DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY GARRISON
FORT BUCHANAN, PUERTO RICO 00934-4206

Fort Buchanan Safety Standard Operating Procedures (SOP)
7 January 2016

Safety

Summary. This SOP supersedes version dated 4 April 2014. It provides procedures on Army Safety management with special emphasis on responsibilities and organizational concepts. It implements requirements of the Occupational Safety and Health Act of 1970 (OSH Act) as implemented in Executive Order 12196; part 1960, title 29, Code of Federal Regulations (CFRs); Department Of Defense (DOD) Directive 1000.3 and DOD.

Applicability. This SOP applies to all garrison activities, directorates, staff offices/departments, and tenant organizations on Fort Buchanan, Puerto Rico.

Supplementation. Supplementation of this SOP is prohibited without prior approval from the Commander, United States Army Garrison, ATTN: IMBC-SO, Fort Buchanan, Puerto Rico 00934-4206.

Suggested improvements. The proponent of this SOP is the Fort Buchanan Installation Safety Office. Users are invited to send comments and suggested improvements to the Fort Buchanan Installation Safety Officer.

Availability. This document is available on the Fort Buchanan P: drive under the Installation Safety Office (ISO) folder.

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Chapter 1
Introduction

1-1. Purpose

This handbook is to be used by supervisors and employees in the performance of their daily Safety and Occupational Health (S&OH) requirements and responsibilities. It provides safety program information in a manner that allows quick familiarization with the garrison safety program and also contains very detailed information in the appendices for the management of specific safety program elements. The handbook is meant to supplement, but not replace, guidance in applicable U.S. Army and U.S. federal safety laws and regulations. The handbook is essentially the Garrison Safety Standing Operating Procedure (SOP). Questions concerning the content of this handbook should be addressed directly to the Installation Safety Office (ISO) for clarification. Other safety-related subjects that affect only a small number of unit personnel or operations will be addressed in separate safety program policy or guidance placed in Appendix E

1-2. Program Goal and Understanding.

a. Our goal is to reduce hazards by implementing S&OH programs that identify hazardous conditions or situations before they lead to accidents or incidents. We operate under the understanding that managers, supervisors and employees all have specific roles and responsibilities in ensuring safety in the workplace and that safety remains a top priority. Safety in the workplace is not extra to what we do, it is what we do.

b. Employees will have the right to report unsafe or unhealthy working conditions to upper levels of management without the fear of reprisal, and to request workplace safety evaluations if they believe hazardous conditions are being allowed to exist after supervisory notification. When no action is taken to address employee concerns, the ISO should be requested to assist in issue resolution.

c. Supervisors will encourage employees to report unsafe/ unhealthful work condition and to correct deficiencies as they discover them. Management will make every effort to address employee concerns and to correct identified hazards. Use the following link to electronically report a safety hazard: usarmy.buchanan.imcom-atlantic.list.safety@mail.mil

1-3. References. Explanation of Abbreviations and Terms.

Abbreviations and terms used in this handbook are explained in the glossary.

1-4. Policy

a. Leaders and supervisors at all levels must pursue a vigorous 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 the Army's risk management process to effectively preclude unacceptable risk to the safety of personnel and property. Accidental losses affect combat readiness. Positive action will be taken to control these losses through the risk management process, training, education, and aggressive leadership. Fort Buchanan Risk Management program requirements are in Chapter 4. Labor management relations / responsibilities regarding consultations, negotiations, union/management agreements, and applicable laws, rules, or government-wide regulations will be fulfilled and complied with the following principles that will be effectively integrated into all Fort Buchanan plans, programs, decision processes, operations, and activities:

(1) Accidents are an unacceptable obstacle to Army missions, readiness, morale, and resources: hence, decision makers will exercise Risk Management.

(2) Decision makers at every level will employ the Risk Management process, as specified in Chapter 4 of this SOP, to avoid unnecessary residual risk to missions, personnel, equipment, and the environment.

(3) The acquisition of materials, equipment, facilities, and systems will maximize the use of engineering design to preclude unnecessary residual risk and control residual risks.

(4) Life cycle safety considerations will be considered in the acquisition, use, and disposal of chemicals and hazardous materials so as not to endanger or compromise public health and safety.

(5) Appropriate action will be taken to expeditiously correct nonconformities with mandated standards, workplace hazards, and accident causes.

(6) As a requirement for annual performance evaluations, military, civilian managers and supervisors will include accident prevention responsibilities as a rating element. The success or shortcomings of managers or supervisory personnel in performing Safety and Occupational Health (SOH) responsibilities will be considered in Army Civilian employee performance appraisals, Officer Evaluation Reports (OERs), and Enlisted Evaluation Reports (EERs) and discussed during performance counseling sessions.

1-5. Responsibilities

a. The Garrison Commander will exercise the overall staff responsibility for the Fort Buchanan Accident Prevention Program. The Fort Buchanan Installation Safety Officer acts for the Garrison Commander in discharging this responsibility.

b. The Fort Buchanan Installation Safety Officer (ISO) will:

(1) Serve as principal staff element in planning, organizing, directing, and evaluating all safety program elements within the command.

(2) Provide guidance and assistance to the command with the establishment and implementation of plans, policies, and procedures for conducting safety programs at all levels of command.

(3) Assist commanders in determining the numbers and qualifications of personnel necessary to ensure an effective accident prevention program.

(4) Provide technical and professional assistance to eliminate or control unsafe behavior and unsafe environments.

(5) Determine the need for, obtain, and distribute safety promotional and educational materials.

(6) Provide technical assistance in accident investigation and reporting to ensure accuracy and completeness.

(7) Collect, analyze, and disseminate data concerning the accident experience of the command, prepare reports of safety activities, and conduct studies as required by higher authority.

(8) Review operating procedures, manuals, directives, and other instructions to ensure the incorporation of safe practices and safe physical standards.

(9) Review plans for proposed installation activities to ensure the safety of Army personnel and the public.

(10) Maintain close liaison with other staff agencies, military services, along with Federal and Civilian agencies in all relevant safety matters.

(11) Conduct surveys and inspections of activities to include review of accident prevention programs.

(12) Ensure Standard Army Safety and Occupational Health Inspections are conducted in all installation worksites.

(13) Implement and manage all aspects of the Army Safety Program for this installation as outlined in AR 385-10.

(14) Implement and manage the Installation Hazard Communication, Bloodborne Pathogen, Risk Management, Ergonomics, Radiation Protection, and Respiratory Protection Programs.

(15) Develop recommendations for corrective measures where warranted by adverse accident rates or trends, hazardous conditions or procedures, or other deficiencies.

(16) Provide accident prevention material and ensure high quality training for Civilian and Military safety personnel at all levels.

(17) Coordinate with Preventive Medicine Service (PMS) at Rodriguez Army Health Clinic (RAHC), to identify and abate existing or potential occupational health hazards in the workplace.

(18) Publicize channels for reporting unsafe or unhealthful conditions.

(19) Convene the Command Safety Council quarterly or as directed by the Garrison Commander.

(20) Develop a comprehensive safety-training program for collateral duty safety personnel, which will ensure competence in carrying out their duties.

(21) Actively participate in the Federal Employees Compensation Act (FECA) Working Group as council for safety matters and accident prevention policies.

c. Directorate of Public Works (DPW) will:

(1) Coordinate DA Forms 4283 (Facilities Engineering Work Requests) with the Fort Buchanan Installation Safety Office for identification of safety deficiencies.

(2) Consolidate deficiencies, where correction exceeds local capability, into projects for Department of the Army funding.

(3) Establish internal procedures to assure work requests as safety related by the Risk Assessment Code (RAC) are given priority for correction, and request identified by the Fort Buchanan Installation Safety Office as imminent danger (risk assessment codes 1 and 2) are corrected immediately.

(4) Provide the Fort Buchanan Installation Safety Office a quarterly status report of safety deficiency abatement status.

(5) Assure coordination with the Fort Buchanan Installation Safety Office in the design, construction, and renovation of new or existing facilities to ensure compliance with OSHA standards.

(6) Support the safety program within their respective areas and provide necessary assistance to enhance the overall safety effectiveness of the installation.

(7) In coordination with applicable unit or directorate, prepare a formal hazard abatement plan for any risk assessment code 1 or 2 hazards that will require more than 30 days to correct, and for any risk assessment code 3 hazards that will require more than 60 days to correct.

(8) Appoint at least one Collateral Duty Safety Officer (CDSO) (more may be appointed as needed), one of them to be assigned to the Operations and Maintenance (O&M) Division.

d. Logistics Readiness Center (LRC) will:

(1) Provide the Fort Buchanan Installation Safety Office with Estimated Cost of Damage (ECOD) reports on all equipment and vehicles involved in accidents.

(2) Ensure that DD Form 1348-6 (DOD's Single Line Item Requisition System Document) or DA Form 3953 (Purchase Request and Commitment) or equivalent electronic PRC Web request for all hazardous chemicals or materials include the required information per AR 700-141.

(3) Appoint at least one CDSO to cover the distinct operations of the organization. More may be used if deemed necessary.

e. Directorate of Plans, Training, Mobilization and Security (DPTMS) will:

(1) Notify the Fort Buchanan Installation Safety Office within 1 hour of all accidents that occur in Fort Buchanan upon information becoming available to the Emergency Operation Center (EOC).

(2) Include safety training courses and requirements into organizational training plans and calendars.

(3) Provide the Fort Buchanan Installation Safety Office copies of Serious Incident Reports (SIRs).

f. Director of Emergency Services (DES) will:

(1) Support Fort Buchanan Installation Safety Office investigations to include providing necessary reports. (See Chapter 5)

(2) Assist in correcting potential traffic hazards.

(3) Provide Fort Buchanan Installation Safety Office with a weekly summary of accident information collected through DOD Police channels, e.g., blotter extracts and traffic accident reports.

(4) Provide the Fort Buchanan Installation Safety Office with Fire Incident Reports.

g. Rodriguez Army Health Clinic (RAHC) will:

(1) Upon request from the Fort Buchanan Installation Safety Office, support accident investigations to include evaluations of human and environmental factors, which caused or contributed to the accident.

(2) Coordinate with the Fort Buchanan Installation Safety Office on applicable aspects of industrial hygiene surveys and ergonomic evaluations.

h. Civilian Personnel Advisory Center (CPAC) will:

(1) Coordinate with the Fort Buchanan Installation Safety Office on all aspects of the Federal Employees Compensation Act (FECA) program in order to reduce lost workday claims.

(2) Consult with the Fort Buchanan Installation Safety Office during the negotiation of all safety aspects of employee organization contracts.

(3) Ensure union notification of any change in policy, practice, or working conditions provided by the Fort Buchanan Installation Safety Office.

(4) Provide the Fort Buchanan Installation Safety Office monthly information regarding lost time FECA claims and Continuation of Pay (COP) costs.

(5) Provide the Installation Safety Office courtesy copies of injury reports pertaining to Non-appropriated Fund (NAF) employees.

i. Missions and Installations Contracting Command (MICC) will:

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

(2) Provide copies of all contractor accident reports to the Fort Buchanan Installation Safety Office.

(3) Coordinate any additional procedures with the Fort Buchanan Installation Safety Office to ensure using activities have access to Safety Data Sheets (SDS).

(4) Inform the Fort Buchanan Installation Safety Office whenever contractor equipment containing radioactive material is brought on the installation.

(5) Ensure that no contractor begins work without a Safety Office-approved Safety Plan.

j. Directorate of Resource Management (DRM) will provide the Fort Buchanan Installation Safety Office:

(1) A quarterly report of the garrison Civilian Appropriated-Fund personnel strength.

(2) A quarterly report of the total number of hours worked by garrison Appropriated-Fund civilian personnel.

k. All Leaders will:

(1) Act as Safety Officers for their unit, directorate, or activity.

(2) Appoint additional/collateral duty safety officer personnel to accomplish assigned duties and responsibilities and will be appointed in writing. Individual must have at least 1-year retainability in the organization.

(3) Assure employee job descriptions accurately identify hazards, to which the employee may be exposed, the requirement for wearing specific items of Personal Protective Equipment (PPE), and other unique safety requirements.

(4) Establish procedures to ensure that personnel at all management and 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.

(5) Include safe practices and physical standards in all directives, standing operating procedures (SOPs), and training doctrine. Assure a comprehensive SOP is prepared and readily available for each hazardous operation, e.g., severe weather plan, vehicle operations, welding, tire changing, use of simulators, medical evacuation procedures, battery charging and storage, fuel storage or refueling operations, storage and handling of ammunition and explosives, loading, storage and handling of chemicals, communications and electronics, radioactive equipment, warehouse operations, etc. The SOPs will contain detailed operating procedures, emergency procedures, training required, and required inspections, as well as other applicable information.

(6) Develop and implement an accident prevention program encompassing all operations and activities under their control. Establish specific written safety goals for their organization.

(7) Include safety objectives in all civilian supervisors performance plans, enlisted efficiency reports, and officer evaluation reports.

(8) Arrange to receive a safety orientation from the Fort Buchanan Installation Safety Office within 14 days of assignment to a directorate.

(9) Identify and eliminate hazardous conditions, establish safe practices and procedures consistent with the mission, motivate and instruct personnel in safe performance on-and off-duty.

(10) Ensure compliance with all appropriate provisions of this document and referenced safety regulations.

(11) Require all military and civilian supervisors to actively supervise performance of subordinates to ensure compliance with safety requirements. Require rigorous enforcement of the use of required personal protective equipment.

(12) Ensure that ADSO/CDSO's receive training and develop skills necessary to ensure competence.

(13) Require timely reporting of accidents as required in AR 385-10 and this document.

(14) Determine causes for each accident and take positive corrective action to preclude recurrence of a similar accident.

(15) Ensure safety briefings are presented to all personnel before holiday weekends. Maintain training records for 2 years.

(16) Comply with hazard communication requirements (e.g. SOP, posting of SDSs, etc.). Office workers who only encounter hazardous chemicals in isolated instances are considered exempt from hazard communication standard.

(17) Actively participate in the Installation Safety and Occupational Health Advisory Council (SOHAC) meeting.

(18) Meet with the directorate safety representative at least quarterly.

(19) Conduct internal safety inspections of low risk work areas semi-annually. Maintain inspection report for 2 years.

(20) Have a radiation safety SOP if applicable.

(21) Inspect POVs/POMs belonging to military personnel before all holiday weekends, PCS moves, and vacation trips. Ensure that POV/POM inspections are made available to all DA Civilian employees. The last record of inspection should be kept on file.

(22) Directorates that are primarily administrative in nature with no extremely high, high or moderate risk activities (e.g., PAIO, DRM, etc…) may use this SOP as their safety SOP.

m. Supervisors will:

(1) Perform a Job Hazard Analysis (JHA) to ensure the work environment complies with applicable safety standards and regulations and those personnel under their supervision perform all operations in the safest possible manner consistent with the mission.

(2) Assure employees under their supervision observe and comply with appropriate safety and occupational health rules and regulations, including the use of PPE provided for their protection. Supervisors will set the example in using PPE.

(3) Be responsible for accident prevention to the same extent as for production, services, mission, and training.

(4) Control unsafe acts or conditions that may be conducive to accidents; procure, maintain in sanitary working condition, and require use of PPE and devices necessary to protect employees from injury.

(5) Report unsafe workplace conditions to the Fort Buchanan Installation Safety Office for assistance in correction. Where DPW support will correct such deficiencies, prepare DA Form 4283 (Facilities Engineering Work Request) and forward through the Installation Safety Office to DPW.

(6) 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.

(7) Orient all newly assigned personnel concerning the hazards inherent in their job and work environment. Conduct regulatory training concerning specialized and general hazards in the workplace and methods for avoiding accidents and near misses.

(8) Report all accidents immediately to the Installation Safety Office. Conduct comprehensive factual investigations when on-duty injuries result in lost time.

(9) Ensure facts on civilian compensation forms are fully documented and accurately reported.

(10) Provide light duty for employees injured on the job when indicated by the appropriate medical authority. When light duty is not available, the next higher employing echelon will attempt to find such duty.

n. Collateral Duty Safety Officers (CDSO) will:

(1) Complete the Collateral Duty Safety Officer course on line https://safetylms.army.mil within 30 days of appointment.

(2) Become familiar with Army safety regulations, safety requirements for the unit, principles of accidents prevention, and safety aspects included in SOPs, field manuals, technical manuals, etc.

(3) Supervise and conduct semi-annual safety inspections of buildings giving particular attention to recurring and serious hazards and to new or varied operations.

(4) Coordinate with supervisors to provide technical assistance to eliminate unsafe work practices.

(5) Provide prompt assistance with accident investigation and reporting. Review reports for completeness and accuracy and evaluate adequacy of corrective actions. Follow-up to ensure corrective actions are taken.

(6) Maintain safety records on all near misses/injuries and analyze the organization's accident experience to determine accident patterns, then develop and implement countermeasures.

(7) Provide the commander or director with periodic safety progress reports and information concerning accidents.

(8) Provide assistance in conducting periodic briefings with supervisors regarding the objectives of the safety program, methods of attaining these objectives, and the degree of success expected.

(9) Arrange for the incorporation of safety practices in operating procedures, operations orders, training publications, and activities to ensure the safety of Army personnel and the public.

(10) Determine the need for and obtain material for safety training, safety promotions, and safety awards.

o. Responsibilities listed above are for the overall general safety program. Responsibilities for specific areas or activities are provided in subsequent respective chapters addressing that subject.

1-6. Requirements for Commanders. Army Readiness Assessment Program (ARAP). The Secretary of the Army and the Chief of Staff of the Army require battalion level commanders to use ARAP as part of their Command Inspection Program. The Commander, Installation Management Command, has expanded the requirement to include all garrison commanders and garrison directors and managers. The program requires leaders to register via the Combat Readiness/Safety Center website https://crc.army.mil, or https://unitready.army.mil, and complete the initial survey within 90 days of assuming command. The survey is taken again at mid-point of assignment or as deemed appropriate by organizational changes and challenges.

1-7. Required Safety Training.

a. Commanders Safety Training. All officers are required to complete the Commander's Safety Course prior to assuming command. This course is available via the Combat Readiness/Safety Center website https://safetylms.army.mil.

b. Collateral Duty Safety Officer Training. CDSO Training: All newly assigned CDSOs are required to complete the Collateral Duty Safety Officer Course within 30 days of initial assignment as a CDSO. The course is available via the Combat Readiness/Safety Center website https://safetylms.army.mil.

c. Manager, Supervisor and Employee Training. Completion of mandatory occupational safety and health training by all managers, supervisors and employees is required. The training must be completed within 90 days of being appointed as a manager or supervisor, and within 90 days of initial appointment of new employees. The training is available at the Combat Readiness/Safety Center website https://safetylms.army.mil.

d. Risk Management (CRM) Training. CRM is the Army's primarily process for identifying hazards and controlling risks within the full spectrum of Army missions, functions, operations and activities. To this end, it is critical that all Fort Buchanan personnel (Soldiers and civilians) are trained and understand the CRM process. All civilian personnel will complete the Risk Management Civilian Basic course while military personnel will

complete the Risk Management Basic course. The training is to be accomplished online via the Combat Readiness/Safety Center website at https://safetylms.army.mil.

e. Workplace safety training. Workplace safety training will be conducted in accordance with Appendix C, DA Pam 385-10. Employees may use the safety training needs assessment to determine which training is required for their job type and work environment (see Figure 4).

f. New Employee Orientation. The ISO provides general safety orientation to newcomers prior to being assigned to duty at Fort Buchanan. Supervisors will conduct a more in-depth orientation for their employees and will document these orientations.

Chapter 2
Motor Vehicle Accident Prevention Program

2-1. General.

a. To establish responsibilities and procedures for carrying out the Fort Buchanan Motor Vehicle Accident Prevention Program as required by DoDI 6055.4 and AR 385-10. This program applies to all military and civilian personnel assigned or attached to Fort Buchanan.

b. Army Motor Vehicle (AMV) and privately-owned vehicle (POV) accidents constitute one of the Army's most repetitive causes of fatalities and serious injuries. While commanders, directors, and supervisors do not directly control personnel while they drive, there are numerous actions that can be taken to reduce accidents. Applying command direction in three primary areas: driver selection, driver training, and vehicle inspections, will reduce the potential of injury and property damage.

2-2. Responsibilities.

a. Commanders/Directors/Activity Chiefs at all levels will ensure that--

(1) Procedures are prescribed for the safe operation of Army Motor Vehicles (AMV), material handling equipment (MHE), and POVs on and off Army installations and contractor vehicles on-post.

(2) Vehicle operations and maintenance are carried out in accordance with Army publications and technical manuals.

(3) Motor vehicle activities and accident data are collected, analyzed, and evaluated to identify where efforts can be focused on accident prevention.

(4) Ensure that AMV operators are selected, trained, tested, and licensed in accordance with Army Regulations.

(5) Supervision of Army drivers is maintained.

(6) On-post roads and trails are maintained at a level that will permit safe vehicle operations.

(7) Training, education, and motivation programs dealing with POVs are developed and applied.

2-3. Prevention of Army Motor Vehicle Accidents. Most Army motor vehicle accidents are caused by driver error. Proper selection, training, and supervision of drivers will help to prevent these errors and produce safe driving behavior.

a. Select, train, test, and license drivers according to AR 385-10, AR 600-55, and AR 190-5.

b. Leaders ensure that Army or General Service Administration (GSA) motor vehicle drivers and other Army equipment operators receive training and education that meet the requirements of--

(1) Driver Education, AR 385-10, chapter 11 and AR 600-55.

(2) The web-based Army Accident Avoidance Course (AAC) is required for all Soldiers, Department of Army Civilians and contract personnel that operate Army owned, leased, or rented vehicles. The training must be completed prior to operating Army vehicles and every 4 years thereafter. The AAC can be accessed at https://safety.army.mil/TRAININGCOURSES/OnlineTraining.aspx .

(3) All military and civilian personnel required to operate the following type government-owned wheeled motor vehicles are recommended to study the Army Commercial Drivers License (ACDL) Program as a guide for safe and efficient operation of military vehicles:

(a) Wheeled motor vehicles with a gross vehicle weight rating (GVWR) of 10,000 pounds or heavier.

(b) Emergency type vehicles (i.e., military police patrol vehicles, ambulances, or fire fighting vehicles) regardless of their GVWR.

(c) Vehicles that are designed to transport 16 or more passengers including the driver, or is used to transport hazardous materials requires the vehicle to be placarded under Hazardous Materials Regulations (49 CFR part 172).

(4) Department of the Army (DA) Technical Manuals and Field Manuals containing procedures to follow in selecting, training, examining, licensing, and supervising vehicle drivers or equipment operators.

2-4. Unsafe Operations. The operation of any Army or GSA, motor vehicle in an unsafe mechanical condition or in an unsafe manner is prohibited. Such mechanical conditions include, but are not limited to--

a. Improper functioning of lights, windshield wipers mirrors, or other safety equipment.

b. Broken or cracked windshields.

c. Failure to use safety equipment (i.e., seatbelts).

2-5. DA Form 348 (Equipment Operator's Qualification Record). Include the following information, as a minimum, on DA Form 348.

a. Army Accident Avoidance Course training and date.

b. Safety awards.

c. AMV accidents.

d. Civilian and military traffic points and citations.

e. Operator's training completed.

f. Vehicles authorized.

2-6. Investigating and Reporting Accidents.

a. Investigate and report Army motor vehicle accidents in accordance with AR 385-10 and AR 190-5. The Directorate of Emergency Services (DES) and the Fort Buchanan Installation Safety Office should coordinate to ensure completeness of accident reports and to avoid duplication of efforts.

b. Directors and Commanders responsible for motor vehicle operations will ensure that--

(1) Investigative procedures reveal operator task errors, management or supervisory errors, equipment failures, and environmental factors causing or contributing to the accident. As an aid to AMV accident investigation, SF 91 (Operator Report of Motor Vehicle Accident) should be available to operators.

2-7. Motivating Safe Performance.

a. Leaders will--

(1) Consider assigning designated drivers and alternate drivers to vehicles. This practice fosters "pride in ownership" and designates responsibility for operator maintenance.

(2) Annually recognize vehicle operators, who maintain outstanding safe driving records, and directorates/units with outstanding records. Use DA Form 1119-1 (U.S. Army Safety Award), or other forms of recognition. Other incentives for safe driving performance are as follows.

(a) The Driver and Mechanic Badge for Military and Civilian personnel as prescribed in AR 600-8-22.

(b) Suggestions, superior accomplishments, and honorary awards as prescribed in AR 672-20.

(c) Consideration of an individual's superior driving record when assigning vehicles, routes, and duties.

b. Supervisors of AMV operations will--

(1) Set standards of performance for vehicle operations to ensure continuity, safety, consistency, and clarity so drivers are aware of and understand their responsibilities.

(2) Periodically assess driver performance and use incentives to reward drivers with good driving records. Refer drivers failing to maintain good driving records to remedial and disciplinary measures when appropriate.

2-8. Safe Driving Operation.

a. Do not assign drivers to drive an AMV for more than 10 continuous hours, nor will the combined duty period exceed 12 hours in any 24-hour period without at least 8 consecutive hours of rest.

b. If more than 10 hours are needed to complete operations, assign a qualified assistant driver to each vehicle.

c. Drivers will take 15-minute rest breaks every 1 to 2 hours of driving or every 60 to 100 miles, whichever occurs first. During these breaks, drivers will inspect their vehicles and ensure equipment and cargo is secure. Take 1-hour meal breaks. Leaders may require additional rest periods based on local conditions or for specific missions or operations. They should do so whenever operators can be expected to encounter unusually poor weather or road conditions, when hazardous materials are being transported, or operators will be involved in prolonged or unusually difficult operations.

d. The use of headphones, earphones, or cell phones while driving Army or GSA motor vehicles is prohibited; however, this prohibition does not negate the requirement for wearing hearing protection where conditions require their use.

e. Drivers will not consume intoxicating beverages during the 8 hours prior to scheduled duty or during their normal duty shift.

f. Drivers will not eat, drink, or smoke while the vehicle is in motion. Smoking reduces night vision.

2-9. Vehicle Safety Standards.

a. Before vehicle dispatch, commanders/directors or their representatives will ensure that drivers perform before, during, and after operation checks, to prevent the following conditions:

(1) Improper functioning or adjustment of steering, lights, windshield wipers, horns, warning signals, side or rearview mirrors, restraint systems, and other safety devices. Ensure restraint systems are readily available for use by both the driver and passengers.

(2) Improper condition of windshields, windows, mirrors, lights, reflectors, or other safety devices that are broken, cracked, discolored, or covered with dirt, mud, or grime.

