- (5) Ensure employees are supplied with required personal protective clothing and equipment to safely enter confined spaces.
- (6) Maintain entry permit for at least 1 year.

g. Supervisors will:

- (1) Be familiar with the provisions of this program as they relate to personnel or operations under their control.
- (2) Explain to all personnel under their immediate supervision the nature of the hazards with the operations and the precautions necessary to control such hazards.
- (3) Ensure personnel entering confined spaces are properly trained prior to entering confined space.
- (4) Strictly enforce safety and health guidelines for confined space operations.
- (5) Take prompt action to correct and report any unsafe acts, conditions, or procedures and, where warranted by such conditions, cease operation until corrective actions are taken.
- (6) Include proper protective clothing and equipment requirements in job descriptions and that employees are clean-shaven for the wear of respirators.

(7) Allow only trained entry supervisors, attendants, and entrants to do permit-required confined space work.

h. Entry Supervisors will:

- (1) Be appointed in writing with a copy furnished to the Installation Safety Office.
- (2) Be trained IAW paragraph 2 (e).
- (3) Approve or disapprove routine entry into permit-required confined spaces.
- (4) Ensure training certification is made part of their personnel folders.
- (5) Test confined space with properly calibrated testing equipment prior to entry.
- (6) Complete and sign the confined space entry permit IAW paragraph 3 of this regulation before permitting entry.
- (7) Ensure sufficient personnel are present for operation.
- (8) Ensure required PPE is worn and in good condition.
- (9) Ensure precautions are taken to prevent dangerous air contamination.

i. Attendants will:

- (1) Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- (2) Continuously maintains an accurate count of authorized entrants.
- (3) Remain outside during entry operations until relieved by another attendant.
- (4) Communicate with authorized entrants.
- (5) Monitor activities inside and outside permit space and take appropriate action if unsafe condition/act occurs or is about to occur.
- (6) Summon rescue and other emergency services as soon as assistance is needed to rescue entrant.
- (7) Perform non-entry rescues.
- (8) Perform no duties that interfere with the primary duty to monitor and protect the authorized entrants.

(9) Continuously monitor confined space atmosphere.

j. Authorized entrants will:

(1) Know the hazards that may be faced during entry, including information on the mode, signs, or symptoms, and consequences on the exposure.

(2) Communicate with the attendant.

(3) Wear a personal monitor or be monitored by a device adjacent to the entrant.

(4) Properly use required equipment.

(5) Alert the attendant.

(a) Recognize any warning sign or symptom of danger.

(b) Detect a prohibited condition.

(6) Exit from the permit space as quickly as possible whenever:

(a) Attendant or entry supervisor orders evacuation.

(b) Recognize warning signs or symptom of danger.

(c) Detect a prohibited condition.

(d) An alarm activates.

k. *Contractor/subcontractor.* All permit-required confined spaces and/or non-permit required confines will follow guidance directed by OSHA, 29 CFR 1910.146, and Fort Lee regulations. The contractor/subcontractor will:

(1) Coordinate and work closely with DPW.

(2) Provide DPW or the Installation Safety Office a copy of the “Accident Prevention Plan.”

(3) Provide supporting training documents on proof of certification training for all workers required to perform confined space entry tasks.

(4) Contact the FES for hot work permit prior to any hot work operations.

(5) Provide supporting documentation showing that continuous forced air ventilation alone is sufficient to maintain the space safe for entry. Develop monitoring and inspection data

that support a non-hazardous condition. The supporting data will be updated annually as long as there is no change during the atmosphere testing.

(6) Follow all procedures in 29 CFR 1910.146 paragraphs g – k for employees' safety.

(7) Use the permit-required confined space decision flow chart prior to entering a confined space listed in appendix A of 29 CFR 1910.146. The flow chart is at appendix E in this regulation.

(8) Ensure the contractor contacts FES prior to entering a permit-required confined space.

(9) Ensure that when providing a pre-work briefing, the contractor understands that in the event of a incident, dialing 911 on a cell phone will go to an off post emergency communication center.

(10) Installation Safety Officers shall conduct site inspections of active confine space work sites when it is active with person or persons entered.

(11) Recommend contacting PMO, 734-7400, prior to beginning work in the confined space area, and when work is completed. Document that all contract personnel are accounted for. FES can be notified by radio when firefighters are out of the station.

10-3. Permit required confined space

a. The permit-required confined spaces on Fort Lee are classified below unless demonstrated differently in accordance with 29 CFR 1910.146 (c) (5) (i) and (ii) that forced air ventilation alone will control all hazards in the space. Supervisors will refer to 29 CFR 1910.146 for additional guidance. These areas are identified as follows:

(1) Manholes for electrical, sewage, and telephone cable lines.

(2) Steam pits.

(3) Crawl spaces.

(4) Tankers/carriers.

(5) Vessels.

(6) Underground vaults.

b. Entry into a permit-required confined space shall be by permit only using Fort Lee Form 937, Fort Lee Confined Space Entry Permit, which is located at the back of this regulation, or an approved permit from a private contractor. The permit is an authorization and approval in writing that specifies the location and type of work to be done and certifies that all existing

hazards have been evaluated by the entry supervisor and necessary protective measures have been taken to ensure the safety of each worker.

c. The entry supervisor shall be responsible for completing the permit and shall sign off when the following areas and actions have been reviewed and confirmed:

(1) Location and description of the work to be done.

(a) Provide adequate barriers/shields.

(b) Perform testing and monitoring.

(2) Hazards that may be encountered.

(3) Isolation checklist is complete.

(a) Blanking and /or disconnecting.

(b) Electrical lockout.

(c) Hazardous energy lockout/tagout procedures.

(4) Special clothing and equipment.

(a) Personal protective equipment and clothing.

(b) Safety harness and/or lines.

(c) Tools, approved electrical and lighting equipment, for use in accordance with the Hazardous Location Certification IAW the National Electrical Code (NEC) 1990).

(d) Ventilating equipment.

(e) Communication equipment.

(f) Any other equipment necessary for safe entry and rescue.

(g) Retrieval mechanical device.

(5) Atmospheric test monitors.

(a) Oxygen level.

(b) Flammability and/or explosive levels.

(c) Toxic substance levels.

- (6) Atmospheric monitoring while work is being performed.
- (7) Personnel training and complete understanding of the hazards.
- (8) Attendant(s) as named on the permit.
- (9) Rescue and emergency equipment and procedures.
- (10) Evaluate permit-required conditions prior to entry.
 - (a) Document the readings.
 - (b) Sign the permit before entering.

(c) Made available to all authorized entrants, by posting it at the entrance so that notification of pre-entry preparation has been completed.

d. Permit-required confined space shall carry expiration time and date valid for one shift only and shall be updated for each shift. The entry supervisor authorizes entry and cancels the permit. Retain each cancelled entry permit for at least 1 year.

10-4. Medical

a. Workers who enter a permit-required confined space shall have a pre-placement physical examination. The supervisor shall provide the physician performing or responsible for the medical surveillance program information such as the type of confined space the employee may be required to enter, substances the employee may encounter, and a description of protective devices or equipment the employee may be required to use. The physical examination shall include:

(1) A demonstration of the worker's ability to use negative and positive pressure respirators as cited in 29 CFR 1910.134.

(2) A demonstration of the worker's ability to see and hear warnings, such as flashing lights, buzzers or sirens.

b. Following completion of the examinations, the physician shall approve or disapprove the employee for confined space work.

c. Periodic medical examinations shall be made available to employees required to work in permit-required confined spaces at least annually.

10-5. Emergency and rescue services

a. The authorized entrant shall wear a full body harness or a chest belt attached to a retrieval lifeline except if it creates a greater hazard. If the exit opening is less than 18 inches (45 cm) in diameter, a wristlet harness shall be used.

b. Attendant will only perform non-entry rescues. Rescue procedures shall be specifically designed for each entry. There shall be a trained attendant assigned to that confined space and properly trained with the operation of the rescue retrieval system. Under no circumstances will the attendant enter the confined space. However, while awaiting rescue services, the attendant will make rescue attempts using the retrieval system.

c. The Fort Lee Fire and Emergency Services Division is the authorized rescue service to enter permit spaces to perform rescue services. The emergency telephone number is 911.

10-6. Training

a. Personnel working in the vicinity of confined spaces shall be made aware of the hazards. Personnel required to work in a confined space or in support of those working in a confined space shall have additional training as follows:

(1) Emergency entry and exit procedures.

(2) Use of applicable respirators.

(3) First aid.

(4) Lockout procedures.

(5) Safety equipment use.

(6) Initial and annual rescue and training drills designed to maintain proficiency or at lesser intervals as determined necessary.

(7) New or revised procedures.

(8) Permit system.

b. Training shall not be considered complete until the employee has attained an acceptable degree of proficiency for entering and working in confined spaces. The trainee's judgment of the adequacy of his training should be properly considered.

c. The supervisor shall certify the employees training. Documentation of employee's name, signatures or initials of the trainers and the dates of training. Ensure copies are sent to the Installation Safety Office, and included in the office of personnel file and workplace training file.

10-7. Testing and monitoring

a. Monitoring of the atmosphere shall be performed in accordance with the permit. Equipment for continuous monitoring of gases and vapors shall be explosion-proof and equipped with an audible alarm or danger-signaling device that will alert employees when a hazardous condition develops. Instruments used for testing the atmosphere in a confined space shall be selected for their functional ability to measure hazardous concentrations. Instruments shall be calibrated in accordance with the manufacturer's guidelines or manuals. Each calibration shall be recorded, filed, and available for inspection for 1 year after the last calibration date.

b. The percentage of oxygen for entry into a confined space shall be no less than 19.5 percent or greater than 23.5 percent. If tests indicate the oxygen level to be greater than 23.5 percent hot work is prohibited until ventilating techniques have reduced the oxygen level to approximately 21 percent. If the percentage of oxygen falls below 19.5, approved respiratory equipment shall be used in accordance with the Test to be Taken chart on page 2 of Fort Lee Form 937, Confined Space Entry Permit, located at the back of this regulation.

c. When the contaminants in the atmosphere cannot be kept within permissible exposure levels as set down in 29 CFR 1910 Subpart Z, the employee shall wear an approved respirator.

10-8. Posting, labeling and barriers

a. To prevent unauthorized or inadvertent entries into confined spaces where work is in progress; such areas shall be posted, as warranted, until the operations have been completed. These signs include the following information:

CAUTION
CONFINED SPACE
WORK IN PROGRESS
DO NOT ENTER WITHOUT PROPER AUTORIZATION
EMERGENCY NUMBER 911

b. Entrances to confined spaces of permanent structures shall be posted as necessary. Signs shall include but not necessarily be limited to the following information:

DANGER
CONFINED SPACE
ENTRY BY PERMIT
ONLY
EMERGENCY NUMBER 911

c. When employees enter a confined space, a barricade shall be erected if inadvertent entry poses a problem. The barricade shall have a mechanism to prevent closure of the escape way, signs warning of the danger present, a physical barrier (fence) to keep the area clear, and an adequate platform (3 feet x 3 feet as a minimum) for entry or exit. The attendant shall be responsible for maintenance of the barricade system.

10-9. Personal protective equipment and clothing

a. The entry permit includes a list of necessary protective equipment to be used in the confined space as determined by the entry supervisor.

b. Items normally used to protect against traumatic injury include: safety glasses, hardhats, footwear, protective coveralls, and respiratory protection as directed by Fort Lee Form 937, Confined Space Entry Permit, located at the back of this regulation.

c. Other protective measures shall include: Safety nets used to protect employees working 10 feet (3m) above ground or grade level when other protective devices are impractical; life jackets worn if workers are exposed to falls into liquid over 4 feet (1.2m) in depth; insulated floor mats when hot work requires use of electrical energy.

10-10. Work practices

Before entering a confined space, employees shall review the specific guidelines appropriate for safe entry and emergency exit. These guidelines or standards shall be compiled by the entry supervisor and be definitive on all possible hazards. Areas covered by such guidelines shall follow this recommended standard.

a. Purging and Ventilating.

(1) Environmental control within a confined space is accomplished by purging and ventilating. The method used will be determined by the potential hazards that arise due to the product stored or produced, suspected contaminants, work to be performed, and the design of the confined space. When ventilating and/or purging operations are to be performed, the blower controls shall be at a safe distance from the confined space. In a permit-required confined space an audible warning device shall be installed in all equipment to signal when there is a ventilation failure. When a ventilation system is operational, airflow measurements shall be made before each work shift to ensure that a safe environmental level is maintained. Initial testing of the atmosphere shall be performed from outside the confined space before ventilation begins to determine necessary precautions in purging and ventilating. Testing of more remote regions within the confined space may be performed once the immediate area within the confined space has been made safe. Exhaust systems shall be designed to protect workers in the surrounding area from contaminated air. If flammable concentrations are present, all electrical equipment shall comply with the National Fire Protection Association NEC 70, article 250 requirements for bonding and grounding. Where continuous ventilation is not part of the operating procedure, the atmosphere shall be tested until continuous acceptable levels of oxygen and contaminants are maintained for three tests at 5-minute intervals. Care shall be taken to prevent recirculation of contaminated air and interaction of airborne contaminants.

(2) Continuous general ventilation shall be maintained where toxic atmospheres are produced as part of a work procedure, such as welding or painting, or where a toxic atmosphere may develop due to the nature of the confined space, such as desorption from walls or evaporation of residual chemicals. General ventilation is an effective procedure for distributing

contaminants from a local generation point throughout the workspace to obtain maximum dilution. However, special precautions shall be taken if the ventilating system partially blocks the exit opening. These precautions include a method for providing respirable air to each worker for the time necessary for exit and a method of maintaining communications.

(3) Local exhaust ventilation shall be provided when general ventilation is not effective due to restrictions in the confined space or when high concentrations of contaminants occur in the breathing zone of the worker. Local high concentrations of contaminants may occur during activities such as welding, painting, and chemical cleaning. The worker shall not be exposed to concentrations of contaminants in excess of those specified in 29 CFR 1910 Sub Part Z. Therefore, respiratory protection may be needed in addition to engineering controls. The use of respiratory protection will be determined by the entry supervisor. However, when fumes may be generated that contain highly toxic or other airborne metal contaminants, provisions of 29 CFR 1910.252 shall be observed. When freely moving exhaust hoods are used to provide control of fumes generated during welding, such hoods shall maintain a velocity of 100 feet per minute in the zone of the welding. The effective force of freely moving exhaust hoods is decreased by approximately 90 percent at a distance of one duct diameter from the plane of the exhaust opening. Therefore, to obtain maximum effectiveness, the welder shall reposition the exhaust hood as he changes welding locations to keep the hood in close proximity to the fume source.

(4) Special precautions shall be taken when out-gassing or vaporization of toxic and/or flammable substances is likely. If the vapor-generating rate can be determined, the exhaust rate required can be calculated to dilute the atmosphere below the Permissible Exposure Limit (PEL) and/or 10 percent of the Lower Explosive Limit (LEL), whichever is lower. This shall be the lowest acceptable ventilation rate. If the area of concern is relatively small, diffusion of the contaminants may be controlled by enclosure with a relatively low volume exhaust for control, or by exhaust hoods located as close as possible to the area of vaporization or out-gassing. If the area to be ventilated is too extensive to be controlled by local exhaust, general ventilation procedures shall be used to control the contaminant level. When the problem of out-gassing is due to the application of protective coatings or paint, ventilation shall be continued until the buildup of a flammable and/or toxic atmosphere is no longer possible.

b. Isolation/Lockout/Tagging.

(1) The isolation procedures shall be specific for each type of confined space. Safety equipment required during this procedure shall be designated by the entry supervisor and be depended upon the potential hazards involved. A permit-required confined space shall be completely isolated from all other systems by physical disconnection, double block and bleed, or blanking of all lines. In continuous systems where complete isolation is not possible, such as sewers or utility tunnels, specific written safety procedures that are approved and enforced by the entry supervisor shall be used.

(2) All blanks for that specific confined space shall be recorded on the entry permit.

(3) If a drain line is located within the confined space, provision shall be made when necessary to tag it and leave it open. This shall also be recorded on the entry permit.

(4) Additional procedures necessary when the confined space is of double wall type construction, such as water-jacketed or similar type, shall be determined by the entry supervisor and noted on the entry permit.

(5) Electrical isolation of the confined space to prevent accidental activation of moving parts that would be hazardous to the worker is achieved by locking circuit breakers and/or disconnects in the open (off) position with a key-type padlock. The only key is to remain with the person working inside the confined space. If more than one person is inside the confined space, each person shall place his own lock on the circuit breaker. In addition to the lockout system, there must be an accompanying tag that identifies the operation and prohibits use.

c. Cleaning.

(1) Procedures and processes used to clean the inside of a confined space shall be reviewed by the Installation Safety Office, Fire and Emergency Services Division, and Industrial Hygienist. The method to be prescribed shall be dependent upon the product in the space. If the confined space contains a flammable atmosphere above the upper flammable limit, it shall be purged with an inert gas to remove the flammable substance before ventilating with air. Initial cleaning shall be done from outside the tank if at all possible.

(2) Special procedures should be adopted to handle the hazards created by the cleaning process itself. If the tank is steamed:

(a) It shall be allowed to cool prior to entry.

(b) Ventilation shall be maintained during neutralization procedures to prevent build-up of toxic materials.

(c) Steaming shall not be used as a cleaning method when the product stored was a liquid with an auto ignition temperature 120 percent or less of the steam temperature.

(d) The pipe or nozzle of the steam hose shall be bonded to the tank to decrease the generation of static electricity that could accumulate in tanks during steaming procedures. These and other hazards and controls shall be evaluated by the Installation Safety Office and the Fire and Emergency Services Division.

d. Equipment and tools to be used in a confined space shall be carefully inspected and shall meet the following requirements:

(1) Hand tools shall be kept clean and in good repair.

(2) Portable electric tools, equipment, and lighting shall be approved in accordance with 29 CFR part 1910 Sub Part Z and be equipped with a ground fault circuit interrupter that

meets the requirements of 29 CFR 1910.309. All grounds shall be checked before electrical equipment is used.

(3) All electrical cords, tools, and equipment shall be of heavy-duty type with heavy-duty insulation and inspected for defect use.

(4) Air-driven power tools shall be used when flammable liquids are present. Air-driven power tools reduce the risk of explosion but do not eliminate it. Explosions can arise by tools overheating (drilling), sparks produced by striking (percussion), grinding or discharge of accumulated electrostatic charges developed from the flow of compressed air.

(5) Lighting used in permit-required confined spaces shall be explosion-proof and where necessary, equipped with guards. Only equipment listed by Underwriters Laboratories for use in Division 1, atmospheres of the appropriate class and group, or approved by U.S. Bureau of Mines or Mining Enforcement (MESA) and Safety Administration or Mine Safety and Health Administration (MSHA), or the U.S. Coast Guard shall be used. Lighting shall not be hung by electric cords unless specifically designed for that purpose. The illumination of the work area shall be sufficient to provide for safe work conditions as referenced in the ANSI/IES-RP-7-1991. Under no circumstances will matches or open flames be used in a confined space for illumination.

(6) Cylinders of compressed gases shall never be taken into a confined space and shall be turned off at the cylinder valve when not in use. Exempt from this rule are cylinders that are part of self-contained breathing apparatus (SCBA) or resuscitation equipment.

(7) Ladders shall be adequately secured or of a permanent type which provides the same degree of safety as cited in 29 CFR 1910 Sub Part D.

(8) Scaffolding and staging shall be properly designed to carry maximum expected load, be equipped with traction-type planking, and meet the requirements of 29 CFR 1910.28.

(9) Electrical lines, junctions, and appurtenances will be in accordance with National Electric Code and 29 CFR 1910.309.

(10) Only hose lines and components designed specifically for the compressed gas and working pressure shall be used, and such systems shall have a pressure relief valve outside the confined space.

(11) All equipment that may be used in a flammable atmosphere shall be approved as explosion-proof or intrinsically safe for the atmosphere involved by a recognized testing laboratory such as the U. S. Bureau of Mines, MESA, or MSHA for methane and by the Underwriters Laboratories or by Factory Mutual for all cases.

Chapter 11

Radiation Safety Program

11-1. General

a. Command policies and procedures for the procurement, production, transfer, storage, use, and disposal of radioactive material and ionizing and non-ionizing producing devices will be developed.

b. Policies and procedures developed will delineate responsibilities to ensure that ionizing radiation hazards are minimized and that the control of these items are effectively maintained to ensure exposure to ionizing radiation and the release of radioactive effluents are as low as reasonably achievable (ALARA).

c. Guidance developed will identify and control potential health hazards resulting from the use of equipment capable of producing potentially hazardous non-ionizing radiation.

11-2. Ionizing radiation

a. The Garrison Commander shall:

(1) Ensure there are adequate resources to support the radiation safety program to include, but not limited to, the presence of a Radiation Safety Officer (RSO) or an Alternate RSO (ARSO) for duty during all normal duty hours.

(2) Ensure measures are established to control health and safety hazards from ionizing radiation sources and radioactive material.

(3) Ensure occupational exposures are maintained within regulatory limits as ALARA.

(4) Designate an RSO and one alternate ARSO.

(5) If the necessity arises for a Radiation Control Committee (RCC), designate members to the RSO.

b. The RSO and ARSO shall be designated in writing. The RSO shall not be assigned duties that will interfere with radiation safety duties. The RSO may be an officer, enlisted, or Civilian employee. When a Civilian employee is performing the duties of RSO, that employee's job description should be appropriately modified to reflect this additional duty. The RSO and the ARSO shall:

(1) Establish procedures that will assure the Garrison Commander, or the appointed designee, is advised of any anticipated use of radiation sources or operations other than scheduled calibration of radiac instruments or x-ray equipment used by the U.S. Army Medical Department Activity (MEDDAC) and tenant U.S. Army Forces Command (FORSCOM) units. Routine x-ray procedures conducted by the MEDDAC/U.S. Army Dental Activity (DENTAC) are exempt from the reporting requirements of this paragraph.

(2) Provide advice and instruction on radiological hazards.

- (3) Evaluate existing uses of radioactive materials.
- (4) Provide operating officials with advice on safety matters in carrying out the responsibilities for radiological safety.
- (5) Review all plans for the proposed use of radioisotopes and sources of ionizing radiation.
- (6) Be responsible for control of radioactive material. Maintain an inventory of all radioactive material and ionizing radiation producing devices.
- (7) Survey incoming and outgoing shipments of radioactive materials.
- (8) Recommend method of handling, shielding, storing, and disposing of radioactive materials.
- (9) Periodically monitor operations involving ionizing radiations; however, enforcement of rules and regulations is the responsibility of each individual user and his/her supervisor.
- (10) Supervise decontamination of all spills.
- (11) Perform annual checks to ensure all radiation detection equipment has been properly calibrated.
- (12) Consult with and maintain close liaison with IMCOM and mission headquarters' RSOs in connection with established controls relative to radiological safety.
- (13) Check the use and storage of radiation sources annually.
- (14) Review reports of safety violations and recommend corrective action.
- (15) In conjunction with the specific user, will provide assistance in completing the application for license to use, possess, handle, or transfer radioactive material or ionizing radiation-producing devices.

c. Principal users will:

- (1) Be selected from the organization to which the equipment is assigned.
- (2) Receive training IAW 10 CFR Part 19 prior to use of the radioactive material. This training will be verified by the RSO. Training will include:
 - (a) Fundamentals of radiation safety.

- (b) Methods of controlling the radiation dose by time, distance, and shielding.
- (c) Operation, adjustment, and knowledge of the limitations of radiation survey instruments that are available for monitoring.
- (3) Be qualified to handle and use radioactive materials safely.
- (4) Ensure all personnel inform and coordinate with the RSO on matters involving ionizing radiation.
- (5) Ensure leak tests are performed annually by the RSO or other qualified individual. Records of such tests will be maintained.
- (6) Report all proposed changes in source location to the RSO prior to movement.
- (7) Ensure that SOPs are prepared and reviewed by the RSO.
- (8) Ensure radioactive material/source(s) are stored in a controlled area under principle user's supervision and are secured from unauthorized removal from the designated place of storage.
- (9) Ensure radiation exposure received by individuals under their supervision is maintained ALARA.
- (10) Notify the RSO whenever there are alleged items of noncompliance or any safety hazard.

d. *Control Procedures for Radioactive Material.* Any sources obtained that require a license, contact the RSO for assistance. Submit requests on NRC Form 313, Application for Material License, located on the NRC website, www.nrc.gov. MEDDAC requests for the procurement, possession, and use of radiation-producing equipment such as x-ray machines, particle generators and accelerators, and other equipment capable of producing x-rays will be submitted to the MEDDAC RSO and a copy furnished to the Installation RSO. MEDDAC radiation surveys will be forwarded to the Installation RSO annually.

e. *Procurement, shipment, transfer or loan, storage, and disposal.*

(1) *Procurement.*

(a) Requests for procurement of radioisotopes and ionizing radiation-producing machines will be forwarded to the RSO for review. All materials will be accrued and licensed in the name of the licensee, as provided in 10 CFR 30. Procurement will not be taken until the required NRC license is received.

