

**Virginia Defense Force  
Pamphlet 385–10-7**

**Safety**  
**Virginia Defense Force**  
**Safety Program**  
**Training Requirements**

**Headquarters  
Virginia Defense Force  
5001 Waller Road  
Richmond, VA 23230-2915  
1 September 2014**

**Headquarters  
Virginia Defense Force  
George Washington Division  
Richmond, VA  
1 September 2014**

## **Safety**

### **VDF Safety Program**

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**Summary.** This document is an adaptation of the Department of the Army Pamphlet 385-10, Army Safety Program, for use by the units of the Virginia Defense Force (VDF). This pamphlet provides guidance to commanders and other personnel in regards to the safety program I the Virginia Defense Force.

**Applicability.** This pamphlet applies to units of the VDF. During mobilization for state active duty, procedures in this publication can be modified to support policy changes as necessary.

**Suggested Improvements.** Users are invited to send comments and suggested improvements directly to Headquarters, Virginia Defense Force, George Washington Division, Division Safety Office, 5001 Waller Road, Richmond, Virginia 23230-2915.

**Distribution.** Distribution is intended for all VDF units down to, and including, company-level.

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JOHN D. TAYLOR  
Major General, Virginia Defense Force

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## **Chapter 1**

### **Safety Training Requirements**

#### 1-1. General

The VDF goal is to have a well-trained cadre of safety personnel providing leadership in safety and to have VDF personnel knowledgeable in the practical application of safety to their job(s).

- a. Safety personnel will be trained in the basics of safety. Each safety manager will identify training required by personnel under their supervision, and themselves, to develop a schedule and a budget to achieve the needed training. Training should be selected that would enhance each individual's knowledge and understanding of safety, with emphasis on any specialty areas (e.g., radiation safety, aviation safety, or occupational safety).
- b. Safety managers also have the function of identifying safety training required for job performance for personnel within their area of responsibility. Safety training may be incorporated into operational instruction on systems and task performance, or be a standalone course addressing a specific area.

#### 1-2. Safety professional training.

VDF safety personnel provide safety guidance and oversight of safety within their area(s) of responsibility. They advise their commander on safety issues and policy and have the staff function of ensuring that policy is implemented within the command. Due to the variety of function that each safety officer may be required to perform, it is essential that they be knowledgeable in all aspects of safety.

- a. Primary position Safety Officers. Individuals in a primary, or full-time, safety officer position should either have held a similar military position or specialty previously and/or either have held (or currently is in) a safety-related occupation. This includes positions and/or board certifications such as:
  - (1) Industrial hygienists
  - (2) Safety officer.
  - (3) Environmental Health and Safety (EHS)
  - (4) Occupational Health and Safety Technologist (OHST)
  - (5) Certified Industrial Hygienist (CIH)
  - (6) Associate Safety Professional (ASP)
  - (7) Certified Safety Professional (CSP)
  - (8) BS or MS degree in Occupational Safety and Health (OSH)

#### 1-3. Safety training for non-safety personnel

- a. Appendix C contains matrixes that identify training recommended for individuals, supervisors, individuals working in specific environments, and for emergency preparedness and response personnel. In addition to identifying the training required, the matrixes identify the frequency of training required (i.e., upon assignment, annually, etc.).
- b. The U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) offers safety and health promotion items through their web site at <http://chppm-www.apgea.army.mil>.

- c. Traffic safety programs and educational materials are available from the USACRC website, but access requires the use of an AKO account / CAC card.

## **Appendix A References**

### Section 1. Publications

AR 385-10, Army Safety Program

AR 40-5, Preventive Medicine

Code of Federal Regulations (CFR) (<http://www.gogpoaccess.gov/cfr/index.html>)

29 CFR 1910.23, Guarding floor and wall opening and holes

29 CFR 1910.120, Hazardous Waste Operations and Emergency Response (HAZWOPER)

29 CFR 1910.146, Permit-Required Confined Spaces

29 CFR 1910.147, Control of Hazardous Energy (Lock-out/Tag-out)

29 CFR 1910.176, Handling Materials – General

29 CFR 1910.178, Powered Industrial Trucks

29 CFR 1910.1030, Bloodborne Pathogens

29 CFR 1910.1200, Hazard Communications

DA Pam 385-1, Small Unit Safety Officer / NCO Guide

DA Pam 385-10, Army Safety Program

DA Pam 385-30, Mishap Risk Management

DA Pam 385-40, Army Accident Investigations and Reporting

FM 5-19, Composite Risk Management (CRM)

### Section 2. Forms

OSHA-2H Form, Notices of Unsafe and/or Unhealthful Working Conditions

OSHA Form 300, Log of Work-Related Injuries and Illnesses (<http://www.osha.gov>)

OSHA Form 300A, Summary of Work-Related Injuries and Illnesses (<http://www.osha.gov>)

VDF Accident Investigation Report Form

## Appendix B Training Programs

Table B-1

Exposure based training matrix for all personnel (including managers and supervisors)

<b>Training Standard</b>	<b>Frequency</b>	<b>Source of Regulation</b>	<b>Training Required</b>
Division Health and Safety Program	Initial safety orientation	Federal OSHA General Duty clause	Supervisor and employee safety responsibilities, safety communications methods, hazard id, inspections, EH&S program
Emergency preparedness and fire prevention / evacuation	Initial safety orientation and annually. Fire / tornado drill.	29 CFR 1910.38, 151, 156, 165, 1200	Procedure to be followed in the event of emergencies, evacuation procedure / drill, overview of emergency action plan including fire hazards at the site
Hazard Communication	Initial safety orientation, annually and refresher with change or new materials.	29 CFR 1910.1200, 119, 157, 120	Substance ID and properties, PPE, spill prevention, and containment, MSDS/SDS, overview of site HazCom plan.
Safe lifting	Initial safety orientation, changes in workplace, increase in injury rates.	Federal OSHA General Duty clause	Overview of back anatomy and physiology review of basic lifting techniques, application to workplace setting.
Specification of accident prevention signs and tags	Initial safety orientation and when personnel understanding is questioned.	29 CFR 1910.144, 145	Danger/caution signs and tags, special precautions when these are encountered.
Employee alarm systems	Initial safety orientation and on reassignment to different area.	29 CFR 1910.165, 38	Inform personnel of preferred means of reporting emergencies and how system alarms function.
Walking and working surfaces	Before work or when personnel	29 CFR Subpart D	Use of ladders, guarding holes, floors,

	understanding is questioned		use of railings, toeboards, stairways
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Table B-2

Exposure based training matrix for supervisors.

<b>Training Standard</b>	<b>Frequency</b>	<b>Source of Regulation</b>	<b>Training Required</b>
OSHA regulations	As needed for management staff for OSHA regulations	As needed for facility	Overview of OSHA regulations and reporting.
Supervisor roles	Initial assignment and annually	Federal OSHA General Duty clause	To supplement personnel program, more in-depth training on recognition, prevention, role of supervisors, and policies
Senior management / supervisor safety competency training	Annually	Federal OSHA General Duty clause	EH&S policies and supervisor responsibilities, accident investigation, emergency procedures, reporting requirements, site specific issues.
Recordkeeping	As needed for management staff responsible for record keeping.	As needed for facility	In-depth training for OSHA 300 recordkeeping, accident and claims files, length of time to maintain.
Train the trainer	As needed for supervisors responsible for personnel safety programs.	As needed for facility	Intro to basic training program, overview of adult learning models, review of learning aids for safety program training.

Table B-3

Exposure based training matrix for affected personnel groups.