(3) Defective, inoperable, or out of adjustment brakes or parking brakes. Vehicles with defective brakes or parking brakes are not mission-capable (NMC) until repaired. When vehicles with braking conditions are moved for maintenance, tow them using a tow bar.

(4) Leaks. Vehicles with any Class III gasoline, diesel, oil, or water leaks will be NMC until repaired.

(5) Any condition likely to cause injuries to personnel or failure of a component. Examples are tires that are excessively worn, deeply cut, or have exposed cords, cracked wheel hubs, worn or frayed tie down straps or personnel restraint systems, torn sheet metal with exposed sharp edges, damaged or missing exhaust pipe shields, and leaks from exhaust systems.

(6) Improperly secured loads.

(7) Vehicle loaded beyond design load limits.

(8) Unsafe transport of personnel.

b. Driver training courses and driver performance evaluations will include safety aspects of driver maintenance.

c. Commanders/Directors determining that an AMV accident was caused by design or component failure will submit appropriate reports per DA Pam 385-40.

d. Operators are responsible for bringing any vehicle shortcoming to the supervisor's attention. Further, vehicles with conditions outlined in a (1) through (8) above will not be operated unless authorized by the Garrison Commander.

e. Commercial-type passenger-carrying AMVs built to manufacturers' specifications and purchased, leased, or rented by the Army are required to meet all applicable requirements of the Federal Motor Vehicle Safety Standards (FMVSS).

f. Foreign built commercial vehicles will meet all applicable local (Puerto Rico) safety requirements. Prior to procuring foreign built commercial vehicles, directors and commanders will review the motor vehicle safety standards for acceptability. The review will include all standards applicable to the make, model, and year of manufacture for each type vehicle to be procured.

g. Equip all Army vehicles with restraint systems, unless you obtain a written risk acceptance document from the Garrison Commander.

h. Equip all Army vehicles, in which the normal structure of the vehicle will not protect the driver and passengers during rollover, with a rollover protective structure that conforms to applicable Society of Automotive Engineers Standards, unless you obtain a written risk acceptance document from the Garrison Commander.

2-10. Prevention of Privately-Owned Vehicle Accidents.

a. All Soldiers less than 26 years of age must complete the Intermediate Traffic Safety Training Course upon arrival to Fort Buchanan. The classes are announced through the following web site: https://apps.imcom.army.mil/AIRS/default.aspx.

b. POV accidents most often occur off-duty and off-post, outside the presence of Army supervision. Directors and Commanders can provide direct influence through information, motivation, and guidance given to POV operators before they leave Army control.

c. Ensure personnel have a duty to avoid unnecessary injury by using safety devices and equipment. When a violation occurs, leaders should consider a full range of possible actions before selecting the appropriate courses of action to deal with the violation. Such actions include, but are not limited to, suspension or loss of on-post driving privileges, removal of the vehicle from the installation, and additional training in the particular aspect of the safety violation.

d. Most Army personnel killed or injured in POV accidents are involved in single-vehicle accidents at night as a result of excessive speed, alcohol or other drug use, or fatigue. At a minimum, leaders will include in their POV safety and accident prevention programs the areas of emphasis listed in paragraphs e through k.

e. Command Emphasis. Positive leadership at all levels is imperative. Leader emphasis on POV safety must be unrelenting. Junior leaders see their employees every day. They should know where they go, what they do, and assert positive influence on how, when, and where they operate their POVs.

f. Discipline. Junior leaders work with their employees daily and know them well. Employees sometimes telegraph signals that translate later into accidents. Negative behavior such as traffic offenses, alcohol abuse, misconduct, and poor performance often are indicators of potential POV accident victims. Identify "at risk" individuals; counsel them; take proactive measures to modify their risk behavior.

g. Risk Management. Use Risk Management. Identify hazards associated with POV operations, assess the hazards, and make decisions to control them, implement the controls, and supervise execution. Use the POV Risk Management Tool Box at the Combat Readiness/Safety Center website. This program provides a comprehensive set of tools and controls that have proved successful throughout the Army.

h. Standards. Set high and unmistakable standards and enforce them. Follow the Army regulatory traffic standards (AR 385-10 and AR 190-5) and be uncompromising on the use of seatbelts and motorcycle safety equipment. Educate Soldiers on the risks of speed, fatigue, and use of alcohol. Conduct POV safety inspections and random roadside checks. Emphasize the use of designated drivers for social events.

i. Provide Alternatives. Provide alternatives for personnel living on-post by scheduling activities on-post to minimize driving off installation. Keep gyms, recreation centers, and other places personnel use off-duty open later. These same measures also can provide alternatives to alcohol use. Look for transportation alternatives and promote their use.

j. Leaders Assessment. Following every fatal or serious injury POV accident, leaders will conduct an assessment of the accident with the involved individual’s chain of command to determine what happened, why it happened, and how we could have prevented it. Implement corrective and preventive measures and publicize lessons learned.

k. Other Considerations. The above listed are the minimum standards for a model POV safety program; other considerations are--

(1) Causes of Army POV accidents
(2) Emotions as causes of accidents
(3) How to avoid a collision with another vehicle
(4) Pedestrian safety precautions
(5) Driver's view of motorcycling
(6) Fatigue

Occupant protective devices will be worn by all persons in or on an Army–owned motor vehicle on or off the installation.

l. All personnel, to include Family members, guests, and visitors, will wear occupant protective devices at any time on an Army installation. Occupant protective devices will be worn by all Soldiers driving or riding in a POV whether on or off the installation.

m. Individuals will not ride in seats from which manufacturer–installed occupant restraints, including airbags, have been removed or rendered inoperative.

n. Child safety seats shall be used on all Army installations. Installation traffic safety programs shall be consistent with state or local child safety seat laws and with AR 190–5. If there is no applicable local requirement, the installation traffic safety program shall specify age, weight, seating placement, or other criteria for child safety seat use.

o. The vehicle operator is responsible for informing passengers of the occupant protective device requirement and the senior occupant is responsible for ensuring enforcement. If the senior occupant cannot be ascertained, the driver is responsible for ensuring enforcement.

p. Failure to wear PPE or comply with licensing or operator training requirements may be considered in making line of duty determinations if the injury is contributed to by the non–use of PPE or noncompliance with requirements.

q. Soldiers will complete a Travel Risk Planning System (TRiPS), POV risk assessment when going on leave, pass, or TDY out of the immediate local area (100 mile radius) and will be operating a motor vehicle. The risk assessment tool is accessed through the USACRC Web site at https://crc.army.mil.

r. When access to the internet is not available, supervisors will ensure the Soldier is provided with assistance in completing a DA Form 7566 (Risk Management Worksheet), and ensure the form is signed by the appropriate authority.

2-11. Motorcycle/Moped Training and Operation. Military and Department of Defense (DoD) Civilian and contractor personnel who operate motorcycles, motor scooter, or mopeds (engine displacement of 50cc and over) on Fort Buchanan roadways will comply with the following. In addition, all operators of government or privately owned motorcycles (both street and off-road versions) on DoD installations must be appropriately licensed to operate on public highways, meet all training requirements, and wear Personal Protective Equipment (PPE) IAW AR 385-10, paragraph 11-9. The requirements of this section are applicable to military personnel when operating these vehicles off post on or off duty.

(1) Prior to operating a motorcycle, Army military personnel must successfully complete an Army approved hands-on motorcycle rider safety course. The Army standard motorcycle rider's course is the Motorcycle Safety Foundation Basic Rider Course (BRC). All military motorcyclists wanting to register their motorcycles on the installation must complete the Motorcycle Safety Foundation Basic Rider Course.

a. Motorcycle or moped operators will have in their possession:

(1) A valid motorcycle driver's license or a valid driver's license to operate a moped.

(2) An Motorcycle Safety Foundation Course card as evidence of completing an Army approved motorcycle safety course. This requirement does not apply to civilians.

(3) Mopeds are not required to have state registration.

b. All motorcycles, scooters, or moped operators will wear:

(1) A Department of Transportation (DOT) approved helmet properly fastened under the chin.

(2) Shatter resistant goggles or full-face shield properly attached to helmet (a windshield or eyeglasses alone are not proper eye protection).

(3) Full-fingered gloves.

(4) Long trousers and long sleeve shirt or jacket.

(5) Over-the-ankle shoes or boots.

(6) During daylight hours, riders will wear either a brightly colored upper outer garment (i.e., long sleeve shirt or jacket) or a brightly colored cover (e.g., vest) over the upper outer garment.

(7) During hours of darkness, riders will wear either an upper outer garment with reflective material (patches, stripes) sewn into it or a reflective cover, (e.g., vest) over the top of the upper outer garment.

c. Motorcycles, scooters, and mopeds will have a rearview mirror mounted on the handlebar or fairing.

d. Wearing of headphones or earphones, operating built-in headset in approved helmets, or inserting any audio device into the ear is prohibited while riding on Fort Buchanan.

e. Motorcycle, scooters, and moped will have headlight turned on at all times.

f. Military personnel are not permitted to register or ride their motorcycle on-post until they complete the Motorcycle Safety Foundation (MSF) course. The only exception is riding a motorcycle to the scheduled training course.

g. Military personnel are not permitted to ride their motorcycle off-post until they complete the motorcycle safety course. Motorcycle riders operate motorcycles in accordance with DoDI 6055.4, AR 190-5, and AR 385-10.

2-12. Bicycle Operations. Personnel who operate bicycles on Fort Buchanan roadways will:

a. Obey all traffic laws and traffic control devices.

b. Not wear headphones or earphones while riding a bicycle.

c. Comply with the following during the hours of darkness:

(1) Bicycles will be equipped with one light in front, which will clearly reveal objects at least 50 feet ahead.

(2) Bicycles will be equipped with one red light or red reflector in the rear.

(3) Bicyclists will wear a high-visibility vest or other reflective gear.

d. Will wear approved bicycle helmets.

2-13. Pre-Holiday POV Inspections.

a. Leaderswill inspect POVs of military personnel prior to 3-day holidays or longer.

b. At a minimum, the following items will be inspected:

(1) Proper functioning of restraining devices.

(2) Tire treads depth.

(3) Lights, horn, windshield, and windshield wipers (operation and efficiency).

(4) Emergency Brake.

(5) Properly inflated spare tire with functioning jack system.

(6) Valid driver's license and current state registration.

2-14. All Terrain Vehicles (ATV). Like motorcycles, all terrain vehicles pose an extreme hazard to the inexperienced rider. All operators of Government or privately owned all terrain vehicles (for off-road use only) on DoD installations must meet all training requirements and wear PPE.

a. The operation of personally owned ATVs on any Fort Buchanan road or off-road area is prohibited.

b. When ATVs are authorized for official use on-post, (e.g. security mission), all drivers will be trained and licensed. Drivers and riders will wear a helmet (which meets the American National Standards Institute standards), goggles or face shield, full fingered gloves, long trousers and long sleeve shirt or jacket, and leather boots or over-the ankle shoes. The operator of an ATV will not carry more persons than that for which the vehicle was designed.

c. Training is strongly recommended for personnel who ride ATVs. Learning to properly ride an ATV in the off road environment requires mandatory PPE and takes time and practice.

2-15. Forklift Safety. All DoD civilian and military forklift operators shall have a current operator's certification. Operators are prohibited from operating a forklift when their certification has expired. The only recognized certificates are a current OF 346 or a Fort Buchanan issued MHE certification. This applies to all activities within USAG-FB. All contractor personnel shall adhere to 29 CFR 1910.178 OSHA Standards. The Installation Safety Office (ISO) will not issue MHE certifications for contractor personnel. All DoD civilian and military forklift operators shall wear proper head protection and foot protection while executing MHE work. Head protection shall consist of type I hardhats as described by ANSI Z89.1. No exceptions shall be authorized unless specifically permitted by the ISO and a Risk Assessment has been approved for the specific task. Seat belt use is mandatory for DoD civilian, military and contractor operators. If the forklift does not have seatbelts, then a manufacturer's kit shall be installed to bring the equipment into compliance. All forklift operators in Fort Buchanan must have proof of completion of initial training and must be evaluated at least every 3 years afterwards. The operator must undergo refresher training when determined by a competent person, due to either poor performance, or involved in an accident or near miss event.

Chapter 3
Accident Prevention Program

3-1. General. This chapter prescribes responsibilities, policies, and procedures for the Fort Buchanan Accident Prevention Program.

3-2. Responsibilities. Directors/Activity Chiefs will:

a. Act as Safety Officers for their organizations.

b. Appoint a Collateral Duty Safety Officer (CDSO)/Additional Duty Safety Officer (ADSO) in writing. Ensure these personnel receive training and develop skills necessary to perform their duties. Appointment orders will be forwarded to the Fort Buchanan Installation Safety Office within one week of appointment.

c. Appoint a safety committee on orders. Directors will be chairperson for their safety committees. The committees will have regularly scheduled meetings at least semiannually. Special meetings should be called when critical or urgent safety problems arise. A copy of minutes should be kept on file for at least two years.

d. Develop in written form and implement a comprehensive accident prevention program, which encompasses all operations and activities within the organization.

e. Include safe practices and physical standards in all directives, standard operating procedures, and training doctrine. Ensure a comprehensive SOP is prepared and readily available for each hazardous operation.

f. Establish procedures to ensure those personnel at all management levels that have safety related tasks associated with their jobs are identified and that their duty assignments and job descriptions clearly reflect these responsibilities. Based on clear identification and assignment of safety tasks, directors will monitor the degree of accomplishment of safety responsibilities. Safety duties/requirements will be included in the Civilian Evaluation Report Support Form and other appropriate performance standards for all military and civilian supervisory personnel and Collateral Duty Safety Officers. Performance evaluations will reflect the degree of accomplishment.

g. Publicize all channels for reporting unsafe or unhealthful conditions.

h. Fully investigate all accidents and take positive action to preclude occurrence of similar accidents. Require timely reporting of accidents as required by AR 385-10 and DA Pam 385-40.

i. Establish a formal safety awards program for directorates/individuals. Personnel who actively support and contribute to the directorate safety program will receive special recognition. Leaders will identify supervisors, drivers, and other deserving individuals, and recommend them for recognition and award as appropriate.

j. Ensure a DD Form 2272 (DoD Occupational Safety and Health Poster) available from the Fort Buchanan Installation Safety Office is posted in each work place in the location where personnel notices are usually placed. This poster explains employee rights and responsibilities established by DoD.

k. All Civilian employees are required to report all injuries and submit a complete copy of the DA Form 285 A_B (Abbreviated Ground Accident Report).

Fort Buchanan Installation Safety Officer. The Fort Buchanan Installation Safety Officer will:

a. Serve as the principal staff advisor, technical consultant and coordinator to the command and the staff in planning, organizing, directing and evaluating all safety program elements within the command.

b. Provide for the establishment and implementation of plans, policies, and procedures for conducting safety programs.

c. Provide technical and professional assistance to eliminate or control unsafe behavior and unsafe environments.

d. Provide technical assistance as requested in accident investigation and reporting to ensure accuracy and completeness.

e. Collect, analyze and disseminate information concerning the accident experience of the installation and prepare progress reports and other reports and studies required by higher authority.

f. Review operating plans, procedures, manuals, directives and other instructions to ensure incorporation of safe practices and safe physical standards.

g. Review plans for proposed events, training, or mission related activities to ensure the safety of Army personnel and the public.

h. Maintain close liaison with other staff agencies, military services, federal and civilian agencies in all relevant safety matters.

i. Conduct surveys and inspections of activities and accident prevention programs.

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

k. Assist directors in developing safety management programs.

l. Develop recommendations for corrective measures where warranted by adverse accident rates or trends, hazardous conditions or procedures, or other deficiencies.

Director of Emergency Services (DES). The DES will forward a courtesy Blotter Extract Report to the Fort Buchanan Installation Safety Office on a weekly basis.

Fort Buchanan Preventive Medicine. The Fort Buchanan Preventive Medicine Office will forward reports on hazardous noise, ergonomic and ventilation surveys conducted on the installation to the Fort Buchanan Installation Safety Office a quarterly basis.

Collateral Duty Safety Officers (CDSO) will:

a. Assist directors in meeting their safety program responsibilities by:

(1) Providing information on Risk Management assessments.

(2) Assisting in the reporting and investigation of accidents.

(3) Providing safety training and safety briefings for personnel.

(4) Conducting and documenting Standard Army Safety and Occupational Health Inspections (SASOHI) of administrative and other low risk organizational facilities.

b. Serve as point of contact with the Fort Buchanan Installation Safety Office by:

(1) Coordinating with and accompanying Installation Safety Office representatives on safety surveys and inspections of workplaces, facilities, operations and training.

(2) Distributing safety promotional literature and materials.

(3) Notifying Installation Safety Office of safety or health concerns raised by leaders or personnel.

(4) Scheduling, attending, and recording organizational safety committee meetings.

c. Maintain records of periodic safety inspections.

d. Provide information to leaders on safety related issues.

e. Track, investigate, and document all accidents involving injury or property damage as required by DA Pam 385-40.

f. Coordinate safety related work orders with Installation Safety Office to ensure risk assessment code is assigned and work is validated as being safety related.

g. Establish and maintain an organizational safety bulletin board.

h. Maintain a basic safety publications library consisting of appropriate safety, occupational health, and fire prevention regulations, directives and standard operating procedures.

i. Assist the Fort Buchanan Installation Safety Office during emergencies occurring on the installation.

3-3. Training

a. Leaders will present a safety briefing to all newly arrived personnel within 2 weeks of arrival. Material to be covered will include the individual's rights and responsibilities related to the safety program and information relating to hazards in the local area.

b. Personnel and supervisors involved in certain types of operations must attend the 10-Hour General Industry OSHA Outreach courses given by the Fort Buchanan Installation Safety Office. See Appendix C, DA Pam 385-10 for Safety Training Requirements.

c. Leaders will conduct specialized on the job safety training for employees and Soldiers. This training will include, but not be limited to, job hazards, safety requirements and necessary protective equipment and procedures. All safety training must be documented.

d. Fort Buchanan union representatives are eligible and encouraged to attend any safety and occupational health courses presented by the Fort Buchanan Installation Safety Office.

3-4. Inspections

a. Organization Conducted Inspections.

(1) Only trained and certified Collateral Duty Safety Officers (CDSO)/Additional Duty Safety Officers (ADSO) or competent supervisor will conduct regularly scheduled inspections based upon the type of activity and degree of hazard involved. Inspections of hazardous operation/facilities will be conducted at least semiannually; other operations/facilities will be inspected annually. Records of all such inspections will be maintained for two years.

(2) A statement signed by the directors stating that the required inspections of low risk work areas have been completed, will be forwarded to the Fort Buchanan Installation Safety Office every quarter.

(3) Supervisors/leaders will conduct informal daily inspections of assigned areas and take or recommend necessary action to eliminate any hazards.

b. Fort Buchanan Installation Safety Office conducted Inspections.

(1) Installation Safety Office will conduct Standard Army Safety and Occupational Health Inspections semi-annually in all high hazard worksites, and annually in moderate risk worksites (e.g. maintenance shops, motor pools) and in selected low risk work areas (e.g. offices, classrooms). Formal reports of these inspections will be forwarded to the affected organization for information and necessary corrective action. Organizations must provide a written response within 30 days of the inspection concerning the correction status of each deficiency identified in the report.

(2) On request, will conduct courtesy inspections/terrain walks of facilities, operations and training. No formal report will be prepared for these inspections.

(3) Will conduct periodic inspections of training operations and facilities. Frequency of these inspections will be based on the level of risk involved in the operation. Inspection reports will be forwarded to the organization conducting the operation and the organization with responsibility for the facility.

(4) Installation Safety Office will conduct other inspections on an as needed basis.

(5) Follow-up inspections will be conducted to ensure correction of identified hazards.

c. Inspection of Training Facilities. Periodic, regular inspections of training facilities are required to identify structural, maintenance and procedural hazards at training sites/facilities. The following inspections will be accomplished and documented.

(1) Organizations using a training facility will, prior to commencement of the training event, conduct a walk through visual inspection of the overall training site and facilities to identify safety hazards. Any hazards identified will be corrected prior to using the facility.

(2) Installation Safety Office will address safety of training facilities (i.e., ROTC) during regularly scheduled on-site-evaluations of training operations or during specially scheduled annual facility inspections. Inspections of special facilities such as obstacle and confidence courses and rappel towers will be inspected semiannually. These facility inspections will address visible hazards only; structural issues should be addressed by a Structural Engineer. Written reports concerning facility hazards will be provided to the training site sponsor.

3-5. Reports of Unsafe or Unhealthy Working Conditions. Personnel have the right to report unsafe and unhealthful conditions directly to the Installation Safety Office. However, they are highly encouraged to use the normal chain of command by initially notifying first-line supervisors.

Personnel desiring to report such conditions directly to the ISO may do so orally or by written report using DA Form 4755 located in DA Pam 385-10, Army Safety Program, appendix H. As an alternative, personnel may report unsafe or unhealthful conditions utilizing the ISO-Garrison Interactive Customer Evaluation site at https://ice.disa.mil/index.cfm?fa=card&sp=113293&s=436&dep=*DoD&sc=29. Procedures for using DA Form 4755 are as follows:

a. Submit reports to organization safety personnel, commanders, directors, or ISO.

b. Personnel submitting the reports may request anonymity if they desire.

c. The originator, if known, will be provided a response within 10 workdays following receipt of the report.

d. If the originator is dissatisfied with the response, he/she may appeal to the Garrison Commander.

3-6. Reports of Near Misses. Near misses are potentially serious accidents or incidents that could have resulted in personal injury, death, or property damage, damage to the environment and/or illness but did not occur due to one or more factors. All near misses must be reported to the Fort Buchanan Installation Safety Office as soon as possible.

3-7. Hazard Abatement.

a. Deficiencies noted during safety inspections or employee reports of unsafe or unhealthful conditions will be entered on DA Form 4754 (Violation Inventory Log) or equivalent document. Building Managers or Collateral Duty Safety Officers (CDSOs) will submit a DA Form 4283 for all hazards that are identified as safety, occupational health, or fire-related. The DA Form 4283 will be sent to ISO so an RAC can be assigned to the work order. The RAC will make DPW aware that a hazard exists and will identify the severity of the hazard. Building Managers/CDSOs will maintain a record of all DA Forms 4283 that are safety, occupational health, or fire-related. Building Managers/CDSOs will track the progress of such work requests and institute any necessary interim safety measures to protect personnel from the hazard until such time that the hazard is abated. Telephonic service requests should not be used for abatement of safety, occupational health, or fire hazards, except where emergency service is needed. CDSOs and full-time safety personnel are authorized to assign RACs 3-5 to facility work requests, but must furnish ISO a copy so the DA Form 4283 may be included in the hazard abatement log. ISO personnel will evaluate the reported hazards and assign a RAC 1 or 2 if needed. CDSOs must submit all safety-related DA Forms 4283 to ISO for assignment of RACs 1-5. Serious hazards should be reported immediately to ISO. A hazard abatement log will be maintained in ISO to track all work requests that have assigned RACs.

b. For RAC 1 and 2 hazards which cannot be corrected within 30 calendar days of discovery, ISO will develop an abatement plan for the deficiency. This will consist of the following:

(1) Completion of DA Form 4756 (Installation Hazard Abatement Plan). This document will be forwarded to DPW for assignment of a project number, estimated cost of correction, and timeline for abatement.

(2) Maintenance of an open suspense for the abatement project until corrected.

(3) Notification to IMCOM of the existence of an RAC 1 or 2 hazard.

(4) Completion of DA Form 4753 (Notice of Unsafe or Unhealthful Working Condition). This document will be posted at the site where the deficiency exists. The form will be posted in a high visibility area.

c. Upon completion of the abatement, DPW will notify ISO in writing that the project has been completed and the suspense for the project may be closed.

d. RAC 1 and 2 hazards will be discussed during the Garrison Directors Meeting.

e. DES Fire Department will report serious hazards to ISO to be entered in the appropriate abatement plan.

3-8. Safety Awards Program

a. Leaders at all levels will recognize safe performance displayed by individuals within their organization. Leaders are encouraged to develop awards that are tailored to recognize the accident prevention accomplishments within their sphere of activity, interest, or operation. Leaders are authorized to design and use locally produced certificates or trophies. Awards will be signed by the organization's leader and will include, at a minimum, the awardees' name and the contribution for which the award is given.

b. On-The-Spot Safety Awards. Supervisors are encouraged to identify acts of safety that merit On-The-Spot Safety Awards. The Installation Safety Office should maintain suitable award items for presentation.

(1) Recipients: All USAG Fort Buchanan team members are eligible.

(2) Eligibility Requirements: Individuals must contribute to accident prevention in their workplace. Examples of qualifying achievements are as follows:

(a) An employee notices a blocked exit and takes the initiative to clear the route.

(b) A Soldier identifies a need for safety training and proceeds to coordinate and execute the training for his/her the organization.

(c) An employee provides a significant safety tip prior to or during a training event.

(3) Presentation: On-The-Spot Safety Awards may be awarded immediately or during a Town Hall or Command and Staff Meeting.

c. Quarterly Safety Awards. One or more individuals will be chosen each quarter to be rewarded for their significant contribution to preventing an accident or for their outstanding achievement in accident prevention. These activities may include training, equipment maintenance, fire prevention, life-saving or rescue work, significant safety act, or other commendable contributions to safety activities. Directors will validate their employees' accomplishments and nominate them for safety recognition by filling out the attached awards worksheet and forwarding it to the Installation Safety Office. The nominees and quarterly winner will be recognized either at the Garrison Town Hall Meeting or during the Safety Council. The winner may be eligible to receive a one day time off award, if mission permits. The award winner will receive the U.S. Army Certificate of Achievement in Safety (DA Form 1119-1). Runner-up nominees will receive a locally-produced Certificate of Merit in Safety. Certificates may be supplemented with a safety promotional item (i.e., coffee mug, umbrella, etc.) Submissions are due by January 15 (1Qtr), April 15 (2Qtr), July 15 (3Qtr), and Oct 15 (4Qtr).

(1) Recipients: All USAG Fort Buchanan team members are eligible.

(2) Eligibility Requirements: The individual must make a significant contribution in the area of accident prevention in his/her workplace. Examples of qualifying achievements are as follows:

(a) An employee notices that personnel working on a task that requires the use of Personal Protective Equipment (PPE) do not have the required PPE or are not using it and proceeds to alert the supervisor and affected personnel, preventing the possibility of a serious incident.

(b) A Soldier notices that a mechanic is working under a vehicle that is not chalked and/or does not have its parking brake engaged. The Soldier stops the operation until these issues are rectified.