(b) An SOP for each project involving ionizing radiation shall be submitted to the RSO. Include the following: subject, brief description of proposal, area/building/ room number,

source of ionizing radiation and activity, and type of operation. General safety precautions will be included.

(2) *Shipment of outgoing or incoming radioactive equipment.*

(a) Outgoing equipment will be transported IAW 10 CFR 71 and/or 49 CFR 173, whichever is applicable.

(b) When transporting such equipment vehicle operators and/or escorts will be briefed as to the potential hazards, methods to minimize hazards, and emergency procedures. No passenger will be in the part of the vehicle containing the radioactive material, such as the body of truck, backseat, etc. If necessary to leave the radioactive equipment in an unattended vehicle, the container will be locked in or to the vehicle.

(c) When transporting such equipment, the vehicle operator and/or escorts will be briefed on the potential hazards, methods to minimize hazards, and emergency procedures.

(d) Incoming equipment shall be reported to the RSO. Notification will be made within 3 hours of receipt during duty hours or within 18 hours if received after duty hours.

(3) *Transfer or Loan.*

(a) Before any radioactive material can be transferred from one location to another, the RSO must be notified so the location can be properly surveyed and approved.

(b) Transfer or loan of any radioactive material outside the immediate command requires prior approval from the Garrison Commander. Requests are submitted through the RSO. Requests will include type/model of equipment, serial number, NRC license number, and justification for proposed transfer. Shipment documents and the NRC 314, Certification of Disposition of Materials, located on the NRC website, will be prepared by the owning installation.

(4) *Storage.*

(a) Store in a fire resistant building or within a fire resistant enclosure.

(b) Storage facility will be locked and access controlled at all times.

(c) Appropriate radiation signs will be posted.

(d) Only authorized personnel will be allowed to enter the storage area.

(e) Individual user of radioactive material that has temporary storage is directly responsible for the manner in which it is stored.

(5) *Disposal.*

(a) Incidents or losses involving radioactive materials will be reported immediately to the RSO/ARSO via telephone. The RSO will notify IMCOM, and mission headquarters RSOs, and commodity license holder.

(b) Unit responsible for equipment loss will conduct formal investigation. Report will be provided the RSO within 10 calendar days.

f. Radiological hazards and personnel safety.

(a) *External radiation or radiation from sources outside the body.* These sources may be radioactive materials emitting gamma rays, beta particles, or neutrons, or they may be machines producing radiation, such as x-rays. Since the body penetration by alpha particles is insignificant, they are not considered an external hazard. External radiation causes body damage due to tissue penetration.

(b) *Internal radiation or radiation from sources within the body.* This hazard is created by ingestion, inhalation, or through skin wounds and deposition of radiation material in the body organs. While alpha particles are not considered an external hazard, the internal hazard of these particles is extreme and considered to be 20 times as hazardous as beta or gamma radiation.

(c) *Types of personal safety.* The safety of personnel is the foremost consideration in any operation involving ionizing radiation. Projects requiring the use of radioactive materials should be well planned. Prepare written job hazard analysis and risk assessment prior to operation.

(1) Safety from external radiation consists of three factors: time, distance, and shielding. Exposure time is determined by the radiation intensity, which is radiation exposure rate multiplied by time. Intensity of radiation decreases as the square of the distance increases from the source. Shielding materials are selected with reference to the type of radiation involved: lead used for gamma and x-ray, plastics for beta, and paraffin or water for neutrons.

(2) Safety from internal radiation requires the prevention of radioactive materials from entering the body through ingestion, inhalation, or wounds. This may be accomplished by the use of protective clothing, masks, or respirators and by preventing contamination. Do not smoke, drink, or eat in radiation areas.

(3) Personnel are also protected from radiation hazards by the erection of barriers, posting of signs in radiation areas, and by labeling all radioactive equipment. Written and verbal instructions will be given to personnel involved in the handling of radioactive equipment. Keep contaminated clothing and equipment in marked containers in radiation area until proper disposal can be made. Good housekeeping rules will greatly decrease occurrence of contamination.

(4) Decontamination procedures will depend upon the type and degree of contamination and material contaminated. In minor spills, the person using the radioisotope will confine the

contamination of liquids by using absorbent paper. Contaminated dry material will be confined by wetting and using absorbent paper. It is most important that the user be familiar not only with all rules and regulations concerning the handling of radioactive materials, but also with the immediate steps to be taken in case of serious contamination. These steps apply not only to confining and removing the contamination, but also include actions that will protect the user and all other personnel.

g. *Emergency procedures.* Immediately notify the RSO, 765-3124 or Alternate RSO 765-3127 in case of contamination.

(1) All cases involving personal injury will be reported to the RSO. This covers accidental overexposure of external radiation, ingestion or inhalation of radioactive materials, and wounds, including minor scratches.

(2) In case of liquid spills, don protective rubber gloves and drop absorbent paper on spills. In case of dry spills, don protective rubber gloves and dampen spill thoroughly taking care not to spread the contamination. Water may generally be used except where chemical reaction with water would generate an air contaminant. Oil should not be used.

(3) When spills involve no immediate radiation hazard to personnel, notify all personnel to leave the room and confine the spill. Notify the RSO.

(4) When spills pose radiation hazard to personnel, the device operator or senior person present will notify all persons not involved to leave the room. If the spill is on the skin, flush immediately. If spill is on clothing, discard outer or protective clothing. Notify the RSO.

(5) Wounds affected by radiation must be washed immediately under running water, spreading the edge of the gash. Do not use oil or solvents – they increase skin absorption.

(6) Permit no person involved in a radiation injury to return to work without clearance from a Radiological Health Officer.

(7) Report all radiation accidents to the RSO. If injury, contact 911.

(8) The RSO will notify IMCOM and mission headquarters RSOs, and commodity license holder point-of-contact of any incident involving radiation.

(9) Supervisors will prepare a complete history of the emergency and subsequent related activity for the RSO records.

(10) The RSO shall inform firefighters of the amounts and types of radioactive material stored in buildings.

11-3. Non-ionizing radiation

a. The Garrison Commander will designate in writing a radiation safety officer and alternate radiation safety officer whose duties are to manage the non-ionizing radiation safety program. The RSO will be provided training, equipment, and support staff commensurate with the extent of his/her responsibilities. Complete program files will be maintained by the RSO to include current records of inventory, SOPs, and records related to safety instruction.

b. Medical activities with nuclear medicine services require a full-time RSO qualified under DA PAM 385-24.

c. Exposure to radiofrequency radiation (RFR) will be controlled to ensure that persons are not subjected to the DOD RFR permissible exposure limits, American National Standards Institute (ANSI), ANSI/IEEE Standard C95.1-2005, and American Conference of Governmental Industrial Hygienists (ACGIH).

d. RFR sources will be in place and operated so as to prevent exposure of persons within the hazard distance of the sources.

e. RFR hazard assessments will be performed according to TB Med 523.

f. RFR workers consist of two categories.

(1) Low-risk workers have a possible, but unlikely, risk or overexposure such as, operators of currently fielded systems. This class requires pre-placement and termination examinations using the screening protocol listed below.

(2) High-risk workers routinely work in research development, test, and evaluation (RDTE), or maintenance and are subject to significant risk of overexposure in the workplace. This group will require pre-placement and termination examinations using the diagnostic protocol described below.

g. Medical surveillance programs will be performed as established in AR 40-5.

(1) DOD 6055.5-M standardizes the medical surveillance procedures.

(2) Four categories of ocular surveillance examinations are pre-placement, periodic, immediate, and termination.

(3) The screening protocol for biennial examinations will consist of those procedures described in DA Pamphlet 40-506 for the applicable job standard, unless modified locally per AR 40-5. If the distance visual acuity, with correction, on the biennial examination is less than that on the pre-placement examination, the worker will be referred to an optometrist or ophthalmologist to determine if there is an actual loss of acuity and, if so, to ascertain its cause.

(4) The diagnostic protocol is used for some pre-placement and termination examinations and for immediate examinations. An optometrist, ophthalmologist, or physician possessing the necessary skills must perform it.

h. Directors/chiefs will ensure:

(1) SOPs are published and enforced. They will specify the safety policies concerning operational limitations placed upon equipment and the control of the movement of personnel to ensure that the exposure of personnel is minimized. Under no circumstances should exposure exceed established limits in DA Pam 385-24. Copies of these SOPs will be forwarded to the RSO.

(2) SOPs should include:

(a) Safe working techniques.

(b) Proper use of protective equipment and devices.

(c) Procedures to be followed when an accident or incident occurs.

(d) Daily preoperational, operational, and post-operational checks to ensure proper radiation safety.

(e) The proper markings for controlled areas (29 CFR 1910 and TB Med 521).

(f) Inventory of equipment capable of producing radiation.

(g) *Proper personal protective equipment.* Electrically-insulated gloves and shoes for safety against electrical shock and RFR burn or insulation from the ground plane, are authorized.

(h) Requirement for annual safety briefings and training regarding the RFR safety needs of individual units. A record of attendees is required and kept on file for 2 years.

Chapter 12

Construction Safety

12-1. General

Construction projects, to include self-help (U-Do-It), minor or major renovations, new construction, and credit card work, are a way of life for Fort Lee employees and Service Members. However, construction projects can produce unforeseen hazards. To prevent safety, fire, and health hazards, contact the Installation Safety Office and FES in writing 60 days prior to beginning any construction project so that proper life safety measures may be reviewed. Also notify the Installation Safety Office and FES for all pre-construction conferences, pre-final inspections, and final inspections.

12-2. Responsibilities

Commanders/supervisors of DPW, Directorate of Family and Morale, Welfare and Recreation (DFMWR), Army and Air Force Exchange Service (AFFES), Fort Lee Commissary, and MICC and all others who are proponents for construction plans or initiate construction contracts will:

a. Route renovation plans through the Installation Safety Office, Fire and Emergency Services, Environmental Management Office, DPW, and Industrial Hygienist prior to commencement of work. Areas of concern are:

- (1) Fire egress.
- (2) Ventilation changes.
- (3) Ergonomic considerations.
- (4) Type of materials.
- (5) Hazardous chemicals that may be used.
- (6) People sensitivities.

(7) Hazardous materials, such as lead-based paint and asbestos, which may still be in the facility.

b. Complete job hazard analyses on the tasks to be performed listing potential hazards and controls to minimize the risk.

- c. Provide the proper personal protective equipment.
- d. Ensure individuals doing the work are trained on the tools which will be used.
- e. Ensure the right tools are available to perform the job.

f. Contractors performing construction work will submit a Safety Plan or an Accident Prevention Plan to the Installation Safety Office for approval prior to commencing work.

Chapter 13 Chemical Hygiene Plan

13-1. General

a. The Chemical Hygiene Plan (CHP) establishes the minimum regulatory requirements for safe use of hazardous chemicals in the laboratory. Chemical exposure shall be minimized through the use of engineering controls, work practices, and protective equipment and clothing.

b. This CHP applies to all chemical laboratories within CASCOM to include Quartermaster, Ordnance, and Transportation School, and all tenant activities assigned to Fort Lee.

c. Minimize all chemical exposures. Because few laboratory chemicals are without hazards, general precautions for handling all laboratory chemicals should be adopted, rather than specific guidelines for particular chemicals. Skin contact with chemicals should be avoided as a cardinal rule.

d. Do not underestimate the risk. Even for substances of no known significant hazard, exposure should be minimized; for work with substances that present special hazards, special precautions should be taken. One should assume that any mixture will be more toxic than its most toxic component and that all substances of unknown toxicity are toxic.

e. Provide adequate ventilation. The best way to prevent exposure to airborne substances is to prevent their escape into the working atmosphere by use of hoods and other ventilation devices.

f. Laboratory personnel shall not be exposed to airborne concentrations that exceed the more stringent of either the Permissible Exposure Limit (PEL) or Threshold Limit Value (TLV) for a specific compound or mixture IAW AR 40-5. A list of PELs and TLVs is found in 29 CFR part 1910-1000, subpart Z.

13-2. Responsibilities

a. Activities/directorates with laboratories will appoint a Chemical Hygiene Officer (CHO).

b. CHO will:

(1) Develop a CHP and implement guidance for handling hazardous chemicals in the laboratory IAW 29 CFR 1910.1450. Program will be reviewed by the Installation Safety Office and Preventive Medicine Service prior to approval.

(2) Review the CHP at least annually and revise the document as necessary to reflect current regulatory practice.

(3) Review SOPs for all laboratory operations using hazardous chemicals.

(4) Conduct pre-operational surveys of all new laboratory operations using hazardous chemicals.

(5) Request annual surveys from Preventive Medicine Service.

(6) Maintain an inventory of chemicals routinely used in the laboratory and of chemicals that are stored. The inventories should reflect quantity estimates and location of

storage. The Installation Safety Office will annually request an up-to-date Chemical Inventory Log.

(7) Provide training to all employees on the hazards associated with the laboratory operations and maintain records of such training.

(8) Maintain Safety Data Sheets (SDSs) for all chemicals on the chemical inventory. The SDSs should be available so employees have easy access to them.

c. Environmental Management Office will:

(1) Provide guidance on hazardous waste handling and disposal.

(2) Conduct inspections of all laboratories where hazardous waste is generated or stored.

(3) Review plans and specifications for construction to ensure environmental regulatory requirements are met and pollution abatement measures are included.

d. Preventive Medicine Service will:

(1) Review CHP and SOP for all laboratory operations using hazardous chemicals.

(2) Review plans and specifications for all laboratory construction to ensure industrial hygiene requirements are met.

(3) Conduct annual industrial hygiene surveys in laboratories where hazardous chemicals are used IAW AR 40-5 and TB Med 503.

(4) Maintain the Health Hazard Information Module (HHIM) data base for all laboratories IAW AR 40-5 and TB Med 503.

(5) Conduct air sampling of laboratory operations where there is a reasonable probability that employee exposure exceeds the action level for a chemical IAW 29 CFR 1910.1045 and AR 40-5.

(6) Conduct pre-placement, pre-assignment, and periodic job-related medical surveillance for military and Civilian employees potentially exposed to hazardous chemicals IAW AR 40-5.

e. Installation Safety Office will conduct periodic safety inspections of all laboratories.

f. Supervisors will:

(1) Ensure an SOP is prepared for all laboratory operations using hazardous chemicals.

(2) Ensure laboratory personnel receive job-related medical surveillance as identified by the Preventive Medicine Service.

(3) Ensure personnel working with hazardous chemicals are trained on the health and safety aspects of their jobs.

(4) Ensure personnel have received hazard communication training IAW 29 CFR 1910.1200.

(5) Ensure personnel are provided and have received adequate training in the use of personal protective equipment necessary for the operations.

(6) Perform daily inspections of laboratory operations using hazardous chemicals to ensure compliance with the SOP, the CHP, and applicable regulations.

(7) Ensure hazardous waste handlers receive annual hazardous waste training.

g. Laboratory personnel will:

(1) Plan and conduct laboratory operations using hazardous chemicals in accordance with procedures found in the SOP, the CHP, and applicable regulations.

(2) Report hazardous conditions, exposure, or abnormal circumstances associated with an operation to their supervisor.

(3) Report for any job-related medical surveillance examinations.

(4) Manage laboratory waste in accordance with applicable environmental regulations.

h. Acutely toxic compounds, carcinogens and reproductive toxins shall be handled using the special procedures found in appendix A of 29 CFR Part 1910.1450.

13-3. Inventories

a. Inventories shall be available for each room where chemicals are stored or handled. The inventory shall be maintained by the room custodian and list the chemical name, quantity, container type, storage code, date received and expiration date, if applicable.

b. Inventories shall be available, kept current, and provided to the Installation Safety Office and Preventive Medicine Service.

c. Copies of the inventories for a single laboratory building shall be maintained in a central location(s) accessible to firefighters or other response personnel in the event of an emergency.

d. SDS for each chemical on the inventory must be available for workers in the laboratory.

13-4. Personal protective equipment (PPE)

The following PPE shall be available in each laboratory. Follow OSHA standards on use of all personal protective equipment.

- a. Protective apparel compatible with the required degree of protection for substances being handled.
- b. An easily accessible drench-type safety shower and eyewash. Design and installation shall comply with the latest edition of ANSI/ISEA Standard Z358.1 - 2009.
- c. A fire extinguisher.
- d. Respiratory protection, fire alarm, and telephone for emergency use should be available. Selection and use of respirators shall be IAW AR 11-34, TB MED 502, and this regulation.
- e. Other items designated by the laboratory supervisor.

13-5. Air monitoring

Air monitoring shall be conducted when there is a reasonable probability that employee exposure exceeds the action level for a chemical IAW 29 CFR 1910.1045 and AR 40-5.

13-6. Information and training

a. Personnel shall be provided with information and training to ensure they are apprised of chemical hazards in the laboratory. The following health and safety information shall be provided:

- (1) Contents of the OSHA Laboratory Standard and its appendixes.
- (2) Location and availability of the Chemical Hygiene Plan.
- (3) PELs for OSHA regulated substances.
- (4) Signs and symptoms associated with exposure to hazardous chemicals used in the laboratory.
- (5) Location and availability of reference material including SDSs.

b. Personnel handling hazardous chemicals shall be trained. Training shall include the following:

- (1) Details of the Chemical Hygiene Plan.
- (2) Methods and observations that may be used to detect the presence of hazardous chemicals.

(3) Physical and health hazards of chemicals used in the laboratory.

(4) Measures personnel can take to protect themselves from these hazards including use of engineering controls, work practices, and personal protective equipment.

13-7. Hazard communication

Training in hazard communication shall be conducted in accordance with the Installation Hazard Communication Program.

13-8. Medical program

a. Regular medical surveillance shall be established to the extent required by regulations. Consult the Preventive Medicine Services.

b. *Routine surveillance.* Anyone whose work involves regular and frequent handling of toxicologically significant quantities of a chemical should consult the Preventive Medicine Services to determine on an individual basis whether a regular schedule of medical surveillance is necessary.

c. For emergencies, call 911.

13-9. Spills and accidents

a. A written emergency action plan shall be established and communicated to all personnel. It should include procedures for ventilation failure, evacuation, medical care, reporting, and drills.

b. There shall be an alarm system to alert people in all parts of the facility including isolation areas.

c. A spill control policy shall be developed and should include consideration of prevention, containment, cleanup, and reporting. Refer to the internal SOP.

d. All accidents or near accidents shall be reported to the Installation Safety Office and carefully analyzed with the results distributed to all who might benefit.

13-10. Waste disposal program

a. Laboratory wastes shall be handled and disposed of in accordance with applicable federal, state and local environmental regulations and policies.

b. Chemicals shall be handled and stored in such a way that their identity is retained from initial receipt or production to use or ultimate destruction whenever feasible. When chemicals are combined and become part of a laboratory waste mixture, a record of all chemicals in the mixture shall be maintained.

c. SDSs will be maintained on all chemical wastes and provided to the Property Disposal Officer or Environmental Management Office when turned in.

13-11. Emergencies

a. Laboratory buildings shall have a written emergency action plan that includes the following elements:

(1) *Evacuation procedures.* Primary and alternate routes shall be established as necessary and communicated to personnel. Outside assembly areas shall be designated.

(2) *Shutdown procedures.* Instructions for shutting down equipment or apparatus in the event of an emergency shall be documented in SOPs.

(3) *Return procedures.* Procedures shall be developed to ensure personnel do not re-enter the laboratory before the emergency is over.

b. *Fires.*

(1) Laboratory personnel shall not attempt to extinguish large fires. The following steps should be taken:

(a) Confine the fire by closing the hood sash or laboratory doors and fire doors as appropriate.

(b) Immediately evacuate the fire area and call 911.

(2) Incipient stage fires may be extinguished by designated laboratory personnel trained in the use of portable fire extinguishers IAW 29 CFR 1910.157. At least two personnel shall be available when the fire is extinguished. The following steps should be taken:

(a) Alert other personnel and have them notify Fire and Emergency Services.

(b) Extinguish the fire by directing the discharge at the base of the flames.

(c) If the fire cannot be controlled, evacuate the area and implement the guidance in paragraph b(1) above.

c. *Ventilation failure.*

(1) Operations shall be terminated in a safe manner in the event of a low flow condition or complete ventilation failure.

(2) Personnel shall not re-enter the laboratory until ventilation has been restored for at least 30 minutes.

(3) In cases where the operation could not be terminated and there is a reasonable probability that the laboratory atmosphere is unsafe, air monitoring may be necessary before re-entry.

13-12. Records

- a. Accident reports will be sent to the Installation Safety Office.
- b. Inventory and usage records for high-risk substances will be maintained by the using section.
- c. Medical records will be retained by Preventive Medicine Service in accordance with the requirements of state and federal regulations.

13-13. Signs and labels

Prominent signs and labels will be posted.

- a. Telephone numbers of emergency personnel/facilities, supervisors, and laboratory workers.
- b. Labels showing contents of containers, including waste receptacles, and associated hazards.
- c. Location signs for safety showers, eyewash stations, other safety and first aid equipment, exits, and areas where food and beverage consumption and storage are permitted.
- d. Warnings at areas or equipment where special or unusual hazards exist.

13-14. Basic rules and procedures

In addition to the procedures mentioned above, laboratory workers will also follow the rules listed below.

- a. *Accidents and spills.*
 - (1) *Eye Contact.* Promptly flush eyes with water for 15 minutes and seek medical attention.
 - (2) *Ingestion.* Encourage the victim to drink large amounts of water.
 - (3) *Skin Contact.* Promptly flush the affected area with water and remove any contaminated clothing. If symptoms persist after washing, seek medical attention.
 - (4) *Clean-up.* Promptly clean up spills, using appropriate protective apparel and equipment and proper disposal.

b. *Avoidance of routine exposure.* Develop and encourage safe habits and avoid unnecessary exposure to chemicals by any route.

(1) Do not smell or taste chemicals. Use a vent apparatus, such as vacuum pumps, distillation columns, etc., to discharge toxic chemicals into local exhaust devices.

(2) Inspect gloves and test boxes before use.

(3) Do not allow release of toxic substances in cold rooms and warm rooms since these have contained re-circulated atmospheres.

c. *Choice of chemicals.* Use only those chemicals for which the quality of the available ventilation system is appropriate.

d. *Eating, smoking; etc.* Avoid eating, drinking, smoking, gum chewing, or application of cosmetics in areas where laboratory chemicals are present. Wash hands before conducting these activities. Avoid storage, handling, or consumption of food or beverages in storage areas, refrigerators, glassware, or utensils that are also used for laboratory operations.

e. *Equipment and glassware.* Handle and store laboratory glassware with care to avoid damage and do not use damaged glassware. Use extra care with Dewar flasks and other evacuated glass apparatus and shield or wrap them to contain chemicals and fragments should implosion occur. Use equipment only for its designed purpose.

f. *Exiting.* Wash areas of exposed skin well before leaving the laboratory.

g. *Horseplay.* Avoid practical jokes or other behavior that might confuse, startle, or distract another worker.

h. *Mouth suction.* Do not use mouth suction for pipetting or starting a siphon.

i. *Personal apparel.* Confine long hair and loose clothing. Wear shoes at all times in laboratory but do not wear sandals, perforated shoes, or sneakers.

j. *Housekeeping.* Keep the work area clean and uncluttered, with chemicals and equipment being properly labeled and stored. Clean up the work area on completion of an operation or at the end of each day.

k. *Personal protection.* Assure that appropriate eye protection is worn by all persons, including visitors, where chemicals are stored or handled. Wear appropriate gloves when the potential for contact with toxic materials exists; inspect the gloves before each use, wash them before removal, and replace them periodically. Use appropriate respiratory equipment when air contaminant concentrations are not sufficiently restricted by engineering controls, inspecting the respirator before use. Use any other protective and emergency apparel and equipment as appropriate. Avoid use of contact lenses in the laboratory unless necessary; if they are used,

inform supervisor so special precautions can be taken. Remove laboratory coats immediately on significant contamination.

l. *Planning*. Seek information and advice about hazards, plan appropriate protective procedures, and plan positioning of equipment before beginning any new operation.

m. *Unattended operations*. Leave lights on, place an appropriate sign on the door, and provide for containment of toxic substances in the event of failure of a utility service, such as cooling water, to an unattended operation.

n. *Use of hood*. Use the hood for operations which might result in release of toxic chemical vapors or dust.

o. *Vigilance*. Be alert to unsafe conditions and see that they are corrected when detected.

p. *Waste disposal*. Assure that the plan for each laboratory operation includes plans and training for waste disposal.

q. *Working alone*. Avoid working alone in a building; do not work alone in a laboratory if the procedures being conducted are hazardous.