<b>Training Standard</b>	<b>Frequency</b>	<b>Source of Regulation</b>	<b>Training Required</b>
Bloodborne pathogens	Initial assignment where exposure potential is present and annually	29 CFR 1910.1030, 1200, 1020	Explanation of the standard contents, engineering and work practice controls, PPE, emergency response involving blood, how to handle potential exposures, post exposure

			evaluations, and signs / labels.
Personal Protective Equipment (PPE)	On initial use of equipment / changes in PPE, or personnel understanding is questioned.	29 CFR 1910.132-139, 1043, Subpart I	When PPE is necessary, what PPE is necessary, how to don, adjust and wear PPE, limitations of PPE, proper care, maintenance, useful life, and disposal of PPE.
Eye and face protection	On initial assignment of personnel needing this PPE, change of condition, or personnel understanding is questioned.	29 CFR 1910.133, 1200, 252	Limitation of the equipment and precautions by manufacturer.

Table B-3

Exposure based training matrix for affected personnel groups (continued)

Forklift operation	On initial assignment and periodically as regulation requires.	29 CFR 1910.178	Safe operation, fueling, load distribution, and inspection of the truck.
Hazardous energy (lock-out/tag-out)	On initial assignment to equipment affected by lock-out/tag-out.	29 CFR 1910.147	Respect of lock and tag, no attempt at removal, checking equipment after lock-out removed.
DOT HazMat employee training	On initial assignment to work in shipping, receiving, or work in transportation of hazardous materials and biannually.	29 CFR 1910.1201 49 CFR 172.704, 173.3	Hazardous materials properties, shipping regulations, manifests, labels, placards, and emergency procedures.
Flammable and combustible liquids	When personal assigned to operations and when personnel knowledge is questioned.	29 CFR 1910.106, 107, 1200	Detailed, printed instructions on flow, emergency procedures, operators thoroughly informed about locations and operations of valves and other equipment, safe grounding.
Storage and handling of LPG and gas handling safety	On assignment to perform maintenance or operate LPG equipment and personnel knowledge is questioned.	29 CFR 1910.110, 151, 252, Subpart S	Operations personnel trained and knowledgeable in proper operation of equipment. Maintenance personnel must be trained in such functions.
Hand and portable power operated and other hand held equipment and compressed air.	On assignment to use these tools and when personnel knowledge is questioned.	29 CFR 1910.242	Personnel trained in safe condition of tools and equipment including any tools furnished by the individual, PPE required. Compressed air for cleaning must be under 30 psi.
Powder-actuated hand	On assignment to use	29 CFR 1926.302	Personnel trained in

tools	these tools and when personnel knowledge is questioned.		loading, firing, PPE, flammables, materials to be used on, misfires.
Pneumatic fastening tools, nailers, staplers and other similar equipment.	On assignment to use these tools and when personnel knowledge is questioned.	29 CFR 1926.302	Personnel trained in the safe condition of tools and equipment including any tools furnished by the individual, PPE required.

Table B-4

Exposure based training matrix for emergency preparedness and response personnel.

<b>Training Standard</b>	<b>Frequency</b>	<b>Source of Regulation</b>	<b>Training Required</b>
Emergency response team training.	On initial assignment, frequently enough to ensure each team member is able to perform assigned duties, and annually.	29 CFR 1910 Subpart E, Subpart L	Training should be quality training in sound firefighting and other emergency response principles.
CPR and first aid	On initial assignment to render first aid and at periodic intervals to maintain competence	29 CFR 1910.151, 156	General first aid skills and CRP, qualifications and content of training should be determined by responsible medical consultant.
Portable fire extinguishers	On initial assignment where fire extinguishers are for employee use and those designated to use firefighting equipment as part of emergency plans and annually.	29 CFR 1910.157, 156	Recognize the type of fire, operate the appropriate fire extinguisher properly, how to fight the fire, incipient fires, and when to leave if fire becomes uncontrollable.
Sire alarm systems / fire protection systems	Initial safety orientation and on assignment to different area.	29 CFR 1910.165, 38, 160	Inform personnel of preferred methods of reporting emergencies and how alarm and fire protection systems function.
Emergency management	Personnel assigned to implement site emergency plan and continuity plan - annually	Facility policy	Training on site emergency management

**Appendix C****Standard VDF Safety and Occupational Health Inspections Mandatory Procedures**

Facility level inspections will use the following procedures and processes:

**C-1. Standard VDF Safety and Occupational Health Inspections**

- a. All workplaces will be inspected at least biannually using standard VDF Safety and Occupational Health Inspection procedures.
- b. Facilities and operations involving special hazards will be inspected more frequently as determined by qualified Safety personnel.

**C-2. Standard VDF Safety and Occupational Health Inspections for all work sites**

- a. Unless specifically exempted in this paragraph, Standard VDF Safety and Occupational Health Inspections for all work sites will be conducted by qualified Safety personnel, as defined in Section II of the Glossary.
- b. Safety and Occupational Health Inspections for work sites meeting the following criteria may be performed by trained, qualified and appointed additional or collateral duty safety personnel. If there is a dispute over interpretation of safety and health standards, hazards, or risk severity and probability, a qualified safety professional, as defined in Section II of the Glossary, will make the final determination on the disputed issue. Current reference materials pertinent to the work site, such as standards, regulations, SOPs, hazard analyses / job hazard analysis (JHA), risk assessments, MSDS / SDS, TMs, FMs, and/or operator's manuals, will be readily available.
- c. Criteria for work sites where Safety and Occupational Health Inspections can be conducted by additional / collateral duty safety personnel:
  - (1) Low risk operations as determined by a written hazard assessment specified in subparagraph c(3), below.
  - (2) Lost time job-related injury rate of no more than 10 per 1,000 personnel averaged for the last 3 years.
  - (3) Written hazard assessment (Ref. 29 CFR 1910.132) for current operations on file at the work site, conducted by qualified Safety personnel as defined in Section II of the Glossary.
- d. Qualifications for additional or collateral duty safety personnel conducting Safety and Occupational Health Inspections include:
  - (1) Appointment and validation by the activity commander that personnel can accomplish tasks required in 29 CFR 1960.57 and outlined below.
  - (2) Recognize hazards.
  - (3) Assess risks including the requirement and procedures to contact Safety professionals when risks are assessed as medium or higher.
  - (4) Advise on abatement options, complete abatement documentation and follow-up on corrective actions.
  - (5) Use OSHA Standards and VDF requirements appropriate to the work site(s).
  - (6) Use equipment necessary to conduct a thorough inspection.
  - (7) Complete supervisor and/or employee training as required by 29 CFR 1960.55 and 29 CFR 1960.59.
  - (8) Conduct at least one inspection accompanied by qualified Safety personnel as

defined in Section II of the Glossary.

### C-3. Additional or collateral duty

Additional or collateral duty personnel should conduct their inspections on a semi-annual basis, and a qualified Safety person, as defined in Section II of the Glossary, should accompany them on at least one inspection every two years in order to assure quality inspections are being conducted.

### C-4. Standard VDF Safety and Occupational Health Inspection standards

Inspections may be conducted with or without prior notice. No-notice inspections will be used when local safety and health personnel determine that they will provide a significantly more meaningful assessment of actual operating conditions and practices.