(c) An employee delivers an outstanding safety brief on a subject that has been previously overlooked. This brief effects a change in behavior or working conditions that result in a safer workplace.

(3) Nominations: Nominations for Certificate of Achievement in Safety will be submitted to the Installation Safety Office using attached awards worksheet.

(4) Presentation: Quarterly Safety Awards should be awarded during a Town Hall Meeting. The presentation of these awards will be recorded in the Installation Safety Office's awards files.

3-9. Recreation Safety. Installation Safety Office will conduct periodic inspections of recreation facilities, distribute materials concerning recreation, and investigate reported hazards.

3-10. Installation Childcare Safety. Installation Safety Office will conduct semiannual inspections of the Child Development Center.

a. Child Development Services. Childcare at Fort Buchanan is provided primarily at the Child Development Center. Additional care programs available at Fort Buchanan include School Age Services and Middle School Program. Each of these care programs and the facilities in which they are conducted will be surveyed by ISO IAW criteria established in AR 608-10, Child Development Services. Playgrounds will be surveyed IAW American Society for Testing and Materials (ASTM) F1487-07ae1, ASTM F2223-10, and United Facilities Criteria 3-210-04 standards and Consumer Product Safety Commission guidelines.

b. Garrison and Headquarters, IMCOM, Childcare Evaluation Teams. The Installation Safety Office will serve as a member of the Installation Childcare Evaluation Team (ICET). The ISO will be responsible for attending the pre- and post-ICET inspection meetings, conducting the ICET surveys, and completing the ICET checklists and tally sheets.

3-11. Emergency Action Plan. Installation Safety Office will provide input into development of emergency action plans and will participate in exercises involving these plans as appropriate.

a. General. IAW 29 CFR 1910.38, Emergency Action Plans will be written to provide personnel with information on procedures to be followed in the event of fires or other emergency conditions. These may include tornadoes, earthquakes, and severe weather conditions, bomb threats, and accidental release of toxic materials. All employees will be briefed on emergency procedures during their workplace specific safety briefing by their supervisor on their first day of work and annually thereafter. Unannounced practice drills will be conducted on an annual basis or more often if required per occupancy regulation. A site specific plan must be generated for any workplace with disabled employees or others who may require evacuation assistance. Any questions regarding evacuation procedures should be directed to DPTMS. Separate plans are maintained by DPTMS for additional emergency situations.

b. Elements of an Emergency Action Plan:

(1) Emergency Escape Procedures and Emergency Escape Routes. Floor plans or workplace maps that clearly indicate the emergency escape route shall be included in the EAP.

(2) Procedures to be followed by personnel who remain to perform critical procedures before they evacuate.

(3) Procedures to account for all employees after an emergency evacuation has been completed.

(4) The methods for reporting fires and other emergencies.

(5) Rescue and/or medical duties for personnel who are required to perform them.

(6) Names or job titles of personnel who can be contacted for further information or explanation of duties under the plan.

(7) After personnel have been trained on the EAP, a copy of the plan will be posted on the permanent bulletin board where it can be accessible for review during any given work shift.

3-12. Federal Employees Compensation Act Program (FECA) Installation Safety Office will provide accident prevention assistance to CPAC to support operation of the installation FECA program.

Chapter 4
Risk Management (RM)

4-1. General. This chapter establishes requirements for implementation of Risk Management principles for Fort Buchanan. All directorates must assess and control the risk associated with all potentially hazardous operations IAW Army Tactics and Procedures (ATP) 5-19, and will use the risk management process.

4-2. Responsibilities. This chapter covers the mandatory training and assigns responsibilities for Risk Management and assessments.

a. Fort Buchanan Installation Safety Officer. The Fort Buchanan Installation Safety Officer will:

(1) Provide overall coordination of the Risk Management program.

(2) Provide guidance and assistance to facilitate effective implementation of the program.

(3) Review Risk Assessment Worksheets (DD Form 2977) (Figure 1) for operations and training determined to have extremely high, high, or moderate residual risk.

b. Directors/Activity Chiefs. Directors and Activity Chiefs will:

(1) Develop and implement a comprehensive Risk Management program which meets the requirements of this handbook.

(2) Integrate Risk Management into all operations and training.

(3) Train all leaders in Risk Management concepts and requirements of this handbook.

(4) Ensure a formal, documented Risk Assessment Worksheet is completed for each operation utilizing the procedures and forms described in this SOP. This document will be completed during the planning phase of the operation.

(5) Ensure Risk Assessment Worksheets are reviewed by and the risk accepted in writing by the leader at the appropriate level as designated in this handbook.

(6) Maintain copies of all Risk Assessment Worksheets in appropriate organizational files.

(7) Ensure Risk Assessment Worksheets are reevaluated prior to each operation.

4-3. Procedures

a. Risk Management will be integrated into every operation and training event conducted on the installation.

b. Deliberate Risk Assessment Worksheets will be prepared and risks will be accepted utilizing the methodology and format described in this SOP.

c. For those operations which are conducted on a repetitive basis there is no requirement to complete a new Risk Assessment Worksheet prior to each iteration. The initial Risk Assessment Worksheet completed prior to the first iteration is sufficient unless changes have been made to the operation plan which would affect the safety of personnel, equipment or the environment, or new hazards are identified which are not on the current Risk Assessment Worksheet.

d. Whenever there is a change of command or supervision, the Risk Assessment Worksheet where risk was accepted by the outgoing commander or manager will be revised, updated and submitted to the new commander or manager for acceptance of risks.

4-4. Rules of Risk Management.

a. No unnecessary risk will be accepted. The leader who has authority to accept a risk has the responsibility to protect his or her personnel from unnecessary risk. An unnecessary risk is one which could be reduced or eliminated without hindering mission accomplishment.

b. Risk decisions must be made at the appropriate level. Risk decisions are made at a level consistent with the risk involved. The leader who is ultimately responsible for the mission should make the risk decision.

c. Risk is acceptable if benefits outweigh costs. Leaders must understand that risk taking is a decision making process that balances mission benefits and costs. Leaders must be prepared to take acceptable risks to accomplish the mission.

4-5. Risk Management (RM) Process. RM is a decision making process used to mitigate risk associated with all hazards that have the potential to injure or kill personnel, damage or destroy equipment, or otherwise impact mission effectiveness. A key consideration in managing risk is to match the process to the extent of the risk probability. If the risk is high, the process should be very complete and detailed. Steps will be documented on Risk Assessment Worksheets.

a. Identify the hazards. Hazards are the potential sources of danger that could be encountered while performing a task or mission. Leaders must seek to identify all hazards associated with the operation or training. Special attention should be paid to identifying those hazards which have the potential to change such as weather, level of supervision, alertness, terrain, equipment condition, etc. In this situation, each possibility should be identified, e.g., for weather: heat, lightning, high wind, hurricanes, etc.

b. Assess the hazards. Hazards are assessed and risk is assigned in terms of probability and severity of adverse impact of an event/occurrence. This step considers the risk or likelihood of an event or incident adversely impacting mission, capabilities, people, equipment, or property. Hazards associated risk are assessed during the mission analysis, Course of Action (COA) development, analysis, and rehearsal and execution steps of the Military Decision Making Process (MDMP), and must consider both mission and non-mission related aspects that may have an impact. The end result of this assessment is an initial estimate of risk for each identified hazard expressed in terms of extremely high, high, moderate, or low as determined from the standardized application of the risk assessment matrix. The risk level for each hazard and the overall operation will be determined prior to implementation of control measures (initial) and after controls are implemented (residual.)

c. Make a risk decision. Leaders are expected to weigh the risk against the benefits of conducting training or performing an operation. The hazard is reassessed to determine a residual risk. Risk decisions are always based on the residual risk. The process of developing and applying controls and reassessing risk continues until an acceptable level of risk is achieved or until all risks are reduced to a level where benefits outweigh the potential cost. This step is accomplished during Course of Action (COA) development, COA analysis, COA comparison, and COA approval of the MDMP. Initial risk levels, controls and residual risk levels should be considered when making a risk acceptance decision. Risk decisions must be made at a level that corresponds with the degree of risk.

d. Implement controls. The controls established as a result of the first three steps are implemented in step four. Included is leader action to reduce or eliminate hazards. Specific controls will be integrated into plans, orders, SOPs, training performance standards and rehearsals. Knowledge of controls down to the individual Soldier or employee is essential.

e. Supervise and Evaluate. Supervise and Evaluate is the means to ensure that risk controls are implemented and enforced to standard. It also provides the means of validating the adequacy of selected control measures in supporting the objectives and desired outcomes. Supervision and evaluation must occur throughout all phases of any operation or activity. Supervision goes beyond ensuring that personnel do what is expected of them. It includes following up during and after an action to ensure that all went according to plan, reevaluating the plan or making adjustments as required to accommodate unforeseen issues, and incorporating lessons learned for future use.

4-6. Deliberate Risk Assessment Worksheet (DD Form 2977). This form will be completed during the planning phase of the operation or training. The signature block of the appropriate risk acceptance authority will be placed in block 12 of DD Form 2977. For the use of this form, refer to ATP 5-19.

4-7. Risk Assessment Approval

a. Approval authority on Risk Management. The Garrison Commander (GC) will approve all garrison operations with a residual risk level of High and Moderate. The GC may delegate low risk approval to Directors. The Garrison Commander is the only individual authorized on Fort Buchanan to decrease safety/risk standards.

b. The residual risk level determines who may accept the risk and sign the DD Form 2977. Acceptance of risk and signature on the DD Form 2977 will be accomplished by the following based on the overall level of residual risk.

(1) Extremely High – IMCOM Regional Director or Senior Commander .

(2) High and Moderate – Garrison Commander.

(3) Low - Directors, Activity Chiefs.

c. The signature block of the individual accepting the risk will be entered in block 12 of DD Form 2977. The form will then be signed and dated. Requests for risk acceptance decisions at the Garrison, Region, or Senior Commander level must be properly staffed through the Fort Buchanan Installation Safety Office at least 10 days prior to the event.

d. Fort Buchanan Installation Safety Office personnel will be available for consultation during the preparation of the Risk Assessment Worksheets.

Chapter 5
Accident Investigation and Reporting

5-1. General. Accident reporting and investigation will be in accordance with AR 385-10, DA Pam 385-10, and this handbook.

5-2. Responsibility. Supervisors experiencing the accident will ensure prompt notification to the Fort Buchanan Installation Safety Office.

a. On-Duty Accident Requirements.

(1) Immediately notify the Fort Buchanan Installation Safety Office of all fatal and serious accidents, and property damage (within 4 hours). Provide information as requested on a DA Form 7306-R (Telephonic Notification of Ground Accident) worksheet.

(2) Report all accidents resulting in an employee being given restricted activity light duty or having days away from work using DA Form 285-AB-R (AGAR) to the Fort Buchanan Installation Safety Office within 5 workdays of the accident occurrence.

b. Off-Duty Accident Requirements.

(1) Immediately notify the Fort Buchanan Installation Safety Office of all fatal off-duty accidents involving military and civilian personnel (within 4 hours of the start of the next workday). These accidents require you to submit a completed DA Form 285-AB-R to the Fort Buchanan Installation Safety Office within 5 workdays of the accident occurrence.

c. Immediately report all accidents involving explosives, chemicals, radiation, or equipment that may cause adverse publicity to the Army, to the Fort Buchanan Installation Safety Office through the appropriate command channels (within 4 hours).

Directors/Activity Chiefs will:

a. Notify the Directorate of Plans, Training, Mobilization, and Security (DPTMS) and the Fort Buchanan Installation Safety Office immediately when an accident results in one of the following circumstances:

(1) Fatality.

(2) Permanent total or permanent partial disability.

(3) Hospitalization of three or more personnel as the result of a single accident.

(4) Property damage which seriously degrades operational readiness.

(5) Forwarding of an accident related Serious Incident Report (SIR) to higher headquarters.

b. Directors/Activity Chiefs, who experience any of the above, will:

(1) Appoint a point of contact (POC) for the investigation and advise DPTMS of the name and phone number of the POC.

(2) Secure the accident site, in coordination with DES, and ensure that the site is undisturbed to the maximum extent possible.

(3) When applicable, gather training records for all personnel directly involved in the accident.

(4) Gather records concerning equipment involved in the accident.

(5) Identify, separate, and isolate all witnesses.

(6) Obtain fuel and oil samples from Army Motor Vehicles involved as requested.

(7) Provide office space that can be secured and a phone with DSN capabilities for the investigation board.

(8) Provide clerical support for accident investigation boards.

c. Furnish Estimated Cost of Damage (ECOD) report to Fort Buchanan Installation Safety Office on property damage in excess of $5,000 that results from an accident.

d. Submit a DA Form 285, U.S. Army Accident Investigation Report, for all recordable on-duty Class A and B accidents, and a DA Form 285-AB-R, U.S. Army Abbreviated Ground Accident Report (AGAR) for all recordable on-duty Class C, D, and E accidents, and for all recordable off-duty accidents to Fort Buchanan Installation Safety Office within 30 calendar days of the accident.

Civilian Personnel Advisory Center (CPAC). CPAC will:

a. Furnish the Fort Buchanan Installation Safety Office a Log of Worker Compensation Claims on a monthly basis. Report is due the 15th workday of the month.

b. Ensure that personnel records of civilian employees involved in an accident being investigated by an accident investigation board are made available for review at CPAC.

Logistics Readiness Center (LRC). The LRC will:

a. Furnish ECOD reports to the Fort Buchanan Installation Safety Office on all government vehicles involved in an accident. Report is due no later than the 10th work day of the month.

b. Provide the following support upon request from accident investigation boards appointed by the Garrison Commander or Department of the Army:

(1) Provide vehicles for use by properly licensed board members.

Directorate of Public Works (DPW). The DPW will:

a. Provide engineering assistance as needed by accident investigation board.

5-3. Accident Reporting and Recording. All categories of Army accidents, on-and-off duty, involving Army operations, personnel, or materiel are reportable. Record certain classes of accidents on DA Form 285 (U.S. Army Accident Report) or DA Form 285-AB-R (U.S. Army Abbreviated Ground Accident Report (AGAR)), as prescribed in AR 385-10 and per the instructions on the form. Accident class definitions are described in AR 385-10, paragraph 3-4. Directorates will report/investigate all accidents unless, otherwise, notified by the Fort Buchanan Installation Safety Office.

5-4. Accident Reports. DA Forms 285, U.S. Army Accident Investigation Report, and DA Forms 285-AB-R, U.S. Army Abbreviated Ground Accident Report (AGAR), are required for recordable accidents as defined in AR 385-10, and will be submitted to the Fort Buchanan Installation Safety Office within 5 calendar days of the accident.

5-5. Accident Classes. Accident classes are used to determine the appropriate investigative and reporting procedures. Accident classes are as follows:

a. Class A accident. An Army accident in which the resulting total cost of property damage is $2,000,000 or more; an Army aircraft or missile is destroyed, missing, or abandoned; or an injury and/or occupational illness results in a fatality or permanent total disability.

b. Class B accident. An Army accident in which the resulting total cost of property damage is $500,000 or more, but less than $2,000,000; an injury and/or occupational illness results in permanent partial disability, or when 3 or more personnel are hospitalized as inpatients as the result of a single occurrence..

c. Class C accident. An Army accident in which the resulting total cost of property damage is $50,000 or more, but less than $500,000; a nonfatal injury or occupational illness that causes 1 or more days away from work or training beyond the day or shift on which it occurred or disability at any time (that does not meet the definition of Class A or B and is a lost time case).

d. Class D accident. An Army accident in which the resulting total cost of property damage is $20,000 or more, but less than $50,000; a nonfatal injury or illness resulting in restricted work, transfer to another job, medical treatment greater than 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 requirements of an OSHA standard, occupational hearing loss, or a work–related tuberculosis case.

e. Class E ground accident. An Army ground accident in which the resulting total cost of property damage is $5,000 or more but less than $20,000.

Chapter 6
Explosive Safety Program

6-1. General

a. This chapter prescribes specific procedures and responsibilities to ensure safe handling and storage of ammunition and explosives on Fort Buchanan. In the event of conflicting requirements between this handbook and the regulations of higher headquarters, the most stringent will be followed.

6-2. Responsibilities.

a. Fort Buchanan Installation Safety Office will:

(1) Monitor installation operations for compliance with explosives safety standards

(2) Be responsible for explosives storage licensing.

(3) Assist with explosives safety site plan submissions.

(4) Assist in the developing and processing of Certificates of Risk Acceptance (CORAs).

(5) Conduct annual inspections of all arms rooms under garrison jurisdiction.

(6) Conduct random inspections of ammunition storage locations under garrison jurisdiction to verify compliance with explosives storage standards.

(7) Monitor ammunition uploads and other activities involving transportation and storage of ammunition.

(8) Process and submit required documentation to the IMCOM Safety Office and the U.S. Army Technical Center for Explosives Safety (USATCES).

(9) Inspect the DES K-9 Scent Kit storage bunker semi-annually.

6-3. Arms Rooms.

a. Ammunition storage in unit arm's rooms require an approved explosive storage license IAW DOD 6055.9E and DA Pam 385-64, chapter 9.

b. Directors/Commanders shall limit arms room storage to the quantity of ammunition required for operational necessity or immediate training operations.

c. Munitions items authorized for storage in unit arms rooms are limited to hazard class/division 1.2.2 not to exceed 50 pounds net explosive weight (NEW), 1.3 not to exceed 100 pounds NEW, and 1.4 operational necessity 100 pounds NEW without regard to QD requirements. Prior to a unit storing any ammunition in arms rooms on Fort Buchanan, the Garrison Commander will approve the CRM assessment that justifies the storage based on operational necessity and safety considerations.

d. Ammunition will be packed in approved U.S. Department of Transportation (DOT) containers.

e. Training ammunition will be physically separated from the operational necessity ammunition and training ammunition will be clearly marked as training ammunition. Amounts will not exceed 100 pounds NEW.

6-4. Transportation and Temporary Storage of Ammunition.

a. Q-D requirements apply to temporary storage of ammunition and explosives.

b. Observe special requirements specified by the Army, Federal, State, and local regulations, concerning mechanical condition, refueling, placarding, and marking of vehicles.

6-5. Site Plans and Safety Submissions.

a. Prepare site plans and safety submissions IAW AR 385-10 and DA Pam 385-64.

b. Forward original and two complete copies of site plan and safety submissions through channels to Commander, IMCOM, for submission to Director, U.S. Army Technical Center for Explosives Safety.

6-6. Certificates of Risk Acceptance (CoRAs)

a. Waivers and exemptions are no longer in use. Certificates of Risk Acceptance (CORA) will be used in place of waivers and exemptions IAW DA Pam 385-64. All explosives safety risk will be accepted at the appropriate level.

6-7. Ammunition and Explosives Amnesty Program.

a. The Ammunition Amnesty Program is intended to ensure maximum recovery of military ammunition and explosives (A&E) items outside the supply system. It is not intended to circumvent normal turn-in procedures. This program is conducted on a no-questions-asked basis to provide an opportunity for individuals to return items without fear of reprisal or prosecution.

b. There is one amnesty container in Fort Buchanan, located outside Building 206 (DES Supply Room). This container only accepts .50 caliber and small ball ammunition. The amnesty container will be checked by the ISO and the DES Supply Specialist at irregular basis, but not less that once monthly, for unexpended A&E. The DES Supply Specialist will schedule transportation of amnesty A&E to Camp Santiago as part of DES regular resupply runs. DES Police desk personnel will be knowledgeable of the amnesty program and advise callers of what to do with A&E found on post.

c. The ISO will promote the Amnesty Program semiannually through all available media sources, including email distributions. Information will include the program intent, procedures for reporting and disposing of A&E found on post, and the location of the amnesty container.

Chapter 7
Radiation Protection Program

7-1. Purpose. Fort Buchanan is committed to the operating philosophy of maintaining occupational radiation exposure as low as is reasonably achievable (ALARA) and to maintaining effective control of radioactive items to ensure that exposure to ionizing radiation and the possible release of airborne radioactive contaminants is as low as is reasonably achievable. The Installation Radiation Safety Officer (IRSO) will provide overall coordination, advice, and assistance for radiological safety, except for medical issues.

7-2. Responsibilities. All activities will pursue the ALARA policy through aggressive implementation of this handbook.

a. Garrison Commander. The Garrison Commander shall:

(1) Ensure each organization that handles, uses, or has radioactive commodities in their possession, implements an effective radiation safety program that complies with the requirements of federal standards, ARs, and this handbook.

(2) Appoint, in writing, a radiation safety officer to oversee the radiation safety program IAW DA Pam 385-24, paragraph 1-4k(1).

(3) Appoint a radiation safety committee, if required.

(4) Ensure an accurate record of the inventory of radiation sources is maintained. Ensure a physical inventory of all radiation sources and radiation producing equipment in Fort Buchanan is conducted at least annually.

b. The Installation Safety Officer will:

(1) Have overall staff responsibility for establishing and monitoring the Radiation Protection Program, exercised through an Installation Radiation Protection Officer (RPO).

(2) The RPO will be designated in writing by the Garrison Commander and will normally be a member of the Fort Buchanan Installation Safety Office.

(3) Provide guidance, technical information and assistance to units and activities on radiation hazards and protective measures.

(4) Monitor unit/activity training programs for radiation workers.

(5) Evaluate all operations involving the use or storage of radiation producing devices and material, especially radioactive material, to determine the need for restricted areas, or other control measures.

(6) Ensure notices to workers, warning signs, instructions and other notices required by 10 CFR and Army publications are posted.

(7) Assist with coordinating shipping arrangements for radioactive materials for return to depots or to designated disposal areas. The RPO will monitor outgoing packages, if required, and provide information to be annotated on shipping documents.

(8) Ensure installation compliance with Army and federal procedures for receipt of radioactive material and the monitoring of transportation vehicles.

c. Local Radiation Protection Officer (LRPO). The Local Radiation Protection Officer will:

(1) Be appointed in writing by Directors or Unit Commanders.

(2) Be trained at a level commensurate with the duties to be performed. Provide specific training for all equipment containing radioactive materials to employees and troops.

(3) Manage the Radiation Protection Program within their respective organizations.

(4) Perform quarterly wipe surveys of Radioactive Restricted Areas.

(5) Ensure all personnel working with radioactive or hazardous radiation producing material are briefed annually concerning the nature of the radiation involved, and safety and emergency procedures to be followed. A signed statement that such a briefing has been conducted, with a listing of personnel briefed, will be kept on file.

(6) Conduct an annual physical inventory of all radioactive materials within their activity.

(7) Advise the Director/Commander of the proper use, storage and transportation of radioactive and radiation producing material.

d. Director of Emergency Services. The Director of Emergency Services will:

(1) Ensure that the Fire Prevention and Protection Division is equipped and trained to fight fires involving radioactive material.

(2) Ensure that the Hazardous Materials Response Team of the Fire Prevention and Protection Division is trained, equipped

and prepared to provide first response to spills or other accidents involving radioactive material.

e. The Director of Mission and Installation Contracting Center (MICC) will:

(I) Ensure that contractors transporting radioactive materials on or off Fort Buchanan are knowledgeable concerning the accident reporting requirements of AR 385-10, and other Federal regulations.

(2) Ensure that contractors have completed and forwarded to the Fort Buchanan Installation Safety Office an Army Radiation Permit (ARP) request (See Figure 8) at least 30 days before transporting radioactive material/instruments onto the installation.

(3) Ensure that license holders and license applicants (i.e. contractors or subcontractors) do not impose conditions in settlement agreements or in other agreements affecting employment that would prohibit, restrict, or discourage an employee from providing information on potential safety hazards or violations.

f. Logistics Readiness Center (LRC) will:

(1) Screen all items received for issue or turn in to determine if they might contain radioactive material.

(2) Notify the RPO if items are received which contain a radioactive symbol, are listed in TB 43-0116, or are otherwise suspected to contain radioactive material not determined to be safe for public use.

7-3. Army Radiation Permits (ARP).

a. Non-Army agencies (including other military services, vendors, and civilian contractors) require an Army Radiation Permit to use, store, or possess ionizing radiation sources on an Army installation (32 CFR 655.10). (For the purpose of this paragraph, ionizing radiation source means any source that, if held or owned by an Army organization, would require a specific Nuclear Regulatory Commission license or ARA).

b. Disposal of radioactive material by non-Army agencies on Army property is prohibited. However, the garrison commander may authorize radioactive releases to the atmosphere or to the sanitary sewerage system that are in compliance with all applicable Federal, state, local, DOD, and Army regulations.

c. Non-Army agencies requiring to bring radioactive material to Fort Buchanan must request an Army Radiation Permit (ARP) through the Installation Safety Office to the Garrison Commander by completing an ARP application form (See Figure 8). The ARP application must be sent at least 30 days before transporting radioactive material/instruments onto the Installation.

7-4. Storage of Radiation Sources.

a. Storage areas for radioactive items, and operating areas for hazardous radiation producing items, must be properly marked, have appropriate warning signs and, where required, have proper warning signals and safety interlocks. In addition, storage and operating areas for radioactive material must have specific documents posted as information to workers. These include, but are not limited to:

(1) NRC Form 3 (Notice to Workers).

(2) Applicable licenses and license application.

(3) Instructions for complying with 10 CFR Part 21.

(4) Emergency procedures including a list of persons to be notified in the event of an emergency.

(5) Unit SOPs for operation of the facility/equipment.

(6) If posting these documents is not practical, a notice may be posted with NRC Form 3 that describes the documents and states where they may be examined.

7-5. Damaged Radiation Sources. Standard issue items containing radioactive material must be removed from service immediately when found to be broken or unserviceable. Radioactive components will not be disassembled or removed by unauthorized personnel. Radioactive components frequently consist of glass vials containing Tritium (used in self-luminous fire control instruments, among others) which may only be removed at depot level maintenance. Breakage of these sources should be reported immediately to the unit LRPO and the Fort Buchanan Installation Safety Office.

7-6. Transportation of Radioactive Materials

a. Upon receipt of a package containing radioactive material (in excess of Type A limits), the packages will be monitored within 3 hours of receipt during normal duty hours and within 18 hours if received after normal duty hours. All types of other packages do not require monitoring.

b. Off-post shipments must comply with regulations established by the Department of Transportation (DOT), the Nuclear Regulatory Commission (NRC), affected states, and Army regulations. Type A packages will be monitored/wipe tested by the IRSO to ensure appropriate information is placed on the shipping documents.

c. Radioactive materials may be temporarily stored in connection with movement (transportation using standard procedures) as long as the following guidelines are followed:

(1) They will not be stored in the same warehouse section with explosives, flammable materials, photographic film, or unsealed food products.