13-15. Safety recommendations

The above rules do not include those that are directed primarily toward prevention of physical injury rather than toxic exposure. However, failure of precautions against injury will often have the secondary effect of causing toxic exposures.

Chapter 14 Bloodborne Pathogen Exposure Control

14-1. General

a. It is impossible to know the status of disease or infection of every person that employees may come in contact with while performing their jobs. The standard precautions to take when the employee is at risk of exposure to bloodborne pathogens are to wear gloves, masks, and goggles.

b. The bloodborne pathogen exposure control plan establishes minimum regulatory requirements for personnel at risk of exposure to blood, body fluids, and other potentially infectious material.

14-2. Scope

Personnel identified to be at risk of exposure to blood, body fluids and other potentially infectious materials by virtue of their occupations are in the MEDDAC Reg 385-1 paragraph 5(a).

14-3. Responsibilities

a. The Infection Control Committee of Kenner Army Health Clinic is proponent for the bloodborne pathogen exposure control plan for the installation.

b. The Installation Safety Office will assist the Infection Control Committee in determining requirements for PPE and environmental controls.

c. Supervisors, as needed, will:

(1) Enforce the use of Universal Precautions/Body Fluid Isolations and PPE for exposed personnel.

(2) Validate the status of Hepatitis B vaccination of all potentially exposed personnel and ensure they either complete the vaccination series or sign a Vaccination Refusal Form listed in MEDDAC Reg 385-1. Forward completed form to Preventive Medicine Services.

(3) Provide exposed personnel with annual training. Maintain training records and forward a copy to the Infection Control Practitioner.

(4) Perform Job Hazard Analyses on tasks in which personnel may be exposed to bloodborne pathogens and write a task-specific SOP or guidelines to decrease exposure risk.

(5) Take appropriate disciplinary action when personnel do not use PPE or environmental controls or fail to perform according to the SOP guidelines.

d. Personnel, as needed, will:

(1) Follow the engineering and work practice controls referenced MEDDAC Reg 385-1.

(2) Use Universal Precautions /Body Fluid Isolation, PPE, environmental controls during tasks in which exposure might occur.

(3) Comply with training and vaccination requirements. Civilian personnel electing not to receive the Hepatitis B Vaccination series will sign the Hepatitis B Vaccination Refusal Form. Personnel who refuse the initial vaccine may change their decision and receive the vaccine at any time as long as they are still considered at risk.

(4) Immediately inform the supervisor of events involving exposure to body fluids and go to Kenner Army Health Clinic (KAHC).

Chapter 15 Ergonomics Program

15-1. General

This program establishes policies, responsibilities, and procedures for implementing the Fort

Lee Ergonomics Program which provides guidance to recognize, control, and prevent work-related musculoskeletal disorders. Command emphasis, commitment by management, and demonstrated visible involvement are imperative to provide the organizational resources and motivation necessary to implement a sound ergonomic policy. All commanders, leaders, managers, and supervisors will ensure that each workstation or environment in their area of responsibility is fitted to the person(s) assigned to that workstation.

15-2. Responsibilities

a. The Installation Safety Office will:

- (1) Evaluate employee workplaces for ergonomic problems upon request of the Occupational Health Office, supervisors, or employees and make recommendations and modifications for corrections.
- (2) Develop and teach a train-the-trainer workshop as needed.
- (3) Assist directors, commanders, and supervisors in resolving ergonomic-related issues.
- (4) Develop and disseminate ergonomic awareness materials.
- (5) Maintain and review injury and illness records related to musculoskeletal disorders to develop trend analysis and countermeasures.
- (6) Assist supervisors in preparing job hazard analyses when needed.
- (7) Assist Occupational Health in identifying, modifying, and resolving work-related musculoskeletal disorders of personnel.
- (8) Chair the Ergonomic Subcommittee Council and hold quarterly meetings.

b. Medical Department Activity (MEDDAC) will:

- (1) Assist in evaluating the workplace for ergonomic problems and make recommendations and modifications for corrections.
- (2) Assist in conducting ergonomic training as needed.
- (3) Provide technical assistance in identifying and resolving ergonomic issues.

c. Mission and Installation Contracting Command (MICC) will:

- (1) Ensure that when activities purchase new furniture, it is ergonomically designed.
- (2) Ensure MICC personnel receive ergonomic training to assist customers with

purchasing furniture and equipment.

d. Directorate of Public Works (DPW) will:

(1) Ensure ergonomic considerations are an integral part of the design, modification, and construction of all facilities.

(2) Consult with trained ergonomic personnel concerning facility modifications and construction.

e. Commanders and Directors will:

(1) Establish and implement an ergonomic plan at figure 15-1.

(2) Ensure supervisors are trained on ergonomic awareness factors applicable to their area of responsibility.

(3) Ensure area of responsibility is periodically evaluated for identification of ergonomic deficiencies and take appropriate corrective action.

(4) Ensure ergonomic considerations are included in all job hazard analyses.

f. Supervisors will:

(1) Develop and implement an ergonomic plan applicable to their area of responsibility.

(2) Provide ergonomic awareness training to employees in their specific work tasks and procedures for recognizing and reporting early signs of work-related musculoskeletal disorders.

(3) Conduct job hazard analyses (JHA) and identify tasks that pose a risk of musculoskeletal disorders, evaluate the tasks, and ensure the risks are reduced or eliminated.

(4) Ensure personnel workstations are properly setup and personnel are trained to properly adjust their furniture and equipment.

(5) Ensure proper use of work/rest breaks which can vary according to the job's physical and psychological demands.

(6) Provide protective equipment to reduce potential ergonomics injury or illness while engineering controls are implemented.

(7) Ensure ergonomic considerations are being integrated into the purchase of new furniture.

(8) Detect early signs of musculoskeletal problems of personnel such as frequent reports of aches and pains or job tasks requiring repetitive, forceful exertions.

Sample Ergonomic Plan

Each activity is required to have a written plan for ergonomics. Commanders, directors, and supervisors at each level will establish and maintain a continuing comprehensive and aggressive ergonomic program throughout areas of responsibilities.

Activity Ergonomic Plan

1. Purpose

To establish a plan for integrating ergonomic standards fitting the work environment to the worker.

2. References

Fort Lee Regulation 385-10, Chapter 15.

3. Scope

This plan outlines the information needed to carry out the procedures and responsibilities in the implementation of ergonomic standards in the work environment.

4. Objective

To reduce the risk of ergonomic-related injuries increasing productivity, job satisfaction, and the quality of work; decreasing lost time from work and costs; and ultimately improving the quality of life.

5. Policy

All personnel will support and participate in the ergonomic program.

6. Responsibilities

Include responsibilities listed in paragraph 15-2 of this chapter and any other additional responsibilities required in specific work areas.

7. Procedures

Procedures shall be set in accordance with paragraph 15-3 of this chapter and specific activity procedures and requirements.

SIGNATURE

Commander/Activity Director

Figure 15-1. Sample ergonomic plan

(9) Send personnel with signs of musculoskeletal disorders to Occupational Health Clinic along with completed Fort Lee Form 1051, Record of Injury. Also contact the Installation Safety Office for workstation evaluations.

g. Individuals will:

- (1) Assist supervisors in identifying ergonomic hazards.
- (2) Report symptoms of possible work-related musculoskeletal disorders or related injuries or illnesses to their supervisor.
- (3) Take mini-breaks or perform a different task if duration is more than one hour.

15-3. Procedures

Ergonomic considerations will be integrated in the job hazard analysis process and conducted in accordance with Army regulations. Worksite analysis implementation of ergonomic hazard control measures will be performed in conjunction with the job hazard analysis.

a. *Worksite analysis.* Problem or hazard identification and detail analysis are essential steps in conducting worksites analysis.

(1) *Problem or hazard identification.* Identification of jobs or worksites with ergonomic risk factors is the first step in the prevention of ergonomic hazards. This is accomplished by direct observation, case referrals, and incident reports. Direct observation may be done by trained personnel or by workers who can identify task or situations which are uncomfortable and may indicate ergonomic risks. Case referrals from Occupational Health Nurse, Industrial Hygienist, or safety personnel may be used to identify a work area with potential ergonomic risk. For example, a computer technician seeks medical care for hand or wrist pain and provides an occupational history that indicates possible worksite risk factors. In this situation, the referral would be from the Occupational Health Nurse to the supervisor. Specific health or performance events such as wrist pain, back pain, or increased mishaps may be indicative of ergonomic risks. Incident reports such as accident reports, occupational and health reports, and supervisor monthly surveys are used to help identify ergonomic risk factors. The following are risk factors that contribute to ergonomic related disorders that should be considered in identifying ergonomic problems or hazards:

- (a) Repetitive motions, especially during prolonged activities.
- (b) Sustained or awkward postures.
- (c) Excessive bending or twisting of the wrist.
- (d) Continued elbow or shoulder elevation, such as overhead work.

- (e) Forceful exertions, especially in an awkward posture.
- (f) Excessive use of small muscle groups, such as pinch grip.
- (g) Acceleration and velocity of dynamic motions.
- (h) Vibration.
- (i) Mechanical compression.
- (j) Restrictive workstations, such as inadequate clearances.
- (k) Improper seating or support.
- (l) Inappropriate hand tools.
- (m) Machine-pacing and production based incentive.
- (n) Extreme temperatures.
- (o) Extended exposure to noise.

(2) The combined effect of several risk factors in a job workstation may lead to a higher probability of causing an ergonomic disorder.

(3) *Detailed analysis.* Detailed analysis is necessary for further evaluation of those jobs or worksites that have been identified as posing an ergonomic hazard. Personnel conducting analysis should systematically:

- (a) Consider the concept of multiple causations.
- (b) Look for trends including age, gender, work task, and time of injury.
- (c) Identify the work task or portions of the process which contain risk factors.

b. *Prevention and control of ergonomic hazards.* The primary method of preventing and controlling exposure to ergonomic hazards is through effective design or redesign of a job or worksite. The following are intervention methods, in order of priority, for preventing and controlling ergonomic hazards:

(1) *Process elimination.* Elimination of the ergonomically demanding process essentially eradicates the hazard. For example, eliminating a meat wrapper's need to use a manual tape dispenser and label applicator by providing an automatic label and tape dispenser.

(2) *Engineering controls.* Develop ergonomic engineering controls in the worksite or

re-design equipment to fit the limitations and capabilities of workers. Equipment or worksite redesign typically offers a permanent solution; for example, the provision of a visual display terminal (VDT) workstation which is adjustable over a wide range of anthropometric dimensions.

(3) *Substitution*. Substituting a new work process or tool without ergonomic hazards for a work process with identified ergonomic hazards can effectively eliminate the hazard. For example, replacing hand tools which require awkward wrist positions, such as extreme wrist flexion, extension, or deviation, with tools which allow a neutral wrist posture.

(4) *Work practices*. Practices which decrease worker exposure to ergonomic risks include changing work techniques, providing employee conditioning programs, and regularly monitoring work practices. It also includes equipment maintenance, adjustment, and modification of current equipment or tools, as necessary.

(a) Proper work techniques include methods that encourage correct posture, use of proper body mechanics, appropriate use and maintenance of hand and power tools, and correct use of equipment and workstations.

(b) Trained ergonomic personnel in consultation with Occupational Health should identify those jobs that require a break-in period. Occupational Health should evaluate those employees returning from a health absence and define the break-in period for each individual employee.

(c) Regular monitoring of operations helps to ensure proper work practices and to confirm that the work practices do not contribute to cumulative trauma injury or hazardous risk factors.

(d) Effective schedules for facility, equipment, and tool maintenance, adjustments, and modifications will reduce ergonomic hazards. This includes ensuring proper working condition, having sufficient replacement tools to facilitate maintenance, and effective housekeeping programs.

(5) *Administrative controls*. Administrative controls can be used to limit the duration, frequency, and severity of exposure to ergonomic hazards. Examples of administrative control include, but are not limited to:

(a) Reducing the number of repetitions by decreasing production rate requirements and limiting overtime work.

(b) Reducing the speed and number of repetitions by reducing line and/or production speed or by having worker input into production speed, such as using worker-based rather than machine-based production speed.

(c) Providing rest breaks to relieve fatigued muscle-tendon groups. The effort required, total cycle time, and the muscle-tendon group involved should determine the length of the rest

break.

(d) Increasing the number of employees assigned to the task, such as lifting in teams rather than individually.

(e) Instituting job rotation as a preventive measure, with the goal of alleviating physical fatigue and stress to a particular set of muscles and tendons. Job rotation should not be used in a response to symptoms of cumulative trauma, as this can contribute to symptom development in all employees involved in the rotation schedule rather than preventing problems. Trained ergonomic and health care personnel should conduct an analysis of the jobs used in the rotation schedule.

(f) Providing limited-duty assignments to allow injured muscle/tendon groups time to rest, assisting in the healing process. Limited-duty assignments should be provided when physical limitations are identified by a health care provider, thereby allowing the worker to return to work performing less than their normal work requirements.

(6) *Personal protective equipment (PPE)*. PPE is not necessarily recommended for controlling exposure to ergonomic hazards, as little research has been conducted to support the claims of its usefulness.

(a) Ergonomic appliances such as wrist rests, back belts, back braces, etc., are not considered to be personal protective equipment. Consultation with trained ergonomic personnel on the effectiveness of such devices should be made prior to purchase.

(b) PPE should be provided in a variety of sizes, accommodate the physical requirements of workers and the job, and should not contribute to ergonomic hazards.

c. Health care management. Early recognition and medical management of ergonomic disorders are critical to reduce the impact of injury on both the employee and employer.

(1) Common symptoms of musculoskeletal ergonomic disorder can include, but are not limited to, pain, tingling, numbness, stiffness, and weakness in the neck, shoulders, arms, hands, back, and legs. Other symptoms can include headaches, visual fatigue, and increased errors.

(2) Service Members and employees with symptoms of ergonomic disorders should report to medical personnel for an evaluation. Active duty Service Members should report to their primary care provider. Civilian employees should report to Occupational Health with Fort Lee Form 1051, Record of Injury.

(3) Supervisors should ensure that symptomatic Service Members and employees report for a medical evaluation in a timely manner.

d. Training and education. The Installation Safety Office in conjunction with MEDDAC will conduct train-the-trainer ergonomic education for designated collateral duty personnel.

(1) *Training curriculum.* Training will consist of, but not be limited to the following:

(a) The potential risk of ergonomic disorders.

(b) The possible causes and symptoms.

(c) How to recognize and report symptoms.

(d) The means of prevention.

(e) The sources of treatment.

(2) *Types of training:*

(a) *General.* Employees who are potentially exposed to ergonomic hazards should receive formal instruction on hazards associated with their jobs and equipment. This training could be conducted at the initial orientation and annually thereafter.

(b) *Specific training.* New employees and reassigned workers should receive an initial orientation and hands-on training prior to being placed in a full production position. The initial orientation should include a demonstration of the proper use, care, and operating procedures for all tools and equipment; use of safety equipment; and the use of safe and proper work procedures such as proper lifting techniques.

Chapter 16

Indoor Air Quality

16-1. General

Good indoor air quality is an environment that contributes to a favorable, productive atmosphere and enables building occupants to experience a sense of well being. This chapter establishes guidelines for facility managers, Collateral Duty Safety Officers, and managers to provide a safe and healthful workplace for all administrative areas.

16-2. Policy

Although there is no specific policy on indoor air quality, employers are required to furnish employees a safe and healthful workplace. This includes good indoor air quality. The Indoor Air Quality Committee will assist with solutions or instructions on actions to take concerning various odors, mold or moisture problems.

16-3. Responsibilities

a. Indoor Air Quality (IAQ) Committee is comprised of members of the Installation Safety Office, Directorate of Public Works (DPW), Operations and Environmental Management Office (EMO), and Preventive Medicine Services (PMS). The IAQ Committee will evaluate employee indoor air quality concerns/complaints and will work together to make recommendations for air quality improvement.

b. Supervisors will:

(1) Evacuate the building and then call 911 if there is a suspected gas leak.

(2) Report water leaks, mold or mildew growth, and unusual odors to Facility Managers or DPW either by calling in a service order or preparing a work order. Supervisors can also contact a member of the Indoor Air Quality Committee to evaluate the situation.

(3) Work with Facility Manager, DPW, and contract personnel to ensure indoor air quality is maintained during renovations, installations, or applications which might alter the indoor environmental conditions.

(4) Enforce the following practices to help indoor air quality:

(a) Do not cover or block vents and diffusers.

(b) Ensure employees refrain from opening windows when the heating, ventilating, and air conditioning (HVAC) system is being utilized.

(c) Avoid using room deodorizers.

(d) Do not park or operate vehicles or other exhaust producing equipment near buildings.

(e) Wipe surfaces with a damp cloth to reduce dust.

(f) Do not allow food to be left in trash cans overnight.

c. Facility managers will:

(1) Ensure all inhabitants of administrative areas will have a healthful and safe area to include proper indoor air quality and thermal comfort.

(2) Initiate work orders to correct deficiencies and route them through the Installation Safety Office for a Risk Assessment Code (RAC).

(3) Become familiar with the mechanical systems of the facility with the aid of DPW. Inspections by the facility manager and the union representative with maintenance personnel should be encouraged.

(4) To ensure good indoor air quality, the following actions will be taken:

(a) All sources of water and moisture incursion are identified and fixed as soon as possible. Dry water damaged areas within a 24 to 48 hour period to prevent mold growth.

Indoor relative humidity levels should not exceed 60 %; ideal levels should be kept between 30% and 50%.

(b) Filter media is changed on schedule.

(c) Condensate trays are kept dry and serviceable, and drain lines are kept clear.

(d) Outside air inlets, if applicable, are kept in the open position.

(e) All diffusers remain in the open position.

(f) Employees will not be exposed to any chemicals during cleaning and rescaling of HVAC systems in the proximity of the workplace.

(g) No unauthorized personnel will adjust, open, close, or otherwise tamper with diffusers, thus affecting the ventilation balance.

(h) Contract representatives will interface with the activity supervisor and facility manager before any chemicals are used or any work is done in the facility to ensure a safe environment is maintained at all times.

(i) Pesticide applications, carpet or flooring installations or general renovations in occupied facilities will be executed only after the supervisor and facility manager have had proper coordination with the contractor to ensure provisions have been made for hypersensitive employees.

(j) Be vigilant in keeping ventilation air supply sources free of vehicle exhaust emissions or any other undesirable fumes.

(k) Request an indoor air quality assessment by the IAQ Committee in writing explaining the need for a survey, such as increased illnesses, headaches, etc.

(l) Clean areas where mold colonies are suspected that are less than 10 square feet in size. Clean soiled hard surfaces with water and detergent, and dry completely. Absorbent materials such as ceiling tiles that are moldy will need to be replaced.

(m) Problems of acute illness involving life and health will require calling 911 for assistance.

(5) *Thermal comfort.*

(a) In the winter during the heating season, thermostats will be set at 68 degrees Fahrenheit.

(b) In the summer during cooling season, temperatures will be set to 74 degrees Fahrenheit.

(6) In case of mechanical ventilation failure, common sense will prevail.

(a) Attempt to relocate personnel to work areas with proper temperature.

(b) Release personnel on administrative leave only after proper chain of command and Civilian Personnel Advisory Center have been consulted.

(7) *Energy Conservation.*

(a) Extenuating circumstances may necessitate building supply air systems to be operated regardless of weekend or holiday schedules. This will be determined as the need arises.

(b) Extenuating medical circumstances for personnel will be identified to the Occupational Health Physician for resolution.

Chapter 17

Ammunition and Explosives Safety

17-1. General

Safety as it relates to explosives is an important aspect of an Army mission. Maintaining the proper balance between absolute safety in an inherently hazardous mission and total disregard for risk to life and property is what our explosives programs must strive to achieve. The catastrophic potential for accidents during handling, storage, and use of ammunition/explosives (AE) must be guarded against by implementation of safety principles.

17-2. Responsibilities

a. Commanders at all levels are responsible for the protection of personnel and equipment under their command and for the effective implementation of ammunition and explosives safety standards, IAW references below.

b. Installation Safety Office will:

(1) Inspect Ammunition Supply Points (ASP) at least semi-annually.

(2) Inspect all arms rooms twice annually using the Fort Lee Form 385-4, Arms Room Checklist, at the end of this regulation.

(3) Furnish local ammunition license for ASP storage. Coordinate with the Quality Assurance Specialist Ammunition Surveillance (QASAS) for assistance.

(4) Investigate ammunition and explosives accidents IAW AR 385-10, chapter 3.

(5) Assist units with determining quantity distance (QD) requirements.

- (6) Convene/chair the Installation Ammunition Certification Board quarterly .
- (7) Provide the local Armorer and Ammo Handlers safety awareness training quarterly.
- (8) Issue arms room licenses with the QASAS assistance.

c. DOL Ammunition Officer will:

- (1) Ensure magazines comply with license for amount of explosives and compatibility.
- (2) Ensure units return amount of brass and unfired ammunition equal to amount initially drawn from ASP.
- (3) Notify the Installation Safety Office of QASAS inspections and furnish the Installation Safety Office with a copy of the report.
- (4) Ensure the lightning protection system is mechanically checked every 24 months and visually checked every 6 months. Furnish the Installation Safety Office a copy of the lightning protection system survey report.
- (5) Furnish Fire and Emergency Services an inventory of ammunition in each magazine annually or when significant changes occur.

d. Supervisors and operating personnel will:

- (1) Be responsible for accident prevention to the same extent that they are responsible for production or other services.
- (2) Maintain a safe and healthful workplace.
- (3) Assure personnel under their supervision observe all appropriate ammunition and explosives safety standards, to include the use of personal protective equipment when handling chemical ammunition.
- (4) Promptly evaluate and take appropriate action as required to correct hazards reported by personnel or identified through accident investigations.
- (5) Require subordinate supervisors to assist in explosive safety awareness.
- (6) Supplement HQDA safety directives with more detailed and specific instructions to support missions and environments.
- (7) Identify in writing personnel immediately responsible for supervising each explosives operation and for ensuring the use of safe practices.

(8) Ensure that necessary technical manuals and SOPs are available for each explosives operation.

17-3. Accident reporting, investigation, and analysis

a. Unit commanders will:

- (1) Immediately cease fire.
- (2) Contact Ammunition Officer.
- (3) Contact the Installation Safety Office.
- (4) Relate available information pertaining to accident.
- (5) Secure malfunction site.
- (6) Contact Explosive Ordnance Disposal (EOD) office.
- (7) Send preliminary report IAW AR 75-1.

b. Ammunition Officer or QASAS will:

- (1) Instruct unit to retain residue.
- (2) Assign malfunction number.
- (3) Gather malfunction data.
- (4) Locally suspend affected ammunition.
- (5) Ensure prompt and complete report is submitted to Joint Munitions Command (JMC) for dud and misfire reporting rates and copy furnished to the Installation Safety Office.
- (6) Coordinate JMC on-site investigation if required.
- (7) Interview witnesses.
- (8) Inspect site.
- (9) Inspect weapon.
- (10) Inspect impacted unpacked ammo/residue.
- (11) Submit detailed report to CDR, Joint Munitions Command (JMC) Surveillance Office, Rock Island, IL, within 10 calendar days.

- (a) Include photos.
 - (b) Include all data required by DA Form 4379 and AR 75-1.
 - (c) Furnish information copy to Installation Safety Office.
- c. EOD will assess safety of ammunition/residue and take action required by AR 75-15.

17-4. Unit arms room

- a. Temporary ammunition storage/holding in unit arms room requires an approved explosive storage license issued by the Installation Safety Office.
- b. Prior to a unit storing/holding any AE in an arms room, the unit commander will approve the CRM worksheet. The CRM worksheet must be coordinated with the Installation Safety Office prior to issuing the AE storage license. The approved CRM-worksheet must be posted in the arms room.
- c. Commanders shall initiate an authorization memo stating the quantity of ammunition required for a specific operational necessity or immediate training operations. The authorization memo must be posted in the arms room.
- d. Appointed Armorer, or personnel handling ammunition, must complete the Installation Armorer and Ammo Handlers Safety Awareness training.
- e. The approved CRM worksheet will be briefed to arms room personnel annually.
- f. An arms room SOP with safety procedures and awareness must be posted inside the arms room.
- g. The appropriate fire explosive symbol will be posted on all arms room doors and/or outside the building when storing ammo/explosives.
- h. All double stacked weapon racks will be properly secured/anchored for personnel safety.
- i. Inform the Installation Safety Office and Fire and Emergency Services when holding ammo/explosives.
- j. Request temporary authorization when licensed quantity limits may be exceeded for training or operational events.