- a. A representative of the official in charge of a workplace will be given the opportunity to accompany the inspector during physical inspection of workplaces. Facility and activity commanders, or their designated representative, may deny the right of accompaniment to any person who, in their judgment, will interfere with the inspection.
- b. The inspector performing the inspection will consult a sampling of personnel on matters affecting their safety and health and offer them the opportunity to identify, confidentially, unsafe or unhealthful working conditions in the work areas.
- c. When an “imminent danger” situation is discovered, the immediate supervisor and activity head will be notified as soon as possible.
  - (1) The inspector will provide technical advice to the supervisor on the scene, who will correct the condition or cease operation and withdraw personnel from exposure.
  - (2) If the inspector finds that the hazard cannot be immediately eliminated, he or she will notify the Division Safety Office. If this official finds that corrective action is inadequate, he or she will secure approval of the commander or an authorized representative of the commander for measures to be taken to prevent personnel exposure to the hazard.
  - (3) Imminent danger hazards from which personnel have been withdrawn from as an interim measure will be identified on the forms described in subparagraph i, below.
  - (4) Commanders may authorize specific safety personnel to temporarily halt operations when imminent danger situations are found.
- d. Upon completion of a formal inspection, a closing conference will be held with the commander or their designated representative, and a notice of unsafe or unhealthful working conditions will be discussed for each RAC 1, 2, or 3 hazard that was not corrected immediately.
- e. Written reports of violations resulting from Standard VDF Safety and Occupational Health Inspections will be provided to the head of the activity or the commander of the unit inspected. These reports will cite hazards and safety management deficiencies and will recommend corrective actions. DA Form 4753 (Notice of Unsafe or Unhealthful Working Conditions) or its equivalent may be used for this purpose (see Appendix E for a sample form). RAC 1 and 2 violations that cannot be corrected within 30 calendar days of discovery will be recorded and maintained at the facility

- on DA Form 4756 (Installation Hazard Abatement Plan) or its equivalent (see Appendix G for a sample form and instructions). Written reports of inspections will be retained for 5 years, unless specific regulations require longer retention times, after the deficiencies have been corrected. Automatic data processing systems may be used to facilitate the recording and documentation of inspections and abatement plans, provided that the requirements of this regulation are met.
- f. Notices of violations for RAC 1 and 2 hazards detected during a Standard VDF Safety and Occupational Health Inspection will be recorded on DA Form 4753 or equivalent. Copies of each notice of unsafe or unhealthful conditions will be given to the appropriate official in charge of the workplace. Notices will be posted by the official in charge of the workplace where the condition was discovered. Where it is not practical to post the notice at or near the hazard, it will be posted in a prominent place where it will be readily observable by all affected personnel. Delivery and posting will take place within 15 calendar days of detection for safety violations and 30 calendar days for health violations. The notices will remain posted for 3 working days or until correction, whichever is later. All posted notices will describe the nature and severity of the violation, the substance of the abatement plan, and interim protective measures.
  - g. All violations of standards detected during a Standard VDF Safety and Occupational Health Inspection will be entered on DA Form 4754 (Violation Inventory Log) or equivalent (see Appendix F for a sample form). This log will be used to monitor compliance. It will show all violations in order of discovery and prescribe an abatement date and the date for follow-up on correction of the deficiencies.
  - h. Procedures will be established to follow-up on the correction of deficiencies identified during an inspection. If corrective action has not been accomplished or it is discovered that interim safety measures are not being enforced, the inspector will inform the facility or activity commander if appropriate. For all uncorrected violations, entries on DA Form 4756 (or equivalent) will reflect the revised corrective action schedule and appropriate remarks.

**Appendix D**  
**Notice of Unsafe or Unhealthful Working Conditions**

D-1. Sample of DA Form 4753.

<p><b>NOTICE NO. <u>07-101</u> OF</b></p> <p><b>UNSAFE OR UNHEALTHFUL</b></p> <p><b>WORKING CONDITION</b></p> <p><b>(DO NOT REMOVE NOTICE UNTIL CONDITION IS ABATED)</b></p> <p style="font-size: small;">For use of this form, see DA PAM 385-10; the proponent agency is OCSA.</p>	
1. UNIT INSTALLATION USADTC School Brigade Technical Services Library	3. DATE OF INSPECTION 30-31 Oct 2007
2. OFFICIAL IN CHARGE OF WORKPLACE J. Lang	4. STANDARD VIOLATED 29 CFR 1910.1001(c)
5. LOCATION OF VIOLATION Main Library room, particularly NE and NW corner desks	
6. DESCRIPTION OF UNSAFE OR UNHEALTHFUL CONDITION Air sampling by Industrial Hygiene Associate Inc. indicates that the personnel in this area are exposed to respirable asbestos fibers well in excess of permissible levels. Exposure is intermittent, apparently caused by the effect of physical disturbances of the ceiling material by air conditional vibration and air flow.	
7. RECOMMENDED ABATEMENT PROCEDURES	
a. Interim Remove employees from the area. Clean-up employees will be selected, trained, and equipped in accordance with applicable regulations. All materials removed to temporary library will be thoroughly cleaned by capable contractor.	
b. Final: Abatement should be completed by Airborne exposure will be eliminated by removal or encapsulation of asbestos-containing installation. Air will be sampled and shown to be within allowable limits before routine reoccupancy.	
8. ADDITIONAL INFORMATION CONCERNING THIS VIOLATION CAN BE OBTAINED FROM Safety or Occupational Health Services	
	TELEPHONE NO. <u>X2345/9876</u>

DA FORM 4753, OCT 1978

APD PE v2.00

D-2. Instructions for completion of DA Form 4753.

- a. Block 1. Enter name of unit and facility on which hazard was found.
- b. Block 2. Enter name of workplace supervisor.
- c. Block 3. Enter date of the inspection.
- d. Block 4. Enter specific reference to the standard violated.
- e. Block 5. Enter exact location of the violation.
- f. Block 6. Describe hazardous condition found in terms of physical standards and the Risk Assessment Code (RAC).
- g. Block 7. Describe interim safety measures supervisory personnel and personnel should maintain until the hazard is abated to an acceptable level.
- h. Block 8. Enter name of facility safety manager and the office phone number.

D-3. Corrective Action

When representatives issue notice of unsafe or unhealthful conditions, local officials should treat such notices in the same manner as similar internal notices and provide for abatement of significant deficiencies.

**Appendix E  
Violation Inventory Log**

E-1. Example of DA Form 4754

VIOLATION INVENTORY LOG								
For use of this form, see DA PAM 385-10; the proponent agency is OCSA.								
LOG OF SCHEDULE OF CORRECTIVE ACTION-COMPLIANCE WITH SAFETY AND HEALTH STANDARDS								
NAME OF INSTALLATION U.S. Army Driver Training Center, Fort James, AR (School Bde Tech Service Library)								
ITEM	LOCATION OF INCONSISTENCY <sup>1/</sup>	OSHA REFERENCE		INCONSISTENCY	CORRECTIVE ACTION	TARGET DATE FOR CORRECTIVE ACTION <sup>3/</sup>	DEGREE OF DANGER <sup>3/</sup>	ESTIMATED COST
		TITLE/PART	SUB-PART <sup>2/</sup>					
a	b	c	d	e	f	g	h	
1	Main Room (stacks) NE & NW corners and throughout.	29 CFR 1910.1001  TB MED 513	(c)	Personnel are exposed to asbestos concentration several times higher than standards.	Remove or encapsulate asbestos in accordance with engineering study. Clean contaminated surfaces and material to levels below cited references. Withdraw personnel during interim.	Interim: accomplished Final: 26 May	LA(I)	

NOTES: <sup>1/</sup> Such as "Carpenter Shop and/or Building Number." <sup>2/</sup> Include paragraph number in another code if further referenced. <sup>3/</sup> Use Roman numerals (Category I - Imminent danger, Category II - Serious hazard, Category III - Moderate hazard, Category IV - De minimus hazard)