(2) Packages labeled with Radioactive White I, Yellow 11, or Yellow I11 labels will be placed in a controlled area of the warehouse.

(3) The IRSO will be made aware of the location of any package labeled with Radioactive White I, Yellow 11, or Yellow III label.

d. Standard issue items containing radioactive materials (except individual controlled items) may be moved and used anywhere on the installation, consistent with the owning activity's mission and the items intended purpose as specified in the applicable technical publications.

e. Unsealed or leaking "sealed sources" will be moved only by the IRSO.

f. Drivers of vehicles carrying radioactive materials will adhere to safety procedures governing safe transport of radioactive materials.

7-7. Medical Surveillance.

a. Physical examinations are required for some personnel working with hazardous radiation. These examinations are supervised by the Fort Buchanan Preventive Medicine Service, RAHC. Supervisors are responsible for coordinating with the Preventive Medicine Service concerning these examinations.

b. Personnel Dosimeter:

(1) Storage locations requiring dosimeters will be approved in writing by the RPO. Dosimeters will be left in an approved storage location at the end of each work day. A control dosimeter will be stored at each storage location.

(2) The RPO will be notified immediately if any radiation exposure is reported on a Record of Occupational Exposure to Ionizing Radiation.

(3) The RPO will be immediately notified in the event of lost dosimeters.

7-8. Training.

a. All Commanders/Directors will establish training programs for personnel working in, or frequenting any portion of a controlled area where radioactive materials are used or stored. Training will be conducted prior to personnel commencing work in the area, and annually thereafter.

b. Records of training will be maintained by the unit/activity, and will include a brief outline of the instruction, and a list of persons trained. A copy will be forwarded to the RPO.

7-9. Ionizing Radiation. Contamination, suspected contamination, a damaged radioactive source, or some other potentially dangerous situation involving radioactive material will be considered an emergency and handled as follows: The RPO and unit/activity LRPO will be immediately notified. Instructions to this effect, along with telephone numbers for these individuals and the Hazardous Materials Response Team, will be posted in each Radiation Restricted Area.

7-10. Nonionizing Radiation.

a. A class III b or class IV laser system (section 1.3, ANSI Safety Code Z136.1) that is not type classified. (In this case, the title of the person so designated is “laser safety officer.”)

b. A deployable unit possessing radioactive commodities or radiation emitting equipment that requires the implementation of a radiation safety program (for example, leak testing, radiation postings, shipping requirements).

c. Any x–ray systems, except for small, security type x–ray (for example, airport x–ray security machines, mail screening systems).

d. Any x–ray systems meeting the conditions of TB Med 521, ANSI, or National Council on Radiation Protection and Measurements standards.

e. A non–Army agency using, storing, or possessing ionizing radiation sources on an Army installation requires a license.

7-11. Laser Safety Responsibilities. Commanders/Directors of staff sections and activities, as well as Commanders of units and activities attached to or located on Fort Buchanan, whose operations involve the use of lasers, are responsible for establishing a unit Laser Accident Prevention Program, in writing, to include:

a. Establish safe operating procedures at the inception of each specific laser operation or application.

b. Ensure that all personnel are informed of laser hazards and the necessary precautions required for the specific equipment involved.

c. Ensure that laser accident prevention rules and precautions are observed by all personnel, including visitors, in any area where lasers are used.

d. Ensure that all personnel who are occupationally exposed to laser radiation receive an eye examination every six months.

e. Ensure that the necessary protective equipment is provided, tested, and properly used.

Chapter 8
Personal Protective Equipment Program (PPEP)

8-1. Purpose. This handbook describes responsibilities and procedures for ensuring appropriate personnel protective clothing and equipment (PPE) is provided to and utilized by installation personnel who are exposed to hazards in the workplace.

8-2. Responsibilities.

a. Installation Safety Officer (ISO). The ISO will:

(1) Ensure overall development of the PPEP program.

(2) Assist organizations with implementation of the PPEP.

(3) Monitor compliance during regularly scheduled inspections.

b. Rodriguez Army Health Clinic (RAHC) Preventive Medicine. The RAHC Preventive Medicine will:

(1) Assist organizations with implementation of the PPEP.

(2) Assist the ISO with development and presentation of appropriate training for users of personnel protective equipment.

(3) Assist organizations with selection of appropriate PPE.

(4) Assess the need for PPE during annual worksite evaluations by the Industrial Hygienist and his staff.

c. Commanders/Directors. Commanders/directors will:

(1) Implement a comprehensive PPE program which meets the requirements of 29 CFR 1910.132-138 and this handbook.

(2) Ensure all PPE users complete required training.

(3) Provide all necessary PPE and ensure it is used.

(4) Ensure each worksite and operation is assessed to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment.

(5) Ensure all PPE provided is of safe design and appropriate for the hazard.

(6) Establish a system to inspect, maintain, and store PPE which ensures personnel are provided safe, sanitary equipment.

d. Director of Civilian Personnel Advisory Center (CPAC). The CPAC will provide support to supervisors and other individuals responsible for implementing or enforcing the PPEP. Examples of support are: developing job descriptions to address requirements for PPE use, identifying ability to use PPE as a condition of employment when required by the nature of the job, and documenting training.

8-3. General.

a. PPE required to protect personnel from job hazards will be provided free of charge to the individual.

b. PPE is considered an acceptable method of protecting personnel only under the following circumstances:

(1) When engineering and work practice controls are not adequate to control the hazard.

(2) During intermittent, non-routine operations not exceeding one hour per week.

(3) During the interim periods while engineering controls are being designed, funded, and installed.

(4) During emergencies.

(5) When required by other federal regulation or operating license.

c. The ability to use PPE will be a condition of employment when required by the job.

8-4. Training.

a. Commanders/directors will provide training to each individual who is required to use PPE. The training must address:

(1) When PPE is necessary

(2) What PPE is necessary

(3) How to properly don, doff, adjust, and wear PPE

(4) The limitations of PPE

(5) The proper care, maintenance, useful life and disposal of the PPE.

b. Supervisors will ensure that each individual demonstrates an understanding of the training received and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.

c. Retraining is required when:

(1) Individuals do not demonstrate the required understanding and ability.

(2) Changes in the workplace render the previous training obsolete.

(3) Changes in the types of PPE to be used render previous training obsolete.

d. Training must be formally documented.

8-5. Needs Determination/Job Hazard Assessment.

a. Each worksite and operation will be assessed to determine if hazards which necessitate the use of PPE are present, or are likely to be present.

b. Worksite evaluations conducted by the Fort Buchanan Installation Safety Office will be used in conjunction with risk assessments conducted by the supervisor and chain of command.

c. Results of the assessment will be included on DD Form 2977 (Risk Assessment Worksheet), as part of the overall risk assessment of the operation.

8-6. Selection.

a. PPE must be selected to ensure that the individual is furnished equipment which will provide effective protection against the identified hazard.

b. Assistance is available from the Fort Buchanan Installation Safety Office.

c. PPE must be chosen which properly fits the individual for whom it is intended.

d. Selection decisions will be communicated to each affected individual.

8-7. Maintenance, Inspection, Storage, Disposal.

a. PPE will be maintained in a sanitary and reliable condition.

b. PPE will be stored in an appropriate area which protects the equipment from hazardous conditions and maintains cleanliness.

c. Users will inspect PPE prior to each use.

d. Defective/damaged PPE will be removed from use and destroyed.

8-8. Eye and Face Protection.

a. General requirements

(1) Each affected individual shall use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gasses or vapors, potentially injurious light radiation, or other hazardous conditions.

(2) Each individual shall use eye protection which provides side protection when there is a hazard from flying objects.

(3) Each individual who wears prescription lenses while engaged in operations that involve eye hazards shall wear eye protection that incorporates the prescription in its design, if the individual requires protection on a regular basis as part of the job; or shall wear eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription

lenses or protective lenses when use of protection is not required on a regular basis

(4) Each affected individual shall use equipment with filter lenses that have a shade number appropriate for the work performed for protection from injurious light radiation.

b. Criteria for protective eye and face devices.

(1) Protective eye and face devices purchased after July 5, 1994 shall comply with ANSI Z87.1-1989, American National Standard Practice for Occupational and Educational Eye and Face Protection.

8-9. Head Protection.

a. General requirements

(1) Each affected individual shall wear protective helmets when working in areas where there is a potential for injury to the head from falling objects.

(2) Protective helmets designed to reduce electrical shock hazard shall be worn by each such affected individual when near exposed electrical conductors which could contact the head.

b. Criteria for protective helmets

(1) Protective helmets purchased after July 5, 1994 shall comply with ANSI Z89.1-1986, American National Standard for Personnel Protection - Protective Headwear for Industrial Workers - Requirements.

8-10. Occupational Foot Protection.

a. Each affected individual shall wear protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, or where feet are exposed to electrical hazards.

b. Criteria for protective footwear

(1) Protective footwear purchased after July 5, 1994 shall comply with ANSI Z41-1991, American National Standard for Personnel Protection - Protective Footwear.

8-11. Electrical Protective Devices.

a. Insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber shall meet the design requirements of 29 CFR 1910.137.

b. In-service care and use.

(1) Electrical protective equipment shall be maintained in a safe, reliable condition.

(2) The following specific requirements apply to insulating blankets, covers, line hose, gloves, and sleeves made of rubber:

(a) Insulating equipment shall be inspected for damage before each day's use and immediately following any incident that can reasonably be suspected of having caused damage. Insulating gloves shall be given an air test, along with the inspection.

(b) Insulating equipment with any of the following defects may not be used:

(1) A hole, tear, puncture or cut

(2) Ozone cutting or ozone checking

(3) An embedded foreign object

(4) Any texture changes such as swelling, softening, hardening, or becoming sticky or inelastic

(5) Any other defect that damages the insulating properties

(c) Insulating equipment found to have other defects that might affect its insulating properties shall be removed from service.

(d) Insulating equipment shall be cleaned as needed to remove foreign substances.

(e) Insulating equipment shall be stored in such a location and in such a manner as to protect it from light, temperature extremes, excessive humidity, ozone, and other injurious substances and conditions.

8-12. Hand Protection.

a. Commanders/Directors shall ensure appropriate hand protection is selected, procured, and used when individuals' hands are exposed to hazards such as those from skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes.

b. The selection of equipment will be based on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.

Chapter 9
Hazard Communication (HAZCOM) Program

9-1. Purpose. The Fort Buchanan Hazard Communication (HAZCOM) Program provides guidance to installation personnel regarding implementation of, and adherence to chemical safety standards based on the OSHA Standard 29 CFR 1910.1200.

9-2. Applicability. The program applies to all Active Army, Army National Guard (ARNG), U.S. Army Reserve (USAR), Army Civilian Employees, Contractors and non-appropriated fund activities at this installation and satellite activities.

9-3. Responsibility. The Fort Buchanan Installation Safety Officer will:

a. Ensure overall development and coordination of the program.

b. Assist users in obtaining SDS.

c. Assist activities with storage compatibility and physical hazard determinations.

d. Coordinate with DPW (Environmental Management Branch) to provide assistance as needed.

e. Provide appropriate training for supervisors and personnel designated to provide unit/activity level training.

f. Evaluate directorate programs during regularly scheduled inspections.

g. Have access to unit inventories of hazardous materials contained in the Hazardous Materials Pharmacy database.

Supervisors will:

a. Maintain a list of all hazardous chemicals in stock, on procurement, and currently in use.

b. Prepare a local SOP covering the use of chemical compounds, safe handling procedures, protective clothing and equipment employees must use. Ensure that a copy of the SOP and the hazardous chemical inventory are available to personnel during each work shift, and that a Safety Data Sheet (SDS) for each chemical contained in the inventory is on hand.

c. Ensure training regarding the Hazard Communication Program is completed and documented.

d. Provide personnel with the necessary protective clothing and equipment, and ensure that this clothing and equipment is properly maintained.

e. Enforce the usage of personal protective clothing and equipment, and compliance with safe work practices.

f. Ensure all personnel review SDSs annually for all hazardous chemicals to which they are exposed. Require personnel to initial a record of review which should be maintained on file as documentation. (This item will be inspected during routine Safety Inspections)

g. Prepare emergency action plans for each chemical used. Emergency plans should specify notification of emergency personnel, rescue of victims, first aid, evacuation of hazardous areas, protective equipment, spill containment, neutralization of hazardous chemicals and spill cleanup. Supervisors will ensure personnel review plans and SOPs.

h. Ensure all chemical containers bear adequate hazard warning labels including the name, appropriate hazard warning, and sufficient identification to match the contents to the proper SDS. All labels will comply with the Globally Harmonized System (GHS) standards.

RAHC Preventive Medicine Service. Chief of Preventive Medicine Service will:

a. Provide technical guidance to users concerning necessary protective equipment, work practices, engineering controls and required medical screenings.

b. Evaluate health aspects of the Hazard Communication Program during regularly scheduled inspections and surveys.

c. Conduct air sampling of worksites to determine if workers are exposed to hazardous levels of chemicals.

d. Evaluate SDSs of “new” material to minimize the addition of HMs to the command’s supply system.

Chief, Environmental Management Division, DPW. Chief, Environmental Management Division, DPW will:

a. Evaluate environmental hazards associated with each chemical used on the installation and satellite activities. Provide information to users on request.

b. Evaluate environmental aspects of the hazardous chemicals in use by commands/directorates during regularly scheduled inspections and surveys.

c. Provide guidance to users concerning methods of spill control.

d. Provide assistance to Commands/Directorates in developing hazardous chemical SOPs. Assist commands/directorates in establishing proper procedures for disposal of hazardous waste.

e. Maintain an inventory of all hazardous chemicals/materials on the installation and satellite activities.

f. Approve IMPAC credit card purchases of HM.

Mission and Installations Contracting Command (MICC). The MICC will:

a. Contractors include in service/construction contracts, along with their safety plan, an inventory of all hazardous materials to be used on the jobsite and the storage location for these materials prior to beginning work.

b. Contractors include, by reference, the hazardous materials and hazardous waste requirements contained in Engineer Manual 385-1-1, Safety - Safety and Health Requirements and 29 CFR 1926, Safety and Health Regulations for Construction.

c. Service/Construction contractors are informed of any possible hazardous materials to which their employees may be exposed while working on the installation.

Military and Civilian Employees will:

a. Comply with all applicable SOPs, directives, and regulations regarding the safe handling and use of hazardous chemicals.

b. Use engineering controls and protective clothing and equipment to eliminate or protect against hazards in the workplace, and maintain protective clothing and equipment in good repair.

c. Report for health screenings and tests as required.

d. Attend training sessions as directed to become informed of the hazards associated with the materials being used or handled in the workplace.

9-4. Labeling. Each container of hazardous chemicals in the workplace must be labeled, tagged or marked with the following information:

a. Product Identifier

b. Signal Word

c. Hazard Statement

d. Pictogram

e. Precautionary Statement

f. Name, Address and telephone number of the chemical manufacturer

g. Additional labeling for transportation shall be consistent with the requirements of the Hazardous Materials Transportation Act (49 USC 1801)

All labels shall be in conformance with established OSHA guidelines and the Globally Harmonized System (GHS).

9-5. Portable Containers. Labeling of portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the individual who performs the transfer is not required.

9-6. Information and Training. Personnel will be provided effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard the personnel have not previously been trained about is introduced into their work area.

9-7. Training Content.

a. Personnel will be informed of:

(1) The requirements of this SOP and 29 CFR 1910.1200

(2) Any operations in their work area where hazardous chemicals are present

(3) The location and availability of the written program including the required list of hazardous chemicals, and SDSs.

(4) The methods which will be used by the organization to inform personnel of the hazards of non-routine tasks.

b. Training will include at least:

(1) The physical and health hazards of the chemicals in the work area

(2) The measures personnel can take to protect themselves from these hazards, including specific procedures the organization has implemented to protect personnel from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.

(3) The details of this program, including an explanation of the labeling system and the material safety data sheet, and how personnel can obtain and use the appropriate hazard information.

(4) Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area such as monitoring, continuous monitoring devices, visual appearance or odor

9-8. Training Presentation. The Fort Buchanan Installation Safety Office will present a course which provides an overview of this program and 29 CFR 1910.1200, general information concerning chemical hazards and protective measures, and information on using material safety data sheets. This course is designed for supervisory personnel and trainers charged with presenting training to organizational personnel. Other personnel may attend on a space available basis.

Chapter 10
Lockout/Tagout Program

10-1. Purpose. This SOP prescribes and establishes the minimum requirements, responsibilities, policies, and procedures for the Fort Buchanan Lockout/Tagout Program. This SOP requires commander/directors to establish a program and utilize procedures for affixing appropriate lockout devices or tagout devices to energy isolating devices, and to otherwise disable machines or equipment to prevent unexpected energization, start up or release of stored energy in order to prevent injury to civilian employees and Soldiers

10-2. Scope. This handbook covers the servicing and maintenance of machines and equipment in which the unexpected energization or start up of the machines or equipment, or release of stored energy could cause injury to employees.

a. This handbook applies to the control of energy during servicing and/or maintenance of machines and equipment. Normal production operations are not covered by this handbook. Servicing and/or maintenance which takes place during normal production operations is covered by this handbook only if:

(1) An employee is required to remove or bypass a guard or other safety device; or;

(2) An employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.

Exception: Minor tool changes and adjustments, and other minor servicing activities, which take place during normal production operations, are not covered by this standard if they are routine, repetitive, and integral to the use of the equipment for production, provided that the work is performed using alternative measures which provide effective protection.

b. This handbook does not apply to the following:

(1) Work on cord and plug connected electric equipment for which exposure to the hazards of unexpected energization or start up of the equipment is controlled by the unplugging of the equipment from the energy source and by the plug being under the exclusive control of the employee performing the servicing or maintenance.

(2) Hot tap operations involving transmission and distribution systems for substances such as gas, steam, water or petroleum products when they are performed on pressurized pipelines, provided that the commander/director demonstrates that-

(a) continuity of service is essential;

(b) shutdown of the system is impractical; and

(c) documented procedures are followed, and special equipment is used which will provide proven effective protection for employees.

10-3. Responsibility. Fort Buchanan Installation Safety Office. The Fort Buchanan Installation Safety Officer will:

a. Ensure overall development of the Fort Buchanan Lockout/Tagout Program.

b. Assist organizations with implementation of the program.

c. Monitor compliance during regularly scheduled inspections.

Directors/Commanders. Directors/Commanders will implement all aspects of this program in their organizations.

Mission and Installations Contracting Command (MICC). The DOC will:

a. Inform contractors involved in servicing and maintenance of machines and equipment in which the "unexpected" energization or start up of the machines or equipment, or release of stored energy could cause injury to individuals, of the requirement to comply with 29CFR 1910.147.

b. Ensure that contractor personnel performing lockout/tagout, inform any affected personnel in the work area of all hazards, and of the work that is to be performed.

10-4. Energy Control Program. The commander/director shall implement a program consisting of energy control procedures, employee training and periodic inspections. The implementation of this program will ensure that before any employee performs any servicing or maintenance on a machine or equipment where the unexpected energizing, startup or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source and rendered inoperative.

10-5. Lockout/Tagout.

a. If an energy isolating device is capable of being locked out, lockout will be used, unless it can be demonstrated that the utilization of a tagout system will provide full employee protection.

b. Whenever replacement, major repair, renovation or modification of a machine or equipment is performed, and whenever new machines or equipment are installed, energy isolating devices for such machine or equipment shall be designed to accept a lockout device.

10-6. Full Employee Protection.

a. When a tagout device is used on an energy isolating device which is capable of being locked out, the tagout device shall be attached at the same location that the lockout device would have been attached, and the commander/director shall demonstrate that the tagout program will provide a level of safety equivalent to that obtained by using a lockout program.

b. In demonstrating that a level of safety is achieved in the tagout program which is equivalent to the level of safety obtained by using a lockout program, the commander/director shall demonstrate full compliance with all tagout-related provisions of this handbook together with such additional elements as are necessary to provide the equivalent safety available from the use of a lockout device. Additional means to be considered as part of the demonstration of full employee protection shall include the implementation of additional safety measures such as the removal of an isolating circuit element, blocking of a controlling switch, opening of an extra disconnecting device, or the removal of a valve handle to reduce the likelihood of inadvertent energization.

10-7. Energy Control Procedure.

a. Commanders/directors will ensure that written procedures are developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in the activities covered by this handbook. Each machine or piece of equipment which is subject to being locked/tagged out must be addressed in a written procedure. Equipment/machines which require similar lockout procedures may be addressed in one procedure document.

Note: Exception: The commander/director do not need to document the required procedure for a particular machine or equipment, when all of the following elements exist:

(1) The machine or equipment has no potential for stored or residual energy or re-accumulation of stored energy after shut down which could endanger employees;

(2) The machine or equipment has a single energy source which can be readily identified and isolated;

(3) The isolation and locking out of that energy source will completely de-energize and deactivate the machine or equipment;

(4) The machine or equipment is isolated from that energy source and locked out during servicing or maintenance;

(5) A single lockout device will achieve a locked-out condition;

(6) The lockout device is under the exclusive control of the authorized employee performing the servicing or maintenance;

(7) The servicing or maintenance does not create hazards for other employees; and

(8) The commander/director, in utilizing this exception, has had no accidents involving the unexpected activation or re-energization of the machine or equipment during servicing or maintenance.

b. The procedures shall clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, and the means to enforce compliance including, but not limited to, the following:

(1) A specific statement of the intended use of the procedure;

(2) Specific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy;

(3) Specific procedural steps for the placement, removal and transfer of lockout devices or tagout devices and the responsibility for them; and

(4) Specific requirements for testing a machine or equipment to determine and verify the effectiveness of lockout devices, tagout devices, and other energy control measures.

10-8. Protective Materials and Hardware.

a. Locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners, or other hardware shall be provided by the commander/director for isolating, securing or blocking of machines or equipment from energy sources.

b. Lockout devices and tagout devices shall be singularly identified; shall be the only devices(s) used for controlling energy; shall not be used for other purposes; and shall meet the following requirements:

(1) Durable - Lockout and tagout devices shall be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected. Tagout devices shall be constructed and printed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or the message on the tag to become illegible. Tags shall not deteriorate when used in corrosive environments such as areas where acid and alkali chemicals are handled and stored.

(2) Standardized. Lockout and tagout devices shall be standardized within the organization in at least one of the following criteria: color, shape, or size; and additionally, in the case of tagout devices, print and format shall be standardized.

(3) Substantial - Lockout devices shall be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools. Tagout devices, including their means of attachment, shall be substantial enough to prevent inadvertent or accidental removal. Tagout device attachment means shall be of a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds and having the general design and basic characteristics of being at least equivalent to a one-piece, all environment-tolerant nylon cable tie.

(4) Identifiable. Lockout devices and tagout devices shall indicate the identity of the employee applying the device(s).

c. Tagout devices shall warn against hazardous conditions if the machine or equipment is energized and shall include a legend such as the following: Do Not Start. Do Not Open. Do Not Close. Do Not Energize. Do Not Operate.

10-9. Periodic Inspections.

a. The commander/director shall conduct a periodic inspection of the energy control procedure(s) at least annually to ensure that

the procedure(s) and the requirements of this handbook are being followed.

(1) The periodic inspection shall be performed by an authorized employee other than the ones(s) utilizing the energy control procedure being inspected.

(2) The periodic inspection shall be conducted to correct any deviations or Inadequacies identified.

(3) Where lockout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized employee, of that employee's responsibilities under the energy control procedure being inspected.

(4) Where tagout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized and affected employee /Soldier, of that employee's responsibilities under the energy control procedure being inspected, and the elements set forth in this section.

b. The commander/director shall certify that the periodic inspections have been performed. The certification shall identify the machine or equipment on which the energy control procedure was being utilized, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

10-10. Training and Communication.

a. The commander/director shall provide training to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees. The training shall include the following:

(1) Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.

(1) Each affected employee shall be instructed in the purpose and use of the energy control procedure. The authorized employee performing the lockout/tagout procedure will provide this training to affected personnel.

(2) All other employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedure, and about the prohibition relating to attempts to restart or reenergize machines or equipment which are locked out or tagged out.

b. When tagout systems are used, employees shall also be trained in the following limitations of tags:

(1) Tags are essentially warning devices affixed to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock.

(2) When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.

(3) Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective.

(4) Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace.

(5) Tags may evoke a false sense of security, and their meaning needs to
Be understood as part of the overall energy control program.

(6) Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

c. Employee retraining.

(1) Retraining shall be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures.

(2) Additional retraining shall also be conducted whenever a periodic inspection reveals, or whenever the commander/director has reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

(3) The retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

d. The commander/director shall certify that employee training has been accomplished and is being kept up to date. The certification shall contain each employee's name and dates of training.

10-11. Energy Isolation. Lockout or tagout shall be performed only by the authorized employees who are performing the servicing or maintenance.

10-12. Notification of Employees. Affected employees shall be notified by the commander/director or authorized employee of the application and removal of lockout devices or tagout devices. Notification shall be given before the controls are applied, and after they are removed from the machine or equipment.

10-13. Application of Control. The established procedures for the application of energy control (the lockout or tagout procedures) shall cover the following elements and actions and shall be done in the following sequence:

a. Preparation for shutdown. Before an authorized or affected employee turns off a machine or equipment, the authorized employee shall have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means to control the energy.

b. Machine or equipment shutdown. The machine or equipment shall be turned off or shut down using the procedures established for the machine or equipment. An orderly shutdown must be utilized to avoid any additional or increased hazard(s) to employees as a result of the equipment stoppage.

c. Machine or equipment isolation. All energy isolating devices that are needed to control the energy to the machine or equipment shall be physically located and operated in such a manner as to isolate the machine or equipment from the energy source(s).

d. Lockout or tagout device application.

(1) Lockout or tagout devices shall be affixed to each energy isolating device by authorized employees.

(2) Lockout devices, where used, shall be affixed in a manner to that will hold the energy isolating devices in a "safe" or "off" position.

(3) Tagout devices, where used, shall be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.

(a) Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment shall be fastened at the same point at which the lock would have been attached.

(b) Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

e. Stored energy. Following the application of lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained, and otherwise rendered safe. If there is a possibility of re-accumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.

f. Verification of isolation. Prior to starting work on machines or equipment that have been locked out or tagged out, the authorized employee shall verify that isolation and de-energization of the machine or equipment have been accomplished.