17-5. Transporting

- a. Units will:

(1) Ensure all packages/boxes are marked “THIS END UP” and stacked properly on pallets.

(2) Check load for correct compatibility and class of ammunition.

(3) Ensure no smoking within 50 feet or no open flames within 100 feet during loading or unloading.

(4) Allow no smoking during transport.

(5) Turn engine off during loading and unloading.

(6) Handle explosives with care and never overload the vehicle.

(7) Carry two fire extinguishers and know how to use them.

(8) Ensure that no loading is done near the vehicle exhaust.

(9) Close and secure the tailboard or tailgate; no loading on the tailgate.

(10) Do not drive past a fire on the highway without first making sure it is safe to do so.

(11) Never push or tow a truck carrying explosives except to move it off the road.

(12) Do not transport detonating caps with other explosives.

(13) Avoid congested areas and heavy traffic.

(14) Drive a safe distance away from other traffic and avoid sudden stops.

b. Any class A or class B ammunition and explosives transported over public highways require state permit and vehicle markings with the appropriate DOT hazardous material placards posted at the front, rear, and both sides of the vehicle..

c. Personnel must complete a Hazardous Transportation Course (AMMO 62), IAW 49 CFR 172.700 -704 for cargo certifying shipments of hazardous materials for transporting Class A or Class B ammunition and explosives on U.S. government highways.

Chapter 18

Safety Awards

18-1. General

a. The Safety Awards Program is to recognize and reward personnel and units for making significant contributions to the Fort Lee Safety Program and to encourage individuals to participate in a proactive safety program. The program is designed to instill a sense of pride and accomplishment in promoting safety.

b. Awards will be made to individuals or units based on their total safety record or specific steps taken to correct a hazard or prevent an injury.

18-2. Responsibilities

a. Directors/supervisors will:

(1) Recognize their employees when contributions are made through safe, efficient mission performance and accident prevention measures, and for their support in the Fort Lee Safety Program.

(2) Present a U.S. Army Safety Award, Fort Lee Safety Award, or CASCOM Safety Award to individuals who have at least one accident-free year performance. This award will normally be for those employees whose work requires constant alertness and safe work practices, such as motor vehicle operations, heavy equipment operators, mechanic, etc.

(3) Document awards in the individual's personnel file. Safe driving awards will be documented on the individual's DA Form 348.

(4) Present awards to recipients at suitable ceremonies to emphasize management's concern to reduce accidents/injuries.

b. The Installation Safety Office will: Recognize deserving individuals/units at an installation safety awards ceremony, unit awards ceremonies, staff meetings, or on-the-spot.

18-3. Criteria Fort Lee awards

a. Collateral Duty Safety Officers will:

(1) Have held the office at least one year.

(2) Promote safety in the workplace.

(3) Conduct annual inspections of assigned office buildings and barracks; submit inspection forms to the Installation Safety Office.

(4) Ensure that deficiencies found on inspections are either corrected or that service or work orders are submitted to DPW for correction.

(5) Follow up on safety-related service or work orders.

- (6) Ensure attendance of personnel in all mandated safety training.
- (7) Provide seasonal or holiday safety briefings.
- (8) Play an active role in the annual Installation Safety Day.
- (9) Ensure all accidents are reported and required accident reports are submitted to the Installation Safety Office in a timely manner.

b. Supervisors will:

- (1) Promote and emphasize safety awareness throughout the use organization.
- (2) Ensure safety procedures are implemented and adhered to.
- (3) Ensure SOPs are written and implemented.
- (4) Complete Job Hazard Analyses for all tasks performed by employees.
- (5) Conduct risk assessments.
- (6) Ensure employees wear appropriate personal protective equipment and clothing.
- (7) Ensure employees receive all mandated safety training.
- (8) Appoint Collateral Duty Safety Officers and ensure they are trained.

c. Service Members and Civilians will:

- (1) Report hazards in the workplace to responsible personnel.
- (2) Take continuous action to correct safety deficiencies in the workplace.
- (3) Develop safety promotions/procedures for the unit/activity.

d. Drivers of Army Motor or GSA Vehicles will:

- (1) Possess a valid DA motor vehicle operator's permit for truck, a state driver's license for sedans and a current accident avoidance card.
- (2) Operate a government vehicle/GSA vehicle, whether truck or sedan, for 12 consecutive months or longer without an accident.

e. Units/Directorates will:

- (1) Have no lost time injuries or reportable motor vehicular accidents for a year.
- (2) Developed and implemented safety initiatives.

18-4. Selection and presentation

a. Supervisors/directors can:

- (1) Select and present awards to their employees any time of the year.
- (2) Provide to the Installation Safety Office a short justification of their employee's/unit's accomplishments. The Installation Safety Office will complete the U.S. Army, CASCOM, or Garrison safety certificate.

(a) United States Army in Safety, DA Form 1119-1.

(b) United States Army Combined Arms Support Command Certificate of Achievement, Fort Lee Form 385-6.

(c) United States Army Garrison Safety Certificate of Achievement, Fort Lee Form 1124.

b. Members of the Installation Safety Office may recommend individuals or units deserving recognition to the Director of Safety. These awards can be presented any time of the year.

18-5. Army safety awards

The awards listed below are additional awards which can be presented to units and individuals. Criteria for these awards are in AR 385-10. They can be initiated by the unit commander. Nominations will be submitted through the unit's chain of command to the Installation Safety Office for review. The Installation Safety Office will forward them to the appropriate higher headquarters.

a. *Unit accident prevention awards.*

- (1) Army Exceptional Organization Safety Award.
- (2) Director of Army Safety, Composite Risk Management Award.
- (3) Army Industrial Operations Safety Award.
- (4) Army Excellence in Explosive Safety Award.
- (5) Army Accident Prevention Award of Accomplishment.

b. *Individual accident prevention awards.*

- (1) Army Individual Award of Excellence in Safety.
- (2) Director of Army Safety, Composite Risk Management Award.
- (3) Sergeant Major of the Army, Superior Service Member Safety Award Plaque.
- (4) United States Army Safety Guardian Award.

Chapter 19

Recreation Safety

19-1. General

Because Fort Lee is a training post, and jogging and walking are excellent forms of exercise, there are many pedestrians walking and jogging on the roadways, especially during the hours of darkness and times of limited visibility. In addition, bicycles, skateboards, rollerblading, roller-skating, scooters, and ATVs pose dangers of their own, so extra precautions must be taken.

19-2. Personal safety precautions while walking/jogging

Drivers of automobiles, as well as trucks and military buses, have difficulty in seeing joggers, especially in the early morning and late afternoon. All persons using installation roadways for recreational walking and jogging will wear retro-reflective clothing, which is visible in all directions, between the hours of dusk and dawn to provide motorists warnings of pedestrian presence.

a. School commandants and unit commanders will advise incoming personnel in welcome packages and in orientation briefings of pedestrian safety precautions contained in this regulation.

b. Directorate of Family Moral, Welfare, and Recreation (DFMWR) will:

(1) Notify Fort Lee Lodging guests of the pedestrian safety precautions contained in this regulation and will provide retro-reflective clothing and flashlights for guest check-out.

(2) Provide retro-reflective clothing and flashlights at physical fitness facilities for check-out.

c. While walking and/or jogging, pedestrians will.

(1) Face traffic when traveling on the roadway shoulders.

(2) Carry flashlights while running during hours of darkness and limited visibility. Retro-reflective clothing is not required for trips of minimal duration, such as crossing a roadway from a parking lot to a building.

(3) Avoid areas with potholes or uneven surfaces which can cause trips and falls and streets with heavy traffic.

(4) Stay off the roadways when road crews are clearing them after snow and ice storms.

(5) Wait on the curb for traffic to pass.

(6) Jog in single file.

(7) Not enter the portion of the roadway used by vehicular traffic except when crossing the street, while on roadways where the speed limit is 15 mph or less, or when the terrain does not permit use of the shoulder or sidewalk.

(8) Not impede the flow of vehicular traffic on any roadway.

(9) Not jog or walk on streets and sidewalks wearing headphones or earphones.

(10) Not jaywalk or disregard traffic signals, stop signs, and crosswalks.

19-3. Bicycle safety

a. Bicycles operating on the roadways of this installation during the hours of darkness, between dawn and dusk, will be equipped with reflective markings, front and rear, a headlight . Markings may be either reflectorized paint or tape not less than 4 inches in length.

b. All personnel riding bicycles on Fort Lee will wear approved helmets. An approved helmet is one that meets or exceeds the American National Standards Institute (ANSI) or SNELL Memorial Foundation Standards for bicycle helmets.

c. The use of headphones and earphones is prohibited while operating a bicycle on Fort Lee.

d. Provost Marshal is responsible for the enforcement of this requirement.

e. Unit commanders will:

(1) Ensure Service Members under their command are familiar with this requirement.

(2) Enforce the policy found in this regulation in areas under unit control.

19-4. Skateboarding, rollerblading, roller-skating, and riding on scooters

a. All personnel on Fort Lee will wear helmets when skateboarding, rollerblading, roller-skating, and riding on battery/gasoline powered scooters.

b. The use of headphones and earphones is prohibited while skateboarding, rollerblading, roller-skating, and riding on scooters on Fort Lee.

19-5. Operation of All-Terrain Vehicles (ATVs)

ATVs are off-road motorized vehicles requiring a high degree of operator skill and large operations field environment. Because of the many ATV-related injuries and deaths, the operation of three- or four-wheel ATVs for recreation on Fort Lee property is prohibited. Only PMO and EMO are authorized to use ATVs on post. They have met the requirements of AR 385-10, para 11-9, which states Government ATV operators will complete the Specialty Vehicle Institute of America based course.

19-6. Hunting program

a. Environmental Management Office (EMO) and the Directorate of Family Morale, Welfare, and Recreation (DFMWR) will complete a risk assessment for review by the Installation Safety Office prior to changing any hunting area.

b. The Installation Safety Office will:

- (1) Monitor the effectiveness of enforcement of the hunting regulation.
- (2) Attend regular hunting meetings.
- (3) Review risk assessments and make recommendations.

19-7. Community events

a. Activities will conduct and provide written risk assessments to the Installation Safety Office prior to the event.

b. The Installation Safety Office will review risk assessments and conduct safety inspections prior to the event.

Chapter 20 Weather

20-1. Heat injury prevention

a. *General.*

(1) Exposure to excessive heat may cause injury and threaten the well-being of military and Civilian personnel. Heat injuries pose a threat to personnel involved in both indoor and outdoor exercise and operations. Heat injuries are preventable and can be avoided by following the precautions outlined in TB Med 507 and this regulation.

(2) Commanders/directors will designate, either verbally or in writing, "mission essential" personnel by name and/or position. These individuals will be made aware of their responsibility to report for duty regardless of temperature and humidity levels.

b. Responsibilities.

(1) Installation Operations Center (IOC) will notify all organizations via email and some by telephone when the heat category is 3 or above.

(2) The Civilian Personnel Advisory Center (CPAC) will notify the appropriate unions when the decision is made to administratively dismiss Civilian personnel.

(3) Directors/supervisors will take precautions and administrative action as required for indoor and outdoor work under excessive heat as outlined below.

(4) Commanders will ensure Wet Bulb Globe Temperature (WBGT) monitors are located in all training areas and used by trained personnel.

c. Curtailment/release guidance.

(1) *Personnel working outside.* At the beginning of the hot weather season, work/training schedules should make allowance for an acclimatization period of approximately 2 weeks. Where possible, outside work/training should be scheduled during the cooler parts of the day. During this acclimatization period, work/training schedules should provide for increasingly longer work periods alternating with rest periods.

(2) The WBGT Index is a temperature by which air temperature, air movement, relative humidity, and radiant heat can be expressed as favorable or unfavorable for certain types of activities. The following guidance will be adhered to for outside activities upon receipt of WBGT observations:

(a) If the WBGT Index exceeds 82 degrees Fahrenheit (CAT II), caution must be used in planning heavy work or exercise for troops/workers that are not acclimatized.

(b) When the WBGT Index reaches 85 degrees Fahrenheit (CAT III), strenuous work should be suspended during the acclimatization period. After personnel have been acclimatized, work may be carried on at a reduced scale at this temperature. Frequency and/or duration of rest or relief periods should be increased. Care should be taken that ample water is consumed and that appropriate clothing is worn.

(c) When the WBGT Index reaches 88 degrees Fahrenheit (CAT IV), strenuous work should be curtailed for all personnel during the acclimatization period. Acclimatized personnel who are in good physical condition can continue to work at a reduced scale at a WBGT of 88 degrees Fahrenheit to 90 degrees Fahrenheit for periods not exceeding 6 hours a day. Frequency and duration of rest or relief periods should be increased. Care should be taken to insure that ample water is consumed and that appropriate clothing is worn.

(d) When the WBGT Index reaches 90 degrees Fahrenheit (CAT V), non-essential or non-mission outside work should be halted. Efforts should be made to provide inside work for those employees whose outside activities have been suspended. For example, when grass mowing operations are suspended, grass mowing equipment could be taken to the shop for operator maintenance.

(e) Use the WBGT index as a guide. In addition to the above, follow table 20-1 which is the Work/Rest Water Consumption Table. Good judgment on the part of the supervisor is essential in scheduling or curtailing outside training/work. The above guidance is general and cannot cover every possible situation. Each case must be considered on an individual basis. Supervisors must consider intensity of the work, physical condition of employee, acclimatization factors, duration of task, WBGT, and importance of the task.

(3) *Command Ceremonies.* During periods of excessive heat, command ceremonies will be conducted in the morning hours.

d. *Recognition of heat injury.* Commanders, cadre, medical, and safety personnel should be knowledgeable in recognition, prevention, and emergency treatment of heat illnesses. Preventive Medicine Service (PMS) personnel are available as consultants on prevention of heat injuries.

(1) *Heat cramps.* Heat Cramps are a form of muscle cramp brought on by exertion and insufficient salt.

(2) *Fainting.* Fainting can occur in an effort to cool the body. Skin blood vessels dilate so much that blood flow to the brain is reduced, resulting in symptoms of dizziness, headache, nausea, vomiting, and fainting.

(3) *Heat exhaustion.* Heat Exhaustion occurs when more fluid is lost from sweating and respiration than is taken in, so there is not enough fluid to cool the body off.

(4) *Heat Stroke.* Heat Stroke is caused by an increase in the body's core temperature and can lead to death. The body has plenty of fluid, but the external temperature is too much so the body is unable to eliminate its excess heat.

Work/Rest and Water Consumption Table

Applies to average sized, heat-acclimated soldier wearing BDU, hot weather. (See TB MED 507 for further guidance.)

Easy Work	Moderate Work	Hard Work
<ul style="list-style-type: none"> • Weapon Maintenance • Walking Hard Surface at 2.5 mph, < 30 lb Load • Marksmanship Training • Drill and Ceremony • Manual of Arms 	<ul style="list-style-type: none"> • Walking Loose Sand at 2.5 mph, No Load • Walking Hard Surface at 3.5 mph, < 40 lb Load • Calisthenics • Patrolling • Individual Movement Techniques, i.e., Low Crawl or High Crawl • Defensive Position Construction 	<ul style="list-style-type: none"> • Walking Hard Surface at 3.5 mph, ≥ 40 lb Load • Walking Loose Sand at 2.5 mph with Load • Field Assaults

Heat Category	WBGT Index, F°	Easy Work		Moderate Work		Hard Work	
		Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)
1	78° - 81.9°	NL	½	NL	¾	40/20 min	¾
2 (GREEN)	82° - 84.9°	NL	½	50/10 min	¾	30/30 min	1
3 (YELLOW)	85° - 87.9°	NL	¾	40/20 min	¾	30/30 min	1
4 (RED)	88° - 89.9°	NL	¾	30/30 min	¾	20/40 min	1
5 (BLACK)	> 90°	50/10 min	1	20/40 min	1	10/50 min	1

- The work/rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hrs of work in the specified heat category. Fluid needs can vary based on individual differences (± ¼ qt/hr) and exposure to full sun or full shade (± ¼ qt/hr).

- NL = no limit to work time per hr.
- Rest = minimal physical activity (sitting or standing) accomplished in shade if possible.

- CAUTION: Hourly fluid intake should not exceed 1½ qts.

Daily fluid intake should not exceed 12 qts.

- If wearing body armor, add 5°F to WBGT index in humid climates.

- If doing Easy Work and wearing NBC (MOPP 4) clothing, add 10°F to WBGT index.

- If doing Moderate or Hard Work and wearing NBC (MOPP 4) clothing, add 20°F to WBGT index.

For additional copies, contact: U.S. Army Center for Health Promotion and Preventive Medicine Health Information Operations Division at (800) 222-9698 or CHPPM - Health Information Operations@apg.amedd.army.mil.
For electronic versions, see <http://chppm-www.apgea.army.mil/heat>. Local reproduction is authorized.
June 2004



CP-033-0404

Table 20-1. Work/Rest and Water Consumption Table

e. *Procedures for the preventing heat injury.* Water loss must be replaced, preferably by periodic intake of small amounts of water throughout the work period. Thirst is not an adequate indicator for water intake since it means the body is already low on fluids. Personnel with ample water supplies will frequently dehydrate unless drinking is encouraged or required by command. However, water intoxication or over-hydration occurs by drinking too much water too quickly. This dilutes the electrolytes in the blood causing interference with brain, heart, and muscle functions and may result in death. Symptoms of water intoxication are the same as other heat injuries although bloating and swelling may also exist. More serious symptoms include vomiting, muscle twitching, delirium, seizures, and coma. Therefore, hourly fluid intake should not exceed 1.5 quarts.

20-2. Cold weather injury prevention

a. *General.* Successful cold injury prevention requires vigorous command leadership and proper use of preventive measures which are enforced. Prior planning, cold weather training, and the provision of proper clothing and equipment are paramount. Direct specific preventive measures toward conservation of total body heat, and avoiding unnecessary prolonged exposure of personnel to cold, moisture, and activities favoring cold injury.

b. Responsibilities.

(1) The Installation Safety Office will promote cold weather injury prevention and provide supervisors and safety officers/NCOs with written materials and videos upon request.

(2) Commanders will:

(a) Appoint a cold weather injury prevention officer/NCO in accordance with TB Med 81.

(b) Include safety in planning.

(c) Ensure suitable cold weather gear is available and serviceable, taking appropriate exercises to avoid constriction of the extremities by clothing and footgear.

(d) Train supervisors in cold weather responsibilities.

(e) Train troops in cold weather injury prevention procedures, proper cold weather operational procedures, and carbon monoxide hazards.

(f) Ensure all equipment is ready, such as weapons winterized and tent stoves checked.

(g) Monitor cold weather for changes to prevent cold weather injuries. Refer to the Installation Safety Office website or SharePoint Portal to access reference materials “Wind Chill Chart” and “Cold-Weather Casualties and Injuries Chart.”

(h) Frequently observe Service Members/employees for early signs and symptoms of cold injury.

(i) Follow guidance in TB Med 81 and other policies.

(3) Cold weather control officer/NCO will:

(a) Follow guidance in TB Med 81 and other appropriate guidelines and policies to prevent cold weather injuries.

(b) Frequently observe Service Members for early signs and symptoms of cold injury.

(c) Encourage taking appropriate exercises to avoid constriction of the extremities by clothing and footgear.

(4) Individual Service Members will:

(a) Be familiar with cold weather injury signs and symptoms, and watch for them by doing self-checks and observing others.

(b) Be familiar with cold weather injury prevention procedures, proper cold weather operational procedures, and carbon monoxide hazards.

(c) Maintain cold weather gear in serviceable condition and wear it as directed by leaders.

c. Types of Cold Weather Injuries.

(1) *Hypothermia.* Hypothermia occurs when the body is exposed to colder temperatures or aggravated by wetness, wind, and exhaustion, and is unable to recover the body heat that is lost. Severe hypothermia can lead to death.

(2) *Frostnip.* Frostnip is the freezing of the top layers of the skin tissue and is generally reversible. Skin is white, waxy, and numb. The top layer feels hard and rubbery but deeper tissue is still soft. It is typically seen on cheeks, earlobes, fingers, and toes.

(3) *Frostbite.* Frostbite includes freezing all layers of the skin and possibly freezing muscle and bone. Skin is white and wooden-feeling all the way through and possibly without feeling.

(4) *Trench Foot.* Trench Foot is caused by prolonged exposure of the feet to cool, wet conditions. This can occur at temperatures as high as 60 degrees Fahrenheit if the feet are constantly wet. The skin is initially reddened with numbness, tingling pain, and itching, then becomes pale and mottled and finally dark purple, grey or blue. If circulation is impaired for more than 24 hours, the victim may lose the entire foot. Service Members should check their

feet regularly to see if they are wet; change socks at least once a day and do not sleep with wet socks. Cases of trench foot should not walk out but be evacuated by litter since the feet are susceptible to damage by walking on them.

(5) *Chilblains*. Chilblains are caused by repeated exposure of bare skin to cold but above freezing temperatures. Redness and itching will appear, particularly on the cheeks, ears, fingers, and toes. The redness and itching will return with future exposure because the cold exposure causes permanent damage to the capillaries, and the redness and itching will return with future exposures.

(6) *Snow Blindness*. Snow blindness occurs when there is glare from ice and snow. This condition is not likely to occur on a hazy or cloudy day. A scratchy feeling when eyelids close could be an early symptom of snow blindness.

(7) *Dehydration*. Dehydration is an abnormal depletion of body fluids which occurs during cold weather because liquids are difficult to find and inconvenient to drink.

(8) Slower thinking and reaction time are phenomena of low temperatures and can cause accidents.

d. *Prevention*. Prevention is the buddy system and self-check by watching out for signs and symptoms.

(1) All personnel are susceptible to cold injury. Certain factors increase the likelihood of sustaining injury.

(a) A previous cold injury increases the risk for another cold injury.

(b) Fatigue contributes to cold injury. Personnel may become exhausted and fail to carry out simple preventive measures.

(c) Nicotine and alcohol greatly increases the danger of cold injury.

(d) Too little physical activity contributes to cold injury causing a decreased body heat production. Over-activity, with rapid and deep breathing, can cause the loss of large amounts of body heat and perspiration markedly reduces the insulating quality of clothing.

(2) Proper dressing includes wearing one pair of socks and glove inserts at a time. Several loose layers of clothing are recommended. When sweating during hard work, remove a layer or two of clothing. Protect ears and nose when temperatures are extremely low. Wear insulated boots in cold, damp weather and in snow, slush, or when the ground is frozen. This is especially important when movement is limited or when riding in open vehicles.

(3) Keep the body, especially the feet, clean and dry by changing socks and massaging feet at least every 12 hours or whenever there is a break in action.

(4) Avoid extremes of activity and inactivity; exercise the feet and hands; and massage the face for better blood circulation.

(5) When possible, eat hot foods and drink warm liquids when exposed to cold weather.

(6) Sit or stand on insulating material such as cardboard instead of cold or wet ground.

(7) Avoid handling cold materials with bare hands. Avoid letting any bare skin touch cold metal, snow, or other objects that retain the cold.

(8) In extreme cold, tighten and relax arm and leg muscles, do knee bends, stamp feet, run in place, or wiggle toes and fingers. If possible, elevate feet to help blood circulation.

(9) Remove boots before getting into sleeping bags.

e. *Treatment.* Seek medical treatment as soon as possible.

f. *Prevention of Carbon Monoxide Overexposure.* Commanders will:

(1) Ensure personnel are trained in the hazards of carbon monoxide.

(2) Ensure personnel know the most common source of carbon monoxide is the exhaust from internal combustion engines and field heaters in confined spaces without adequate ventilation; for example, communication vans and other enclosed areas where portable internal combustion engines and heaters are used.

(3) Ensure personnel do not sleep in, on, or near fuel-powered vehicles while the engine or heater is running.

(4) Provide adequate ventilation when engines, generators, battery chargers, and space heaters are operated.

(5) Ensure personnel are trained to recognize the warning signs and symptoms of carbon monoxide overexposure and how to perform emergency first aid treatment.

(a) *Signs and symptoms.* Cherry red lips or grayish tint to lips and mouth, throbbing temporal headache, excessive yawning, generalized weakness, dizziness, dimness in vision, nausea, vomiting, muscular uncoordination and collapse, increase pulse/respiration, and unconsciousness.

(b) *Treatment.* Remove individual from contaminated environment to fresh air. If respiration is weak/absent, administer artificial respiration and seek medical help.

g. *Safe operating procedures of field heaters.* Reference TM 10-4500-200-13 and local unit SOPs for safe operating procedures.

20-3. Lightning protection

a. *General.*

(1) While lightning strikes are not predictable, recognized precautions can decrease the likelihood of lightning casualties.

(2) Thunderstorms build up tremendous electrical potential, which searches for the shortest and easiest path to the ground. Therefore, lightning is attracted by metal fences, wires and/or the tallest object available, such as trees, isolated buildings, antennas, animals or people in open areas.

b. *Troop precautions.* In the event of an electrical storm, take the following measures.