## Appendix F Alleged Unsafe or Unhealthy Working Conditions

### F-1. Example of DA Form 4755

<b>EMPLOYEE REPORT OF ALLEGED UNSAFE OR UNHEALTHFUL WORKING CONDITIONS</b> <small>For use of this form, see DA PAM 385-10; the proponent agency is OCSA.</small>		
<i>This form is provided for the assistance of any complainant and is not intended to constitute the exclusive means by which a complaint may be registered with the local Safety Office (Ref OSHA Poster on rights of employees and their representatives).</i>		
The undersigned (check one) <input checked="" type="checkbox"/> Employee <input type="checkbox"/> Representative of employees <input type="checkbox"/> Other (Specify) _____		
believes that a job safety or health hazard exists at the following place of employment: Technical Services Library (Main Room), Bldg. 6001, School Brigade		
Does this hazard(s) immediately threaten serious physical harm? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If "yes" checked, immediately contact your supervisor or safety representative		
Name of official in charge	Mrs. J. Lang	Telephone x2345
Operation/Activity <u>Library</u>		
Exact location of worksite The whole main room, especially near the air condition vents.		
1. Kind of operation Shelving and signing out publications, helping patrons.		
2. Describe briefly the hazard which exists there including the appropriate number of employees exposed to or threatened by such hazard White powder blows down from the ceiling when the air condition runs. Sometimes it gets all over the desks. A lot of people say it might be asbestos, but no one will check and tell us for sure. Only 4 of us work in the room, but a lot of patrons come through.		
3. List by number and/or name the particular occupational safety and health standard (s) which may have been violated, if known I don't know, but I know it's against the law.		
4. (a) To your knowledge, has this hazard been the subject of any union/management grievance or have you (or anyone you know) otherwise called it to the attention of, or discussed it with the employer or any representative thereof?      I don't think so.		
(b) If so, please give the results thereof, including any efforts by management to eliminate or reduce the severity of the hazard The supervisor says it can't be asbestos because the building is too new.		
5. Please indicate your desire: <input type="checkbox"/> I do not want my name revealed to the official in charge. <input checked="" type="checkbox"/> My name may be revealed to the official in charge.		
WORK LOCATION	TELEPHONE NO.	DATE
Technical Services Library, Bldg. 6001	x2345	20 Sep 07
TYPED OR PRINTED NAME OF EMPLOYEE OR EMPLOYEE REPRESENTATIVE		SIGNATURE
Ms. H. Stokes		

**Appendix G  
Installation / Facility Hazard Abatement Plan**

G-1. Example of DA Form 4756

<b>INSTALLATION HAZARD ABATEMENT PLAN</b> <small>For use of this form, see DA PAM 385-10; the proponent agency is OCSA.</small>		
1. PROJECT NO. 3-1-2b	2. DATE PREPARED 21 Sep 07	3. DATE REVISED 6 Nov 07
4. ACTIVITY/ORGANIZATION School Brigade Technical Services Library	5. HAZARD LOCATION(S) Main Section Ceiling	6. RISK ASSESSMENT CATEGORY LA (I)
7. CITATION OF SPECIFIC OSHA AND OTHER STANDARD VIOLATED 29 CFR 1910.1001(c). TB MED 513		
8. DESCRIPTION OF PROPOSED CORRECTIVE ACTION OR REMEDIAL MEASURES Revise original proposal to encapsulate ceiling material to complete removal based on cost and requirements for monitoring. All ceiling material which tests positive for asbestos content is to be removed and disposed of in accordance with the installation hazardous materials control plan.		
9a. ESTIMATED COST OF CORRECTIVE ACTION \$ 16,000.00	9b. APPROPRIATION CPA	
9c. PROGRAM ELEMENT NUMBER 362-109-ATES	9d. BUDGET COST ESTIMATED (BCE: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> )	
10. ESTIMATED ADDITIONAL OPERATING AND MAINTENANCE COSTS, IF ANY \$		
11. DESCRIPTION OF INTERIM HAZARD CONTROL MEASURES IN EFFECT Essential library operations have been moved to temporary facilities in Bldg. 5069. Equipment and materials moved into that building were thoroughly cleaned by contractors with expertise in this area. Air sampling established that detectable levels of asbestos contamination were not present in the new facility.		
12. OTHER RELEVANT INFORMATION		
13. ESTIMATED ABATEMENT COMPLETION DATE 6 Dec 07		
PREPARED BY J.C. Stokes, Safety and Occ. Health Spec.	APPROVED BY Jim Chapman, Chief, Loss Control	

## G-2. Instructions for completion of DA Form 4756.

- a. Block 1 – Not applicable to the VDF.
- b. Block 2 – Self-explanatory.
- c. Block 3 – Enter date when plan is amended.
- d. Block 4 – Enter name of unit and facility which hazard was found.
- e. Block 5 – Enter building number and room number, if applicable, of location.
- f. Block 6 – Enter Risk Assessment Code (RAC).
- g. Block 7 – State specific OSHA or other recognized safety and health standards violated.
- h. Block 8 – Describe project details necessary to abate the hazard to an acceptable level.
- i. Block 9 – Self-explanatory.
- j. Block 10 – Self-explanatory.
- k. Block 11 – Explain interim measure that supervisors and workers are to maintain until hazard is abated to an acceptable level.
- l. Block 12 – Include points of contact, as appropriate.
- m. Block 13 – Enter initial estimate of final abatement date, update as required.

**Appendix H****Safety and Occupational Health Program Sub-functions / Tasks / Cost Drivers**

H-1. Table H-1, below, lists the sub-function definitions, tasks, and cost drivers for the safety and occupational health programs.

<b>Table H-1 Sub-functions, definitions and cost drivers</b>		
<b>Sub-function</b>	<b>Task</b>	<b>Cost Driver</b>
Program management	Develop, justify, manage, plan, organize and implement a safety program to manage compliance with statutory and regulatory standards. This sub-function includes the following programs: leader consultation, human and fiscal resources, policy, and guidance, councils, and records management.	Size of the organizations and mission and sub-programs.
Education, training, and promotion	Design, conduct, develop, and execute safety awareness, statutory and regulatory training, promotional and special emphasis campaigns, and programs to enhance safety awareness throughout the command.	Number of training requirements / events and number and type of personnel.
Mishap and near-miss investigations	Identify mishap casual factors and potentially unsafe practices or conditions, and recommendations for corrective actions to prevent mishap reoccurrence and reduce hazardous conditions. The sub-function includes the following elements: mishap screening, accident feeder reports, notifications, investigation, report review / coordination, report processing, mishap log, board appointments, command level reviews, countermeasure development, malfunction recording for components, OSHA recordkeeping.	Population served. Risk factors. Historical data.
Inspections, surveys, assessments, and technical consultation	Establish and execute a program for the conduct of inspections, surveys, and assessment of programs, projects, events, workplaces / facilities, and training sites.	Level of risk (low, medium, high). Number of inspections and/or evaluations required. Number of units, facilities, events, projects supported.
Hazard analysis and countermeasure	Collect, review, and analyze data from various sources to identify trends, systemic deficiencies and profiles for use in establishing program initiatives and priorities. Develop, implement, and manage a countermeasure program.	Risk level of operations (low, medium, high). Number of data resources (work orders, accident investigations, findings, and recommendations,

		feeder reports).
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## H-2. Common Core Sub-functions and Tasks

Table H-2, below, lists the general sub-functions and tasks applicable to the VDF.