10-14. Pre-release Checks. Before lockout or tagout devices are removed and energy is restored to the machine or equipment, procedures shall be followed and actions taken by the authorized employee to ensure the following:

a. The machine or equipment. The work area shall be inspected to ensure that nonessential items have been removed and to ensure that machine or equipment components are operationally intact.

b. Employees. The work area shall be checked to ensure that all employees have been safely positioned or removed. After lockout or tagout devices have been removed and before a machine or

equipment is started, affected employees shall be notified that the lockout or tagout device(s) have been removed.

10-15. Lockout or Tagout Devices Removal.

a. Each lockout or tagout device shall be removed from each energy isolating device by the employee who applied the device.

b. When the authorized employee who applied the lockout or tagout device is not available to remove it, that device may be removed under the direction of the commander/director, provided that specific procedures and training for such removal have been developed, documented and incorporated into the commander/director's energy control program. The commander/director shall demonstrate that the specific procedure provides equivalent safety to the removal of the device by the authorized employee who applied it. The specific procedure shall include at least the following elements:

(1) Verification by the commander/director that the authorized employee who applied the device is not at the facility:

(2) Making all reasonable efforts to contact the authorized employee to inform him/her that his/her lockout or tagout device has been removed; and

(3) Ensuring that the authorized employee has this knowledge before he/she resumes work at that facility.

10-16. Testing or Positioning of Machines, Equipment or Components Thereof. In situations in which lockout or tagout devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machine, equipment or component thereof, the following sequence of actions shall be followed:

a. Clear the machine or equipment of tools and materials.

b. Remove employees from the machine or equipment area.

c. Remove the lockout or tagout devices;

d. Energize and proceed with testing or positioning;

e. De-energize all systems and reapply energy control measures to continue the servicing and/or maintenance.

10-17. Outside Personnel (contractors, etc.).

a. Whenever outside servicing personnel are to be engaged in activities covered by the scope and application of this standard, the on-site Contractor Officer Representative (COR) and the contractor shall inform each other of their respective lockout or tagout procedures.

b. The on-site COR shall ensure that the employees understand and comply with the restrictions and prohibitions contractor's energy control program.

10-18. Group Lockout or Tagout.

a. When servicing and/or maintenance is performed by a group, they shall utilize a procedure which affords the employees a level of protection equivalent to that provided by the implementation of a personal lockout or tagout device.

b. Group lockout or tagout devices shall be used in accordance with the procedures required by this SOP including, but not necessarily limited to, the following specific requirements:

(1) Primary responsibility is vested in an authorized employee for a set number of employees working under the protection of a group lockout or tagout device (such as an operations lock);

(2) Provision for the authorized employee to ascertain the exposure status of individual group members with regard to the lockout or tagout of the machine or equipment and

(3) When more than one group is involved, assignment of overall job-associated lockout or tagout control responsibility to an authorized employee designated to coordinate affected work forces and ensure continuity of protection; and

(4) Each authorized employee shall affix a personal lockout or tagout device the group lockout device, group lockbox, or comparable mechanism when he or she begins work, and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

10-19. Shift or Personnel Changes. Specific procedures shall be utilized during shift or personnel changes to ensure the continuity of lockout or tagout protection, including provision for the orderly transfer of lockout or tagout device protection between off-going and oncoming employees, to minimize exposure to hazards from the unexpected energization or start-up of the machine or equipment, or the release of stored energy.

Chapter 11
Respiratory Protection Program

11-1. General. This handbook assigns responsibilities for implementing the Fort Buchanan Respiratory Protection Program (FBRPP).

11-2. Responsibilities.

The Fort Buchanan Installation Safety Officer will:

a. Serve as the Installation Respirator Program Director (IRPD) and Installation Respirator Specialist (IRS).

b. Ensure overall development of the FBRPP.

c. Assist organizations with implementation of the FBRPP.

d. Monitor compliance during regularly scheduled inspections.

e. Conduct respirator user training.

Rodriguez Army Health Clinic (RAHC) will:

a. Assist organizations with implementation of the FBRPP.

b. Assist the Fort Buchanan Installation Safety Officer with presentation of training for respirator users and unit respirator custodians.

d. Determine if workers assigned to tasks requiring the use of RPE are physically, psychologically, and physiologically able to perform assigned tasks while wearing the prescribed RPE. Conduct necessary medical evaluations. Review the status of RPE users at least annually.

e. Conduct initial and annual fit/leak testing to ensure proper selection of respirator size and style for each user. Counsel each individual on respirator handling, fitting, and seal testing.

f. Advise users and organizations concerning proper selection of respirators for specific operations/individuals.

g. Issue respirator user cards after determining all requirements for medical evaluation, fit testing, and training are met. Ensure card specifies what type respirator, to include size and appropriate cartridges each individual should use. Maintain records of respirator brand, size, and model in individual's medical record.

h. Maintain appropriate surveillance of work area conditions and degrees of employee exposures. Report all discrepancies noted with recommendations to the Fort Buchanan Installation Safety Office.

i. Maintain an accurate medical record for each individual who uses RPE.

j. Advise organizations concerning appropriate personal protective equipment and other necessary supplies.

k. Assist the Fort Buchanan Installation Safety Officer with program evaluations and inspections.

l. Assess the quality of air provided by supplied air systems not less than annually.

Leaders with operations requiring use of RPE. Leaders will:

a. Implement a respiratory protection program which meets the requirements of 29 CFR1910.134, AR 11-34, and this SOP.

b. Ensure all personnel involved in these operations receive appropriate training.

c. Provide all necessary personal protective equipment and supplies, and ensure they are used.

d. Ensure users receive mandatory medical evaluations, fit testing, and training. Schedule medical evaluations prior to training and fit testing.

e. Conduct monthly inspections of emergency use respirators, self contained breathing apparatus, and supplied air. Conduct random inspections to ensure that respirators are properly selected, used, cleaned, and maintained. Maintain records of these inspections.

f. Procure respirators required for organizational operations. Ensure only specific respirators designated for each individual/operation as indicated on the approved respirator user card are purchased.

g. Issue proper respirators to users who have a valid respirator user card.

h. Perform maintenance, repair and cleaning of respirators.

i. Maintain records of purchase, issue, and maintenance of respirators.

j. Provide adequate storage for RPE in a clean/sanitary location within each work center to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals.

k. Prohibit personnel from using respirators with a face piece from working in hazardous atmospheres if facial hair comes between the sealing periphery of the face piece and the face or if facial hair interferes with valve function.

l. Prohibit personnel with perforated eardrums from working in hazardous atmospheres.

m. Ensure corrective glasses and goggles are worn so as not to affect the fit of the face piece. Corrective lenses may be mounted inside full face piece respirators. Prohibit use of contact lenses when wearing a full face piece respirator, helmet, hood or suit.

n. Mark each area and operation requiring RPE to inform personnel of the work hazards or health risks involved and type of respirator needed.

o. Ensure compressed air breathing system alarms are tested prior to use in potentially IDLH situations.

p. Include a statement in each appropriate job description that proper use of PCE is a significant job element. Consider use in performance appraisals.

q. Coordinate with the RAHC to assess the quality of breathing air from supplied air systems on an annual basis.

r. Perform unit level maintenance of supplied air systems such as changing filters and cartridges.

Director of Civilian Personnel Activity Center (CPAC). The Director of the Civilian Personnel Activity Center will:

a. Provide support to supervisors and other individuals responsible for implementing the Respiratory Protection Program requirements. Examples of support are: developing job descriptions to address requirements for respirator use, identifying ability to use RPE as a condition of employment when required by the nature of the job, and documenting training.

b. Require medical evaluations which evaluate the individual's ability to wear RPE, for employees being considered for assignment into jobs which require use of RPE.

11-3. General Procedures.

a. Respirators are considered an acceptable method of protecting the health of Fort Buchanan personnel only under the following circumstances:

(1) When engineering and work practice controls are not adequate to control the hazard.

(2) During intermittent, non-routine operations not exceeding one hour per week.

(3) During the interim periods while engineering controls are being designed, funded, and installed.

(4) During emergencies.

(5) When required by other federal regulation or operating license.

b. The ability to use respiratory protective equipment (RPE) will be a condition of employment when required by the job.

c. Workers will not be assigned to tasks requiring the use of respirators without prior medical evaluation.

d. Respiratory protection will be furnished at no cost to personnel.

11-4. Selection of Respirators. This paragraph requires the commander or director to evaluate respiratory hazard(s) in the workplace, identify relevant workplace and user factors, and base respirator selection on these factors. The paragraph also specifies appropriately protective respirators for use in immediately dangerous to life and health (IDLH) atmospheres, and limits the selection and use of air-purifying respirators.

a. General requirements.

(1) The commander or director shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.

(2) The commander or director shall select a NIOSH-certified respirator. The respirator shall be used in compliance with the conditions of its certification.

(3) The commander or director shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Assistance in identification and evaluation is available from the Fort Buchanan Installation Safety Office and the Rodriguez Army Health Clinic. Where the commander or director cannot identify or reasonably estimate the employee exposure, the commander or director shall consider the atmosphere to be immediately dangerous to life and health (IDLH).

(4) The commander or director shall select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

b. Respirators for IDLH atmospheres.

(1) The commander or director shall provide the following respirators for employee use in IDLH atmospheres:

[a] A full face piece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or

[b] A combination full face piece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.

(2) Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

(3) All oxygen-deficient atmospheres shall be considered IDLH.

c. Respirators for atmospheres that are not IDLH.

(1) The commander or director shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations.

(2) The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.

(3) For protection against gases and vapors, the commander or director shall provide:

(a) An atmosphere-supplying respirator, or

(b) An air-purifying respirator provided that:

[1] The respirator is equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or

[2] If there is no ESLI appropriate for conditions in the commander or director's workplace, the commander or director implements a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life. Procedures for implementing a change schedule are described in paragraph 11-17.

(4) For protection against particulates, the commander or director shall provide:

(a) An atmosphere-supplying respirator; or

(b) An air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR Part 11 as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR Part 84; or

(c) For contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least 2 micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.

11-5. Medical Evaluation. Using a respirator may place a physiological burden on employees that varies with the type of respirator worn, the job and workplace conditions in which the respirator is used, and the medical status of the employee. Accordingly, this paragraph specifies the minimum requirements for medical evaluation that commander or directors must implement to determine the employee's ability to use a respirator.

a. General. The commander or director shall provide a medical evaluation to determine the employee's ability to use a respirator, before is fit tested or required to use the respirator in the workplace. The commander or director may discontinue a employee's medical evaluations when is no longer required to use a respirator.

b. Medical evaluation procedures.

(1) The commander or director shall coordinate with Preventive Medicine, RAHC to identify a physician or other licensed health care professional (PLHCP) to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire.

(2) The medical evaluation shall obtain the information requested by the questionnaire in Sections 1 and 2, Part A of Appendix C of 29 CFR 1919.134, Respiratory Protection.

c. Follow-up medical examination.

(1) The commander or director, in conjunction with Preventive Medicine, RAHC, shall ensure that a follow-up medical examination is provided for an employee who gives a positive response to any question among questions 1 through 8 in Section 2, Part A of Appendix C of 29 CFR 1910.134 or whose initial medical examination demonstrates the need for a follow-up medical examination.

(2) The follow-up medical examination shall include any medical tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination.

d. Administration of the medical questionnaire and examinations.

(1) The medical questionnaire and examinations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire shall be administered in a manner that ensures that the employee understands its content.

(2) The commander or director shall provide the employee with an opportunity to discuss the questionnaire and examination results with the PLHCP.

e. Supplemental information for the PLHCP.

(1) The following information must be provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator:

(a) The type and weight of the respirator to be used by the employee;

(b) The duration and frequency of respirator use (including use for rescue and escape);

(c) The expected physical work effort;

(d) Additional protective clothing and equipment to be worn; and

(e) Temperature and humidity extremes that may be encountered.

(2) Any supplemental information provided previously to the PLHCP regarding an employee need not be provided for a subsequent medical evaluation if the information and the PLHCP remain the same.

f. Medical determination. In determining the employee's ability to use a respirator, the commander or director shall:

(1) Obtain a written recommendation regarding the employee's ability to use the respirator from the PLHCP. The recommendation shall provide only the following information:

(a) Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator;

(b) The need, if any, for follow-up medical evaluations; and

(c) A statement that the PLHCP has provided the employee with a copy of the PLHCP's written recommendation.

(2) If the respirator is a negative pressure respirator and the PLHCP finds a medical condition that may place the employee's health at increased risk if the respirator is used, the commander or director shall provide a PAPR if the PLHCP's medical evaluation finds that the employee can use such a respirator. If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the commander or director is no longer required to provide a PAPR.

g. Additional medical evaluations. At a minimum, the commander or director, in conjunction with Preventive Medicine, shall provide additional medical evaluations that comply with the requirements of this handbook and 29 CFR 1901.134 if:

(1) An employee reports medical signs or symptoms that are related to ability to use a respirator;

(2) A PLHCP, supervisor, or the respirator program administrator informs the commander or director that an employee needs to be reevaluated;

(3) Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for an employee reevaluation; or

(4) A change occurs in workplace conditions (e.g., physical work effort, protective clothing, and temperature) that may result in a substantial increase in the physiological burden placed on an employee.

11-6. Fit Testing. This paragraph requires that, before an employee may be required to use any respirator with a negative or positive pressure tight-fitting face piece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used. This paragraph specifies the kinds of fit tests allowed, the procedures for conducting them, and how the results of the fit tests must be used.

a. The commander or director shall ensure that employees using a tight-fitting face piece respirator pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT) as stated in this paragraph. Fit testing is performed by Preventive Medicine, (Industrial Hygiene Technician).

b. The commander or director shall ensure that an employee using a tight-fitting face piece respirator is fit tested prior to initial use of the respirator, whenever a different respirator face piece (size, style, model or make) is used, and at least annually thereafter.

c. The commander or director shall ensure an additional fit test is conducted whenever the employee reports, or the commander or director, PLHCP, supervisor or program administrator makes visual observations of, changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

d. If after passing a QLFT or QNFT, the employee subsequently notifies the commander or director, program administrator, supervisor, or PLHCP that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator facepiece and to be retested.

e. The fit test shall be administered using an OSHA-accepted QLFT or QNFT protocol. The OSHA-accepted QLFT and QNFT protocols and procedures are contained in Appendix A of 29 CFR 1910.134.

f. QLFT may only be used to fit test negative pressure air-purifying respirators that must achieve a fit factor of 100 or less.

g. If the fit factor, as determined through an OSHA-accepted QNFT protocol, is equal to or greater than 100 for tight-fitting half face pieces, or equal to or greater than 500 for tight-fitting full face pieces, the QNFT has been passed with that respirator.

h. Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators shall be accomplished by performing quantitative or qualitative fit testing in the negative pressure mode, regardless of the mode of operation (negative or positive pressure) that is used for respiratory protection.

(1) Qualitative fit testing of these respirators shall be accomplished by temporarily converting the respirator user's actual face piece into a negative pressure respirator with appropriate filters, or by using an identical negative pressure air-purifying respirator face piece with the same sealing surfaces as a surrogate for the atmosphere-supplying or powered air-purifying respirator face piece.

(2) Quantitative fit testing of these respirators shall be accomplished by modifying the face piece to allow sampling inside the face piece in the breathing zone of the user, midway between the nose and mouth. This requirement shall be accomplished by installing a permanent sampling probe onto a surrogate face piece, or by using a sampling adapter designed to temporarily provide a means of sampling air from inside the face piece.

(3) Any modifications to the respirator face piece for fit testing shall be completely removed, and the face piece restored to NIOSH-approved configuration, before that face piece can be used in the workplace.

11-7. Use of Respirators. This paragraph requires commander or directors to establish and implement procedures for the proper use of respirators.

a. Face piece seal protection.

(1) The commander or director shall not permit respirators with tight-fitting face pieces to be worn by employees who have:

(a) Facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function; or

(b) Any condition that interferes with the face-to-face piece seal or valve function.

(2) If an employee wears corrective glasses or goggles or other personal protective equipment, the commander or director

shall ensure that such equipment is worn in a manner that does not interfere with the seal of the face piece to the face of the user.

11-8. Continuing Respirator Effectiveness.

a. Appropriate surveillance shall be maintained of work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, the commander or director shall reevaluate the continued effectiveness of the respirator.

b. The commander or director shall ensure that employees leave the respirator use area:

(1) To wash their faces and respirator face pieces as necessary to prevent eye or skin irritation associated with respirator use; or

(2) If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece; or

(3) To replace the respirator or the filter, cartridge, or canister elements.

c. If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece, the commander or director must replace or repair the respirator before allowing the employee to return to the work area.

11-9. Procedures for IDLH Atmospheres. For all IDLH atmospheres, the commander or director shall ensure that:

a. One employee or, when needed, more than one employee is located outside the IDLH atmosphere;

b. Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere;

c. The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue;

d. The commander or director or designee is notified before the employee(s) located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue;

e. The commander or director or designee authorized to do so by the commander or director, once notified, provides necessary assistance appropriate to the situation;

f. Employee(s) located outside the IDLH atmospheres are equipped with:

(1) Pressure demand or other positive pressure self contained breathing apparatus (SCBAs), or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA; and either

(2) Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry; or

(3) Equivalent means for rescue where retrieval equipment is not required.

11-10. Procedures for Interior Structural Firefighting. The Fort Buchanan Fire Chief, under the direction of the Director of Emergency Services, will establish procedures for entering IDLH atmospheres.

11-11. Cleaning and Disinfecting of Respirators. The commander or director shall provide each respirator user with a respirator that is clean, sanitary, and in good working order. The commander or director shall ensure that respirators are cleaned and disinfected using the procedures provided by the respirator manufacturer. The respirators shall be cleaned and disinfected at the following intervals:

a. Respirators issued for the exclusive use of an employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition;

b. Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals;

c. Respirators maintained for emergency use shall be cleaned and disinfected after each use; and

d. Respirators used in fit testing and training shall be cleaned and disinfected after each use.

11-12. Storage. The commander or director shall ensure that respirators are stored as follows:

a. All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the face piece and exhalation valve.

b. In addition, emergency respirators shall be:

(1) Kept accessible to the work area;

(2) Stored in compartments or in covers that are clearly marked as containing emergency respirators; and

(3) Stored in accordance with any applicable manufacturer instructions.

11-13. Inspection.

a. The commander or director shall ensure that respirators are inspected as follows:

(1) All respirators used in routine situations shall be inspected before each use and during cleaning;

(2) All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with the manufacturer's recommendations, and shall be checked for proper function before and after each use; and

(3) Emergency escape-only respirators shall be inspected before being carried into the workplace for use.

b. The commander or director shall ensure that respirator inspections include the following:

(1) A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters or filters; and

(2) A check of elastomeric parts for pliability and signs of deterioration.

c. Self-contained breathing apparatus shall be inspected monthly. Air and oxygen cylinders shall be maintained in a fully charged state and shall be recharged when the pressure falls to 90% of the manufacturer's recommended pressure level. The commander or director shall determine that the regulator and warning devices function properly.

d. For respirators maintained for emergency use, the commander or director shall:

(1) Certify the respirator by documenting the date the inspection was performed, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator; and

(2) Provide this information on a tag or label that is attached to the storage compartment for the respirator, is kept with the respirator, or is included in inspection reports stored as paper or electronic files. This information shall be maintained until replaced following a subsequent certification.

11-14. Repairs. The commander or director shall ensure that respirators that fail an inspection or are otherwise found to be defective are removed from service, and are discarded or repaired or adjusted in accordance with the following procedures:

a. Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator;

b. Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed; and

c. Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

11-15. Breathing Air Quality and Use. This paragraph requires the commander or director to provide employees using atmosphere-supplying respirators (supplied-air and SCBA) with breathing gases of high purity.

a. The commander or director shall ensure that compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration accords with the following specifications:

(1) Compressed and liquid oxygen shall meet the United States Pharmacopoeia requirements for medical or breathing oxygen; and

(2) Compressed breathing air shall meet at least the requirements for Grade D breathing air described in

ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:

(a) Oxygen content of 19.5-23.5%;

(b) Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;

(c) Carbon monoxide (CO) content of 10 PPM or less;

(d) Carbon dioxide content of 1,000 PPM or less; and

(e) Lack of noticeable odor.

b. The commander or director shall ensure that compressed oxygen is not used in atmosphere-supplying respirators that have previously used compressed air.

c. The commander or director shall ensure that oxygen concentrations greater than 23.5% are used only in equipment designed for oxygen service or distribution.

d. The commander or director shall ensure that cylinders used to supply breathing air to respirators meet the following requirements:

(1) Cylinders are tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 173 and part 178);

(2) Cylinders of purchased breathing air have a certificate of analysis from the supplier that the breathing air meets the requirements for Grade D breathing air; and

(3) The moisture content in the cylinder does not exceed a dew point of -50 deg.F (-45.6 deg.C) at 1 atmosphere pressure.

e. The commander or director shall ensure that compressors used to supply breathing air to respirators are constructed and situated so as to:

(1) Prevent entry of contaminated air into the air-supply system;

(2) Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (5.56 deg.C) below the ambient temperature;

(3) Have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacturer's instructions.

(4) Have a tag containing the most recent change date and the signature of the person authorized by the commander or director to perform the change. The tag shall be maintained at the compressor.

f. For compressors that are not oil-lubricated, the commander or director shall ensure that carbon monoxide levels in the breathing air do not exceed 10 PPM.

g. For oil-lubricated compressors, the commander or director shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 PPM.

h. The commander or director shall ensure that breathing air couplings are incompatible with outlets for nonrespirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing air lines.

i. The commander or director shall use breathing gas containers marked in accordance with the NIOSH respirator certification standard, 42 CFR part 84.

11-16. Identification of Filters, Cartridges, and Canisters. The commander or director shall ensure that all filters, cartridges and canisters used in the workplace are labeled and color coded with the NIOSH approval label and that the label is not removed and remains legible.

11-17. Respirator/Canister Change Schedules. Commanders and directors will determine change schedules for each respirator/chemical combination. The change schedules will be based on one of the following three procedures (listed in order of desirability).

a. Use cartridges with end of life service indicators approved by NIOSH. Every effort should be made to purchase cartridges with these indicators.

b. Obtain written information from the manufacturer concerning projected end of life for specific cartridges, chemicals, and chemical concentration.

c. Contact the Preventive Medicine, Industrial Hygiene Technician. The Industrial Hygiene Technician will determine the change schedule based on experimental or mathematical data, and will provide a written response.

11-18. Training and Information. This paragraph requires the commander or director to provide effective training to employees who are required to use respirators. The training must be comprehensive, understandable, and recur annually and more often if necessary.

a. The commander or director shall ensure that each employee can demonstrate knowledge of at least the following:

(1) Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;

(2) What the limitations and capabilities of the respirator are;

(3) How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;

(4) How to inspect, put on and remove, use, and check the seals of the respirator;

(5) What the procedures are for maintenance and storage of the respirator;

(6) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and

(7) The general requirements of this section.

b. The training shall be conducted in a manner that is understandable to the employee.

c. The commander or director shall provide the training prior to requiring the employee to use a respirator in the workplace.

d. Retraining shall be administered annually, and when the following situations occur:

(1) Changes in the workplace or the type of respirator render previous training obsolete;

(2) Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill; or

(3) Any other situation arises in which retraining appears necessary to ensure safe respirator use.

11-19. Program Evaluation. This section requires the commander or director to conduct evaluations of the workplace to ensure that the written respiratory protection program is being properly implemented, and to consult employees to ensure that they are using the respirators properly.

a. The commander or director shall conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

b. The commander or director shall regularly consult employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:

(1) Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);

(2) Appropriate respirator selection for the hazards to which the employee is exposed;

(3) Proper respirator use under the workplace conditions the employee encounters; and

(4) Proper respirator maintenance.

11-20. Recordkeeping. This section requires the commander or director to establish and retain written information regarding medical evaluations, fit testing, and training. This information will facilitate employee involvement in the respirator program, assist the commander or director in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA.

a. Medical evaluation. Records of medical evaluations required by this section must be retained and made available in accordance with 29 CFR 1910.1020.

b. Fit testing.

(1) The commander or director shall establish a record of the qualitative and quantitative fit tests administered to an employee including:

(a) The name or identification of the employee tested;

(b) Type of fit test performed;

(c) Specific make, model, style, and size of respirator tested;

(d) Date of test; and

(e) The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs.

(2) Fit test records shall be retained for respirator users until the next fit test is administered.

c. Training. Commanders and directors will ensure that all training is documented and that this documentation is maintained in a readily accessible location for the length of the individual's assignment to Fort Buchanan.

d. Written materials which are required to be retained shall be made available upon request to affected employees.

Chapter 12
Bloodborne Pathogens Program

12-1. Purpose. This handbook prescribes responsibilities, policies, and procedures for protecting installation personnel from occupational exposure to blood or other potentially infectious materials, i.e. bloodborne pathogens (BBP).

12-2. Scope. This SOP applies to all Fort Buchanan and tenant activities with the exception of the Rodriguez Army Health Clinic (RAHC).

12-3. General Responsibilities. This chapter assigns responsibilities for implementing the Fort Buchanan Bloodborne Pathogens Program (FBBPP).

Fort Buchanan Installation Safety Office. The Fort Buchanan Installation Safety Office will:

a. Ensure overall development of the FBBPP.

b. Assist organizations with implementation of the FBBPP.

c. Monitor compliance during regularly scheduled inspections.

Rodriguez Army Health Clinic (RAHC). The RAHC will:

a. Maintain an accurate medical record for each employee with occupational exposure. Retain records for at least the duration of employment plus 30 years.

b. Provide for disposal of regulated waste.

c. Administer Hepatitis B immunizations and provide notification to directors/commanders when the immunizations are completed.

d. Conduct medical aspects of post-exposure evaluation and follow-up.

e. Notify the Fort Buchanan Installation Safety Office whenever there is an exposure incident involving a Fort Buchanan employee.

Directors/Commanders with operations involving potential or actual exposure to BBP. Directors/Commanders will:

a. Implement a comprehensive bloodborne pathogens program which meets the requirements of 29 CFR 1910.1030 and this SOP.

b. Procure, fund and present training for all personnel who can be reasonably expected to be exposed to blood or other potentially infectious materials in the course of their duties.

c. Provide all necessary personal protective equipment and supplies, and ensure they are used.

d. Conduct post-exposure evaluation and follow-up in conjunction with the Rodriguez Army Health Clinic.

e. Ensure that personnel who are at risk for bloodborne pathogen exposures either receive the Hepatitis B vaccine or decline it in writing

12-4. General Methods of Compliance. Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

12-5. Engineering and Work Practice Controls.

a. Engineering and work practice controls shall be used to eliminate or minimize personnel exposure. Where occupational exposure remains after instituting these controls, personal protective equipment shall also be used.

b. Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

c. Organizations shall provide hand washing facilities which are readily accessible to personnel.

d. When provision of hand washing facilities is not feasible, the organization shall provide either an appropriate antiseptic hand cleaner in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible.

e. Organizations will ensure that personnel wash hands and any other skin with soap and water or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

f. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

g. Food and drink shall not be kept in refrigerator, freezers, shelves, cabinets or on countertops or bench tops where blood or other potentially infectious materials are present.

h. All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

i. Equipment which may become contaminated with blood or other potentially infectious materials shall be examined after use and shall be decontaminated, as necessary.

j. A readily observable label shall be attached to the equipment stating which portions remain contaminated.