(1) When marching in formation, troops will increase the minimum distance and interval to twice that normally maintained.

(2) Troops will not use radios nor carry radios with antennas extended.

(3) Troops will evacuate from areas containing TV antennas, relay antennas, or vehicles with whip antennas.

(4) Troops will take shelter in dense woods, a grove of trees, or a deep ravine. Avoid isolated trees. Troops will maintain a low profile in an open, flat area. Retain only minimum metal objects when taking shelter. Stack weapons, metal helmets, radios, etc., away at least 50 meters from personnel.

(5) Personnel will dismount from dozers, graders, and all other metal machinery and move to a safe distance, approximately 100 yards, depending upon terrain and condition.

(6) Personnel will not huddle together, if unavoidably caught in flat, open space, or on a bare hilltop. Instead, scatter with a minimum of 15 feet between people to reduce the attraction of lightning to a mass of bodies.

(7) Personnel in an outside area should avoid hilltops, haystacks, lone trees, flagpoles, fences, overhead wires, tents, and small unprotected buildings in the open, and other metallic objects such as artillery pieces and open top vehicles, to include HMMWVs and trucks.

(8) Personnel should seek shelter in as large a building as possible. A well-grounded metal frame building offers the most protection. When inside, stay away from electrical wiring, fireplaces, stoves, showers, bathtubs, sinks, cold water pipes, and other possible conductors of electricity. Stay away from windows and doors. Take off head phones to electrical devices.

(9) Avoid water, including bathing.

(10) Upon approach of an electrical storm, the senior person at the range or training area will make a decision regarding the lightning hazard and halt activities as necessary.

c. *Protective measures.* In the event warning is provided of impending electrical storm or lightning is noticed within Fort Lee limits, the unit commander, officer or NCO in charge of training, or other senior individual present will:

(1) Cease all outside training immediately. Lightning may strike several miles from a parent cloud so wait for 30 minutes after the last observed lightning or thunder before resuming training.

(2) Move personnel into a building if possible.

(3) Ensure all personnel remove Kevlar helmets and stack weapons at least 50 meters away from personnel. If time is not available, stack weapons and Kevlar helmets on the ground or on firing line rifle rest within view of where troops are located.

(4) Move personnel to one of the following areas if a building is not available:

(a) Area protected by lightning rods.

(b) *Lightning Dispersal Area.* Areas pre-designated as a lightning protection area will be marked with signs reading "Lightning Dispersal Area." Areas are located at the ranges and training sites.

(5) Move personnel into dense woods, a low area, ditch, ravine, or to the foot of a steep hill if a building or lightning dispersal area is not available.

(6) Move personnel away from fences, electrical wiring, vehicles, masses of metal, or other possible conductors of electricity.

(7) Keep personnel in building or within lightning dispersal area or other safe area until lightning stops.

(8) Instruct personnel if they feel their hair stand on end, to crouch down on the balls of their feet with heels touching together but not touching the ground, and place their hands over their ears to minimize hearing damage from thunder.

d. *General protective measures.* The following general rules apply during an electrical storm:

(1) Do not play golf, fish, or participate in other activities which involve the use of metallic instruments in open spaces. Do not ride tractors, golf carts, motorcycles, and bicycles during lightning storms.

(2) Do not swim, operate boats, or participate in any aquatic activities during electrical storms.

(3) Keep to a minimum telephone use during electrical storms. Telephone lines conduct energy from lightning.

(4) Move personnel immediately off playgrounds to a permanent structure at the approach of and during an electrical storm.

(5) Do not use personal plug-in electrical appliances such as hair dryers, toothbrushes, or razors during an electrical storm.

(6) Do not handle flammable material in open containers.

e. *Lightning casualties.* In many instances, personnel are only temporarily stunned and paralyzed and can be revived with prompt first aid measures. Immediate attention should be directed to those who may appear to be dead. Individuals who are stunned or dazed, but moving about, can usually recover alone. Those whose breathing and/or heartbeat have stopped need immediate attention. Should such a casualty occur, a qualified person should begin artificial respiration and cardiopulmonary resuscitation, treat for shock, and evaluate as a litter case to the hospital emergency room.

20-4. Tornadoes

a. *General.*

(1) Tornadoes can occur at any time of the year; however, in Virginia, peak tornado occurrence is May through September. Tornadoes are most likely to occur between 1500 and 2100 hours, but have been known to occur at all hours of the day or night. The average tornado moves from southwest to northeast, but has been known to move in any direction. The average forward speed is 30 mph but may vary from nearly stationary to 70 mph.

(2) Develop or review a unit tornado safety plan. One way to better prepare is to know the difference between a watch and a warning.

(a) A tornado watch means conditions are favorable for tornadoes and severe thunderstorms.

(b) A tornado warning means a tornado has been seen or detected by radar. The warning will give the location of the tornado and the areas immediately affected by the storm.

b. When a tornado warning is issued:

(1) The Fort Lee Installation Operation Center (IOC) will employ the Installation's Mass Warning and Notification System (MWNS) to provide mass warning and notification to the installation with severe weather notifications that have already been established and provided

by the Wakefield Forecast Office of the National Weather Service. IOC will put information out via e-mail and will activate a post-wide siren with tornado watches and warnings, and will announce “All Clear” messages. If the electricity goes off, phone calls will be made.

(2) If there is enough time, turn off all electrical equipment.

(3) Move to an interior room or hallway on the lowest floor, away from windows. Stairwells are good but avoid elevators as they may lose power.

(4) Get under a sturdy piece of furniture if available.

(5) If there is no time to go anywhere else, try to get up against something that will provide support or deflect falling debris; cover your head with your arms.

(6) *Outdoors, trailers, vehicles.* Try to find shelter immediately in the nearest sturdy building. If no buildings are close, lie down flat in a ditch or depression and cover your head with your arms. Open areas will decrease chances of being struck by falling trees and power lines. If it is raining, be aware of flash flooding in any ditch or depression.

(7) Assume the tornado protection position: sit on the floor, lean all the way forward, interlock your fingers together and place your open hands behind your head. This position offers the greatest degree of protection to vital parts of the body from flying debris, which causes the most deaths and injuries.

(8) Stay away from windows if at all possible.

(9) It is not advised that employees leave work early if threatening weather is expected. It is safer inside the workplace than in a car if tornado-strength winds are imminent.

(10) After a tornado passes, listen for the “all clear” announcement on a local radio station and Fort Lee alert system before leaving your shelter. Be alert to fire hazards such as broken electric wires or damaged electrical equipment and gas or oil leaks. Report broken utility lines to appropriate authorities.

20-5. Hurricane/tropical storm

a. General.

(1) Tropical Cyclone is the general term used for all circulating weather systems moving counterclockwise over tropical waters in the Northern Hemisphere. Tropical cyclones are classified as follows:

(a) A tropical depression is an organized system of clouds and thunderstorms with a defined circulation and maximum sustained winds of 38 mph (33 knots) or less.

(b) A tropical storm is an organized system of strong thunderstorms with a defined circulation and maximum sustained winds of 39 to 73 mph (34-63 knots).

(c) A hurricane is an intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 mph (64 knots) or higher.

(2) A hurricane watch is issued for a coastal area when there is a threat of hurricane conditions within 24-36 hours.

(3) A hurricane warning is issued when hurricane conditions are expected in a specified coastal area within 24 hours or less. Hurricane conditions include winds of 74 miles an hour (64 knots) and/or dangerously high tides and waves. Actions for protection of life and property should begin immediately when the warning is issued.

(4) Flash flood watch means a flash flood is possible in the area; stay alert.

(5) Flash flood warning means a flash flood is imminent; take immediate action.

b. IOC will employ the Installation's Mass Warning and Notification System (MWNS) to provide mass warning and notification to the installation with severe weather notifications that have already been established and provided by the Wakefield Forecast Office of the National Weather Service. IOC will put information out via e-mail and will activate a post-wide siren with hurricane watches and warnings, and will announce "All Clear" messages. If the electricity goes off, phone calls will be made.

c. When a hurricane watch is issued, follow these safety procedures:

(1) Know evacuation routes.

(2) Keep battery-operated radio on-hand.

(3) Fill water containers to ensure adequate drinking water supply.

(4) Turn refrigerator to maximum cold and open only when necessary.

(5) Keep medicine in one container.

d. When a hurricane warning is issued, follow these safety procedures:

(1) Stay tuned to radio, TV, or other official communications.

(2) Leave areas which might be affected by storm tide or flooding.

(3) Use phone only for emergencies.

(4) Ensure you have batteries for radio and flashlights.

(5) Secure outdoor equipment and bring in pets.

(6) Keep away from windows.

(7) Drive carefully to nearest designated shelter using recommended evacuation routes when a warning is announced.

e. Develop a disaster plan for your office and home.

20-6. Earthquake

a. *General.* An **earthquake** is the result of a sudden release of energy by shaking and sometimes displacement of the grounds in the earth. Unlike tornados and hurricanes, an earthquake is unpredictable. When an earthquake strikes you may be at work, home, driving a vehicle, indoors, in a high rise, or doing many other types of activity. Knowing what to do when the earth shakes can mean the difference between your life and death. Education, awareness and survival skills are key factors in reducing your risk of injury and death.

b. The Fort Lee Installation Operation Center (IOC) will activate a post-wide siren and employ the Installation's Mass Warning and Notification System (MWNS) to provide mass warning and notifications to the installation. When all aftershocks have ceased the IOC will announce "All Clear" messages. If electricity goes off, phone calls will be made.

c. When an earthquake strikes "**Drop, Cover, and Hold On**". Listed below are several precautions to help reduce your risk of injury or death.

(1) If you are indoors: During the earthquake, drop to the floor, take cover under a sturdy desk or table, and hold on to it firmly. If you are not near a desk or table, drop to the floor against the interior wall and protect your head and neck with your arms. Avoid exterior walls, windows, hanging objects, mirrors, tall furniture, large appliances, and cabinets with heavy objects or glass. Do not go outside!

(2) Outdoors: Move to a clear area if you can safely do so; avoid power lines, trees, signs, buildings, vehicles, and other hazards. Drop to the ground.

(3) Driving: Pull over to the side of the road, stop, and set the parking brake. Avoid overpasses, bridges, power lines, signs and other hazards. Stay inside the vehicle until the shaking is over. IF a power line falls on the vehicle, stay inside until a trained person removes the wire.

20-7. Foggy weather.

a. *General.*

(1) In autumn, the days get shorter and the weather changes. It is pitch black at 0600 and if it is foggy, our Service Members, Civilian employees, and their Family members are at risk of having an accident.

(2) All the normal rules-of-the-road apply to preventing accidents during limited visibility such as no headphones when running or jogging on Fort Lee streets and sidewalks, wearing retro-reflective clothing, walking facing traffic, and maintaining a safe following distance between vehicles.

b. Fog-related tips for drivers.

(1) Start early for work; allow time for limited visibility and slow going.

(2) Clean dew from windows before operating the vehicle.

(3) Keep all vehicle lights clean to gain maximum visibility.

(4) Be alert to slow moving/stopped vehicles, vehicles without lights, and pedestrians.

(5) Slow down. Increase the distance between you and any vehicle you may be following.

(6) Watch out for school children especially around bus stops. Go slow when approaching bus stops because children may cross the street or dart into traffic without looking.

(7) Do not pass troop formations.

(8) Pedestrians, whether running or walking, also need to take the following precautions:

(a) Wear highly visible clothing.

(b) Stay well off the roadway.

(c) If walking or running alone, do so facing traffic.

(d) Do not use headphones.

c. Reminder for leaders of troop formations. If you had difficulty seeing while just driving to the start point, consider using off-road alternatives. BUT, use designated dark/limited visibility troop formation routes per Fort Lee Policy 11-07, PT Road Closure, if you must use the roadway that is where Fort Lee drivers expect you.

Chapter 21

Emergency Action Plans

21-1. General

a. An Emergency Action Plan (EAP) is a written document required by OSHA to facilitate and organize employer and employee actions during workplace emergencies. EAPs establish the immediate actions for personnel at individual facilities or work sites during localized (workplace) or widespread (installation) emergency conditions. Emergency conditions, man-made and natural, include, but are not limited to: fire, severe weather (tornado, earthquake, etc.), bomb threats, active-shooter, and Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) incidents.

b. When an accident happens, there is no time to take a refresher course on the proper procedures to follow. Employees' responses to an emergency should be automatic based on clear communication and thorough training.

c. EAPs are required for every individual facility and work site on the installation that has 11 or more employees.

21-2. Procedures

a. EAPs are a Safety Program requirement, driven by OSHA standards, which are focused on emergency actions at the facility level. Installation level Emergency Management (EM) and Anti-Terrorism (AT) Plans are not needed to develop the facility EAP.

b. Evacuation procedures for tornadoes and hurricanes can be found in this document in Chapter 20, Weather.

c. *Fire*. Report all fires including those that have been extinguished.

(1) Activate building fire alarm system if not activated.

(2) Alert all occupants to evacuate the building using their nearest fire exit.

(3) Dial 911, provide name, building number, phone number, and the nature and location of the fire. Cell phones are not directly linked to the Fort Lee PMO dispatch so identify that you are need emergency services for Fort Lee so the call can be transferred immediately.

(4) Extinguish the fire if possible.

(5) Give all possible assistance to arriving fire units.

d. *Natural gas leak or odor*. Any spark from an electrical or battery source can ignite the gas and can create an explosion.

(1) Do not activate the building fire alarm system. Verbally alert other building occupants to evacuate the building using the nearest exit upwind and away from the leak if possible.

(2) Do not turn on or off any appliances, light switches, or motor vehicles. Whatever is on, leave on and whatever is off, leave off.

(3) Call 911 from a telephone located away from the gas leak or odor. Provide your name, building number, telephone number, and the nature and location of the gas leak or odor.

(4) Provide all possible assistance to arriving fire units.

e. EAPs are required for all facilities. An EAP will be developed for a specific facility, but certain elements are required for all EAPs. As a minimum, the following elements will be included in all plans:

(1) *Required elements of an EAP.*

(a) Name and contact information of the Facility Manager.

(b) Shelter-in-place.

(c) Tornado

(d) Earthquake

(e) Bomb threat

(f) Suspicious package

(g) Active shooter

(h) CBRNE incident

(2) Emergency escape procedures and emergency escape routes. The use of floor plans or workplace maps that clearly show the emergency escape route should be included.

(3) Procedures to be followed by personnel who remain to perform critical procedures before they evacuate.

(4) Procedures to account for all employees after an emergency evacuation has been completed.

(5) The methods for reporting fires and other emergencies.

(6) Rescue or medical duties for personnel who are required to perform them.

(7) Names or job titles of personnel who can be contacted for further information or explanation of duties under the plan.

f. All personnel will be trained on actions to take in case of emergencies. The following topics should be included in the training.

(1) How to report a fire, chemical spill, or other accident or incident. In most cases, call 911.

(2) Emergency alarms that will be used.

(3) The responsibilities for shutting down operations or systems in order to avoid making a bad situation worse.

(4) Where to find fire extinguishers and first aid equipment.

(5) How to alert others to evacuate the area.

(6) Locations of emergency exits and how to reach them quickly.

(7) The assigned point for assembling after evacuating the hazard area so that the whereabouts and safety of all employees can be accounted for.

g. New employees will have initial training and thereafter when changes are made to the plan. After personnel have reviewed and been trained on the EAP, it shall be kept at the workplace and made available for employee review.

Chapter 22

Special Emphasis Areas

22-1. General

Areas of emphasis in units and activities vary depending on the mission, degree of hazard, and operational difficulty. Potential loss areas should be identified so effective controls can be instituted. This chapter identifies special safety emphasis areas established by this command.

22-2. Motor pool operations and maintenance safety

a. SOPs will be prepared, published, and posted in the work area covering each potentially hazardous operation such as, but not limited to:

(1) Painting.

(2) Using grease racks and pits.

(3) Tire changing and repair.

(4) Working in battery shops.

- (5) Welding/grinding.
- (6) Servicing brake linings and clutch pads.
- (7) Working in maintenance shops.
- (8) Tasks requiring respirators.
- (9) Working with hazardous chemicals/materials.
- (10) Woodworking.

b. Traffic flow in and around buildings will be carefully planned with emphasis on eliminating points of traffic conflict, blind corners, close clearances, etc. Parking and/or storage of vehicles will be avoided on sloping ground, inclines, and ramps when possible.

c. Grease pits not in use will be protected by chains or rope barriers around the areas or by pit covers. Illumination in pits, installed and extension lights, will meet requirements for National Electric Code, Class I, Group D, Hazardous Environment.

d. Lights and electrically-operated equipment used in pits or within 18 inches of the floor of any indoor vehicle servicing area will conform with the requirements of 29 CFR 1910.307 and the National Electric Code.

e. Containers or safety cans used to hold oil and grease-soaked rags will be painted red with a yellow band around the can or with the name of the contents conspicuously stenciled or painted on the can in yellow. These safety cans will be emptied daily.

f. Gasoline will not be used to clean parts, floors, pits or other materials. Solvent tanks will be equipped with a self-closing lid or fusible link. Lids will be kept closed when tank is not in use.

g. Air used for cleaning purposes will not exceed 30 pounds per square inch when nozzle is dead-ended. Effective chip guarding will be provided and eye protection will be used, such as a cone of air which directs debris forward.

h. Vehicle motors will be operated in a confined area only when necessary repairs or adjustments are being made. Adequate ventilation will be provided by use of exhaust systems, exhaust fans, or by using tailpipe exhaust extension system which exhausts to the outside.

i. Vehicles jacked-up or suspended by chain hoist will be blocked with jack stands or substantial wood blocking. Personnel will not get under vehicles supported by jacks only.

j. Cranes and hoists will be operated only by trained and qualified personnel.

k. When inflating tires with split/locking rims, the following safeguards will be employed:

(1) Inflation safety cages.

(2) A lock-on air chuck with an extension air hose at least 10 feet long, with pressure gauge located in the air hose at least 10 feet from the cage.

(3) Every individual involved in tire inflation operations will be trained in proper operating procedures.

l. Servicing brake linings and clutch pads may pose a serious hazard from airborne asbestos fibers. All such operations will be evaluated by the Industrial Hygienist and recommended protective measures will be followed.

m. All lifting devices, such as hoists, cranes, jacks, and forklifts, will be inspected, marked, load-tested and maintained in accordance with requirements of TB 43-0142 and 29 CFR 1910.66 by Army Materiel Command (AMC) Maintenance.

n. Spray painting operations are prohibited inside buildings unless ventilation systems and/or paint spray booths are installed.

22-3. Precautions against carbon monoxide poisoning

Carbon monoxide, produced by incomplete combustion of fuels, is a serious hazard in areas where fuel-burning devices are used with insufficient ventilation. To prevent injuries from carbon monoxide, the following precautions will be taken:

a. Commanders and activity chiefs will:

(1) Request surveys be performed by Preventive Medicine Service (PMS) to determine if a hazard from carbon monoxide exists within their areas of responsibility. Surveys should be made in shops, warehouses, and other closed areas where combustible fuel should be checked for defective exhaust systems.

(2) Assure personnel are oriented concerning the hazards of carbon monoxide prior to the cold weather season.

b. Precautions should be taken to safeguard personnel against carbon monoxide gas poisoning from engine exhaust while operating, servicing, or being transported in motor vehicles.

c. Exhaust systems should be checked for leaks monthly, and engines should not be allowed to idle for an extended time without adequate ventilation.

d. Vehicle drivers will not leave parked vehicles with engines running to keep the vehicle or driver warm. If engine is required to operate the radio or for other tactical reasons, vehicles will be ventilated and operators will be required to dismount periodically.

22-4. Weapons safety

Commanders will take the following minimum actions to establish and maintain effective control over firearms and ammunition.

- a. Be familiar with and maintain CASCOM & Fort Lee Regulation 350-1, Range Regulation.
- b. Publish SOPs covering the proper storage, issue, handling, and use of firearms. Frequent checks will be made to ensure compliance. Newly assigned personnel will become thoroughly familiar with the established SOPs. Units will conduct risk assessments prior to using all ranges and present to range control for approval. Keep copy of risk assessment on-hand while at the range.
- c. Ensure firearm training emphasizes accident prevention. Particular emphasis will be placed on the proper methods for loading, locking, and clearing of firearms.
- d. Ensure firearms are not cleared or cleaned in areas where personnel congregate. A separate area will be provided for this purpose.

22-5. Electrical hazards

- a. Only trained and qualified personnel will perform work on electrical transmission lines or electrically-powered equipment. Defective electrical wiring, downed wires, and other electrical hazards should be reported to DPW for correction.
- b. Flag poles, radio masts, and similar objects will not be erected or dismantled where the possibility of contact with energized circuits exists.
- c. The possibility of accidental contact with electrical power lines will be evaluated before commencing operations, and necessary action will be taken to prevent such contact.
- d. Antennas will not be erected or dismantled where the possibility of contact with energized electrical circuits exists.
- e. Commanders and activity chiefs will analyze material handling operations and the electrocution potential of the equipment involved and apply the following safeguards as appropriate:
 - (1) De-energize power lines, if feasible, when equipment is being used close to electrical lines.
 - (2) Notify the DPW when cranes are to be used in close proximity to energized power lines.
 - (3) Position cranes to ensure no part of the equipment, slings, or load can come in contact with an energized line.

(4) In the event it is determined a crane must be positioned so any part of it can be brought within 10 feet of an energized power line, the major unit or activity safety officer is notified and will ensure competent personnel are directing the operations and all possible safeguards are being used.

f. Signs or communication lines will not be attached to electrical utility poles without DPW approval.

22-6. Machine safety

Rings, other jewelry, loose clothing, and unbound hair will not be worn when working around moving machinery, during vehicle maintenance, or other hazardous industrial operations.

22-7. Tripping hazards

All aisles, passageways, stairs, sidewalks, and other walking surfaces will be free of tripping hazards.

Chapter 23

Range Safety

23-1. General

This chapter establishes policies and responsibilities to prevent accidents on Fort Lee ranges.

23-2. Responsibilities

a. Garrison Commander will:

(1) Enforce overall range safety per AR 385-63.

(2) Withdraw user privileges from any organization or person that willfully disobeys prescribed rules and regulations.

b. Installation Safety Office will:

(1) Monitor the effectiveness of enforcement of the installation range safety program.

(2) Inspect for safety deficiencies semi-annually.

c. Training Division, DPTMS will:

(1) Appoint Range Control personnel.

(2) Develop SOP for range operations.

(3) Develop a risk assessment of each range complex.

(4) Monitor units on the range and enforce safety requirements.

d. Range Control will:

(1) Develop a standard program of instruction for the certification of using unit Officer in Charge (OIC) and Range Safety Officer.

(2) Maintain and ensure using unit's police ranges, maneuver areas, and training facilities after completion of scheduled training.

(3) Notify installation personnel and the public of firing exercises involving possible hazard to the public.

(4) Coordinate and schedule all firing.

(5) Review and maintain a copy of the unit composite risk management worksheets prior to allowing units to fire.

(6) Ensure safety-related equipment is used.

(7) Survey and post range boundaries and off-limit areas to prevent trespass and entry by unauthorized personnel into surface danger zones and impact areas.

(8) Coordinate with local EOD unit to clear duds from ranges before allowing people to enter.

(9) Post range guards, barriers, limit of fire markers, signals, and warning signs.

(10) Establish and maintain detailed records that:

(a) Describe the range area including detailed permanent charts and overlays.

(b) Provide information on the types and amounts of ammunition fired into the range areas.

(c) Record known or estimated number of duds located in range impact areas.

(11) Clear temporary impact areas.

(12) Perform other duties and activities related to the safe operation of ranges.

(13) Assist police and other civic organizations in the development of bilateral agreements for the use of range areas.

(14) Forward safety violations and accident reports to the Installation Safety Office and maintain one copy of each as permanent records.

e. Battalion/Group/Unit commanders utilizing the range are will:

(1) Comply with the installation procedures for certification of OICs and Range Safety Officers.

(2) Ensure unit compliance with AR 385-63, CASCOM&FL Reg 350-1, applicable FMs/TMs, and local range SOPs.

(3) Designate an OIC in the grade of Sergeant First Class or above.

(4) Schedule use of range with range control.

(5) Conduct a risk assessment prior to firing on any range.

f. OIC will:

(1) Read and comply with AR 385-63 and CASCOM&FL Regulation 350-1.

(2) Attend range safety certification conducted by range control officer.

(3) Designate a Range Safety Officer in the grade of Staff Sergeant or above.

(4) Immediately record and forward safety violations.

g. Range Safety Officer will:

(1) Read and comply with AR 385-63 and CASCOMFL 350-1.