<b>Table H-2</b>
<b>Sub-functions and Tasks</b>
<b>Common core sub-functions / tasks</b>
<b>A. Safety and Occupational Health Program management</b>
Develop, justify, manage, plan, program, and validate budget requirements for resources necessary to conduct safety activities (TDY travel, contracts, etc.)
Respond to inquiries (i.e., congressional / special interests, higher command, etc.)
Serve as staff advisor, technical consultants, and coordinators to the commander and staff. Provides guidance for establishing and implementing plans, policies, programs, and procedures for conducting safety and occupational health activities at all levels of the VDF. Provides technical assistance and professional assistance to eliminate or control unsafe behavior or environments.
Review and comment on local lesson plans, regulations, and SOPs to ensure incorporation of safe techniques, tactics, practices, procedures, and applications of risk management.
Maintain appropriate VDF safety regulations, directives, messages, and publications in a reference library.
Develop, publish, and integrate safety policies and guidance. Develop and integrate safety and occupational health goals, programs, and evaluation criteria into the command's plan.
Coordinate with the appropriate facility manager(s) for necessary safety support of mission training to include maintenance and repair of unsafe conditions existing (i.e., facilities, barracks, dining and support facilities, roadways, and training areas).
Review, provide recommendations, and interpret Safety and occupational health statutes, standards, and policies promulgated by higher command or regulatory agencies.
Serve on boards, committees, and other groups pertaining to safety and occupational health as the commander's representative and SME.
Plan, coordinate, organize, and administer operational safety programs in accordance with local, VDF, OSHA, and other applicable State and Federal regulations.
Establish budgets for resources necessary to conduct safety activities.
Establish and maintain liaison with other military agencies, State and Federal agencies to ensure cooperation on matters of mutual concern.
Develop and implement tactical safety policies, procedures, and standards designed to minimize accidental losses during tactical operations and training without adversely impacting upon mission accomplishment.
Provide guidance and assistance to develop and integrate the safety requirements into tactical exercises, operations, and training.
Develop force protection – mobilization.
Coordinate with other military services and civilian agencies to ensure safe practices and standards are incorporated into joint training exercises (JTX) and joint readiness exercises. Participates in joint and mobilization, and tactical exercises and operations.
Reviews plans to ensure the safety of VDF personnel and the public for proposed demonstrations, exhibits, exercises, maneuvers, and contingencies.
Provide technical safety advice in planning, preparation, and execution of VDF tactical operations. Participates in the planning, conduct, and debrief of exercises. Ensures the incorporation of safety principles into all field training operations orders.

Review and evaluate courses of action in the decision making process and make recommendations for operations.
Review and assist in development of risk assessments of military-type training conducted on range or training areas.
Develop, plan, organize, and execute workplace safety programs to include hazardous communications, respiratory protection, personal protective equipment, materials handling and storage, machinery and machine guarding, hand and portable powered tools and other hand-held equipment, electrical safety, bloodborne pathogens, and confined spaces.
Execute and monitor workplace safety programs identified above.
Ensure each activity maintain MSDS, as needed.
Ensure hazardous materials are stored in accordance with State and Federal standards.
Ensure personnel are trained in wearing proper protective equipment.
Assist in the development of fire protection plans.
<b>Table H-2</b>
<b>Sub-functions and Tasks – Continued</b>
Assist supervisors in evaluation of proper material handling and storage.
Assist in development and implementation of lock-out/tag-out (LOTO) procedures for each piece of equipment.
Develop, plan and coordinate Vehicle Safety Program to include procedures for safe operating of all VDF vehicles.
Review and analyze feeder reports for motor vehicle accidents.
Review safety releases. Review, assess, and provide recommendations for operational requirements documents.
Review and evaluate system training plans and integrate safety procedures.
Establish and implement Radiation Safety Program, as required.
Advise and ensure safe handling of radioactive material, storage and use.
Advise and ensure safe handling of laser and radio frequency systems.
Designate radiation safety officer for ionizing radiation sources, laser, and radio frequency radiation sources.
Ensure radiation safety officer is adequately trained commensurate with their duties and types of materials within their program.
Ensure individuals working with ionizing and/or non-ionizing radiation are properly trained.
Maintain laser and radio frequency radiation source inventory.
<b>B. Inspections, surveys, assessments, and technical consultation</b>
Conduct frequent operational walk-through inspections of industrial-type activities.
Review reports of accident investigations for completeness, accuracy, and the appropriateness of findings and recommendations.
Assess each workplace to ensure each individual is trained on the hazards they are exposed to.
Conduct special general officer directed operational assessments.
Schedule and execute evaluations and assessments of the VDFs accident prevention efforts, effectiveness of risk management, and accomplishment of command composite safety goals and objectives annually, or as required.
Integrate safety and composite risk management assessment criteria into command and other staff evaluation and assessment programs.
Conduct annual and special assessments of training, events, sites, facilities, etc. as required /

directed.
Investigate report of unsafe and unhealthful conditions and respond within 72 hours of report with written report.
Review all identified hazards and assign risk assessment code (RAC). Ensure hazards are in VDF master plan as priority with any RAC 1 or RAC 2 are corrected within 30 calendar days, or as soon as possible.
<b>C. Mishap and near-miss investigations</b>
Collect, review, and analyze data from various sources (accident records, exposure assessments, feasibility studies, hazard probability and severity modeling, inspections, surveys, product, and document assessments) to identify trends, systemic deficiencies, and profiles for use in establishing program initiatives and priorities.
Conduct accident mishap investigations.
Administer an accident notification and reporting program for the command to ensure timely and accurate notification and reporting of accidents and related data.
Establish and manage procedures for accident reporting to ensure timely notification and reporting to comply with VDF and OSHA regulations.
Provide technical assistance in accident investigation and reporting to ensure accuracy, completeness, and timeliness.
Conduct investigations or support accident / incident investigation boards (internal and external) as required. Coordinate findings and recommendations with the correct party(s) for corrective actions. Review, analyze, and inspect accident scene, conduct interviews, and develop written reports.
Establish and maintain safety Web page; provide safety information to other web sites as appropriate.
Prepare, coordinate, and publish VDF safety awareness correspondence (e.g., holiday safety messages, safety of use messages, special emphasis memos, etc.)
Design, conduct, develop, and integrate component risk management (CRM) training in to military training.
<b>D. Education, training, and promotion</b>
Provide hazard recognition and abatement training specific to regulatory and statutory requirements for work site or activity.
Develop and execute safety promotional and special emphasis campaigns and programs to enhance safety awareness throughout the VDF.

<b>Table H-2</b>
<b>Sub-functions and Tasks – Continued</b>
Integrate safety and occupational health procedures into all VDF training guidelines and techniques to be applied in the field.
Conduct required workplace safety training as required by VDF, OSHA, local, State, and Federal applicable regulations.
Distribute aviation and safety flight information.
<b>E. Hazard analysis and countermeasures</b>
Collect, analyze, and disseminate accident data concerning the experience of the command and report to commanders and subordinate elements. Develop recommendations for corrective actions where warranted by adverse accident rates or trends, hazardous conditions or procedures, and other deficiencies.
Design, develop, conduct, and integrate safety and CRM into Leader Development and Safety Officer / NCO training.
Develop, implement, and manage a countermeasure development program (develop control measures, procedures, programs, engineering, administrative, elimination, and PPE).
Ensure that adequate safe practices and safe physical standards are incorporated in operating procedures, manuals, directives, and other instructions.
Develop and plan pre-accident plan.
Develop reports for recommendation of countermeasures.
<b>F. Special tasks</b>
Manage the safety awards program.
Manage the Occupational Health / Industrial Hygiene program.
Support system safety review boards, as needed.
Provide safety support during mobilization and disaster / contingency operations.
Provide safety support to Homeland defense activities, civil support teams, state active duty, etc.
Conduct operational walk-through inspections of industrial-type areas for health hazard inventory, assessment, and evaluation.

### H-3. Facility / Installation support core sub-functions / tasks

Table H-3, below, lists the general facility / installation support core sub-functions and tasks.

<b>Table H-3</b>
<b>Facility / Installation support core sub-functions and tasks</b>
<b>Facility / Installation support</b>
Coordinate necessary safety support for mission training to include maintenance and repair of unsafe conditions existing in infrastructure (i.e., facilities, barracks, dining and support facilities, roadways and training areas, etc.)