12-6. Personal Protective Equipment (PPE).

a. When there is occupational exposure, organizations will provide, at no cost to personnel, appropriate personal protective equipment, e.g. gloves, masks, face shields, eye protection, mouthpieces, pocket masks, ventilators. Assistance in determining appropriate equipment should be requested from the Fort Buchanan Installation Safety Office.

b. Commanders/directors will ensure personnel use equipment provided.

c. If, in the individual's professional judgment, use of PPE would prevent the delivery of health care or public safety services or would pose and increase the potential hazard to personnel providing aid, the individual may in rare circumstances decline to use the equipment. When this occurs, the incident will be investigated by the supervisor. The supervisor shall document why PPE was not used and investigate the circumstances surrounding the incident to reduce the likelihood of a similar incident in the future.

d. Commanders/directors will ensure that appropriate personal protective equipment in the appropriate sizes is readily available at the worksite. Organizations whose personnel do not work in a fixed location, e.g. law enforcement, fire fighters, will provide an emergency kit to be either issued to individuals or be maintained in a vehicle as appropriate. Assistance in determining kit contents is available from the Fort Buchanan Installation Safety Office.

e. If a garment is penetrated by blood or other potentially infectious material, the garment shall be removed as soon as possible.

f. All personal protective equipment shall be removed prior to leaving the work area.

g. When the personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

h. Gloves shall be worn when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membrane, and non-intact skin, and when handling or touching contaminated items or surfaces.

(1) Disposable gloves such as surgical or examination gloves shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

(2) Disposable gloves shall not be washed or decontaminated for reuse.

(3) Rubber/plastic utility gloves may be decontaminated for reuse if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn,

punctured, or exhibits other signs of deterioration or when their ability to function as a barrier is compromised.

(4) Utility gloves which cannot be decontaminated will be disposed of as regulated waste.

i. Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin length face shields shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

j. Gowns, aprons, and other appropriate clothing shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

k. Protective masks/ventilation devices will be used by all personnel conducting breathing during cardiopulmonary resuscitation.

12-7. Housekeeping, Decontamination.

a. Organizations shall ensure that the worksite is maintained in as clean a manner as is possible under the circumstances.

b. All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.

(1) Contaminated work surfaces shall be decontaminated with an approved disinfectant after completion of procedures; or as soon as feasible when surfaces are visibly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

(2) All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and be cleaned and decontaminated as soon as feasible upon visible contamination.

c. Broken glass which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means. Such broken glass and other potentially contaminated sharp objects will be placed in approved sharps containers for disposal.

d. Other regulated waste shall be placed in containers which are closable, constructed to contain all contents and prevent leakage of fluids, labeled or color coded.

e. Reusable clothing and equipment which is impervious to saturation but has been contaminated on the surface will be decontaminated by the organization using a disinfectant.

f. Organizations will ensure that personnel who have contact with contaminated laundry, equipment or waste wear protective gloves and other appropriate personal protective equipment.

12-8. Laundry.

a. Personnel will under no circumstances take contaminated garments home to launder. The organization is responsible for ensuring proper cleaning of all contaminated clothing whether it be personally owned or government issued.

b. Contaminated laundry shall be handled as little as possible with a minimum of agitation. It shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed at the location of use.

c. Contaminated laundry shall be placed and transported in properly marked impervious bags or containers.

d. Whenever contaminated laundry is wet and presents a reasonable likelihood of soak through of or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak through or leakage.

12-9. Disposal of Waste.

a. Contaminated waste will be placed in an appropriately marked impervious bag or container. Sharps will be placed in approved sharps containers.

b. Disposable equipment will be similarly bagged and marked.

c. Contact the RAHC for transportation and disposal support.

12-10. Disposal of Law Enforcement TASERs.

a. After deployment of TASERs, the wires will be wrapped around the cartridge and the probes shall be inverted into the portals that they were deployed from. This will prevent the sharp ends from piercing evidence bags or envelopes. Tape will be placed over the portals to secure the probes and the cartridge will then be put into an evidence bag or envelope and labeled with the following: the report number, the words “TASER Cartridge”, and the word “Biohazard”.

12-11. Hazard Communication to Personnel.

a. Warning labels shall be affixed to containers of regulated waste and items to be decontaminated or laundered. Labels will include the standard biohazard symbol and "BIOHAZARD" will be printed on the label. The labels will be fluorescent orange or orange-red or predominately so with lettering and symbol in a contrasting color.

b. The labels will be affixed as close as feasible to the containers by string, wire, adhesive, or other method that prevents their loss or unintentional removal.

c. Red bags or containers may be substituted for labels if they have a biohazard symbol imprinted.

d. Labels required for contaminated equipment which is to be disinfected must state which portions of the equipment are contaminated.

12-12. Training of Personnel.

a. Commanders/directors will ensure all personnel with occupational exposure receive appropriate training. Organizations are responsible for procuring, funding and presenting training which meets OSHA requirements. Assistance in identifying appropriate training is available from the Fort Buchanan Installation Safety Office.

b. Training will be provided at the time of initial assignment to tasks where occupational exposure may take place and at least annually thereafter.

c. Additional training must be provided when changes such as modification of tasks or procedures or institution of new tasks or procedures affect occupational exposure. The additional training may be limited to addressing the new exposures created.

d. Training will include requirements addressed in 29 CFR 1910.1030.

e. Training records will be maintained by the organization and shall include the training dates, names and qualifications of trainers, contents of training, names and job titles of all persons attending the training. The training records shall be maintained for 3 years from the date the training occurred. Additionally, training sessions for civilian employees, which are four hours or more, must be documented on a DD Form 1556, and forwarded to the Civilian Personnel Activity Center, CPAC, for filing in the employee's Official Personnel Folder (OPF.)

f. All personnel with occupational exposure must review this memorandum at least annually. A record of review must be maintained.

g. Personnel will be provided on request a copy of 29 CFR 1910.1030, this memorandum and training records.

12-13. Medical Records. Medical records for occupationally exposed employees will be maintained by the Rodriguez Army Health Clinic. The records will include:

a. A copy of the employee's hepatitis B vaccination status including the dates of all the Hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination.

b. A copy of all results of examinations, medical testing, follow-up procedures, health care professional's written opinion and other appropriate documentation.

c. The employer's copy of the healthcare professional's written opinion concerning whether Hepatitis B vaccination is indicated and the results of any post exposure evaluations.

d. Any material provided to the healthcare professional for use in a post exposure evaluation.

12-14. Hepatitis B Vaccination.

a. Hepatitis B vaccination shall be made available after the individual has received required training and within 10 working days of initial assignment to all personnel who have occupational exposure unless the individual has previously received the complete Hepatitis B vaccination series, antibody testing has revealed the individual is immune, or the vaccine is contraindicated for medical reasons.

b. If the individual initially declines Hepatitis B vaccination but at a later date while still covered decides to accept the vaccination, the vaccination will be provided.

c. Personnel who are at risk for bloodborne pathogen exposure will sign a form stating that they accept or decline the Hepatitis B vaccine. The form will be provided by the directors/commanders and forwarded to the Occupational Health Section of the Preventive Medicine Service, RAHC.

d. Hepatitis B vaccination will be provided free of charge to individuals exposed and others designated by the Rodriguez Army Health Clinic. Coordination will be made with Preventive Medicine to obtain the series of vaccinations.

12-15. Post-Exposure Evaluation and Follow-up.

a. Supervisors will immediately report all exposure incidents to Preventive Medicine, Rodriguez Army Health Clinic and the Fort Buchanan Installation Safety Office. Ensure personnel who have had an exposure report to RAHC emergency room within 2 hours of exposure and explain that they had a bloodborne pathogen exposure.

b. The Rodriguez Army Health Clinic will make immediately available to the exposed individual a confidential medical evaluation and follow-up including at least the following elements:

(1) Documentation of the routes of exposure, and the circumstances under which the exposure incident occurred.

(2) Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by law.

(a) The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, it shall be established that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood if available shall be tested and the results documented.

(b) Results of the source individual's testing shall be made available to the exposed individual and that individual shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

(3) Collection and testing of blood for HBV and HIV serological status.

(a) The exposed individual's blood shall be collected as soon as feasible and be tested after consent is obtained.

(b) If the individual consents to baseline blood collection but does not give consent at that time for HIV testing, the sample shall be preserved for at least 90 days. If, within 90 days of exposure, the individual elects to have the baseline sample tested, such testing shall be done as soon as feasible.

(4) Post-exposure prophylaxis.

(5) Counseling statements.

(6) Evaluation of reported illnesses.

c. The Rodriguez Army Health Clinic will provide the exposed individual with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The written opinion shall be limited to the items indicated below. All other findings or diagnoses shall remain confidential and shall not be included in the written report.

(1) Whether Hepatitis B vaccination is indicated for the individual and if the individual has received such vaccination.

(2) That the individual has been informed of the results of the evaluation.

(3) That the individual has been told about any medical conditions resulting from exposure to blood or other potentially infections materials which require further evaluation or treatment.

12-16. Investigation of Exposure Incidents. Investigation of exposure incidents will be conducted jointly by the Fort Buchanan Installation Safety Office and the Rodriguez Army Health Clinic Preventive Medicine. The Fort Buchanan Installation Safety Office will, at the conclusion of the investigation, prepare a report of findings and recommendations. This report will be provided to the Director/Commander of the organization involved in the incident.

12-17. Exposure Determination. Personnel listed below can be reasonably anticipated to have skin, eye, mucous membrane, or potential contact with blood or other potentially infectious materials resulting from the performance of the individual's duties. Only those combat lifesavers that are currently providing medical support on a regular basis in lieu of qualified medical specialists, are to receive Hepatitis B vaccine.

Job Classifications:

Fire Fighters
Police
Lifeguards
Day care center workers
Plumbers
Sewage workers
Combat lifesavers
Combat lifesaver instructors
Medical evacuation personnel
Housekeepers/Hotel Workers

Tasks and Procedures in Which Exposure Could Occur:

Rescue of accident victims
Apprehension of prisoners
Maintaining plumbing and sewage systems
Transporting injured personnel
Providing medical care or first aid
Quelling disturbances
Crime scene activities
Accident scene activities

Chapter 13
Ergonomics Program

13-1. Purpose. This handbook describes responsibilities, policies, and procedures for the control of work related musculoskeletal injury and illness, also known as ergonomic injury/illness throughout the installation.

13-2. Objectives. The objectives of this section are to:

a. Prevent the occurrence of work related musculoskeletal disorders, such as tendonitis, low back pain, and carpal tunnel syndrome, by controlling personnel exposure to the workplace risk factors that can cause or aggravate them.

b. Reduce the severity of work related musculoskeletal disorders through early medical management.

c. Ensure that affected personnel are informed about work related musculoskeletal disorders and the workplace risk factors that can cause or aggravate them.

d. Promote continuous improvement in the technology to control exposure to workplace risk factors.

e. Ensure management leadership and employee involvement in controlling exposure to workplace risk factors.

13-3. Scope and Application. This handbook applies to each workplace where:

a. An employee has daily exposure during the work shift to any of the following risk factors:

(1) Performance of the same motion or motion pattern repeatedly for more than a total of 2 hours during a work shift.

(2) A fixed or awkward work posture, e.g. overhead work, twisted or bent back, bent wrist, kneeling, stooping, and squatting, for more than 2 hours.

(3) Use of vibrating or impact tools for more than 2 hours.

(4) Using forceful hand exertions for more than 2 hours.

(5) Unassisted frequent or forceful manual handling for more than 2 hours.

b. One or more employees, in the same or similar job, has a recorded work related musculoskeletal disorder.

13-4. Responsibilities.

Fort Buchanan Installation Safety Office. The Installation Safety Officer will:

a. Develop the installation Ergonomics Program.

b. Assist organizations with implementation of the program.

c. Monitor implementation during regularly scheduled inspections and assistance visits.

d. Establish an ergonomic subcommittee, consisting of representatives from the Rodriguez Army Health Clinic, CPAC and the Fort Buchanan Installation Safety Office.

Rodriguez Army Health Clinic (RAHC). The RAHC will:

a. Assist organizations with medical aspects of the program.

b. Develop and implement written guidelines for evaluation, treatment, and follow-up for employees with work related musculoskeletal disorders.

c. Develop written health care management protocols.

d. Provide assistance with evaluation of identified ergonomic problems and development of countermeasures.

Civilian Personnel Advisory Center (CPAC). The CPAC will:

a. Manage Federal Employee Compensation Act cases associated with employees who have sustained work related musculoskeletal disorders.

b. Work closely with directors and supervisors to provide light/restricted duty for personnel with these disorders.

c, Provide assistance with evaluation of identified ergonomic problems and development of countermeasures.

Commanders/Directors with operations involving ergonomic hazards. Commanders and Directors will:

a. Implement the ergonomics program.

b. Ensure all personnel exposed to ergonomic hazards receive appropriate training.

c. Provide appropriate ergonomic equipment and ensure it is used.

d. Consider ergonomic design criteria during procurement initiatives.

13-5. Workplace Analysis. Analysis shall be used to identify work related musculoskeletal disorders. Where there is convincing evidence that musculoskeletal hazards exist, active surveillance shall be used to identify, evaluate, and manage workplace risks.

a. The Fort Buchanan Installation Safety Office will conduct analyses to identify problem areas. Data from the following sources will be analyzed: injury and illness reports, log of occupational injuries and illnesses, FECA claims, workforce reports, employee complaints, hazard reports, inspection records, hazard abatement logs, and suggestions.

b. When active surveillance is indicated, an initial survey will be conducted by the Fort Buchanan Installation Safety Office to determine the scope, complexity, risk level, and recommended solutions.

13-6. Hazard Prevention and Control. Effective action will be taken by the commander/director to reduce the potential for injury from ergonomic hazards. Methods to accomplish this are, in order of most desirable to least desirable.

a. Process elimination

b. Engineering controls e.g. redesign of work station

c. Substitution

d. Work practices, e.g. redesign of work process

e. Administrative controls, e.g. work/rest cycles, slowing work pace, task rotation.

13-7. Education and Training.

a. All personnel exposed to ergonomic hazards must receive training in ergonomic awareness to include:

(1) Recognition of workplace risk factors and the methods for controlling them

(2) Identification of the signs, symptoms, and health effects of exposure to workplace risk factors

(3) Procedures for reporting workplace risk factors and work related musculoskeletal disorders

b. Information on training resources is available from the Fort Buchanan Installation Safety Office (707-3853).

c. Commanders/directors ensure records of this training are maintained.

13-8. Program Evaluation and Review. The Fort Buchanan Installation Safety Office will conduct periodic reviews to evaluate the ongoing ergonomic effort to measure the effectiveness of interventions and level of participation

13-9. Acquisition. The Fort Buchanan Installation Safety Office will evaluate ergonomic design criteria for systems, facilities, and equipment to help reduce the life-cycle costs due to ergonomic injuries.

Chapter 14
Permit Required Confined Spaces (PRCS) Program

14-1. Purpose. This Standard Operating Procedure prescribes responsibilities and procedures for conducting operations in confined spaces. Exposure of unprotected personnel to hazardous environments in confined spaces can cause death, serious injury, or acute illness. All entry by personnel into confined spaces will be conducted in conformance with the requirements in 29 CFR 1910.146, Permit Required Confined Spaces, and this SOP. All confined spaces will be treated as permit required until tested and proved otherwise.

14-2. Responsibilities. Directors/Commanders that conduct confined space operations will:

a. Implement a confined spaces entry program which meets the requirements of 29 CFR 1910.146, and this SOP.

b. Provide training for all personnel involved in confined spaces operations, e.g. supervisors, entrants, attendants and rescue personnel, to ensure they acquire the understanding, knowledge, and skills necessary for the safe performance of their duties. Document the training in the Official Personnel Record.

c. Organizations which do not routinely conduct confined spaces operations will contact the Fort Buchanan Installation Safety Office prior to beginning such an operation.

d. Provide all necessary personal protective equipment and rescue equipment, and ensure it is used. Minimum equipment requirements are:

(1) Testing and monitoring equipment
(2) Ventilating equipment
(3) Communications equipment
(4) Personal protective equipment
(5) Lighting equipment
(6) Barriers and shields to protect pedestrians and vehicles
(7) Equipment for entry and exit
(8) Rescue and emergency equipment

Director of Emergency Services (DES). The Director of Emergency Services (DES) will:

a. Assist organizations with implementation of the PRCS program.

b. Monitor compliance during regularly scheduled inspections.

c. Receive calls concerning confined spaces accidents. Provide appropriate emergency response for all confined spaces accidents.

d. Act as Accident Scene Coordinator for all confined spaces accidents.

e. Ensure all rescue team personnel receive ongoing training in confined space accident response.

f. Ensure each member of the rescue team practices making confined space rescues at least once every twelve months.

g. Ensure each member of the rescue service is trained in basic first aid and cardiopulmonary resuscitation. At least one member of the rescue service holding current certification in first aid and cardiopulmonary resuscitation will be available.

h. Ensure necessary rescue equipment is procured and maintained.

Rodriguez Army Health Clinic (RAHC), Industrial Hygiene Technician. The Industrial Hygiene Technician will:

a. Assist organizations with implementation of the PRCS program.

b. Provide training and support to government organizations in the procurement and use of personal protective equipment and atmospheric monitoring equipment. Certify proficiency in calibration and use of monitoring equipment. Conduct necessary medical tests, fit tests and training to ensure entrants and attendants can utilize necessary respirators for operations and emergencies. For all contractor operations the COR shall ensure that all PRCS program operations comply with the requirements of 29 CFR 1910.146 and that contractor personnel have all the necessary resources to execute the program without government intervention.

c. Assist government organizations with selection of personal protective equipment to be used in situations where the toxic atmosphere cannot be completely removed or the potential for development of a toxic atmosphere exists.

Mission and Installations Contracting Command (MICC). MICC will:

a. Ensure that whenever the USAG or any of its tenant activities (host employer) arranges to have employees of another employer (contractor) perform work that involves permit space entry, the host employer shall:

(1) Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of 29 CFR 1910.146;

(2) Apprise the contractor of the elements, including the hazards identified and the host employer's experience with the space, that make the space in question a permit space;

(3) Apprise the contractor of any precautions or procedures that the host employer has implemented for the protection of employees in or near permit spaces where contractor personnel will be working;

(4) Coordinate entry operations with the contractor, when both host employer personnel and contractor personnel will be working in or near permit spaces; and

(5) Create the opportunity for the host employer to debrief the contractor at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in permit spaces during entry operations.

b. In addition to complying with the permit space requirements that apply to all employers, each contractor who is retained to perform permit space entry operations shall:

(1) Obtain any available information regarding permit space hazards and entry operations from the host employer;

(2) Coordinate entry operations with the host employer, when both host employer personnel and contractor personnel will be working in or near permit spaces; and

(3) Inform the host employer of the permit space program that the contractor will follow and of any hazards confronted or created in permit spaces, either through a debriefing or during the entry operation.

Directors DPW, LRC, DFMWR, NEC. Directors involved in preparing or administering contracts involving confined spaces will:

a. Inform the MICC of any construction, maintenance or service contracts which will involve entry into permit required spaces. Include confined space requirements in contracts as appropriate.

b. Monitor contractor compliance with confined spaces entry requirements.

NOTE: Generally, USAG Fort Buchanan employees "will not" perform confined space entry work and will seek, as much as possible, to outsource through contracting Confined Space Entry Operations. If determined that Garrison must perform these operations, work will be delayed until personnel can be verified that is properly trained or another qualified contractor and a program is put in place.

14–3 Entry supervisors. Entry supervisors will:

a. Be familiar with hazards that may be faced during entry, including information on the mode, signs or symptoms of the exposure.

b. Verify, by checking that the appropriate entries have been made on required permits, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before signing the permit and allowing entry to begin. Post atmospheric test results on the permit at not more than 2-hour intervals.

c. Terminate the entry and cancel the permit when the entry operations covered by the permit have been completed or a condition not allowed under the entry permit arises in or near the permit space.

d. Verify that rescue services are available and the means for summoning them are operable.

e. Remove unauthorized individuals who attempt to enter the permit space during entry operations.

f. Determine, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.

14-4. Authorized Entrants. Authorized entrants will:

a. Be familiar with the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.

b. Properly use equipment provided and required.

c. Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space.

d. Alert the attendant whenever the entrant recognizes any warning sign or symptom of exposure to a dangerous situation or the entrant detects a prohibited condition.

e. Exit from the permit space as quickly as possible whenever:

(1) An order to evacuate is given by the attendant or the entry supervisor.

(2) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.

(3) An evacuation alarm is activated.

14-5. Attendants. Attendants will:

a. Perform no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

b. Be familiar with the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.

c. Be aware of possible behavioral effects of hazard exposure in authorized entrants.

d. Continuously maintain an accurate count of authorized entrants in the permit space and ensure that the means used to identify authorized entrants accurately identifies who is in the permit space.

e. Remain outside the permit space during entry operations until relieved by another attendant, or permitted action is completed.

f. Communicate with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space.

g. Take the following actions when unauthorized persons approach or enter a permit space when entry is underway:

(1) Warn the unauthorized persons that they must stay away from the permit space.

(2) Advise the unauthorized persons that they must exit immediately if they have entered the permit space.

(3) Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.

h. Monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space and order the authorized entrants to evacuate the permit space immediately under any of the following conditions:

(1) A prohibited condition is detected.

(2) The attendant detects a situation outside the space that could endanger the authorized entrants.

(3) The attendant cannot effectively and safely perform her/his duties.

i. Upon determining that entrants are in danger and need assistance, immediately notify the entry supervisor, Fire Department, and the Safety Office as required. Under no circumstances will the attendant leave the area.

j. Initiate non entry rescue procedures if doing so will not endanger the attendant or other personnel outside the space, and if doing so will not cause additional harm to the entrants. **Under no circumstances is the attendant to enter the space.**

14-6. Training. Only persons who have completed an appropriate program of instruction will be allowed to serve as supervisors in charge of entry, entrants, attendants, rescue personnel, or to certify a space as safe for entry. Initial training before the employee is first assigned duties in confined spaces is required. Refresher training is required when there is a change in assigned duties, a change in permit space operations, whenever the employer has reason to believe that there are deviations from the permit space entry procedures or inadequacies in the employee's knowledge or use of the procedures. Training must include hands on practice with actual instruments which will be used to determine atmospheric hazards. The Installation Safety Office will certify individuals as proficient in instrument operation and calibration. It is each organization's responsibility to schedule this training. All training shall establish employee proficiency in the duties required by this chapter and shall introduce new or revised

procedures, as needed, for compliance with 29 CFR 1910.146. Training shall be documented with each employee's name, the signature of the trainer, and the dates of the training. These records must be available for routine inspections by safety inspectors or KOs & CORs administering PRCS program operations.

14-7. Protection of Permit Required Confined Spaces. Organizations which have control over permit required confined spaces will post danger signs which indicate the location and danger posed by the permit space. There shall be no requirement to post PRCS program danger signs on any PRCS whose only means of access necessitates the use of tools or keys. (e.g. manhole covers)

14-8. Permits. The entry permit that documents compliance with this chapter and authorizes entry to a permit space shall identify:

(a) The permit space to be entered;

(b) The purpose of the entry;

(c) The date and the authorized duration of the entry permit;

(d) The authorized entrants within the permit space, by name or by such other means (for example, through the use of rosters or tracking systems) as will enable the attendant to determine quickly and accurately, for the duration of the permit, which authorized entrants are inside the permit space; (NOTE: This requirement may be met by inserting a reference on the entry permit as to the means used, such as a roster or tracking system, to keep track of the authorized entrants within the permit space.)

(e) The personnel, by name, currently serving as attendants;

(f) The individual, by name, currently serving as entry supervisor, with a space for the signature or initials of the entry supervisor who originally authorized entry;

(g) The hazards of the permit space to be entered;

(h) The measures used to isolate the permit space and to eliminate or control permit space hazards before entry; (NOTE: Those measures can include the lockout or tagging of equipment and procedures for purging, inerting, ventilating, and flushing permit spaces.)

(i) The acceptable entry conditions;

(j) The results of initial and periodic tests performed, accompanied by the names or initials of the testers and by an indication of when the tests were performed;

(k) The rescue and emergency services that can be summoned and the means (such as the equipment to use and the numbers to call) for summoning those services;

(l) The communication procedures used by authorized entrants and attendants to maintain contact during the entry;

(m) Equipment, such as personal protective equipment, testing equipment, communications equipment, alarm systems, and rescue equipment, to be provided for compliance with this chapter;

(n) Any other information whose inclusion is necessary, given the circumstances of the particular confined space, in order to ensure employee safety; and

(o) Any additional permits, such as for hot work, that have been issued to authorize work in the permit space.

14-9. Alternate Procedures. A space classified by the employer as a permit-required confined space may be reclassified as a non-permit confined space under the following procedures:

(a) If the permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated.

(b) If it is necessary to enter the permit space to eliminate hazards, such entry shall be performed under the directives detailed in this chapter. If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated. **(NOTE: Control of atmospheric hazards through forced air ventilation does not constitute elimination of the hazards.)**

(c) The employer shall document the basis for determining that all hazards in a permit space have been eliminated, through a certification that contains the date, the location of the space, and the signature of the person making the determination. The certification shall be made available to each employee entering the space or to that employee's authorized representative.

(d) If hazards arise within a permit space that has been declassified to a non-permit space under this section, each employee in the space shall exit the space. The employer shall then reevaluate the space and determine whether it must be reclassified as a permit space, in accordance with other applicable provisions of this chapter.