(2) Attend range safety certification conducted by range control officer.

23-3. Privately owned weapons (POW) range

a. DFMWR will:

(1) Schedule range IAW CASCOM&FL Regulation 350-1.

(2) Develop SOP for firing on the range.

(3) Develop risk assessments of range operations.

(4) Ensure OICs and Range Safety Officers attended the Range Safety Class.

b. Individuals using the range will:

(1) Comply with CASCOM&FL Regulation 350-1 and the POW Range SOP.

(2) Attend a range safety briefing.

Appendix A

References

Army publications are available at <http://www.apd.army.mil/>.

TRADOC publications are available at <http://www.tradoc.army.mil/publications.htm>.

29 CFR parts 1910, 1926, and 1960 are available at

http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=0

Section I

Referenced Publications

ANSI/IES-RP-7-1991

American National Standards Institute and Illuminating Engineering Society standard

ANSI/ISEA Standard Z358.1-2009

Emergency Eyewashes and Shower Equipment

AR 11-34

The Army Respiratory Protection Program

AR 40-5

Preventive Medicine

AR 75-1

Malfunctions Involving Ammunition and Explosives

AR 75-15

Policy for Explosive Ordnance Disposal

AR 385-10

The Army Safety Program

AR 385-63

Range Safety

AR 600-55

The Army Driver and Operator Standardization Program

AR 700-141

Hazardous Materials Information Resource System

AR 710-7

Hazardous Material Management Program

ASTM F2413 – 2005

Standard Specification For Performance Requirements For Protective (Safety) Toe Cap Footwear

DA Pamphlet 40-506

The Army Vision Conservation and Readiness Program

DA Pamphlet 385-10

Army Safety Program

DA Pamphlet 385-24

The Army Radiation Safety Program

DA Pamphlet 385-40

Army Accident Investigations and Reporting

DoD 6055.5-M

Occupational Medicine Surveillance Manual

DoDI 6055.4

DoD Traffic Safety Program

<http://www.dtic.mil/whs/directives/corres/pdf/605504p.pdf>

Executive Order 12196

Occupational Safety and Health Programs for Federal Employees

FAR Clause 52.223-3

Hazardous Material Identification and Material Safety Data

Fort Lee Policy 11-07

PT Road Closure

MEDDAC Reg 385-4

Hazard Communication Program

TB Med 502

Respiratory Protection Program

TB Med 507

Heat Stress Control and Heat Casualty Management

TB Med 521

Occupational and Environmental Health Management and Control of Diagnostic, Therapeutic, and Medical Research X-Ray Systems and Facilities

TB Med 523

Control of Hazards to Health from Microwave and Radio-frequency Radiation and Ultrasound

Title 10 CFR 30

Rules of General Applicability to Domestic Licensing of Byproduct Material

Title 10 CFR 71

Packaging and Transportation of Radioactive Material

Title 29 CFR 1910.1200

Hazard Communication

Title 49, CFR 173

Shippers--General Requirements for Shipments and Packagings

Title 29 CFR 1910.1450

Occupational Exposure to Hazardous Chemicals in Laboratories **Title 29 CFR 1910**
Occupational Safety and Health Standards

Title 29 CFR 1926

Safety and Health Regulations for Construction

Title 29 CFR 1960

Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters

Title 30 CFR Part II

Mine Safety and Health Administration

Section II

Prescribed Forms

Army forms are available at <http://www.apd.army.mil/>

Fort Lee Forms are available on the Installation Safety Office Web site

<http://www.lee.army.mil/safety/safety.office.aspx> and the SharePoint Portal

<https://home.army.mil/sites/atl/flg/safety/SitePages/Home.aspx>.

Office of Workers' Compensation Forms are available on the OWCP Web site

<http://webapps.dol.gov/libraryforms/FormsByAgency.asp>

DA Form 285

Technical Report of U.S. Army Ground Report

DA Form 285-AB

Abbreviated Ground Accident Report

DA Form 348

Equipment Operator's Qualification Record

DA Form 1119-1

United States Army Certification of Achievement in Safety

DA Form 3946

Military Police Traffic Accident Report

DA Form 3953

Purchase Request and Commitment

DA Form 4283

Facilities Engineering Work Request

DA Form 4379

Ammunition Malfunction Report

DA Form 4755

Employee Report of Alleged Unsafe or Unhealthful Working Conditions

DA Form 7306

Worksheet for Telephonic Notification of Ground Accident

DA Form 7566

Composite Risk Management Worksheet

DD Form 1348-6

Single Line Item Requisition System Document

DD Form 1556

Request, Authorization, Agreement, Certification of Training and Reimbursement

DD Form 2272

DOD Safety and Occupational Health Protection Program Poster

Fort Lee Form 385-2

Fort Lee Program Evaluation Metrics

Fort Lee Form 385-3

Form Fort Lee Investigation of Injury/Illness

Fort Lee Form 385-4

Arms Room Checklist

Fort Lee Form 385-5

POV Inspection Checklist

Fort Lee Form 385-6

United States Army Combined Arms Support Command Safety Certificate of Achievement

Fort Lee Form 385-7
Motorcycle/ATV Operator Agreement

Fort Lee Form 385-8
Motorcycle Inspections Checklist

Fort Lee Form 789
Safety & Health Deficiency Report

Fort Lee Form 930
Job Hazard Analysis (JHA)

Fort Lee Form 937
Confined Space Entry Permit

Fort Lee Form 1051
Record of Injury

Fort Lee Form 1082
Accident Avoidance Training Card

Fort Lee Form 1124
United States Army Garrison Safety Certificate of Achievement

OWCP Form CA-1
Federal Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation

OWCP Form CA-2
Notice of Occupational Disease and Claim for Compensation

Standard Form 91
Operator's Report of Vehicle Accident

Section III

Websites

Installation Safety Office website:
<http://www.lee.army.mil/safety/safety.office.aspx>

Installation Safety Office SharePoint Portal
<https://home.army.mil/sites/atl/flg/safety/SitePages/Home.aspx>

Combat Readiness/Safety Center
<https://safety.army.mil>

Army Accident Avoidance Training

<https://safety.army.mil/training/ARMYACCIDENTAVOIDANCECOURSE/tabid/982/Default.aspx>

US Army Traffic Safety Training Program Registration System

https://apps.imcom.army.mil/AIRS/usg_disclaimer.aspx.

Workers' Compensation EDI web-based system for CA-1 and CA-2:

www.abc.army.mil

Nuclear Regulatory Commission

<http://www.nrc.gov/>

DoD Traffic Safety Program

<http://www.dtic.mil/whs/directives/corres/pdf/605504p.pdf>

Appendix B

Unit Safety Program Standard Operating Procedure (SOP)

Each unit is required to have a written SOP for safety. Commanders at every level will establish and maintain a continuing, comprehensive and aggressive safety and accident prevention program throughout their units. Unit SOPs need not be lengthy, but must reflect the commander's development of an aggressive safety and accident prevention program. To assist commanders in their SOP development, a sample is included.

Sample Safety SOP

1. Purpose. To ensure a continuing, aggressive preventive safety program throughout this unit.

2. References. AR 385-10, DA PAM 385-40, and this regulation.

3. Scope. This SOP outlines the organization of the unit safety program and the responsibilities of personnel implementing the safety program.

4. Objective. To improve the overall effectiveness of the unit by minimizing personnel and equipment losses.

5. Responsibilities. The commanding officer/director is responsible for assuring the accident prevention effort meets the requirements of current regulations. The following personnel are responsible as indicated:

a. Collateral Duty Safety Officer/NCO will:

(1) Provide staff management of the unit safety program to assure safety requirements are in compliance.

(2) Establish and maintain a portion of the unit bulletin board which provides current safety literature and information.

(3) Make regular inspections of training and maintenance activities within the unit and initiate action to correct the hazards or deficiencies detected. Keep records to document inspections.

(4) Investigate or coordinate investigation of accidents which occur within the unit. Prepare or assist when appropriate with the preparation of accident reports and submit to appropriate level of authority for signature. Ensure all accident reports are sent to the Installation Safety Office for review and any necessary action.

(5) Establish and maintain an accident case file for all accidents during the current and preceding calendar year.

(6) Conduct periodic safety briefings for personnel. Prepare and present initial safety briefing to newly assigned personnel. Briefing should address all applicable safety programs; i.e. Hazard Communication (HAZCOM), Personnel Protective Equipment (PPE), Fire Evacuation Procedures, Troop Formation, Composite Risk Management (CRM), etc.

(7) Prepare safety briefing guide for the commander's/director's use prior to holiday periods or weekends and document training.

(8) Brief the commander regularly on the status of the unit accident prevention effort.

b. Unit Commanders/ Directors/Supervisors/Leaders will:

(1) Assure newly assigned personnel report to the Safety Officer/NCO for safety orientation.

(2) Establish in writing a safety SOP for specific operations. Enforce the procedures established.

(3) Integrate current safety requirements into all activities and plans.

(4) Assure training of personnel is adequate for safe operation of equipment to avoid injury or equipment loss.

(5) Assure necessary protective equipment and clothing is available as required for daily operations. Assure required training is provided to all personnel required to use PPE.

(6) Control the use of flammables to assure they are used only for their designed and intended purpose.

(7) Schedule unit motorcyclists to attend Motorcycle Safety Courses.

(8) Review accident reports for format and completeness and send to the commander for his signature.

c. Motor Officer.

(1) Assure unit drivers are thoroughly trained prior to licensing for operation of military vehicles.

(2) Conduct safety briefings to unit drivers.

(3) Establish safe operating procedures for motor pool operations and provide enforcement measures.

(4) Assure all applicable elements of the Army Traffic Safety Training Program (ATSTP) are implemented.

6. Accident Reporting. All accidents involving personnel from the unit that result in injury to personnel or damage to property will be reported expeditiously. Pending the arrival of the Collateral Duty Safety Officer/NCO, the supervisor of the injured person will begin an investigation to determine why the accident occurred. The supervisor will complete the DA Form 285-AB. The Safety Officer/NCO will check for completion and accuracy and give to Commander for reviewing signature.

7. Unit Safety Committee/Council. The unit Safety Committee/Council shall consist of all members of the unit staff to include the Safety Officer/NCO and shall be operated in conjunction with regularly scheduled staff meetings. Problems concerning safety shall be discussed and resolved on a routine basis during these meetings. The Safety Officer shall provide documentation of actions as needed.

8. Safety Awards. Personnel who actively support and contribute to the unit safety program will receive special recognition. Leaders will identify supervisors, drivers, and other individuals who deserve recognition and recommend them for award as appropriate. Awards committee comprised of the Collateral Duty Safety Officer/NCO, XO and SGM will establish criteria and type of awards to appropriately recognize individuals or subunits/divisions/branches.

Appendix C

Guidance For Unit Safety Notebook

Tab A: Safety Officer/Fire Marshal duty appointment orders and training.

Tab B: Commanding General's safety policy.

Tab C: Unit Safety and Fire SOP/policy records.

Tab D: Safety Council minutes/briefing log.

Tab E: Safety Inspection Record and corrective action.

Tab F: Army regulations:

(1) AR 385-10, Army Safety Program.

(2) DA Pam 385-10, Army Safety Program.

(3) DA Pam 385-40, Army Accident Investigation and Reporting.

(4) AR 420-1, Army Facility Management, Fire Protection, chapter 25.

(5) DA Pam 385-1, Unit Safety Officer/NCO Guide.

(6) Abbreviated Ground Accident Report (AGAR) Use and Preparation Guide, April 2011.

(7) FORT LEE Regulation 385-10.

Tab G: DA Form 285, Copy of Accident Report.

Tab H: Fort Lee Form 1051, Record of Injury; Fort Lee Form 385-3, Investigation of Injury/Illness.

Tab I: Job Hazard Analysis.

Tab J: Annual Training Record.

Tab K: Current safety messages and alerts.

Tab L: Holiday safety messages.

Tab M: Safety training materials.

Tab N: Program Evaluation Metric, Fort Lee Form 385-2.

Tab O: HAZCOM Plan Chemical Inventory.

Appendix D
Safety Notebook Table of Contents

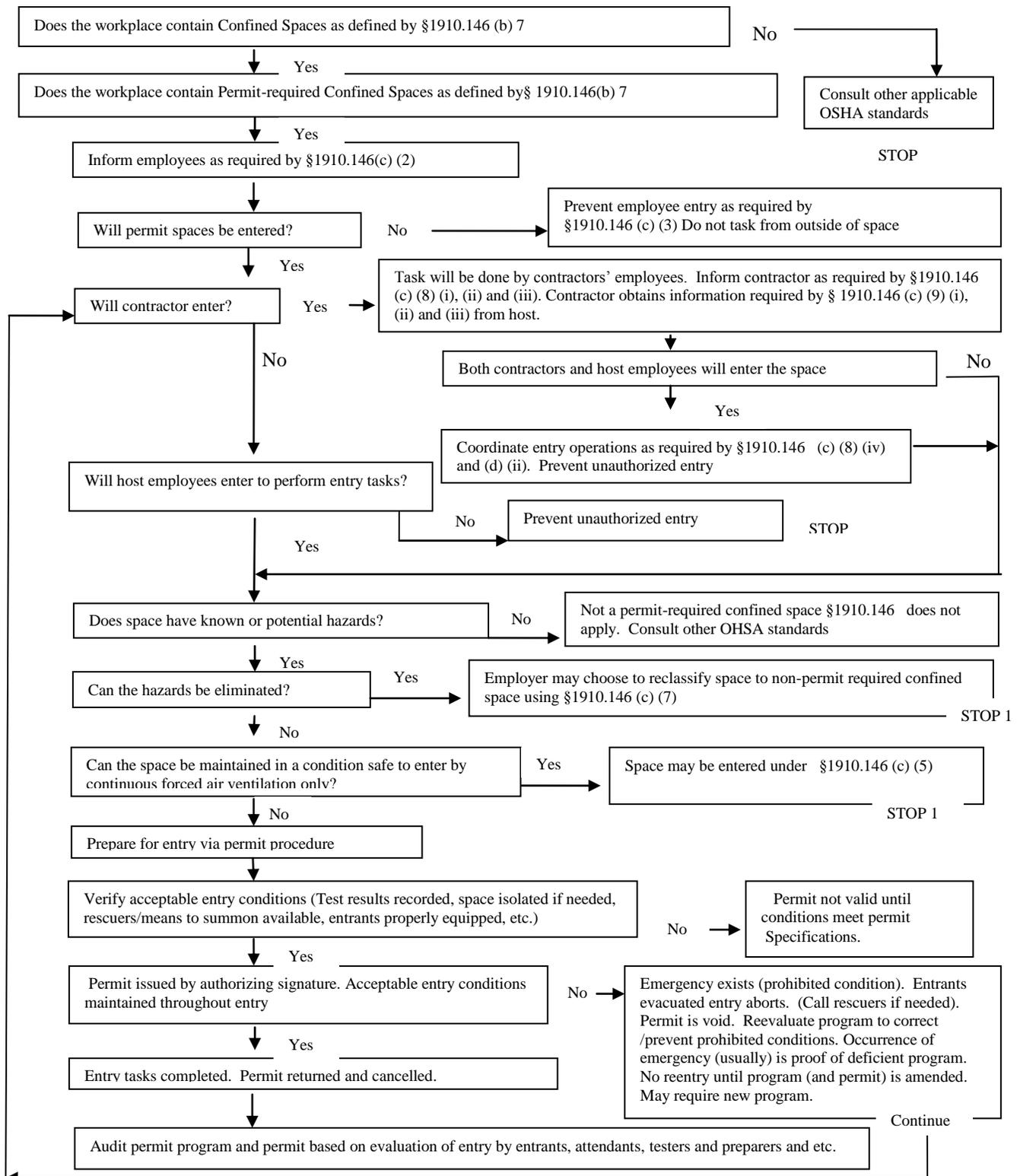
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Safety Notebook

A	Safety Officer / Fire Marshal Duty Appointment Orders & training
B	Commanding General's Safety Policy
C	Unit Safety and Fire SOP/Policy Records
D	Safety Council minutes / briefing log.
E	Safety Inspection Record and corrective actions
F	Army Regulations
G	Copy of Accident Report DA form 285
H	Fort Lee Form 1051, Record of Injury; Fort Lee Form 385-3, Investigation of Injury Form
I	Job Hazard Analysis
J	Annual Training Record
K	Current Safety Messages and Alerts
L	Holiday Safety Messages
M	Safety Training Material
N	Program Evaluation Metric
O	HAZCOM Plan Chemical Inventory

Appendix E Confined Space Decision Flow Chart

Appendix A To §1910.146 – PERMIT-REQUIRED CONFINED SPACE DECISION FLOW CHART



1 - Spaces may have to be evacuated and reevaluated if hazards arise during entry.

Glossary

Section I Abbreviations

ACGIH

American Conference of Governmental Industrial Hygienists

AGAR

Abbreviated Ground Accident Report

AIRS

Army Traffic Safety Training Program Registration System

ALARA

As low as reasonably achievable

AMC

Army Materiel Command

ANSI

American National Standards Institute

ARSO

Alternate Radiation Safety Officer

ASAP

Army Substance Abuse Program

ASP

Ammunition supply point

AMV

Army motor vehicle

ASTM

American Society of Testing Materials

AT

Anti-Terrorism

ATV

All-terrain vehicles

BRC

Beginner Rider Course

CASCOM

Combined Arms Support Command

CASCOM&FL

Combined Arms Support Command and Fort Lee

CBRNE

Chemical, Biological, Radiological, Nuclear, Explosives

CFR

Code Federal Regulation

CHCI

Centralized hazardous chemical inventory

CHO

Chemical Hygiene Officer

CHP

Chemical Hygiene Plan

COP

Continuation of pay

COR

Contracting Officer's representative

CPAC

Civilian Personnel Advisory Center

CRC

Combat Readiness/Safety Center

CRM

Composite risk management

DA

Department of the Army

dB

Decibels

DECA

Defense Commissary Agency

DENTAC

U.S. Army Dental Activity

DFARS

Defense Federal Acquisition Regulation

EFARS

Engineer Federal Acquisition Regulation Supplement

DFMWR

Directorate of Family and Morale, Welfare, and Recreation

EM

Emergency Management

DOD

Department of Defense

DOL

Directorate of Logistics

DPW

Directorate of Public Works

DOT

Department of Transportation

EAP

Emergency action plan

EDI

Electronic Data Interchange

EER

Enlisted Evaluation Report

EMO

Environmental Management Office

EOD

Explosive Ordinance Disposal

ERC

Experienced Rider Course

FAR

Federal Acquisition Regulation

FES

Fire and Emergency Services

FORSCOM

U.S. Army Forces Command

FTX

Field training exercise

GHS

Globally Harmonized System

GSA

General Services Administration

HAZCOM

Hazardous communications

HAZMAT

Hazardous Materials

HBV

Hepatitis B virus

HCS

Hazard communication standard

HFES

Human Factor and Ergonomic Society

HHIM

Health Hazard Information Module

HIV

Human immunodeficiency virus

HMCC

Hazardous Chemicals Control Center

HMMP

Hazardous Materials Management Program

HMMWV

High mobility multipurpose wheeled vehicle

HQ
Headquarters

HQDA
Headquarters, Department of the Army

HVAC
Heating, ventilating, and air conditioning

IAW
In accordance with

IDLH
Immediately dangerous to life or health

IEEE
Institute of Electrical and Electronics Engineers

IES
Illuminating Engineering Society

IMCOM
Installation Management Command

IOC
Installation Operations Center

ISEA
International Safety Equipment Association

ISO
Installation Safety Office

JMC
Joint Munitions Command

LEL
Lower explosive limit

JHA
Job Hazard Analysis

KAHC
Kenner Army Health Clinic

MEDDAC

Medical Department Activity

MESA

Mining Enforcement Safety Administration

MFS

Motorcycle Safety Foundation

MICC

Mission and Installation Contracting Command

MOS

Military occupational specialty

MP

Military police

MSHA

Mine Safety and Health Administration

MWNS

Mass Warning and Notification System

NCO

Non-commissioned officer

NEC

National Electrical Code

NFPA

National Fire Protection Association

NIOSH

National Institute for Occupational Safety and Health

NRC

Nuclear Regulatory Commission

NSN

National stock number

OER

Officer evaluation report

OIC

Officer in charge

OHS

Oil and hazardous substance

OSHA

Occupational Safety and Health Administration

OWCP

Office of Workers' Compensation Program

PAO

Public Affairs Office

PCE

Protective clothing and equipment

PEL

Permissible exposure limit

PMO

Provost Marshal Office

PMS

Preventive Medicine Service

POC

Point of contact

POV

Privately owned vehicle

POW

Privately owned weapon

PPE

Personal protective equipment

QASAS

Quality Assurance Specialist Ammunition Surveillance

QD

Quantity distance

QMS

Quartermaster School

RAC

Risk assessment code

RCC

Radiation Control Committee

RDTE

Research development, test, and evaluation

RFR

Radiofrequency radiation

ROTC

Reserve Officer Training Corps

RPE

Respiratory protective equipment

RSO

Radiation Safety Officer

SCBA

Self-Contained Breathing Apparatus

SDS

Safety data sheet

SHIB

Safety and Health Information Bulletin

SJA

Staff Judge Advocate

SOP

Standing operating procedures

TACOM

Tank-Automotive Command

TDY

Temporary duty station

TLV

Threshold limit value

TRADOC

Training and Doctrine Command

TMP

Transportation Motor Pool

UL

Underwriters Laboratories

USAPHC

United States Army Public Health Command

VDT

Visual display terminal

WBG

Wet bulb globe temperature

Section II**Terms****American Society of Testing Materials (ASTM)**

The standards used are to improve product quality, enhance safety, facilitate market access and trade, and build consumer confidence. ASTM members deliver the test methods, specifications, guides and practices that support industries and governments worldwide.

Antiterrorism Officer

Selected individual who participates in antiterrorism/force-protection program training and exercises. Program determines the threat, planning and resource requirements, deployment considerations, case studies, and awareness training.

Armorer and Ammo Handler

Certified and responsible for the safe storage, handling, and accountability of explosives.

Army Accident

An unplanned event or series of events that results in injury/illness to either Army or non-Army personnel, and/or damage to Army or non-Army property as a result of Army operations caused by the Army.

Army Accident Avoidance Course

An online course designed to make people think about safe driving. All Service Members, Civilian employees and contractor employees who drive Army-owned or leased vehicles must complete the training when they start working for the Army. It is available through the Army Knowledge Online Learning Management Services. Must be reviewed every 4 years.

Asphyxiation

Suffocation; paralyzed muscles which control breathing; person loses consciousness or dies because he/she cannot breathe.

Atmosphere

Refers to the gases, vapors, mists, fumes, and dusts within a confined space.

At-Risk Service Members

Negative behavior, such as traffic offenses, alcohol abuse, misconduct, and poor performance are indicators of potential POV accident victims.

Attendant

An individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the confined space entry permit program.

Authorized Entrant

An employee who is authorized by the supervisor to enter a permit space.

Bloodborne Pathogen

Any pathogenic organism present in human blood which can cause disease in humans. These pathogens include hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Body Fluid Isolation

Body substance isolation is a practice of isolating all body substances (blood, urine, feces, tears, etc.) of individuals undergoing medical treatment, particularly emergency medical treatment of those who might be infected with illnesses such as HIV and hepatitis as to reduce as much as possible the chances of transmitting these illnesses.

Carbon Monoxide Poisoning

Caused by combustion engines and field heaters in confined spaces without adequate ventilation. Lips become cherry red or grayish tint to lips and mouth. Experience throbbing temporal headache, excessive yawning, generalized weakness, dizziness, vision dims, nausea, vomiting, muscular uncoordination and collapse, increase pulse/respiration, unconsciousness, and death.

Ceiling Level

The maximum airborne concentration of a toxic agent to which an employee may be exposed for a specified period of time.

Centralized Hazardous Chemical Inventory (CHCI)

Centralized management of hazardous materials and hazardous wastes by tracking inventory and usage.

Chemical Inventory Log

An inventory of chemicals routinely used in the laboratory and of chemicals that are stored.

Chilblains

Caused by repeated exposure of bare skin to cold but above freezing temperatures. Redness and itching will appear. The cold exposure causes permanent damage to the capillaries so the redness and itching will return with future exposures.

Class A Accident

An Army accident with resulting total cost of property damage of \$2,000,000 or more; or an injury and/or occupational illness that result in a fatality or permanent total disability.

Class A Explosives

Possessing, detonating, or otherwise maximum hazard; such as dynamite, nitroglycerin, black powder, blasting caps, and detonating primers.

Class B Accident

An Army accident with resulting total cost of property damage of \$500,000 or more but less than \$2,000,000; an injury and/or occupational illness that results in permanent partial disability; or when three or more personnel are hospitalized as inpatients as a result of a single occurrence.