## **Glossary**

### **Section 1**

#### **Abbreviations**

ADSC – Additional Duty Safety Course

ADSO – Additional Duty Safety Officer (or NCO)

ANSI – American National Standards Institute

AR – Army Regulation

ARNG – Army National Guard

ASO – Aviation Safety Officer

BBP – Bloodborne pathogens

BBPECP – Bloodborne Pathogen Exposure Control Program

BBPP – Bloodborne Pathogen Program

CBRNE – Chemical, Biological, Radiological, Nuclear, and Explosives

CFR – Code of Federal Regulations

CHEMTREC – Chemical Transportation Emergency Center

CONOPS – Continuity of operations

CPR – Cardio-pulmonary resuscitation

CPSC – Consumer Product Safety Commission

CPX – Command post exercise

CRM – Composite risk management

DA – Department of the Army

DA Pam – Department of the Army Pamphlet

DoD – Department of Defense

DoLI – Virginia Department of Labor and Industry (i.e., State OSHA)

DOT – Department of Transportation

DUI – Driving under the influence

ECP – Exposure control plan

EPA – Environmental Protection Agency

FAA – Federal Aviation Administration

FM – Field Manual

FOIA – Freedom of Information Act

GOV – Government Owned Vehicle

HAZMAT – Hazardous Materials

HBV – Hepatitis B virus

HIV – Human immunodeficiency virus

HSPG – Highway Safety Program Guidelines

IATA – International Air Transport Association

IACO – International Civil Aviation Organization

JHA – Job hazard analysis

MIL-STD – Military Standard

MSDS – Material safety data sheet (see also SDS or safety data sheet)

NARM – Naturally occurring / accelerator produced radioactive material.

NCO – Noncommissioned Officer

NFPA – National Fire Protection Association

NRC – Nuclear Regulatory Commission

NTSB – National Transportation Safety Board

OJT – On-the-job training

OSH – Occupational Safety and Health

OSHA – Occupational Safety and Health Administration

OSH Act – Occupational Safety and Health Act

POC – Point of Contact

POV – Privately Owned Vehicle

PPE – Personal Protective Equipment

RAC – Risk Assessment Code

RSO – Radiation Safety Officer

SDS – Safety data sheet (see also MSDS – MSDS being phased out by revision of OSHA Hazard Communications Standard)

SOH – Safety and occupational health

SOP – Standing Operating Procedure or Standard Operating Procedure

SSMP – Safety System Management Plan

SSP – Strategic Safety Plan

SSRA – Safety System Risk Assessment

TDY – Temporary Duty Assignment

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

VC – Vehicle Commander

VDF – Virginia Defense Force

## Section 2

### Terms

**Accident** – Any unplanned event or series of events that result in death, injury, or illness to personnel, or damage to or loss of equipment or property. (Within the context of this regulation, accident is synonymous with mishap.)

**Accident-based risk management** – A component of CRM used to identify, evaluate, manage and prevent accidents to personnel, equipment, and the environment during peacetime and contingency operations due to safety and occupational health factors and other accident-based factors.

**Aircraft** – Flying machines, whether manned or unmanned, weight carrying structure for navigation of the air that is supported by the dynamic action of the air against its surfaces.

**Aircraft ground accident** – Injury or property damage accidents involving aircraft in which no intent for flight exists and the engine(s) is/are in operation.

**Audit** – A process of collecting information about an organization's safety and occupational health management system and making judgments about its adequacy and performance, identifying both the strengths and weaknesses of the safety and health program as implemented by the organization. To ensure that all necessary safety and health program elements are operating and that procedures are in place for thorough implementation. The aims of auditing should be to establish that: appropriate management arrangements are in place; an adequate CRM control system exists which both reflect the hazard profile of the organization and is properly implemented; and appropriate workplace precautions are in place.

**Command responsibility** – Commanders down the entire chain of command are responsible for the safety of their personnel.

**Commander** – An individual that lawfully exercises over subordinates by virtue of rank or assignment. This includes the authority and responsibility for effectively using available resources for planning the employment or, organizing, directing, coordinating and controlling forces for the accomplishment of assigned missions. This also includes responsibility for health, welfare, morale and discipline of assigned personnel in his or her "command."

**Competent authority** – An individual designated in command, responsible for the direction, coordination and control of personnel. The commander alone is responsible for everything his or her unit does or fails to do. They cannot delegate their responsibility or any part of it, although they may delegate portions of their authority to competent individuals. An individual designated by the commander to address areas of primary interest within that individual's technical expertise.

**Composite risk** – Blends threat-based risks with accidental, hazard-based risks.

**Control** – Action taken to eliminate hazards or reduce their risk.

**Days away from work** – The actual or estimated number of days lost that the individual could not work, excluding the day of the injury / occupational illness. Count all calendar days including weekends and holidays.

**Double hearing protection** – Wearing ear plugs **AND** noise attenuating headsets.

**Educational** – Includes classroom training, excludes field settings such as field training exercises and maneuvers. Examples: Teach/instruct/brief/counsel student/audience activities.

**Emergency** – An event for which an individual perceives that a response is essential to prevent or reduce injury or property damage.

**Engineering controls** – Regulation of facility operations using prudent engineering principles, such as facility design, operation sequencing, equipment selection, and process limitations.

**Environmental factors** – Environmental conditions, which had, or could have had, an adverse effect on the individual's actions or the performance of equipment.

**Establishment** – A single physical location where business is conducted or where services or operations are performed. Where distinctly separate activities are performed at a single physical location, each activity shall be treated as a separate establishment. Typically, an establishment refers to a field activity, regional office, area office, installation, or facility.

**Evaluation** – A specialized inspection designed to determine the effectiveness of a unit's safety and health program.

**Exposure** – The frequency and length of time personnel and equipment are subjected to a hazard.

**Explosion** – A chemical reaction of any chemical compound or mechanical mixture that, when initiated, undergoes a very rapid combustion or decomposition, releasing large volumes of highly heated gases that exert pressure on the surrounding medium. Depending on the rate of energy release, an explosion can be categorized as a deflagration or a detonation.

**Extremely hazardous substances** – The EPA uses the term extremely hazardous substance for the chemicals that must be reported to the appropriate authorities if released above the threshold reporting quantity. Each substance has a threshold reporting quantity. The list of extremely hazardous substances is identified in Title III of Superfund Amendments and Reauthorization Act (SARA) of 1986 (40 CFR 355).

**Facility** – An area within a building that provides appropriate protective barriers for persons working in the facility and the environment external to the facility and outside of the building.

**Field operations** – Operations conducted outdoors or outside of man-made enclosures or structures. Short-term operations in storage structures are also considered as field operations.

**Firefighting** – Activities associated with developing or using firefighting skills.

**First aid** – First aid is defined as using a list of procedures that are all-inclusive and is not a recordable injury. If a procedure is not on the list, it is not considered first aid for recordkeeping purposes. The following are the procedures contained in the list:

- a. Using nonprescription medication at nonprescription strength. However, if an individual is provided prescription medications or nonprescription medications at prescription strength, this is considered medical treatment.
- b. Tetanus immunizations.
- c. Cleaning, flushing, or soaking surface wounds.
- d. Wound coverings, butterfly bandages, Steri-Strips. The use of wound closure methods such as sutures, medical glues, or staples is considered medical treatment.
- e. Hot or cold therapy regardless of how many times it is used.
- f. Nonrigid means of support.
- g. Temporary immobilization device(s) used to transport accident victims.
- h. Drilling of fingernail or toenail; draining fluid from blister.
- i. Eye patches.
- j. Removing foreign bodies from eye using irrigation or cotton swab. However, use of other methods to remove materials from the eye is medical treatment.
- k. Removing splinters or foreign material(s) from areas other than the eye by irrigation, tweezers, cotton swabs, or other simple means.
- l. Finger guards.
- m. Massages. Massage therapy is first aid, but physical therapy or chiropractic treatment is considered medical treatment.
- n. Drinking fluids for relief of heat stress. (Drinking fluids for relief of heat stress is first aid, but administering an IV is medical treatment.)