14-10. General Entry Requirements. For any permit required space the following requirements shall apply:

a. Any conditions making it unsafe to remove an entrance cover shall be eliminated before it is removed.

b. When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.

c. Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct reading instrument, for the following conditions in the order given. There may be no hazardous atmosphere within the space whenever any employee is inside the space. Any employee who enters the space or that employee's authorized representative will be provided the opportunity to observe the pre-entry testing. The space will be reevaluated if an employee or representative believes the prior evaluation was not adequate. Continuous monitoring with an instrument which provides a visual and audible warning will be performed whenever the space is occupied. If the space is vacated it will be retested prior to reentry. Results of atmospheric testing will be posted on the permit at not more than 2 hour intervals by the entry supervisor or the Installation Safety Officer (ISO). Contractors shall have a qualified person that shall perform atmospheric testing, and posting of the results for contractor employees. The government shall not perform these duties for the contractor.

(1) Oxygen content.

(2) Flammable gases and vapors.

(3) Potential toxic air contaminants.

d. Continuous forced air ventilation shall be used as follows:

(1) An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.

(2) The forced air ventilation shall be so directed as to ventilate the immediate areas where an employee is or will be present within the space and shall continue until all employees have left the space.

(3) The air supply for forced air ventilation shall be from a clean source and may not increase the hazards in the space.

e. Hot work or work which introduces hazards, e.g. flammable or toxic substances is not permitted in these spaces.

f. If a hazardous atmosphere is detected during entry, each employee will leave the space immediately, the space shall be evaluated to determine how the hazardous atmosphere developed, and measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry.

g. Electric equipment used in these spaces will be intrinsically safe.

h. Every effort will be made to ensure two qualified personnel are present during entry. One shall remain outside the space and be immediately available to render emergency assistance as may be required. If this is not possible, in situations where it is determined by the entry supervisor that the work can be done safely by a single worker, a check in system will be implemented. The system requires periodic radio contact between the worker and the entry supervisor at specified intervals, e.g. 10 minutes. If contact cannot be made the entry supervisor will contact the Fire Department for rescue.

14-11. Additional Requirements.

a. Entry into permit required confined spaces (PRCS) will not be initiated until all requirements have been met and the permit has been completed and signed.

b. All spaces will to the extent possible be purged, inerter, flushed, or ventilated prior to entry to eliminate or control atmospheric hazards. If toxic atmospheres cannot be eliminated or the potential of development of a toxic atmosphere exists appropriate personal protective equipment will be used.

c. All actual and potential energy sources and sources of hazardous materials will be locked out, blanked etc. prior to entry.

d. Pedestrian, vehicle, or other barriers will be provided as necessary to protect entrants from external hazards.

e. Permit space conditions will be evaluated as follows when entry operations are conducted.

(1) Conditions in the space will be tested to determine if acceptable entry conditions exist before entry is authorized, except that, if isolation of the space is not achievable because the space is large or is part of a continuous system (such as a sewer) pre-entry testing shall be performed to the extent feasible before entry is authorized. The atmospheric tests will be conducted with a calibrated direct reading instrument, for the following conditions in the order given: oxygen content, flammable gases and vapors, potential toxic air contaminants.

(2) When there is a potential to lose control of any potential atmospheric hazard, in the PRCS, continuous monitoring with an instrument which provides a visual and audible warning will be performed whenever the space is occupied. If the space is vacated, the space will be retested prior to reentry. Results of atmospheric testing will be posted on the permit at not more than 2 hour intervals.

f. At least one attendant will be provided outside the permit space into which entry is authorized for the duration of entry operations. Each attendant will monitor only one space. The attendant will have verbal communication with the entrants at all times. The attendant will have on site radio capabilities to contact emergency personnel. The attendant will not enter the space or leave the area unless relieved by another attendant.

g. To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems shall meet the following requirements:

(1) Each authorized entrant shall use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level or above the entrant's head. Wristlets may be used in lieu of the chest or full body harness if it can be demonstrated the use of a chest of full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.

(2) The end of the retrieval line shall be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5 feet deep.

h. Rescue equipment to include a supplied air respirator with a mask sized to fit the attendant will be maintained at the site.

i. If an injured entrant is exposed to a substance for which a SDS is required to be kept at the worksite, the SDS shall be made available to the medical treatment facility.

j. Entry operations will be reviewed when there is reason to believe that the measures currently in use may not protect employees and the program will be revised prior to subsequent entries being authorized.

k. Electrical equipment used in these spaces, e.g. work lights, flashlights, will be explosion proof.

14-12 Rescue and Emergency Services.

(a) The USAG-FB rescue and emergency services shall be provided by the DES unless specifically detailed otherwise in the PWS of contractor services, which shall:

(1) Be evaluated by the Fort Buchanan Installation Safety Office (ISO) who shall determine the rescuer's ability to respond to a rescue summons in a timely manner, considering the hazard(s) identified; (NOTE): What will be considered timely will vary according to the specific hazards involved in each entry.

(2) Be evaluated on their ability, in terms of proficiency with rescue-related tasks and equipment, to function appropriately while rescuing entrants from the particular permit space or types of permit spaces identified;

(3) Have the capability to reach the victim(s) within a time frame that is appropriate for the permit space hazard (s) identified; be equipped for and proficient in performing the needed rescue services;

(4) Be Informed and up to date on the hazards they may confront when called on to perform rescue at the site; and

(5) Have access to all permit spaces from which rescue may be necessary and develop appropriate rescue plans and practice rescue operations.

(b) USAG-FB, tenant activities and contractors whose employees have been designated to provide permit space rescue and emergency services shall take the following measures:

(1) Provide affected employees with the personal protective equipment (PPE) needed to conduct permit space rescues safely and train affected employees so they are proficient in the use of that PPE, at no cost to those employees;

(2) Train affected employees to perform assigned rescue duties. The USAG-FB, tenant activities and contractors must ensure that such employees successfully complete the training required to establish proficiency as an authorized entrant, as detailed in 29 CFR 1910.146;

(3) Train affected employees in basic first-aid and cardiopulmonary resuscitation (CPR). The USAG-FB, tenant activities and contractors shall ensure that at least one member of the rescue team or service holding a current certification in first aid and CPR is available; and

(4) Ensure that affected employees practice making permit space rescues at least once every 12 months, by means of simulated rescue operations in which they remove dummies, manikins, or actual persons from the actual permit spaces or from representative permit spaces. Representative permit spaces shall, with respect to opening size, configuration, and accessibility, simulate the types of permit spaces from which rescue is to be performed.

(c) To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems shall meet the following requirements:

(1) Each authorized entrant shall use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point which the employer can establish presents a profile small enough for the successful removal of the entrant. Wristlets may be used in lieu of the chest or full body harness if the employer can demonstrate that the use of a chest or full body harness is inappropriate or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.

(2) The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5 feet (1.52 m) deep.

(d) If an injured entrant is exposed to a substance for which a Safety Data Sheet (SDS) or other similar written information is required to be kept at the worksite, that SDS or written information shall be made available to the medical facility treating the exposed entrant.

Chapter 15
Contractor Safety

15-1. General. This chapter locally extends the requirements of AR-385-10 assigning responsibilities and proper procedures when dealing with contractor safety programs.

15-2. Responsibilities. The contracting officer of any tenant or the Missions and Installations Contracting Command (MICC) will:

a. Ensure that all services or construction contracts on Fort Buchanan (or executed on facilities Island-wide whenever applicable) must comply with the requirements of AR 385-10, Chapter 4.

b. Ensure that Contracting Officer Representatives (COR) have the necessary safety training to inspect and evaluate the safety performance of the contractor.

c. Not permit that any contractor services or constructions start work without a Fort Buchanan Installation Safety Office-approved Safety and Health Plan.

d. Include a representative of the Fort Buchanan Installation Safety Office in all pre-performance/pre-construction conferences.

e. Document all instances of non-compliance with applicable safety standards and contractor behavior that encourages non-

compliance with safety standards to be used by the Army to determine suitability of the contractor to perform work at Fort Buchanan. This information shall be shared with the Fort Buchanan Installation Safety Office during the competitive process to assist Fort Buchanan in selecting a contractor with an acceptable OSHA compliance history.

f. Shall ensure that the COR contacts the Fort Buchanan Installation Safety Office whenever the contractor suffers an incident/ accident meeting the reporting requirements of this SOP.

g. Ensure that the contractor have on hand all documentation related to Job Hazard Analyses (JHA's), workplace assessments and safety training required for the tasks as described in the Safety and Health Plan. It shall be the responsibility of the COR to ensure that this documentation complies with the requirements set forth in 29 CFR 1910 or 29 CFR 1926.

h. Ensure that the COR verifies that all contractor-owned and operated equipment and vehicles comply with OSHA standards and applicable Fort Buchanan regulations and standards. A contractor certification to this effect may be sufficient for the contractor to start the work. The contractor shall be subject to random inspections by the Fort Buchanan Installation Safety Office and the Directorate of Emergency Services (DES).

The Fort Buchanan Installation Safety Office. The Fort Buchanan Installation Safety Office will:

a. Ensure that all contractors are clearly briefed on the Occupational Safety and Health requirements existing at Fort Buchanan.

b. Provide assistance and guidance whenever requested by the MICC Contracting Officer or any tenant activity.

c. Review proposed designs of construction projects to ensure compliance with applicable Army standards.

d. Review and validate all contractor-supplied Safety and Health Plans.

e. Have the authority to intervene with any contractor personnel that by virtue of their activities may place their personnel or Fort Buchanan personnel in jeopardy or in an Immediate Danger to Life and Health (IDLH) situation. The will immediately contact the responsible COR and report the situation encountered.

Chapter 16
Collateral Duty Safety Officer (CDSO) Program

16-1. General. This program applies to all CDSOs on Fort Buchanan. Directors will appoint CDSOs on written orders. Forward written appointment orders along with a copy of the online CDSO completion certificate to ISO within 90 days of appointment. Electronic submission is encouraged. Assign CDSOs for a minimum of 1 year.

16-2. Responsibilities. The Collateral Duty Safety Officers (CDSO) Program is intended to provide directors with a trained, knowledgeable person from their directorate to assist them in implementing safety program elements into their operations. All CDSOs will:

a. Become familiar with all applicable safety regulations, safety requirements for the directorate, the principles of risk management and accident prevention, and safety aspects included in SOPs, FMs, TMs, etc.

b. Ensure effective risk assessment and risk management techniques are being utilized by personnel at all levels. Conduct thorough investigations of accidents that occur within the organization and ensure submitted accident reports are timely, complete, and accurate and contain valid and appropriate recommended corrective actions. Maintain appropriate safety records and analyze the organization's accident experience to determine accident patterns to ensure effective targeting of preventive efforts.

c. Develop and update a directorate or department safety SOP.

d. Provide the director with periodic safety progress reports

e. Provide technical assistance to eliminate or control unsafe behavior and conditions.

f. Ensure work orders for safety or fire prevention-related hazards are submitted to ISO for assignment of a RAC.

g. Conduct, or provide assistance to directors for conducting periodic briefings with supervisors regarding the objectives of the safety program, methods of attaining these objectives, and the degree of success expected in achieving these objectives.

h. Interpret safety policies for supervisors.

i. Distribute safety literature.

j. Establish a safety publications library.

k. Devote a portion of the bulletin board to display safety and occupational health literature. As a minimum, the safety bulletin board will have:

(1) Garrison Commander's safety philosophies.

(2) Blank DA Form 4755

(3) Completed DD Form 2272 (Department of Defense Safety and Occupational Health Protection Program).

(4) Command safety policies and messages

(5) Annual safety training topics and schedule

(6) Safety-related articles, posters, and magazines

(7) Emergency Action Plan

16-3. Inspections. CDSOs will conduct and document semiannual low hazard inspections of administrative work areas. A copy of the low risk inspection will be retained at the directorate. The CDSO will accompany ISO personnel during the annual safety inspection.

Chapter 17
Family, Recreational, and Off-Duty Safety Program

17-1. General. Statistics have shown that the Army loses more personnel from non-military activities than any other. Recreational sports and outdoor adventures present uncommon hazards that must be addressed to raise the awareness levels of our people. The Installation Safety Office will provide this safety awareness material through the regular distribution of Safety Grams and informational emails. Additionally, the U.S. Army Combat Readiness Center has established the Family Engagement Kit to assist families in keeping themselves safe:
https://safety.army.mil/OFF-DUTY.aspx

17-2. Awareness. USAG Fort Buchanan will conduct one seasonal safety campaign annually, highlighting hazards associated with seasonal, workplace, and off-duty activities. Garrison directorates will make every possible effort to support safety campaigns as written. The ISO will distribute appropriate safety awareness material highlighting general and seasonal safety subjects throughout the year.

Chapter 18
Special Emphasis Areas

18-1. General. Ares of emphasis vary depending on the mission, degree of hazard, and operational difficulties. Such potential loss areas should be identified in order for effective controls to be implemented. This section identifies special safety emphasis areas established by this headquarters.

18-2. 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 will be reported to DPW for correction.

b. The possibility of accidental contact with electrical power lines will be evaluated prior to commencing operations, and necessary action will be taken to preclude such contact.

c. Flagpoles, radio masts, and similar objects should be erected a minimum of two times their height from any possible contact where energized electrical circuits exist.

18-3. Machine Safety. Rings, other jewelry, loose clothing, and unbound long hair will not be worn when working around moving machinery, during vehicle maintenance, or during other hazardous industrial-type operations. The operation of a machine without its guarding devices is strictly prohibited, unless authorized in writing by the manufacturer.

18-4. Tripping, Slipping, and Fall Hazards. All aisles, passageways, stairs, sidewalks, and other walking surfaces will be free of tripping, slipping, and fall hazards. Aboveground mezzanine storage areas will have proper top rails, intermediate rails, and toe boards installed. In addition, a load rating will be determined by DPW for such storage areas. A sign depicting the load rating will be displayed at the storage area.

18-5. Prevention of Seasonal and Special Event Accidents.

a. Prior to the summer season, directors will provide training to all personnel concerning the hazards associated with summer. The summer safety awareness campaign extends from Memorial Day weekend through the Labor Day weekend.

b. Spring and Fall Cleanup. Risk assessments are often overlooked when organizations are conducting cleanup of the areas. Directors should ensure that risk assessments are conducted and proper personal protective equipment is provided during seasonal cleanup.

c. Installation sponsored events (e.g., Fourth of July, Holiday Celebration, Fun Runs) and other recreational activities (family and sport activities) require the preparation of a Risk Assessment Worksheet.

(1) The Risk Assessment Worksheet will be prepared by the organization responsible for the event, in collaboration with ISO, DFMWR, and other directorates/units involved in the event participation.

(2) ISO will conduct inspections of the event grounds 5 days in advance of the event in support of risk management. A final onsite inspection will be conducted the day prior to the event to verify that risk mitigation is in place.

Appendix A
References

Section I

Required Publications

AR 11-34
The Army Respiratory Protection Program

AR 385-10
Army Safety Program

AR 385-26
The Army Electrical Safety Program

AR 600-55
The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing)

AR 608-10
Child Development Services

DA Pamphlet 385-1
Small Unit Safety Officer/ NCO Guide

DA PAM 385-10
Army Safety Program

DA PAM 385-11
Army Guidelines for Safety Color Codes, Signs, Tags, and Markings

DA PAM 385-16
System Safety Management Guide

DA PAM 385-24
The Army Radiation Safety Program

DA PAM 385-40
Army Accident Investigations & Reporting

Army Tactics and Procedures (ATP) 5-19

IMCOM Regulation 385-10
Safety Program

IMCOM Safety Policy 385-10-1

Related Publications

AR 40-5
Preventive Medicine.

DA PAM 40-501
Army Hearing Program

29 Code of Federal Regulations, part 1910.134, Respiratory Protection

29 Code of Federal Regulations Part 1910.146, Permit Required Confined Spaces

26 Code of Federal Regulations, part 1910-132-138, Personal Protective Equipment

29 Code of Federal Regulations 1910.1200, Hazard Communication Program

29 Code of Federal Regulations, part 1910.147, The Control of Hazardous Energy (Lockout/Tagout)

29 Code of Federal Regulations, part 1910.1030, Bloodborne Pathogens

Prescribed Forms

DA Form 285-AB-R
U.S. Army Abbreviated Ground Accident Report (AGAR)

DD Form 2977
Deliberate Risk Assessment Worksheet

Glossary
Abbreviations/Brevity Codes

AGAR	U.S. Army Abbreviated Ground Accident Report
ALARA	As Low As Reasonably Achievable
AMV	Army Motor Vehicle
ANSI	American National Standards Institute
AR	Army Regulation
ARNG	Army National Guard
ASTM	American Society for Testing and Materials
BDE	Brigade
BBP	Blood-borne Pathogens
CAIG	Centralized Accident Investigation of Ground Accidents
CDSO	Collateral Duty Safety Officer
CFR	Code of Federal Regulation
CID	Criminal Investigation Division
CO	Carbon Monoxide
CPAC	Civilian Personnel Advisory Center
CRC	Combat Readiness/Safety Center
DA	Department of the Army
DDC	Defensive Driving Course
DDESB	Department of Defense Explosive Safety Board
DES	Directorate of Emergency Services
DOD	Department of Defense
LRC	Logistics Readiness Center
DPTMS	Director of Plans, Training, Mobilization, and Security
DPW	Directorate of Public Works
DRM	Directorate of Resource Management
DRMO	Defense Reutilization & Marketing Office
DUI	Driving Under the Influence
ECOD	Estimated Cost of Damage
ESLI	End of Service Life Indicator
FB	Fort Buchanan
FBBPP	Fort Buchanan Bloodborne Pathogens Program
FBLOTOP	Fort Buchanan Lockout/Tagout Program
FBPPEP	Fort Buchanan Personal Protective Equipment Program
FBRPP	Fort Buchanan Respiratory Protection Program
FBSM	Fort Buchanan Installation Safety Officer
FPS	Feet Per Second
FM	Field Manual
HBV	Hepatitis B Virus
HIV	Human Immunodeficiency Virus
HEPA	High Efficiency Particulate Air
HQ	Headquarter
IAW	In Accordance With
IDLH	Immediately Dangerous to Life and Health

IRS Installation Respirator Specialist
ISO Fort Buchanan Installation Safety Office
LRPO Local Radiation Protection Officer
MICC Missions and Installation Contracting Command
MMAD Mass Median Aerodynamic Diameters
MPH Miles Per Hour
SDS Safety Data Sheet
NIOSH National Institute of Safety and Health
NRC Nuclear Regulatory Commission
OSHA Occupational Safety and Health Administration
PAPR Powered Air Purifying Respirator
PCE Protective Clothing and Equipment
PFD Personal Floatation Device
PLHCP Physician or other Licensed Healthcare Professional
PMCS Preventive Maintenance Checks and Services
POV Privately Owned Vehicle
PPE Personal Protective Equipment
PPM Parts Per Million
QASAS Quality Assurance Specialist Ammunition Surveillance
QD Quantity Distance
QLFT Qualitative Fit Test
QNFT Quantitative Fit Test
RAHC Rodriguez Army Health Clinic
RF Radio Frequency
RPE Respiratory Protection Equipment
RPO Radiation Protection Officer
RPP Radiation Protection Program
SAR Supplied Air Respirator
SASOHI Standard Army Safety and Occupational Health Inspection
SCBA Self Contained Breathing Apparatus
SF Standard Form
SIR Serious Incident Report
SOP Standard Operating Procedures
TB Technical Bulletin
TB MED Technical Bulletin Medical
TM Technical Manual
USAR U.S. Army Reserve

Section II
Terms

Affected Employee. An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

Air-purifying Respirator. A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

Army Accident. An Army accident is defined as an unplanned event, or series of events, which results in one or more of the following: Occupational illness to Army military or Army Civilian personnel. Injury to on-duty Army Civilian personnel. Injury to Army Military on-duty or off-duty. Damage to Army property. Damage to public property, and/or injury or illness to non-Army personnel caused by Army operations.

Accident classes are used to determine the appropriate investigative and reporting procedures. Accident classes are as follows:

a. Class A accident. An Army accident in which the resulting total cost of property damage is $**2,000,000** or more; an Army aircraft or missile is destroyed, missing, or abandoned; or an injury and/or occupational illness results in a fatality or permanent total disability. **Note** that unmanned aircraft systems (UAS) accidents are classified based on the cost to repair or replace the UAS. A destroyed, missing, or abandoned UAS will not constitute a Class A accident unless replacement or repair cost exceeds $**2,000,000** or more.

b. Class B accident. An Army accident in which the resulting total cost of property damage is $**500,000** or more, but less than $**2,000,000**; an injury and/or occupational illness results in permanent partial disability, or when 3 or more personnel are hospitalized as inpatients as the result of a single occurrence.

c. Class C accident. An Army accident in which the resulting total cost of property damage is $**50,000** or more, but less than $**500,000**; a nonfatal injury or occupational illness that causes 1 or more days away from work or training beyond the day or shift on which it occurred or disability at any time (that does not meet the definition of Class A or B and is a lost time case).

d. Class D accident. An Army accident in which the resulting in total cost of property damage is **$20,000** or more, but less than $**50,000**; a nonfatal injury or illness resulting in restricted work, transfer to another job, medical treatment greater than 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 requirements of an OSHA standard, occupational hearing loss, or a work–related tuberculosis case.

e. *Class E ground accident*. An Army ground accident in which the resulting total cost of property damage is $5,000 or more but less than $20,000.

Atmosphere-supplying Respirator. A respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

Attendant. An individual stationed outside a permit space who monitors the authorized entrants and who performs all attendants' duties assigned in this program.

Authorized Entrant. An employee who is authorized by the employer to enter a permit space.

Authorized Employee. A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

Bloodborne Pathogens. Pathogenic micro organisms that are present in human blood and can cause disease in humans

Canister or Cartridge. A container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

Capable of Being Locked Out. An energy isolating device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it. Other energy isolating devices are capable of being locked out, if lockout can be achieved without the need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.

Confined Space. A space that is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit; and is not designed for continuous employee occupancy.

Confined Space Types:
a. Non permit 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.

Contaminated. The presence or the reasonably anticipated presence of blood or other potentially infectious materials.

Demand respirator. An atmosphere-supplying respirator that admits breathing air to the face-piece only when a negative pressure is created inside the face-piece by inhalation.

Disinfection. The destruction of pathogenic organisms, especially by means of chemical substances.

Emergency. An unplanned event when a hazardous atmosphere of unknown chemical or particulate concentration suddenly occurs, requiring immediate use of a respirator for escape from or entry into the hazardous atmosphere to carry out maintenance or some other task.

Employees. For the purpose of this SOP, the term employees include Soldiers, civilians, and contractors.

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 supply conductors, and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy. Push buttons, selector switches and other control circuit type devices are not energy isolating devices.

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

Entry Supervisor. The person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this Fort Buchanan Safety SOP.

Authorized employee. A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

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

Exposure Incident. A specific eye, mouth, other mucous membrane, non-intact skin or skin piercing contact with blood or other potentially infectious materials that results from the performance of an individual's duties.

Exposure of Employee. Exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

End-of-Service-Life Indicator (ESLI). A system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

Escape-only Respirator. A respirator intended to be used only for emergency exit.

Filter or Air Purifying Element. A component used in respirators to remove solid or liquid aerosols from the inspired air.

Filtering Facepiece (Dust Mask). A negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire face piece composed of the filtering medium.

Fit Factor. A quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

Fit Test. The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.)

Helmet. A rigid respiratory inlet covering that also provides head protection against impact and penetration.

High Efficiency Particulate Air (HEPA) Filter. A filter that is at least 99.97% efficient in removing monodispersed particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.

Hood. A respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

Hot Tap. A procedure used in the repair, maintenance and services activities which involves welding on a piece of equipment (pipelines, vessels or tanks) under pressure, in order to install connections or appurtenances. it is commonly used to replace or add sections of pipeline without the interruption of service for air, gas, water, steam, and petrochemical distribution systems.

Interior Structural Firefighting. The physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage. (See 29 CFR 1910.155)

Leaders. For the purpose of this handbook, the term Leader refers to Directors, Commanders, and Supervisors.

Life Cycle. The life of a system from conception to disposal.

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. Included are blank flanges and bolted slip blinds.

Loose-fitting Face-piece. A respiratory inlet covering that is designed to form a partial seal with the face.

Lost Time Accident. An off or on duty accident that results in an individual losing one full (8-hour) day of duty.

Negative Pressure Respirator (tight fitting). A respirator in which the air pressure inside the face-piece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Occupational Exposure. Reasonably anticipated skin, eye, mouth, other mucous membrane contact with blood or other potentially infectious material that may result from the performance of an individual's duties.

Other Potentially Infectious Material. The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. Any unfixed tissue or organ from a human.

Oxygen Deficient Atmosphere. An atmosphere with an oxygen content below 19.5% by volume.

Qualitative Fit Test (QLFT). A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Quantitative Fit Test (QNFT). An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Positive Pressure Respirator. A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

Powered Air-purifying Respirator (PAPR). An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Pressure Demand Respirator. A positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the face piece by inhalation.

Regulated Medical Waste
Liquid or semi-liquid blood or other potentially infectious materials, contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed, items that are caked with blood or other potentially infectious materials and are capable of releasing these materials during handling, contaminated sharps, and pathological and micro biological wastes containing blood or other potentially infectious materials.

Residual Hazards. Hazards that are not eliminated by design.

Respirator. A device designed to provide the wearer with respiratory protection against inhalation of airborne contaminants and, for some devices, oxygen deficient atmospheres.

Respiratory Inlet Covering. That portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It may be a facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

Risk. A hazard, danger, or peril; exposure to loss or injury; the degree of probability of loss.

Risk Assessment. Step three of the risk management process. Consists of determining the hazards, identifying controls, determining accident probability and severity, and assigning a residual risk level to hazards and the overall operation or training.

Risk Management. A systematic process that identifies risks of missions and training, weighs risks against benefits, and eliminates unnecessary risk. The process of making high risk operations safer by eliminating or reducing risks while retaining overall mission benefit.

Safety. Freedom from those conditions that can cause death, injury, occupational illness, or damage to, or loss of, equipment or property.

Self-contained Breathing Apparatus (SCBA). An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

Service Life. The period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

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.

Setting up. Any work performed to prepare a machine or equipment to perform its normal production operation.

Sharps. Any item that can penetrate the skin including, but not limited to needles, scalpels, broken glass.

Supplied-air Respirator (SAR) or Airline Respirator. An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

System Safety. The application of engineering and management principles, criteria, and techniques to optimize safety within the constraints of operational effectiveness, time, and cost throughout all phases of the system or facility life cycle.

System Safety Engineering. An engineering discipline requiring specialized professional knowledge and skills in applying scientific and engineering principles, criteria, and techniques to identify and eliminate hazards or reduce the risk associated with the hazards.

System Safety Management. An element of management that defines the system safety program requirements and ensures the planning, implementation, and accomplishment of system safety tasks and activities consistent with the overall program requirements.