Class B Explosives

Possessing flammable hazard, such as propellant explosives, photographic flash powders, and some special fireworks.

Class C Accident

An Army accident with resulting total cost of property damage of \$50,000 or more but less than \$500,000; or a nonfatal injury causes any lost time from work beyond the day or shift in which it occurred.

Class D Accident

An Army accident with resulting total cost of property damage of \$2,000 or more but less than \$50,000; or injuries that result in restricted work activity beyond the day or shift in which it occurred, transfer to another job, medical treatment or first aid, contamination from another person's blood or other potentially infectious material, medical removal under medical surveillance, occupational hearing loss, or a work-related tuberculosis case.

Collateral Duty Safety Officer

Individual appointed by commander to serve as the unit safety officer as an added duty.

Combustible Dust

A dust capable of undergoing combustion or burning when subjected to a source of ignition.

Composite Risk Management (CRM)

CRM is a decision-making process used to mitigate risks associated with all hazards that have the potential to injure or kill personnel, damage or destroy equipment, or otherwise impact mission effectiveness.

Confined Space

A space, which by design has limited openings for entry and exit; unfavorable natural ventilation which could contain or produce dangerous air contaminants and which is not intended for continuous employee occupancy. Confined spaces include but are not limited to storage tanks, compartments of ships, process vessels, pits, silos, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, sewers, tunnels, underground utility vaults, and pipelines.

Contaminant

A harmful, irritating, or nuisance material in concentrations exceeding those normally found in the ambient air.

Corrosive

Capable of being eaten away gradually as if by gnawing, especially by chemical action.

Countermeasures

Corrective actions to eliminate or control a hazard.

Deficiencies

Unsafe conditions or practices which create a safety hazard.

Dehydration

An abnormal depletion of body fluids.

Emergency Action Plans

Plans written to provide employees procedures to be followed under recognized emergency conditions.

Energized

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

Energy-isolating device

A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker; a disconnect switch; a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded independently; a slide gate; a slip blind; a line valve; a block; and any similar device used to block or isolate energy. The term does not include a push button, selector switch, and other control circuit-type devices.

Energy source

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

Entry

The action by which a person passes through an opening into a permit-required confined space. Entry includes work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

Entry Supervisor

The person (such as the supervisor, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned and overseeing entry operations and for termination entry.

Ergonomics

Fitting the job to the person, not the person to the job. This is achieved by evaluating and designing workplaces, tasks, equipment, and processes in relation to human capabilities and interactions.

Explosion-Proof

Apparatus enclosed in a case capable of withstanding an explosion which may occur within it and of preventing the ignition of a gas or vapor surrounding the enclosure by sparks, flashes, or explosion and which operates at such an external temperature that a surrounding flammable atmosphere will not be ignited.

Fainting

Skin blood vessels dilate to help cool the body but dilate so much that blood flow to the brain is reduced, resulting in symptoms of dizziness, headache, nausea, vomiting, and fainting.

Frostbite

Freezing all layers of the skin and possibly freezing muscle and bone. Skin is white and wooden-feeling all the way through and possibly without feeling.

Frostnip

The freezing of the top layers of the skin tissue and is generally reversible. Skin is white, waxy, and numb. The top layer feels hard and rubbery but deeper tissue is still soft.

Gas

The fluid form of a substance which can expand indefinitely and completely to fill its container; form that is neither liquid nor solid.

Globally Harmonized System

A system for standardizing and harmonizing the classification and labeling of chemicals. It is a logical and comprehensive approach to: defining health, physical and environmental hazards of chemicals; creating classification processes that use available data on chemicals for comparison with the defined hazard criteria; and communicating hazard information, as well as protective measures, on labels and Safety Data Sheets (SDS).

Grade D breathing air

Normal atmospheric air.

Hazard

Any actual or potential condition or activity that can cause injury, illness, or death of personnel or damage to or loss of equipment, property or mission degradation.

Hazardous Materials Control Center (HMCC)

The HMCC is established for requisition, receipt, distribution, reutilization, and turn-in of all hazardous materials utilized on the installation.

Hazard Communication

Transmittal of information to employers and employees is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets and employee training.

Hazard Communication Standard (HCS)

All workers exposed to hazardous chemicals in all industrial/workplace sectors have both a need and a right to know the hazards and the identities of the chemicals they are exposed to while working.

Hazardous Materials Management Program (HMMP)

An HQ IMCOM program that is driven by the concept of “cradle-to-grave management” of HAZMAT.

Health Hazard Information Module (HHIM)

An automated management information system which is the primary method for maintaining the workplace hazard records.

Heat Cramps

Form of muscle cramp brought on by exertion and insufficient salt in the body.

Heat Exhaustion

Occurs when more fluid is lost from sweating and respiration than is taken in, so there is not enough fluid to cool the body off.

Heat Stroke

Caused by an increase in the body’s core temperature and can lead to death. The body has plenty of fluid, but the external temperature is too much so the body is unable to eliminate its excess heat.

Hot Work

Any work involving burning, welding, riveting, or similar fire producing operations, as well as work which produces a source of ignition such as drilling, abrasive blasting, and space heating.

Human Factor and Ergonomic Society (HFES)

The society's mission is to promote the discovery and exchange of knowledge concerning the characteristics of human beings that are applicable to the design of systems and devices of all kinds.

Hurricane

An intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 mph or higher.

Hurricane Warning

Issued when hurricane conditions are expected in a specified coastal area within 24 hours or less. Actions for protection of life and property should begin immediately when the warning is issued.

Hurricane Watch

Issued for a coastal area when there is a threat of hurricane conditions within 24-36 hours.

Hydrocarbons

Any of a class of compounds containing only hydrogen and carbon as methane, ethylene, benzene, or acetylene.

Hydrogen Sulfide

A colorless gas which smells like rotten eggs. Dulls the sense of smell quickly; person may not be aware that he is breathing toxic concentrations. Frequently found in oil refining industry, sewage treatment, or wherever organic matter containing sulfur decomposes.

Hypothermia

Occurs when the body is exposed to colder temperatures or aggravated by wetness, wind, and exhaustion. The body is unable to recover the heat it has lost.

Illuminating Engineering Society (IES)

Provides services, programs, and publications for the lighting community and its consumers. In addition to design guides, technical memoranda and documents, IES develops standards in conjunction with other related organizations.

Immediately Dangerous to Life or Health (IDLH)

Any condition which poses an immediate threat of loss of life; may result in irreversible or immediate severe health effects; may result in eye damage; irritation or other conditions which could impair escape from the permit space.

Indoor Air Quality Committee

Comprised of members of the Installation Safety Office, Environmental Management Office, Preventive Medicine Services, and Directorate of Public Works, who will evaluate employee indoor air quality concern/complaints and make recommendations for air quality improvement.

Industrial Hygienist

Industrial hygiene is the science of protecting and enhancing the health and safety of people at work and in their communities. Health and safety hazards cover a wide range of chemical, physical, biological and ergonomic stressors. Those scientists, dedicated to anticipating, recognizing, evaluating and controlling those hazards are known as Industrial Hygienists.

Inerting

Displacement of the atmosphere by a non-reactive gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

Installation Ammunition Certification Board

Ensures personnel who handles, manages, or inspects ammunition and explosives are formally trained/certified in ammunition and explosives IAW Army regulations. Members include personnel from the Installation Safety Office, Quality Assurance Specialist Ammunition Surveillance (QASAS), Directorate of Public Works, Directorate of Logistics, and Directorate of Plans, Training, Mobilization, and Security.

Institute of Electrical and Electronics Engineers (IEEE)

It is a nonprofit organization that develops and publishes over 900 standards relating to electronics.

International Safety Equipment Association (ISEA)

The association for personal protective equipment and technologies.

Irritant

Any substance that will induce a local inflammatory reaction on immediate, prolonged, or repeated contact with living tissue.

Isolation

A process whereby the confined space is removed from service and completely protected against the inadvertent release of material by the following: blanking off (skillet type metal blank between flanges), misaligning sections of all lines and pipes, a double block and bleed system, electrical lockout of all sources of power, and blocking or disconnecting all mechanical linkages.

Job Hazard Analysis

A job hazard analysis is a technique that focuses on job tasks as a way to identify hazards before they occur. It focuses on the relationship between the worker, the task, the tools, and the work environment. Steps are then identified to eliminate or reduce hazards to an acceptable risk level.

Lavage

Therapeutic irrigation or washing of a body part.

Lightning Dispersal Area

Areas located at the ranges and training sites, pre-designated as a lightning protection area.

Lockout

The placement of a lockout device on an energy-isolating device, in accordance with an established procedure, ensuring that the energy-isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Lockout device

A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy-isolating device in the safe position and prevent the energizing of a machine or equipment.

Lower Explosive Limit (LEL)

The minimum concentration of a combustible gas or vapor in air (usually expressed in percent by volume at sea level), which will ignite if an ignition source (sufficient ignition energy) is present.

Mopeds

Motorized bicycles

Motorcycle Safety Foundation

Provides information on rider training, licensing, and government relations

Musculoskeletal Disorder

An injury or illness of the muscles, tendons, ligaments, peripheral nerves, joints, cartilage, bones, and/or supporting blood vessels in either the upper or lower extremities, back, or neck. Examples are cumulative trauma disorders and repetitive strain or motion injuries or illnesses.

Non-Permit Confined Space

A confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

Occupational Safety and Health Advisory Council

Council meets biannually to ensure effective implementation of the installation safety and health programs. Members include the Installation Safety Office, the Workers' Compensation Injury Compensation Program Administrator, Preventive Medicine, and installation and unit commanders. Purpose is to provide information relevant to the installation's safety and health policies and programs: employee exposure monitoring data; accident, injury, and illness data; epidemiological data; and inspection reports and abatement plans.

Oil and Hazardous Substance

Oil spills and hazardous substance releases.

Oxygen Deficiency

Refers to an atmosphere with a partial pressure of oxygen.

Oxygen Enriched Atmosphere

Any oxygen concentration greater than 25 percent at normal atmospheric pressure.

Permissible Exposure Limit (PEL)

The maximum 8-hour time weighted average of any airborne contaminant to which an employee may be exposed. At no time shall the exposure level exceed the ceiling concentration for that contaminant as listed in 29 CFR 1910 Sub Part Z.

Permit-Required Confined Space

A confined space that has one or more of the following characteristics: (1) Contains or has a potential to contain a hazardous atmosphere. (2) Contains a material that has the potential for engulfing an entrant. (3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section. (4) Contains any other recognized serious safety or health hazard.

POV Risk Management Toolbox

The Privately Owned Vehicle (POV) Risk Management Toolbox is designed as a tool for Commanders, Leaders, Supervisors and Subordinates to use in their organizations. The toolbox contains best practice examples and lessons learned that can be used as accident prevention measures when developing a unit POV safety program.

POV Task Force

Members are ISO, DPW, PMO, CASCOM Safety Office, Army Substance Abuse Program (ASAP), Public Affairs Office (PAO), and Staff Judge Advocate (SJA). The Installation Safety Office will convene the meetings quarterly to discuss/identify POV accident issues and concerns; analyze trends; and develop countermeasures. Refer issues/concerns to the Traffic Review Board.

Purging

The method by which gases, vapors, or other airborne impurities are displaced from a confined space.

Red Plan

It serves as an SOP in the event of an oil spill or a hazardous substance at Fort Lee to ensure the right response action on track at the earliest possible time.

Reportable Accident

All incidents that cause injury, illness, or property damage of any kind must be reported.

Recordable Accident

An accident that meets the minimum criteria stated in AR 385-10, DA Pam 385-40 and this regulation for Class A-D accidents.

Respirator (Approved)

A device which has met the requirements of 30 CFR Part II and is designed to protect the wearer from inhalation of harmful atmospheres and has been approved by the National Institute for Occupational Safety and Health (NIOSH) or the Mining Safety and Health Administration (MSHA).

Risk Assessment

The identification and assessment of hazards.

Risk Assessment Codes

Risk Assessment Code is a numerical expression of risk determined by an evaluation of both the potential severity of a condition and the probability of its occurrence.

Risk Decision

The decision to accept or not accept the risk(s) associated with an action made by the commander/supervisor responsible for performing that action.

Residual Risk

The level of risk remaining after controls have been identified and selected for hazards that may result.

Safety Notebook

Units are to prepare a comprehensive notebook of all the Safety Program requirements and present it to the Safety Specialist conducting the unit annual safety inspection. See appendix C for a complete and detailed list of tabs.

Safety Data Sheets (SDS)

Document intended to provide workers and emergency personnel with procedures for handling or working with a hazardous substance in a safe manner, and includes information such as physical data (melting point, boiling point, flash point, etc.), toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill handling procedures.

Servicing and/or maintenance

Workplace activities such as constructing, installing, setting-up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

SNELL

Memorial Foundation was established after the crash and death of Pete Snell due to the failure of his helmet. Snell is the world's only independent non-profit organization dedicated exclusively to helmet safety-standards.

Snow Blindness

Occurs when there is glare from ice and snow. A scratchy feeling when eyelids close could be an early symptom.

Spill Prevention and Response Plan

Ensure all hazardous substances are properly labeled, stored, dispensed, and/or used hazardous substances in a way that prevents release. Stop the source of the spill, contain any spilled material, and clean up the spill timely to prevent accidental injury or other damage from occurring.

Tagout

The placement of a tagout device on an energy-isolating device, in accordance with an established procedure, to indicate that the energy-isolating device and the equipment being controlled may not be operated until the tagout device is removed.

Tagout device

A prominent warning device, such as a tag and a means of attachment, which can be securely, fastened to an energy-isolating device in accordance with an established procedure, to indicate

that the energy-isolating device and the equipment being controlled may not be operated until the tagout device is removed.

Tornado Warning

A tornado has been seen or detected by radar.

Tornado Watch

Conditions are favorable for tornadoes and severe thunderstorms.

Trench Foot

Prolonged exposure of the feet to cool, wet conditions at temperatures as high as 60 degrees Fahrenheit if the feet are constantly wet. The skin is initially reddened with numbness, tingling pain, and itching then becomes pale and mottled and finally dark purple, grey or blue. If circulation is impaired for more than 24 hours, the victim may lose the entire foot.

Tropical Depression

An organized system of clouds and thunderstorms with a defined circulation and maximum sustained winds of 38 mph or less.

Tropical Storm

An organized system of strong thunderstorms with a defined circulation and maximum sustained winds of 39 to 73 mph.

Universal Precautions

Universal precautions refers to the practice in medicine of avoiding contact with patients' bodily fluids, by means of the wearing of nonporous articles such as medical gloves, goggles, and face shields.

Water Intoxication

Drinking too much water too quickly which dilutes the electrolytes in the blood causing interference with brain, heart, and muscle functions, and may result in death.

WBGT Index

A temperature by which air temperature, air movement, relative humidity, and radiant heat can be expressed as favorable or unfavorable for certain types of activities.

Workers' Compensation Claim

A form of disability insurance that provides compensation for lost wages, medical expenses, and/or loss of body function for federal Civilian employees who are injured in the course of employment.

Workplace Risk Factors

Actions or conditions in the workplace that may cause or aggravate a work-related musculoskeletal disorder. Examples include repetitive, forceful, or prolonged exertions; frequent or heavy lifting; pushing, pulling, or carrying heavy objects; awkward posture; contact stress; and localized or whole-body vibration.

**EMPLOYEE REPORT OF
ALLEGED UNSAFE OR UNHEALTHFUL WORKING CONDITIONS**
For use of this form, see AR 385-10; the proponent agency is Office of The Inspector General.

This form is provided for the assistance of any complainant and is not intended to constitute the exclusive means by which a complaint may be registered with the local Safety Office (Ref OSHA Poster on rights of employees and their representatives).

The undersigned (check one)

Employee Representative of employees Other (Specify) _____

believes that a job safety or health hazard exists at the following place of employment

Does this hazard (s) immediately threaten serious physical harm? Yes No
If "yes" checked, immediately contact your supervisor or safety representative.

Name of official in charge _____ Telephone _____

Operation/Activity _____

Exact location of worksite _____

1. Kind of operation _____

2. Describe briefly the hazard which exists there including the appropriate number of employees exposed to or threatened by such hazard

3. List by number and/or name the particular occupational safety and health standard(s) which may have been violated, if known

4. (a) To your knowledge, has this hazard been the subject of any union/management grievance or have you (or anyone you know) otherwise called it to the attention of, or discussed it with the employer or any representative thereof? _____

(b) If so, please give the results thereof, including any efforts by management to eliminate or reduce the severity of the hazard

5. Please indicate your desire:

- I do not want my name revealed to the official in charge.
- My name may be revealed to the official in charge.

WORK LOCATION	TELEPHONE NO.	DATE
TYPED OR PRINTED NAME OF EMPLOYEE OR EMPLOYEE REPRESENTATIVE	SIGNATURE	

JOB HAZARD ANALYSIS	JOB:	DATE:	Page ____ of ____ pages	<input type="checkbox"/> NEW <input type="checkbox"/> REVISED
Instructions on Reverse Side	Title of Person Who Does Job:	Supervisor:	Analyzed By:	
Organization:	Approved by Activity Director/Commander:			
Recommended Personal Protective Equipment:				
SEQUENCE OF BASIC JOB STEPS	POTENTIAL HAZARDS	RECOMMENDED ACTION OR PROCEDURE		

INSTRUCTIONS FOR COMPLETING JOB HAZARD ANALYSIS FORM

Job Hazard Analysis (JHA) is an important accident prevention tool that works by finding hazards and eliminating or minimizing them before the job is performed, clarification and hazard awareness, as a guide in new employee training, for periodic contracts, and for retraining of senior employees, as a refresher on jobs which run infrequently, as an accident investigation tool, and for informing employees of specific job hazards and protective measures.

Set priorities for doing JHAs: Jobs that have a history of many accidents, jobs that have produced disabling injuries, jobs with high potential for disabling injury or death, and new jobs with no accident history. Here is how to do each of the three parts of a Job Hazard Analysis:

SEQUENCE OF BASIC JOB STEPS

Break the job down into steps. Each of the steps of a job should accomplish some major task. The task will consist of a set of movements. Look at the first set of movements used to perform a task, and then determine the next logical set of movements. For example, the job might be to move a box from a conveyor and putting it on a hand truck is one logical set of movements, so it is one job step. Everything related to that one logical set of movements is part of that job step.

The next logical set of movements might be pushing the loaded hand truck to the storeroom. Removing the boxes from the truck and placing them on the shelf is another logical set of movements. And finally, returning the hand truck to the receiving area might be the final step of this type of job.

Be sure to list all the steps in a job. Some steps might not be done each time – checking the casters on a hand truck for example. However, that task is a part of the job as a whole, and should be listed and analyzed.

POTENTIAL HAZARDS

Identify the hazards associated with each step. Examine each step to find and identify hazards-actions, conditions, and possibilities that could lead to an accident. It is not enough to look at

the obvious hazards. It is also important to look at the entire environment and discover every conceivable hazard that might exist.

Be sure to list health hazards as well, even though the harmful effect may not be immediate. A good example is the harmful effect of inhaling a solvent or chemical dust over a long period of time.

It is important to list all hazards. Hazards contribute to accidents, injuries, and occupational illnesses.

In order to do part three of a JHA effectively, you must identify potential and existing hazards. That is why it is important to distinguish between a hazard, an accident, and an injury. Each of these items has a specific meaning.

HAZARD – A potential danger. Oil on the floor is a hazard.

ACCIDENT – An unintended happening that may result in injury, loss, or damage. Slipping on the oil is an accident.

INJURY – the result of an accident. A sprained wrist from the fall would be an injury.

Some people find it easier to identify possible accidents and illnesses and work back from them to the hazards. If you do that, you can list the accident and illness types in parentheses following the hazard. But be sure you focus on the hazard for developing recommended actions and safe work procedures.

RECOMMENDED ACTION

Using the first two columns as a guide, decide what actions are necessary to eliminate or minimize the hazards that could lead to an accident, injury, or occupational illness.

Among the actions that can be taken are: 1) engineering the hazard out; 2) providing personal protective equipment; 3) job instruction training; 4) good housekeeping; and 5) good ergonomics (positioning the person in relation to the machine or other elements in the environment in such a way as to eliminate stresses and strains).

List recommended safe operating procedures on the form, and also list required or recommended personal protective equipment for each step of the job.

Be specific. Say exactly what needs to be done to correct the hazard, such as, “lift using part of your leg muscles.” Avoid general statements like “be careful.”

Give a recommended action or procedure for every hazard.

If the hazard is a serious one, it should be corrected immediately. The JHA should then be changed to reflect the new conditions.

COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED (YYYYMMDD)
-------------	---------------	-------------	-----------------------------

4. PREPARED BY		
a. LAST NAME	b. RANK	c. POSITION

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

Additional space for entries in Items 5 through 11 is provided on Page 2.

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED *(Check one)*

LOW
 MODERATE
 HIGH
 EXTREMELY HIGH

14. RISK DECISION AUTHORITY			
a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE

INVESTIGATION OF INJURY/ILLNESS

Authority: Title 10 U.S.C. Section 3013, Privacy Act Statement 5 U.S.C. 552a.

Purpose: To collect required information according to OSHA law in maintaining an OSHA 300 injury log.

Routine: Medical information resulting in death, days away from work, and days of restricted duty provided on this form is entered on the OSHA 300 log.

Storage: It will remain with Installation Safety Office and only be used as supplemental documentation for each entry on the OSHA 300 log. This form will be kept for five years and then destroyed.

Disclosure: Under section 1904.35(b)(2), employees, former employees, their personal representatives, and their authorized employee representatives have the right to access the OSHA 300 Log Form and the OSHA 300-A Summary Form.

Employee Name:		Job Title:	
Location of incident (Bldg, floor, room, street):		Date of Injury:	Time of Injury:
# days lost beyond date of injury per doctor's orders:		# days restrictions beyond date of injury per doctor's orders:	
Nature of Injury (body part affected, appearance, diagnosis):		Was injury reported promptly? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was medical treatment administered? If so, what?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Describe incident and contributing hazards/deficiencies or circumstances in detail:		Work/Service Order Number: Completed? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was employee wearing/using all appropriate and job-related safety equipment? If not, explain:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Were all safety precautions, policies, and directives adhered to? If not, explain:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Was all safety equipment in good working order? If not, explain:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
What corrective actions were taken?			
Signature of Employee:		Date:	
Signature of Supervisor:		Date:	
Signature of Investigating Official:		Date:	

MOTORCYCLE INSPECTION CHECKLIST, page 1

T-CLOCS ITEM	WHAT TO CHECK	WHAT TO LOOK FOR	CHECK-OFF	
T-TIRES & WHEELS				
Tires	Condition	Tread depth, wear, weathering, evenly seated, bulges, embedded objects.	Front	Rear
	Air Pressure	Check when cold, adjust to load.	Front	Rear
Wheels	Spokes	Bent, broken, missing, tension, check at top of wheel: "ring" = OK — "thud" = loose spoke	Front	Rear
	Cast	Cracks, dents.	Front	Rear
	Rims	Out of round/true = 5mm. Spin wheel, index against stationary pointer.	Front	Rear
	Bearings	Grab top and bottom of tire and flex: No freeplay (click) between hub and axle, no growl when spinning.	Front	Rear
	Seals	Cracked, cut or torn, excessive grease on outside, reddish-brown around outside.	Front	Rear
Brakes	Function	Each brake alone keeps bike from rolling.	Front	Rear
C-CONTROLS				
Levers and Pedal	Condition	Broken, bent, cracked, mounts tight, ball ends on handlebar levers, proper adjustment.		
	Pivots	Lubricated.		
Cables	Condition	Fraying, kinks, lubrication: ends and interior.		
	Routing	No interference or pulling at steering head, suspension, no sharp angles, wire supports in place.		
Hoses	Condition	Cuts, cracks, leaks, bulges, chafing, deterioration.		
	Routing	No interference or pulling at steering head, suspension, no sharp angles, hose supports in place.		
Throttle	Operation	Moves freely, snaps closed, no revving when handlebars are turned.		
L-LIGHTS				
Battery	Condition	Terminals; clean and tight, electrolyte level, held down securely.		
	Vent Tube	Not kinked, routed properly, not plugged.		
Headlamp	Condition	Cracks, reflector, mounting and adjustment system.		
	Aim	Height and right/left.		
	Operation	Hi beam/low beam operation.		
Tail lamp/brake lamp	Condition	Cracks, clean and tight.		
	Operation	Activates upon front brake/rear brake application.		
Turn signals	Operation	Flashes correctly.	Front left	Front right
			Rear left	Rear right
Mirrors	Condition	Cracks, clean, tight mounts and swivel joints.		
	Aim	Adjust when seated on bike.		
Lenses & Reflectors	Condition	Cracked, broken, securely mounted, excessive condensation.		
Wiring	Condition	Fraying, chafing, insulation.		
	Routing	Pinched, no interference or pulling at steering head or suspension, wire looms and ties in place, connectors tight, clean.		