**Flammable** – A material that has the characteristic of being easily ignited and burning readily.

**Flight mission** – Flight or series of flights (sorties), conducted to accomplish a specific task or series of tasks in support of the unit's approved mission statement. Each mission is assigned to a designated pilot-in-command (PC) and/or air mission commander.

**Foreign object damage (FOD)** – Damage to VDF vehicle/equipment/property as a result of objects alien to the vehicle/equipment damaged. Excludes aircraft turbine engines defined as a FOD incident.

**Ground accident** – Any accident exclusive of aviation (flight / flight-related / aircraft-ground).

**Hazard** – Any actual or potential condition that can cause injury, illness, or death of personnel or damage to or loss of equipment, property, or mission degradation or a condition or activity with potential to cause damage, loss, or mission degradation.

**Hazard analysis** – A hazard analysis is a clear, systemic, concise, well defined, orderly, consistent, closed-loop, quantitative or qualitative and objective methodology used to identify

possible hazards within a mission, system, equipment, or process that can cause losses to the mission, equipment, process, personnel, or damage to the environment. Examples of hazard analyses are: What-If, Preliminary Hazard Analysis, Sneak Circuit Analysis, Hazard and Operability Study, Fault Tree Analysis, Failure Mode and Effects Analysis, and Fault Hazard Analysis.

**Hazardous chemical** – OSHA uses the term hazardous chemical to denote any chemical that would be a risk to individuals if exposed in the workplace. Hazardous chemicals cover a broader group of chemicals than the other chemical lists.

**Hazardous wastes** – The EPA uses the term hazardous wastes for chemicals that are regulated under the Resource Conservation and Recovery Act (RCRA) (42 USC 6901). Hazardous wastes in transportation is regulated by DOT (49 CFR 170 through 49 CFR 179).

**Hazard class** – The United Nations Organization hazardous classification system, which contains 9 hazard classes, is used by the DOT for dangerous materials to identify the hazardous characteristics of the material(s).

**Hazardous materials (HAZMAT)** – Definitions are:

- a. “Hazardous material” means any material that has been designated as hazardous under 49 USC 5101 to 49 USC 5127 and is required to be placarded under 49 CFR 172, Subpart F or any quantity of material listed as a select agent or toxin in 42 CFR 73.
- b. Substances that have hazardous characteristics such as flammable, corrosive, reactive, toxic, radioactive, poisonous, carcinogenic or infectious, having properties capable of producing adverse effects on the health and safety or the environment of a human being. Legal definitions are found in individual regulations.
- c. Any substance of material involved in an accident and released in sufficient quantities, poses a risk to people’s health, safety, and/or property. These substances and materials include explosives, radioactive materials, flammable liquids or solids, combustible liquids or solids, poisons, oxidizers, toxins, and corrosive materials (Federal Emergency Management Agency definition).
- d. The DOT uses the term hazardous materials which covers 8 hazard classes, some of which have subcategories called classifications and a ninth class covering other regulated materials. The DOT includes in its regulations hazardous substances and hazardous wastes as other regulated materials-E (ORM-E), both of which are regulated by the EPA, if their inherent properties would not otherwise be covered.

**Hazardous Substances** – Two form of definitions:

- a. The EPA uses the term hazardous substance for the chemicals that, if released into the environment above a certain amount, must be reported and depending on the threat to the environment, Federal involvement in handling the incident can be authorized. A list of the hazardous substances is published in 40 CFR 302, Table 302.4.
- b. OSHA uses the term hazardous substance in 29 CFR 1910.120, which resulted from Title I of SARA and covers emergency response. OSHA uses the term differently than the EPA. Hazardous substances, as used by OSHA, cover every chemical

regulated by both DOT and EPA.

**Health hazard** – An existing or likely condition, inherent to the operation, maintenance, storage or disposal of material or a facility, that can cause death, injury, acute or chronic illness, disability, or reduced job performance.

**Health hazard assessment** – The application of biomedical and psychological knowledge and principles to identify, evaluate, and control the risk to the health and effectiveness of personnel.

**Hospitalization** – Admission to a hospital as an in-patient for medical treatment.

**Human error** – Human performance that deviated from that required by the operational standards or situation. Human error in accidents can be attributed to a system inadequacy / root cause in training, standard, leader, individual, or support failure.

**Human factors** – Human interactions (man, machine, and/or environment) in a sequence of events that were influenced by, or the lack of human activity, which resulted or could result in an accident.

**Imminent danger** – Conditions or practices in any workplace that pose a danger that reasonably could be expected to cause death or severe physical hardship before the imminence of such danger could be eliminated through normal procedures.

**Independent evaluation** – The process used by the independent evaluators to independently determine if the system satisfies the approval requirements. It will render an assessment of data from all sources, simulation and modeling, and an engineering or operational analysis to evaluate the adequacy and capability of the system.

**Individual risk** – Risk to a single exposed person.

**Inherent hazard** – An existing or permanent hazard (i.e., high voltage).

**Injury** – A traumatic wound or other condition of the body caused by external force, including stress or strain. The injury is identifiable as to time and place of occurrence and member or function of the body affected, and is caused by a specific event, incident, or series of events within a single day or work shift.

**Inspection** – Comprehensive survey of all or part of a workplace in order to detect safety and health hazards. Inspections are normally performed during regular work hours or the organization, except as special circumstances may require. It is also the process of determining compliance with safety and health standards through formal and informal surveys of workplaces, operations, and facilities.

**Intent for flight** – Intent for flight begins when power is applied or brakes released to move the aircraft under its own power, for the purpose of commencing authorized flight with an authorized crew. Intent for flight ends when the aircraft is at a full stop and power is completely reduced.

Intent for flight is the physical act of applying power to move the aircraft, not the thought process of the crew member as to what is going to occur in the future.

**Investigation** – A systematic study of an accident, incident, injury, or occupational illness circumstance.

**Laser** – A device capable of producing a narrow beam of intense light (LASER = light amplification by stimulated emission of radiation).

**Life cycle** – The life of a system from conception to disposal.

**Maintenance / repair / servicing** – Activities associated with the maintenance, repair or servicing of equipment or other property. Excludes janitorial, housekeeping, or grounds-keeping activities.

**Medical treatment** – Medical treatment is the management and care of a patient to combat disease or disorder. It does not include:

- a. Visits to a physician or licensed health care professional solely for observation or counseling.
- b. Diagnostic procedures.
- c. First aid.

**Mishap risk management** – A component of CRM used to identify, evaluate, and prevent accidents to personnel, equipment, and the environment during peacetime and contingency operations due to safety and occupational health factors, design and construction of equipment, and other mishap factors.

**Mission** – Flight or series of flights (sorties), conducted to accomplish a specific task or series of tasks in support of the unit's approved mission statement. Each mission is assigned to a designated pilot in command and/or air mission commander.

**Motorcycle** – Powered two- and three-wheeled vehicles, including mopeds and motorbikes.

**Near miss** – A potentially serious accident or incident that could have resulted in personnel injury, death, or property damage, damage to the environment and/or illness, but did not occur due to one or more factors.

**Note** – Additional information provided to expand understanding of the subject and to call attention to areas of interest.

**Occupational hazard** – Conditions, procedures, and practices directly related to the work environment that creates a potential for producing occupational injuries or illnesses.

**Occupational illness** – Non-traumatic physiological harm or loss of capacity produced by systemic infection; continued or repeated stress or strain; for example, exposure to toxins, poisons, fumes; or other continued and repeated exposures to conditions of the work

environment over a long period of time. Includes any abnormal physical or psychological condition or disorder resulting from an injury caused by long- or short-term exposure to chemical, biological, or physical agents associated with an occupational environment. For practical purposes, an occupational illness is any reported condition that does not meet the definition of an injury.

**Occupational injury** – A wound or other condition of the body caused by external force, including stress or strain. The injury is identifiable as to time and place of the occurrence and a member or function of the body affected, and is caused by a specific event, incident, or series of events or incidents within a single day or work shift.