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.

Tight-fitting Face-piece. A respiratory inlet covering that forms a complete seal with the face.

Type-A Radioactive Package/Quantity. Type A packages are used for the transport of relatively small, but significant, quantities of radioactive material.

Universal Precautions. An approach to infection control in which all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

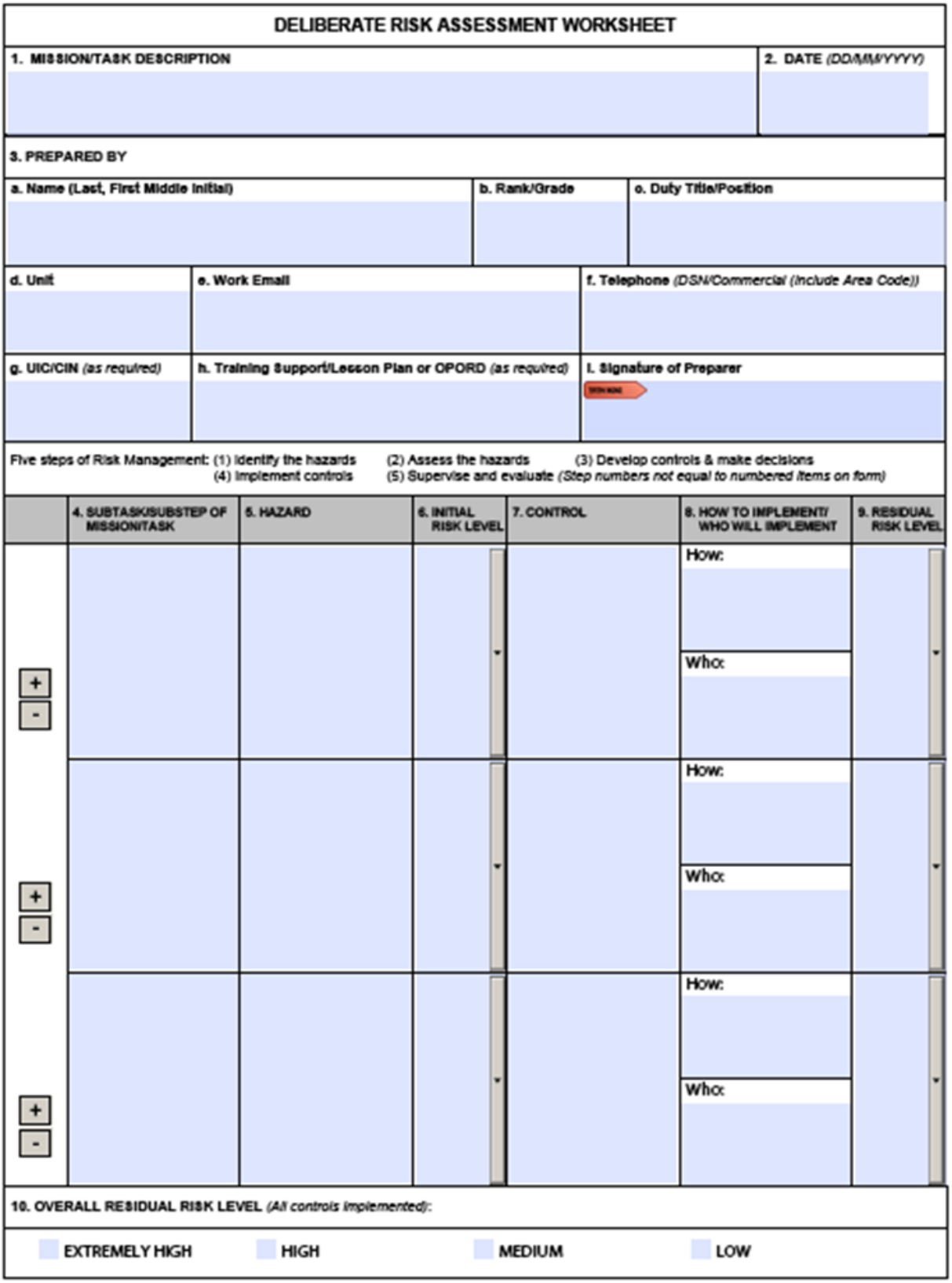
Unnecessary Risk A risk which could be reduced or eliminated without hindering mission accomplishment.

User Seal Check. An action conducted by the respirator user to determine if the respirator is properly seated to the face.

Workplace Risk Factors (Ergonomic). Actions in the workplace, workplace conditions, or a combination thereof, that may cause or aggravate a work related musculoskeletal disorder. Workplace risk factors include, but are not limited to, repetitive, forceful or prolonged exertions; frequent or heavy lifting; pushing, pulling, or carrying of heavy objects; a fixed or awkward work posture, contact stress; localized or whole body vibration, cold temperatures and poor lighting leading to awkward postures. These workplace risk factors can be intensified by work organization characteristics such as inadequate work/ rest cycles, excessive work pace and/or duration, unaccustomed work, lack of task variability, machine work, and piece rate.

Work Related Musculoskeletal Disorder (Ergonomic). An injury or an illness of the muscles, tendons, ligaments, peripheral nerves, joints, cartilage (including intervertebral discs), bones and/or supporting blood vessels in either the upper or lower extremities, back or neck, that is associated with musculoskeletal disorder workplace risk factors. This is not limited to cumulative trauma disorders, repetitive strain injuries or illnesses, repetitive motion injuries or illnesses, and repetitive stress injuries or illnesses.

FIGURE 1



DELIBERATE RISK ASSESSMENT WORKSHEET

1. MISSION/TASK DESCRIPTION	2. DATE (DD/MM/YYYY)

3. PREPARED BY

a. Name (Last, First Middle Initial)	b. Rank/Grade	c. Duty Title/Position

d. Unit	e. Work Email	f. Telephone (DSN/Commercial (Include Area Code))

g. UIC/CIN (as required)	h. Training Support/Lesson Plan or OPORD (as required)	i. Signature of Preparer

Five steps of Risk Management: (1) Identify the hazards (2) Assess the hazards (3) Develop controls & make decisions (4) Implement controls (5) Supervise and evaluate (Step numbers not equal to numbered items on form)

	4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
+ -					How: Who:	
+ -					How: Who:	
+ -					How: Who:	

10. OVERALL RESIDUAL RISK LEVEL (All controls implemented):

EXTREMELY HIGH HIGH MEDIUM LOW

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FIGURE 2

RISK ASSESSMENT

		Probability				
Severity		**Frequent** A	**Likely** B	**Occasional** C	**Seldom** D	**Unlikely** E
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

E – Extremely High | H - High | M - Moderate | L - Low

SEVERITY

CATASTROPHIC	Death or permanent total disability, system loss, major property damage
CRITICAL	Permanent partial disability, temporary total disability in excess of 3 months, major system damage, significant property damage.
MARGINAL	Minor injury, lost workday accident, compensable injury or illness, minor system damage, minor property damage.
NEGLIGIBLE	First aid or minor supportive medical treatment, minor system impairment.

PROBABILITY

FREQUENT	Individual Soldier/employee/item: Occurs very often in career or equipment service life. All personnel or inventory: Continuously experienced. POV accidents, falling, combat causalities, sporting accidents.
LIKELY	Individual Soldier/employee/item: Occurs several times in career/equipment life. All personnel or inventory: Occurs frequently. Motorcycle accidents, pedestrian accidents, drowning, Army Motor Vehicle accidents, heat injuries.
OCCASIONAL	Individual Soldier/employee/item: Occurs sometime in career/equipment life. All personnel or inventory: Occurs sporadically or several times in inventory life. Aviation accidents, negligent weapons discharge, Army Combat Vehicle accident.
SELDOM	Individual Soldier/employee/item: Possible to occur in career/equipment life. All personnel or inventory: Remote chance of occurrence; expected to occur sometime in inventory service life. Electrocution, alcohol poisoning.
UNLIKELY	Individual Soldier/employee/item: Can assume will not occur in career/equipment life. All personnel or inventory: Possible, but improbable; occurs only very rarely. Earthquake and flood.

FIGURE 3

Sample Lockout Procedures

ORGANIZATION:

DATE:

EQUIPMENT/MACHINES:

Purpose

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury.

Compliance With This Program

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment. Personnel who violate the requirements of this procedure will be subject to disciplinary action.

Sequence of Lockout

(1) Notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

(2) The authorized employee shall identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy. Type(s) and magnitude(s) of energy, its hazards and the methods to control the energy are listed below:

(3) If the machine or equipment is operating, shut it down by the normal stopping procedure (depress the stop button, open switch, close valve, etc.). Type(s) and location(s) of machine or equipment operating controls are described below:
(4) De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s). Type(s) and location(s) of energy isolating devices are described below:

(5) Lock out the energy isolating device(s) with assigned individual lock(s).

(6) Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc. Type(s) of stored energy - methods to dissipate or restrain are described below:

(7) Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed and then verify the isolation of the equipment by operating the push button or other normal operating

Restoring Equipment to Service

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

(1) Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.

(2) Check the work area to ensure that all employees have been safely positioned or removed from the area.

(3) Verify that the controls are in neutral.

(4) Remove the lockout devices and reenergize the machine or equipment. Note: The removal of some forms of blocking may require re-energization of the machine before safe removal.

(5) Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for used.

FIGURE 4

SAFETY TRAINING ASSESSMENT

Safety Training Assessment

How do I determine what training is needed in my department?

***Safety Training Questionnaire*: The questionnaire is a series of questions to assist supervisors and employees in determining which safety training courses are required. Answer the questions and get more information from the ISO on how you can receive this training. For more information, contact the Installation Safety Office at 707-3853/2418.**

For more information, contact the Installation Safety Office at 707-3853/2418.

QUESTIONS
1. Are you a supervisor or a Collateral Duty Safety Officer (CDSO)? ACCIDENT REPORTING AND RECORDKEEPING
2. Do you regularly handle, move, or lift materials? BACK INJURY PREVENTION
3. Have you been appointed as a Collateral Duty Safety Officer (CDSO) for your directorate/section? COLLATERAL DUTY SAFETY OFFICER TRAINING
4. Will you be working as a contractor on a FB Project (construction, maintenance, and service) or will you be serving as a Contracting Officer Representative? CONTRACTOR SAFETY
5. Do you work in or supervise any employee who works in areas that may cause employees to slip, trip or fall from same level or elevated surfaces (hallways, stairs, slippery floors, wet surfaces, etc..)? PREVENTION OF SLIPS, TRIPS AND FALLS TRAINING
6. Do you operate powered industrial trucks, or do you supervise an operator of a powered industrial truck? FORKLIFT SAFETY
7. Do individuals work outdoors or in high heat stress facilities? HEAT STRESS PREVENTION
8. Do employees work with radioactive materials or radiation producing machines? IONIZING RADIATION SAFETY
9. Do individuals in your department use portable or fixed ladders? LADDER SAFETY
10. Do individuals in your department conduct servicing and/or maintenance of machines and equipment? LOCKOUT/TAGOUT
11. Are you responsible for utilizing the five-step risk management process and tools for managing risks in your work area? COMPOSITE RISK MANAGEMENT
12. Do individuals in your department perform tasks that required the use of personal protective equipment (i.e. gloves, safety glasses, hard hats, etc.)? PERSONAL PROTECTIVE EQUIPMENT

QUESTIONS
13. Do individuals in your department work around, but not directly with, asbestos-containing building materials? ASBESTOS AWARENESS
14. Can you "reasonably anticipate" coming into bodily contact with human blood or other potentially infectious materials? BLOODBORNE PATHOGENS
15. Do personnel enter spaces not intended for normal occupancy and that has limited means of entry (e.g. manholes, tanks, vessels, pits, etc.)? CONFINED SPACE ENTRY
16. Do individuals work on electrical circuits operating at greater than 50 volts? ELECTRICAL SAFETY
17. Do individuals work from elevated surfaces exposing them to falls greater than six feet? FALL PROTECTION
18. Are hazardous chemicals or chemical products used or stored within your department? HAZARD COMMUNICATION
19. Are employees required to repeat same tasks (e.g. extensive typing, pipetting, using handtools)? INTRODUCTION TO ERGONOMICS
20. Are you a supervisor or employee who has been tasked to evaluate your workplace for job hazards and appropriate controls? JOB HAZARD ANALYSIS
21. Are individuals in your department involved in construction activities that disturb lead containing materials, such as lead-based paint? LEAD AWARENESS TRAINING
22. Have you recently been assigned to Fort Buchanan? NEW EMPLOYEE ORIENTATION TO FORT BUCHANAN SAFETY
23. Are you a supervisor or building manager? SUPERVISOR ORIENTATION TO OSH
24. Are individuals in your department required to use (or are wearing) respirators for protection against dusts, fumes, mists, vapors or particulates? RESPIRATORY PROTECTION

List other training needed:_____
____
_____
_____

EMPLOYEE NAME: _____
_
DEPARTMENT: _____ PHONE: _____

FIGURE 5
SAMPLE CDSO APPOINTMENT MEMORANDUM

IMBC-XX- Date

MEMORANDUM FOR ***Name of CDSO***

SUBJECT: Appointment of Collateral Duty Safety Officer

1. References: AR 385-10, The Army Safety Program, dated 27 November 2013

2. You are hereby appointed as Fort Buchanan ***name of the Directorate*** Collateral Duty Safety Officer for the ***name of the division, section, or shop***. The following are some of the duties you will be performing as the CDSO:

a) Attend scheduled safety meetings and training provided by the Installation Safety Office (ISO). Minutes of these meetings shall be used to train employees within your organization as directed by the ISO.

b) Conduct and document monthly spot check safety inspections of your department spaces and report any safety deficiencies to the Installation Safety Office via supervisor/manager.

c) Assist the ISO during his occupational safety and health inspections of your assigned spaces.

d) Coordinate with the ISO for employee safety training and safety requirements.

e) Report any employee safety violations to the ISO via the employee supervisor and manager using oral or written means.

f) Submit service calls or work request of deficiencies found during safety inspections and keep a log of these service calls or work request (periodically verify the status of the service calls/work request). Be prepared to discuss status at regularly scheduled CDSO meetings.

g) Report to the ISO any employee illness/injury, and assist the ISO in conducting the accident investigation.

h) Coordinate with the ISO for informal/formal safety training and ensure training is documented and kept on file.

i) Be prepared to be activated during emergency operations or situations where the ISO requires augmentation to perform critical safety duties.

3. I will comply with the above duties and will fully support the Army Garrison Fort Buchanan Safety Program. I fully understand that by signing this document, the Installation Safety Office will provide all the required safety training that will allow me to fulfill my assigned duties and that upon my course completion I am committed to serve, at least 24 months, as a Collateral Duty Safety Officer.

4. POC of this action is Mr. Alfredo Nogueras at 707-3853, or alfredo.nogueras3.civ@mail.mil.

_____
Appointee Signature

_____
Director of ***Name of Directorate***

FIGURE 6

SAMPLE SAFETY INSPECTION CHECKLIST

Bldg. No.		Location	Directorate		Date
Supervisor			CDSO	Tel.	
Telephone			Inspector (s)		Please select "NA" if not applicable or not observed.

DESCRIPTION	Y	N	NA
ADMINISTRATIVE			
Are Unsafe/Unhealthful report forms readily available to employees?			
Is the Hazardous Reporting Poster posted on the official bulletin board? Is the DoD Safety & Occupational Health Protection Program Poster posted on the official bulletin board?			
Is the CO's Policy Statement posted on the official bulletin board?			
Is the Fire Evacuation Plan posted?			
Are Stand-up Safety Meeting rosters maintained by the supervisor?			
WALKING/WORKING SURFACES			
Housekeeping; Is the area clean in regards to the type of work being done?			
Where wet processes are used, is proper drainage maintained, and false floors, platform mats, or other dry standing places available?			
When required, are floor loading signs posted? (i.e., mezzanine areas)			
Are aisles and passageways kept clear?			
VERIFICATION OF POSTED DEFICIENCY NOTICES			
Are all outstanding RAC 1, 2, and 3 deficiencies posted?			
HAZARDOUS MATERIALS			
Are flammable and combustible liquids being stored in approved containers and/or storage cabinets?			
Are containers properly labeled as to contents			
Are emergency showers and eye wash facilities available where employees are exposed to corrosive materials?			
Are they being inspected/flushed as required? (documented)			
GUARDING OF OPEN-SIDED FLOORS, WALL OPENINGS, AND PLATFORMS			
Are all open-sided floors, wall openings, and platforms that are more than 4 feet above ground level guarded by guard rails, covers, or other equivalent means?			
Are all stairways provided with handrails 30"-34" high?			
Are all ladders maintained in good condition?			

MEANS OF EGRESS			
Are there adequate number of exits?			
Do all exits provide free and unobstructed egress from all parts of the building?			
Are all exits clearly visible and marked?			
Are all doorways and exits that are not exits clearly marked and unobstructed?			
Are all exits provided with artificial illumination?			
COMPRESSED GASES			
Are all compressed gas cylinders stored in a well ventilated, dry area where they can't be knocked over?			
Are all acetylene and oxygen cylinders stored at least 20 feet apart or separated by a 5 foot non-combustible barrier between them?			
Are acetylene cylinders being stored upright?			
Are all compressed gas cylinders that are not in use stored with their valve protection caps on?			
MATERIAL HANDLING AND STORAGE			
Are materials stored in a stable and secure manner to prevent sliding or collapse?			
Are storage areas kept free of tripping, fire, explosion hazards, or pest harborage?			
Forklift truck Operator's Daily Checklist utilized and completed.			
Forklift truck operators observed have current operator's license.			

FIRE PROTECTION	Y	N	NA
Are all portable fire extinguishers maintained in a fully charged and operable condition?			
Are the fire extinguishers conspicuously located where they will be readily accessible (not blocked) and immediately available when needed?			
Are fire extinguishers inspected monthly to detect any obvious physical damage, corrosion, or other impairments?			
Are the hydrostatic tests of the fire extinguishers current?			
MACHINE GUARDING			
Are all of the machinery that requires point of operation guarding adequately guarded?			
Are all the gears, sprockets, and pulleys adequately guarded?			
Are all fans that are less than 7 feet above the floor or working level provided with guards having openings no larger than 1/2 inch?			
Are all machines designed for a fixed location securely anchored (include soft drink dispensing machines with empty weight of 700 Lbs.) to prevent walking or moving?			
ELECTRICAL			
Are flexible cords and cables being used in continuous lengths without splices or taps?			
Is the area free of flexible cords (extension cords) and cables being used as a substitute for fixed wiring of a structure?			
Are receptacles free of excessive "piggy-backing" of extension cords?			
Are all flexible cords and cables connected to devices and/or fittings so that strain relief is provided which will prevent pulling directly onto the joint or terminal screws?			
Are receptacles grounded and properly wired?			
Are all unused openings in cabinets, boxes, and fittings effectively covered?			
Was frayed or otherwise exposed wiring observed?			
Is there adequate amount of working space (3 feet) fronting electrical panel boxes?			

Were all disconnecting means and circuits properly identified and labeled?			
LOCKOUT/TAGOUT			
Are locks/tags filled out completely and accurately?			
Is the item locked/tagged in the position/condition stated?			
Is there a Lockout/Tagout log			
Do locks/tags match the Lockout/Tagout Log?			
Is the Lockout/Tagout Log being properly maintained by the Coordinator?			
Is the Log being audited as required?			
WEIGHT HANDLING EQUIPMENT			
Hoist hook equipped with an approved mousing device.			
Operator has a valid license for the equipment.			
Is the shackle body permanently and legibly marked with trademark, safe working load (SWL), size, and expiration date?			
Does the pin and the bell of the shackle match?			
Are the wire ropes tagged with current certification date?			
GENERAL			
Does the building or structure have any apparent structural deficiencies that may be hazardous to personnel or may compromise the structural integrity of the building?			
UNSAFE BEHAVIOR			
Are workers wearing the required PPE for the location and for the work being performed?			
Are workers taking the necessary safety precautions for the work being performed?			
Is all work being performed so that other workers in the area are not being exposed to occupational health hazards or unsafe conditions?			
Are any workers being exposed to potential fall hazards without the protection of safety rails or the appropriate fall protection equipment?			
Any other unsafe behavior/act observed at the time of the inspection?			
Any other unsafe behavior/act observed at the time of the inspection?			
What was observed?			

FIGURE 7

US Army Garrison Fort Buchanan

Pre-Construction/Execution Safety Checklist

Requirements for the Safety Plan submittal (Note: Contract work shall not begin until an approved Safety Plan is on hand)

1	Prior to the start of the contract execution, and as part of the Occupational Safety and Health Plan, the contractor is required to provide a signed copy of the OSHA 300A Logs (Summary of Work-Related Injuries and Illnesses) for the previous three years. If the contractor has not been in business for that time period, then only the two most recent postings are required for review.
2	Include a "Workplace Assessment" to determine Personal Protective Equipment (PPE) requirements. It is important that once the PPE requirements are set that those requirements be enforced for all employees and visitors to the site. If there are different areas that require distinct PPE then those must be detailed in the plan as well.
3	Name a Point of Contact (POC) for safety. Include credentials, contact information and if the POC will be present at the job site. If the POC will not be present 100% of the time, then state when the POC will be present.
4	Detail how an injured employee will be handled at the job site. Application of first aid, medical facility where the employee will be transported, means of transportation, designated personnel that will accompany the injured employee, etc.
5	Include accident/incident investigation procedures. Preservation of job site, photography/evidence gathering, name personnel assigned this task. Detail how the incident/accident will be reported to the COR and the Installation Safety Officer (ISO). All accidents, requiring medical attention, must be reported within 4 hours of occurrence to 787-707-3853. Contractor will leave a message for the ISO at that number with preliminary information on the accident. Preliminary information shall consist of name of injured employee, brief description of the accident, body parts injured, medical attention provided, prognosis and any other information that can be relayed to the CMDGRP.
6	If required, Hot Work permits must be obtained from the Fire Department. Whenever an excavation is required then an excavation permit must be obtained. If the excavation is 4 feet or more deep then proper shoring techniques must be used whenever an employee has to enter and perform a task within that trench. Detail if trenches will be left open overnight and how they will be protected so that USAG-FB residents, visitors, or employees are not placed in danger.
7	Safety Training schedule - such as supervisor safety briefs for employees and frequency of the briefs. State how the safety training schedule will be implemented during the length of the project/contract. Detail how the training will be documented. Documented training must be available for inspection by OSHA and the USAG-FB ISO at the job site.

8	Housekeeping procedures - Work site shall be left clean and orderly every day. All trash disposals shall be in accordance with established environmental rules and regulations.
9	Detailed list of toxic or flammable materials that will be used during the project/contract. a) Contractor must maintain a running inventory of hazardous materials to ensure we are aware of any contingencies required during a spill or emergency situation. b) Safety Data Sheets (SDSs) must be available on site c) Hazardous materials inventory must be available for inspection by the Fort Buchanan ISO, Fort Buchanan Environmental Office or the Directorate of Emergency Services Fire Department. d) All hazardous materials must be stored properly and secured when not in use.
10	Contractor shall develop an evacuation plan detailing where the rally point is and head count methodology.
11	As a contractor on USAG-FB you must comply with 29 Code of Federal Regulations (CFR) 1910/1926, EM-385-1-1 (Army Corp of Engineers Safety Manual), and all applicable US Army Garrison Fort Buchanan Safety Regulations. All regulations are available from standard government websites or the ISO. **" Ignorance of the law does not excuse you from compliance"**
12	All contractor personnel must stay within or near project areas. As a rule US Army Garrison Fort Buchanan personnel are not permitted in the project area unless they are discharging official duties related to that contract. It is your responsibility, as a contractor, to ensure that all personnel entering the worksite or coming in contact with a danger zone don the appropriate personal protective equipment.
13	All contractor personnel must obey traffic regulations on post, especially 10 MPH when passing troops on the road, 15 MPH in the housing and school zones and 20 MPH near building 519 the teen center. Vehicles must provide "right of way" to pedestrians in crosswalks. Motor vehicle operators shall not use a cellular phone while driving unless they are activated with a "hands free" device. **"Do not text while driving"**
14	No weapons are allowed on post - Fire arms or personal knives
15	If the contractor is going to use Hilti Power actuated devices, then ensure that all personnel that use the devices are properly licensed and detail the size and/or caliber of the charges used. Include in the Safety Plan an inventory of charges and the describe the storage and security used for storage.
16	Federal OSHA has full jurisdiction over all contractor work performed here at the USAG-FB
17	Anyone that observes an Immediately Dangerous to Life and Health (IDLH) condition can halt work until the condition is controlled. The contractor must notify the COR immediately.
18	The work area/site, if applicable, must be clearly identified.

19	USAG-FB is a Multi-employer Worksite. On multi-employer worksites (in all industry sectors), more than one employer may be citable for a hazardous condition that violates an OSHA standard. (1) Creating Employer, (2) Exposing Employer, (3) Correcting Employer, (4) Controlling Employer
20	The USAG-FB Safety Office will not interact directly with the contractor unless an IDLH situation is experienced. All communication shall be conducted through the COR or KO. The COR/KO has the authority to contact the ISO and ask for an evaluation of a suspected safety violation by the contractor, at any point during the execution of the contract and demand correction if required.
21	If any radioactive commodity is to be used during the execution of this contract then the contractor must provide a description of that commodity, details regarding any NRC licenses, purpose of the radioactive commodity (such as calibration), and any other pertinent information. All radioactive commodities must be approved prior to entry on post. The approving authority is the US Army Garrison Fort Buchanan Commander.

FIGURE 8

SAMPLE ARMY RADIATION PERMIT FORM

DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT COMMAND

3251 Gunston Rd
Fort Belvoir VA 22060-3251

December 26, 2014

Safety Office

Jones and Associates
19900 W. 52nd Street
Austin, Tx 78799

Army Radiation Permit

Dear Mr. Smith

This letter responds to your application dated November 29th, 2014 for an Army Radiation Permit to use a moisture density tester containing no more than 10 millicuries (370 megabecquerels) of Cesium 137. Your application meets the requirements of Department of the Army Pamphlet 385-24, The Army Radiation Safety Program, and of Title 32, Code of Federal Regulations, part 655, section 655.10. I hereby permit you to use the moisture density tester on this installation during the period January 14th, 2015 through February 5th 2015 in accordance with the terms specified in your application. You must remove all radioactive material from this installation by the end of the permitted time and provide evidence that you have done so. We do not permit disposal of radioactive material on Army property. Please reapply if you wish to use the moisture density tester on this installation after February 5th, 2015.

Sincerely,

John A. Doe
COL, AV
Commanding