MOTORCYCLE INSPECTION CHECKLIST, page 2

O-OIL				
Levels	Engine Oil	Check warm on center stand on level ground, dipstick, sight glass.		
	Hypoid Gear Oil, Shaft Drive	Transmission, rear drive, shaft.		
	Hydraulic Fluid	Brakes, clutch, reservoir or sight glass.		
	Coolant	Reservoir and/or coolant recovery tank — check only when cool.		
	Fuel	Tank or gauge.		
Leaks	Engine Oil	Gaskets, housings, seals.		
	Hypoid Gear Oil, Shaft Drive	Gaskets, seals, breathers.		
	Hydraulic Fluid	Hoses, master cylinders, calipers.		
	Coolant	Radiator, hoses, tanks, fittings, pipes.		
	Fuel	Lines, fuel valve, carbs.		
C-CHASSIS				
Frame	Condition	Cracks at gussets, accessory mounts, look for paint lifting.		
	Steering-Head Bearings	No detent or tight spots through full travel, raise front wheel, check for play by pulling/pushing forks.		
	Swingarm Bushings/Bearings	Raise rear wheel, check for play by pushing/pulling swingarm.		
Suspension	Front Forks	Smooth travel, equal air pressure/damping, anti-dive settings.	Left	Right
	Rear Shock(s)	Smooth travel, equal pre-load/air pressure/damping settings, linkage moves freely and is lubricated.	Left	Right
Chain or Belt	Tension	Check at tightest point.		
	Lubrication	Side plates when hot. Note: do not lubricate belts.		
	Sprockets	Teeth not hooked, securely mounted		
Fasteners	Threaded	Tight, missing bolts, nuts.		
	Clips	Broken, missing.		
	Cotter Pins	Broken, missing.		
S-STANDS				
Center stand	Condition	Cracks, bent.		
	Retention	Springs in place, tension to hold position.		
Side stand	Condition	Cracks, bent (safety cut-out switch or pad equipped).		
	Retention	Springs in place, tension to hold position.		

11/07

Operator Signature: _____ Date: _____

Inspector Signature: _____ Date: _____

Motorcycle/ATV Operator Agreement

Before operation of any motorcycle/ATV, you shall successfully complete an approved rider or operator safety course. The safety course must be a Motorcycle Safety Foundation (MSF), or Specialty Vehicle Institute of America (SVIA) or MSF-based State-approved course. You are responsible to contact the installation safety office and schedule training. Once you have completed training you will report to the installation safety office and me. It is mandatory that all persons operating or riding as a passenger on a MC or ATV use appropriate Personal Protection Equipment (PPE). PPE requirements on and off the installation/Army property are as follows.

1. Helmets, certified to meet DOT standards, must be properly fastened under the chin. Outside CONUS riders may wear HN helmets if the helmet meets or exceeds U.S. DOT standards.
2. *Impact or shatter resistant goggles, wraparound glasses, or full-face shield properly attached to the helmet must meet or exceed ANSI Safety Code Z87.1-2003, for impact and shatter resistance. A windshield alone is not proper eye protection.*
3. *Footwear is mandatory. Foot protection includes sturdy over-the-ankle footwear that affords protection for the feet and ankles (durable leather or ballistic type cloth athletic shoes that cover the ankles may be worn).*
4. At a minimum, long sleeved shirt or jacket, long trousers, and full-fingered gloves or mittens designed for use on a motorcycle must be worn.
5. *Recommended protective clothing includes long-sleeved shirt or jacket, long trousers, and full-fingered gloves or mittens made from leather or other abrasion-resistant material. Motorcycle jackets and pants constructed of abrasion-resistant materials such as leather, Kevlar®, or Cordura® and containing impact-absorbing padding are strongly encouraged. Riders are encouraged to select PPE that incorporates fluorescent colors and retro-reflective material. **Note: Check with the installation safety office to get specific state, local, and installation requirements related to reflective equipment.***
6. Include specific installation and state MC/ATV traffic laws.

Reference: Department of Defense Instruction (DoDI) 6055.4 – DoD Traffic Safety Program.

Signature and Date

Motorcycle Operator/ATV Requirements and Individual Responsibilities Agreement

I, _____, have read and understand the requirement of safe motorcycling/ATV operations. I acknowledge the Army requirement for Personal Protective Equipment (PPE), licensing requirements and training requirements as outlined in the Motorcycle/ATV Operator Individual Requirements and Responsibilities Agreement. I understand that if I am injured while riding a motorcycle/ATV in violation of this policy, I may be found Not-in-Line of Duty Due to Own Misconduct. Such a finding by an investigating officer can result in my loss of benefits, to include my right to free medical care, my right to disability pay, separation pay, or medical retirement from the service if my injuries make me no longer eligible for military service.

I could also face forfeiture of many of my veteran's rights such as education benefits. In addition to the Army requirement for PPE, I acknowledge that my commander has given me a direct order to NEVER operate a motorcycle/ATV without the PPE. My failure to comply with his/her order is punishable under Article 92 of the Uniform Code of Military Justice.

Signature and Date

POV INSPECTION CHECKLIST

At least a two week period should be allowed to ensure timely repairs.

ITEM	WHAT TO CHECK	LOOK FOR KNOWN DEFICIENCIES	CHECKOFF	
TIRES				
	Condition	Tread depth, wear, weathering, evenly seated, bulges, imbedded objects, cuts, breaks. At least one mm of tread over entire traction surface. <i>(Using a penny, place it in the tire tread with head facing downward. If the tread does not reach the top of Lincoln's head, there is insufficient tread depth)</i>	Front	Rear
	<i>NOTE: No mixing of radial tires and bias tires.</i>			
	Spare tire	Spare tire (inflated), jack, lug wrench	Pass	Fail
LIGHTS				
	Head lights	Both high and low beams operational, cracked, condensation, secured	Left	Right
	Tail Lights	Lenses intact, tail light working when turned on (red)	Left	Right
	Brake lights	Lenses intact, brake light working when brake is applied (red)	Left	Right
	Turn Signals	Lenses intact, left and right turn signals blink (red lights in rear and yellow lights in front)	Front Left	Rear Right
	Backup lights	Lenses intact, left and right backup lights work (White Light)	Left	Right
	Four-way Flashers	Lenses intact, left and right turn signals flash/blink at the same time	Front Left	Rear Right
	License Plate Light	Lenses intact, does light stay on	Pass	Fail
WINDSHIELD & WINDOWS & WIPERS				
	Windshield	Not cracked, broken or scratched to the degree that impairs vision	Pass	Fail
	Rear Window	Not cracked, broken or scratched to the degree that impairs vision	Pass	Fail
	Windows	Windows go up and down, scratched or tinted to the degree that impairs vision	Pass	Fail
	Window controls	Check handles, push electric buttons	Front	Rear
	Windshield wipers	Both wipers are installed on vehicle, windshield wipers work, blades show signs of wear	Pass	Fail
MIRROR				
	Mirror Outside	Missing, cracked	Left	Right
	Mirror Inside	Missing, cracked	Pass	Fail
BUMPERS				
	Bumper Front	Missing, loose, broken	Pass	Fail
	Bumper Rear	Missing, loose, broken, bent in any way to cause a hazard	Pass	Fail
BRAKES				
	Brakes	Foot pedal cannot travel more than half way to floor, does brake light stay on	Pass	Fail
	Emergency Brake	Properly adjusted, check emergency brake by: pull/push emergency brake, apply foot to brake, gently press gas pedal, ensure brake holds vehicle	Pass	Fail

Interior				
Horn	Does it work	Pass	Fail	
Defroster Front	Ensure hot air blows out above the dash	Pass	Fail	
Defroster Rear	Check light on dash, if in the winter ensure it works by allowing the rear windshield to clear up	Pass	Fail	
Emergency equipment	(OPTIONAL) First aid kit, warning triangle, flashlight, fire extinguisher, blanket, flares, shovel, chains, tools, etc. (Check host nation laws for any additional equipment)	Pass	Fail	
Heater	Ensure heater works	Pass	Fail	
SEATBELTS				
Seatbelt Front/Rear (Include shoulder harness during inspection, may have a center seat belt)	Missing, frayed, does not snap	Front	Rear	
LICENSE/DECALS/INSURANCE				
State Drivers License	Expired, missing	Pass	Fail	
Installation decal	Missing, needs replacing	Pass	Fail	
License Plate (License plates match windshield decal (Europe Only))	Expired, check sticker/decal to ensure plate is current	Pass	Fail	
Insurance	Does the operator have valid insurance	Pass	Fail	
UNDER THE HOOD				
FLUIDS				
Brake	Filled to appropriate level	Pass	Fail	
Windshield washer	Windshield washer fluid	Pass	Fail	
Battery	Check the color indicator on the battery	Pass	Fail	
Power Steering	Filled to appropriate level	Pass	Fail	
HOSES	Cuts, cracks, leaks, bulges, chaffing, deterioration	Pass	Fail	
BATTERY	Terminals, clean and tight, held down securely	Pass	Fail	

Inspector's

Name: _____ Signature _____

Operator

Name: _____ Signature _____

Platoon Sergeant/Platoon Leaders approval _____

Date inspection was conducted _____
conducted _____

Date follow-up inspection was

Leave/Pass/Holiday _____

Inspection checklist can be revised based on local requirements - e.g., snow tires/chains
Fort Lee Form 385-5, Dec 09

U.S. ARMY ABBREVIATED GROUND ACCIDENT REPORT (AGAR) For use of this form, see and DA Pamphlet 385-40; the proponent agency is OCSA							REQUIREMENTS CONTROL SYMBOL CSOCS-308																																														
1. TIME & DATE OF ACCIDENT		a. Yr	b. Mth	c. Day	d. Time	2. PERIOD OF DAY <input type="checkbox"/> Day <input type="checkbox"/> Night <input type="checkbox"/> Dusk <input type="checkbox"/> Dawn		3. ACCT CLASS	4. COMBAT STATUS <input type="checkbox"/> Combat <input type="checkbox"/> Non-Combat																																												
5. UNIT IDENTIFICATION		a. UIC (6-digit Code)			b. Unit Address		c. Unit's Branch		d. Army HQ's																																												
6. LOCATION OF ACCIDENT		a. Exact Location					b. Type Location		c. Grid Coordinates/Lat-Long																																												
d. State/Country		e. <input type="checkbox"/> Off Post <input type="checkbox"/> On Post Name:			7. EXPLOSIVES/AMMO INVOLVED?		<input type="checkbox"/> Yes <input type="checkbox"/> No																																														
8. MISSION		a. Briefly describe the mission.						b. METL Task? <input type="checkbox"/> Yes <input type="checkbox"/> No																																													
9. VEHICLE/EQUIPMENT/MATERIEL INVOLVED																																																					
#1	a. Type of Item (Nomenclature)		b. Make/Model #		c. Serial #		d. Ownership		e. Estimated Cost of Damage	f. Vehicle Collision																																											
	Materiel Failure/Malfunction Information (Blks 9g-9l)																																																				
	g. Failure Mode		h. Part Nomenclature			i. Part #		j. Part NSN		k. Part Manufacturer Code	l. EIR/QDR Submitted <input type="checkbox"/> Yes <input type="checkbox"/> No																																										
#2	a. Type of Item (Nomenclature)		b. Make/Model #		c. Serial #		d. Ownership		e. Estimated Cost of Damage	f. Vehicle Collision																																											
	Materiel Failure/Malfunction Information (Blks 9g-9l)																																																				
	g. Failure Mode		h. Part Nomenclature			i. Part #		j. Part NSN		k. Part Manufacturer Code	l. EIR/QDR Submitted <input type="checkbox"/> Yes <input type="checkbox"/> No																																										
10. WHY DID THE MATERIEL FAIL/MALFUNCTION? (Check the root causes(s) in Blk 10a. In Blk 10b., explain how the root causes(s) led to the materiel failure/malfunction.)							b. Describe how the materiel failed/malfunctioned and explain why (root cause).																																														
<table border="1"> <thead> <tr> <th colspan="2">a.</th> <th colspan="3">LEADER (Not ready, willing, or able to enforce standards)</th> <th colspan="3">STDS/PROCEDURES (Not clear, Not practical)</th> <th colspan="3">SUPPORT (Short comings in type, capability, amount or condition of equip/supplies/services/facilities)</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>Direct Supervision</td> <td><input type="checkbox"/></td> <td>AR</td> <td><input type="checkbox"/></td> <td>SOP</td> <td><input type="checkbox"/></td> <td>Equip/Materiel Improperly Designed</td> <td><input type="checkbox"/></td> <td>Inadequate Manufacture</td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td>Unit Command Supervision</td> <td><input type="checkbox"/></td> <td>TM</td> <td><input type="checkbox"/></td> <td>Other</td> <td><input type="checkbox"/></td> <td>Equip/Materiel Not Provided</td> <td><input type="checkbox"/></td> <td>Inadequate Maintenance</td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td>Higher Command Supervision</td> <td><input type="checkbox"/></td> <td>FM</td> <td><input type="checkbox"/></td> <td>None Exists</td> <td><input type="checkbox"/></td> <td>Inadequate Facilities/Services</td> <td><input type="checkbox"/></td> <td>Other</td> <td></td> </tr> </tbody> </table>										a.		LEADER (Not ready, willing, or able to enforce standards)			STDS/PROCEDURES (Not clear, Not practical)			SUPPORT (Short comings in type, capability, amount or condition of equip/supplies/services/facilities)			<input type="checkbox"/>	Direct Supervision	<input type="checkbox"/>	AR	<input type="checkbox"/>	SOP	<input type="checkbox"/>	Equip/Materiel Improperly Designed	<input type="checkbox"/>	Inadequate Manufacture		<input type="checkbox"/>	Unit Command Supervision	<input type="checkbox"/>	TM	<input type="checkbox"/>	Other	<input type="checkbox"/>	Equip/Materiel Not Provided	<input type="checkbox"/>	Inadequate Maintenance		<input type="checkbox"/>	Higher Command Supervision	<input type="checkbox"/>	FM	<input type="checkbox"/>	None Exists	<input type="checkbox"/>	Inadequate Facilities/Services	<input type="checkbox"/>	Other	
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11a. NAME (Last, First, MI) (Include Address and UIC if different than Blks 6a and 6b.)				12. SSN		13a. PERSONNEL CLASSIFICATION		13b. DATE ASSIGNED/HIRED (YYYYMMDD)																																													
11b. HOME ADDRESS				13c. DATE OF REDEPLOYMENT FROM COMBAT ZONE, IF APPLICABLE (YYYYMMDD)		14. MOS/JOB SERIES		15a. DUTY STATUS <input type="checkbox"/> On-duty <input type="checkbox"/> Off-duty		15b. IF OFF DUTY (if on leave/pass) <input type="checkbox"/> Leave <input type="checkbox"/> Pass Date from (YYYYMMDD) Date to (YYYYMMDD)																																											
				16. DOB (YYYYMMDD)		17. GENDER		18. PAY GRADE		19. FLIGHT STATUS <input type="checkbox"/> Yes <input type="checkbox"/> No																																											

20. MOST SEVERE INJURY (See Instructions)		a. Degree _____		Date of Death (YYYYMMDD) _____		b. Type _____		c. Body Part _____		d. Cause _____					
21. LOST TIME		ACTIVITY OF INDIVIDUAL Provide code (from list in instructions) and describe in space below.													
a. Days Hospitalized _____		23. ACTIVITY CODE (if activity is parachuting, complete Blk 36)		24. SPECIFIC DESCRIPTION OF ACTIVITY/TASK											
b. Days lost not Hospitalized _____															
c. Days Restricted _____															
d. Treated in ER <input type="checkbox"/> Yes <input type="checkbox"/> No															
22a. OSHA Log 300 Case No. _____															
b. Name of Physician _____															
c. Name and Address of Treatment Facility _____															
25. PERSONAL PROTECTIVE EQUIPMENT		AVAILABLE?		USED?		N/A		26. ALCOHOL/DRUGS CAUSE/CONT		27. EQUIP THIS PERSON WAS ASSOCIATED WITH?					
CHECK APPROPRIATE BLOCK(S)		Yes	No	Yes	No			<input type="checkbox"/> Yes BAC % _____ <input type="checkbox"/> No <input type="checkbox"/> Unknown		(Enter Item No. from Blk 9)					
<input type="checkbox"/>	a. Seat Belt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			28a. LICENSED TO OPERATE EQUIPMENT <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		28b. MANDATORY 4hr TRAFFIC SAFETY TRAINING <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date: _____					
<input type="checkbox"/>	b. Restraint System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<input type="checkbox"/>	c. Goggles/glasses/visor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			28c. MSF CERTIFIED <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date: _____		29. DUTY HOURS a. Time work began (e.g., 0645): _____ b. Continuous hours: _____					
<input type="checkbox"/>	d. Gloves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<input type="checkbox"/>	e. Ear Plugs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			30. HRS SLEEP LAST 24		31. TACTICAL TRAINING <input type="checkbox"/> Yes <input type="checkbox"/> No					
<input type="checkbox"/>	f. IBA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<input type="checkbox"/>	g. Other (Specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			32. TYPE TRAINING FACILITY		33. LAST TRAINING					
<input type="checkbox"/>	h. Helmet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<input type="checkbox"/> DOT Approved (if Motorcycle)? Yes <input type="checkbox"/> No <input type="checkbox"/>															
34. FIELD EXERCISE/NAMED OPERATION						35. NIGHT VISION SYSTEM USED									
<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide name: _____						<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide type: _____									
36. DID INDIVIDUAL MAKE A MISTAKE THAT CAUSED/CONTRIBUTED TO ACCIDENT OR SEVERITY OF INJURY/DAMAGE? In Blk a, indicate if individual made a mistake. If yes, provide the code (from instructions) in Blk b and describe in Blk c.															
a. Mistake <input type="checkbox"/> Yes <input type="checkbox"/> No		c. Tell what the mistake was and how it caused/contributed to the accident or severity of injury/damage.													
b. Code															
37. WHY WAS THE MISTAKE MADE? (ROOT CAUSE) (Check the root cause(s) in Blk a. In Blk b, tell how the root cause(s) led to the mistake.)															
a.		LEADER (Not ready, willing, or able to enforce standards)		TRAINING (Insufficient in Content/Amount)		STDS/PROCEDURES (Not clear/Not practical)		SUPPORT (Shortcomings in type, capability, amount or condition of equip/supplies/services/facilities)		INDIVIDUAL (Mistake due to own personal factors)					
<input type="checkbox"/>	Direct Supervision	<input type="checkbox"/>	School	<input type="checkbox"/>	AR	<input type="checkbox"/>	SOP	<input type="checkbox"/>	Equip/Materiel Improperly Designed	<input type="checkbox"/>	Inadequate Manufacture	<input type="checkbox"/>	Poor/Bad Attitude	<input type="checkbox"/>	Fatigue
<input type="checkbox"/>	Unit Command Supervision	<input type="checkbox"/>	Unit	<input type="checkbox"/>	TM	<input type="checkbox"/>	Other	<input type="checkbox"/>	Equip/Materiel Not Provided	<input type="checkbox"/>	Inadequate Maintenance	<input type="checkbox"/>	Overconfident	<input type="checkbox"/>	Alcohol, Drugs
<input type="checkbox"/>	Higher Command Supervision	<input type="checkbox"/>	Experience, OJT	<input type="checkbox"/>	FM	<input type="checkbox"/>	None exists	<input type="checkbox"/>	Inadequate Facilities/Services	<input type="checkbox"/>	Other	<input type="checkbox"/>	In a Hurry	<input type="checkbox"/>	Fear/Excitement

COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED (YYYYMMDD)
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4. PREPARED BY		
a. LAST NAME	b. RANK	c. POSITION

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

Additional space for entries in Items 5 through 11 is provided on Page 2.

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED <i>(Check one)</i>
<input type="checkbox"/> LOW <input type="checkbox"/> MODERATE <input type="checkbox"/> HIGH <input type="checkbox"/> EXTREMELY HIGH

14. RISK DECISION AUTHORITY			
a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE

CONFINED SPACE ENTRY PERMIT

LOCATION: _____ DATE: _____

Description of confined Space: _____ TIME: _____

Purpose of Entry: _____ EXPIRATION: _____

Person in Charge of Work: _____

Authorized Entrant (s): _____

Attendant: _____ Backup Person: _____

Successfully Completed Training Yes No (Circle One) Yes No (Circle One)
 Successfully Completed First Aid Yes No (Circle One) Yes No (Circle One)

SPECIAL REQUIREMENTS

Lockout De-Energize
 Lines Broken – Capped or blanked
 Ventilation
 Purge – Flush & Vent
 Secure Area

YES	NO

HAZARDOUS WORK

Burning
 Welding
 Brazing
 Open Flames
 Non Sparking Tools
 Burning/Welding Permit
 Other

YES	NO

HAZARDS EXPECTED

Corrosive Material

Hot Equipment

Flammable Materials

Toxic Materials

Drains Open

YES	NO

Cleaning (Ex: Chemical or water lance)

Non-Spark Producing Operations

Spilled Liquids

Pressure Systems

Other

YES	NO

VESSEL CLEANED

Deposits _____
 Method _____
 Inspection _____
 Neutralized With _____

Fire Safety Precautions: _____

PERMIT VALID FOR 8 HOURS ONLY. ALL COPIES WILL REMAIN AT JOBSITE UNTIL JOB IS COMPLETED.

PERSONAL SAFETY

	YES	NO		YES	NO
Respirators			Lighting (Explosive Proof)		
Protective Clothing			Communications		
Head, Hand, & Foot Protection			Buddy System		
Shields			Standby Person		
Lifelines			Emergency Egress Procedures		
Full Body Harness			Emergency Escape Retrieval Equipment		
Fire Extinguishers					

TEST(S) TO BE TAKEN

	Permissible Entry Level	Reading and Time							
% of Oxygen	19.5% to 23.5%								
Carbon Monoxide	+35 PPM								
Hydrogen Sulfide	+10 PPM * 15 PPM								
Sulfur Dioxide	+ 2 PPM * 5 PPM								
Ammonia	* 35 PPM								
Hydrogen Cyanide	(Skin) * 4 PPM								
Lower Flammable Limit	Under 10 %								

* **Short-term exposure limit: Employee can work in the area up to 15 minutes.**

+ **8 hr. Time Weighted Avg.: Employee can work in area 8 hrs (longer with appropriate respiratory protection).**

Note: Continuous/periodic tests shall be established before beginning job.

Any questions pertaining to test requirements contact Safety Office or the Industrial Hygienist.

INSTRUMENTS USED: _____ **CALIBRATION DATE:** _____

Communication Style: (Verbal, Radio, Tapping, or etc.)

Remarks: _____

Test Performed By: _____

SIGNATURE

AUTHORIZATIONS:

Entry Supervisor: _____

Entry and Emergency Procedures Understood:

Attendant _____

Rescue _____

Telephone _____

Original to Entry Supervisor
Retain for 1 year

ARMS ROOM CHECKLIST

- ____ 1. Are Hazard Classes (HC) 1.1 and 1.2 (high explosives) ammunition prohibited from being stored in the arms room?
- ____ 2. Does the total amount of small-arms ammunition (HC 1.4, 50 cal or less) exceed 5,000 rounds? (If so, written authorization is required.)
- ____ 3. Is the correct fire symbol posted at arms room entrance? (Fire symbol #4 for HC 1.4, Fire symbol #3 for HC 1.3)
- ____ 4. Is the arms room free of flame producing items, flammable items, and combustible liquids?
- ____ 5. Is a copy of the security construction statement (DA Form 4604-R) on hand?
- ____ 6. Is a serviceable and appropriate fire extinguisher (10 lbs) available?
- ____ 7. Are ammunition containers properly marked?
- ____ 8. Is a complete inventory of stored items on hand?
- ____ 9. Is Class 1.3 (signaling devices and riot control munitions) itemized by DODAC, quantity, limited to mission essential, and specifically authorized by battalion commander?
- ____ 10. Are appropriate chemical hazard symbols posted, if required?
- ____ 11. Are safety data sheets (SDS) posted for each hazardous chemical?
- ____ 12. Are personnel trained in hazard material storage and transportation?
- ____ 13. Is a complete risk assessment posted or on file?
- ____ 14. Is a commander's approval memo posted or on file?
- ____ 15. Is a current license to store small arms (1.4) posted inside?
- ____ 16. Is a company arms room SOP on file?

The proponent of this regulation is the Installation Safety Office.

FOR THE COMMANDER:

OFFICIAL:

M.C. STEPHEN CHERRY IV
Colonel, GS
Chief of Staff

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