**Office** – Activities associated with the performance of clerical, typing, and administrative type duties. Excludes supervisory activities. Examples: Typing / work processing, filing / posting, telephoning, operating office machines.

**Off-duty** – VDF personnel are off-duty when they:

- a. When they are not in an on-duty status, whether on or off a VDF facility or military installation.
- b. Have departed official duty station or temporary duty station at termination of normal work schedule. (**NOTE:** For VDF personnel, this normally includes the one-way travel period to and from the individual's home of record and the duty location. It does not include travel time for multiple-day events other than the initial travel to and the final travel from the duty location.)
- c. Are participating in voluntary and/or installation team sports.
- d. Are on lunch or other rest break engaged in activities unrelated to eating and resting.

**On-duty** – VDF personnel are considered on-duty, for the purposes of accidents, when they are:

- a. Physically present at any location where they are to perform their officially assigned work. (This includes those activities incident to normal work activities such as lunch, coffee, or rest breaks. This does not include non-work related activities (e.g., working on a personal vehicle during work hours).
- b. Being transported by VDF owned or contracted vehicles for the purpose of performing officially assigned work. This would include initial travel to and from a drill or TDY location in a POV, but not daily transportation to or from a work location.
- c. Participating in compulsory physical training activities or other organization events.

**Operating vehicle** – Activities associated with operating vehicle under power. Examples: Driving, convoying / road marching, towing / pushing, mowing, hauling / transporting, driver testing, flying.

**Over-the-road** – Operation or driving on paved roads / highways.

**Permanent partial disability** – Any injury or occupational illness that does not result in death or permanent total disability, but in the opinion of competent medical authority, results in the loss or permanent impairment of any part of the body, with the following exceptions:

- a. Loss of teeth.
- b. Loss of fingernails or toenails.
- c. Loss of tip of fingers or toes without bone involvement.
- d. Inguinal hernia, if it is repaired.
- e. Disfigurement or sprains or strains that do not cause permanent limitation of motion.

**Permanent total disability** – Any nonfatal injury or occupational illness that, in the opinion of competent medical authority, permanently and totally incapacitates a person to the extent that he or she cannot follow any gainful employment. (The loss of, or the loss of use of, both hands, feet, eyes, or any combination thereof as a result of a single accident will be considered as permanent total disability.)

**Physical training** – Body conditioning or confidence building activities. Examples: Confidence courses, marches, running / jogging, physical training test.

**Probability** – Probability is the qualitative or quantitative likelihood of a particular event or sequence of actions initiated by a hazard-related Cause resulting in a Maximum Credible Loss. The Probability can be expressed as the product of the Incident Rate and Mishap Set Likelihood.

**Qualified safety and health personnel** – Includes personnel who have been primarily engaged in safety and occupational health specialties in the military or civilian occupations, have documented training within these areas (i.e., associates, bachelors, and/or masters degrees), and/or are qualified under the civil service classifications for safety, medical, occupational health, or industrial hygiene.

**Recommendations** – Those actions advocated to the command to correct system inadequacies that caused, contributed, could cause or contribute to a VDF accident. Also referred to in this regulation as corrective action, remedial measures and/or countermeasures.

**Recordable accident** – Reportable accident that meets the minimum criteria stated in the regulation for aviation and ground Class A-D accidents.

**Reportable accident** – All occurrences that cause injury, occupational illness, or property damage of any kind must be reported to the local safety office and to the VDF, G.W. Division Safety Office.

**Residual hazards** – Hazards that are not eliminated by design.

**Residual significant risk** – Any risk remaining in a system after corrective actions have been executed.

**Residual risk** – The levels of risk remaining after controls have been identified and countermeasures selected for hazards that may result in the loss of effectiveness. Risks remaining after hazard mitigation measures have been applied.

**Restricted work activity** – Individual's injury is such that they are unable to perform their normal duties (e.g., light duty).

**Risk** – Risk is directly related to the ignorance or uncertainty of the consequences of any proposed action. Risk is an expression of possible loss in terms of hazard severity and hazard probability. Risk is the expected value of loss associated with a loss caused by a hazard expressed in dollars. The risk associated with this loss is mathematically derived by multiplying the probability of the loss's likelihood by the probable dollar loss associated with the loss's severity. Note that risk has two dimensions – likelihood and magnitude, while a hazard has only one – varied magnitude.

**Risk acceptability** – Risk acceptability is that level of risk which has been determined as tolerable in order to fulfill mission requirements. It represents a level of risk where either the output of resources to rectify safety deficiencies does not result in a proportional increase in the level of safety to be provided; or so restricts the performance that the assigned mission cannot be executed.

**Risk acceptance** – Risk acceptance is a formal and documented process indicating that leadership understands the hazard, its associated cause, and the probable consequences to mission, personnel, equipment, public and/or the environment and that they have determined that the total risk is acceptable because of mission execution.

**Risk acceptance level** – Used to denote the level of risk a particular level of leadership may accept. These levels are based on the magnitude of the risk involved and the duration of the risk acceptance.

**Risk assessment** – An evaluation of a risk in terms of loss should a hazard result in an accident and against the benefits to be gained from accepting the risk.

**Risk decision** – The decision to accept or not accept the risk(s) associated with an action; made by the commander, leader, or individual responsible for performing the action and having the appropriate resources to control or eliminate the risk's associated hazard.

**Safety** – Freedom from those conditions that can cause death, injury, occupational illness, or damage to, or loss of, equipment or property.

**Safety objectives** – Criteria for comparing and judging measures for adequacy. Safety objectives incorporate the safest measures consistent with operational requirements.

**Security / law enforcement** – Activities associated with MP or other personnel performing security or law enforcement rescue duties. Examples: Traffic safety guarding / patrolling, controlling disturbances.

**Severity** – A qualitative or quantitative assessment of the degree of injury, occupational illness, property, facility, or environmental damage associated with a maximum credible loss. Severity is dependent only on the Maximum Credible Loss. Once established for a Maximum Credible Loss, it does not change. Only the probability of a Maximum Credible Loss can be reduced.

**Significant Risk** – A risk associated with a particular hazard where the hazard likelihood of occurrence and its potential impact on the mission, person, equipment, or facility is such that it can be reasonably expected to cause bodily harm, damage to equipment, or the facility, or delay in the execution of the mission unless corrected. Normally, they are assigned a RAC of 1, 2, or 3.

**Single-hazard risk** – Risk associated with a single hazard of the system.

**Single hearing protection** – Wearing either ear plugs or noise attenuating headsets.

**Special hazards areas** – Areas identified containing hazards which due to their nature could not be eliminated through design selection and therefore depend upon training, procedures, and PPE for control of the hazards to tolerable levels. Examples: Kitchens, machine shops, areas around conveyor belts, hazardous chemical storage areas, etc.

**Standards failure** – Standards / procedures not clear or practical, or do not exist.

**Supervisory** – Activities associated with the management of personnel.

**Support failure** – Inadequate equipment / facilities / services in type, design, availability, or condition, or insufficient number / type of personnel, which influenced human error, resulting in a VDF accident.

**System** – A composite, at any level of complexity, of trained personnel, procedures, materials, tools, equipment, facilities, and software. The elements of this composite entity are used together in the intended operational or support environment to perform a given task or achieve a specific production, support, or mission requirement.

**System inadequacy** – A tangible or intangible element that did not operate to standards, resulting in human error or materiel failure. Also referred to as causes, readiness shortcomings, and/or root causes.

**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 systems', equipment's, or facilities' life cycle.

**System safety lesson learned** – A collection of real or potential safety or health-related problems based on data analysis or experience that can be applied to future and current systems to prevent similar recurrences.

**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.

**System safety management plan (SSMP)** – A management plan that defines the system safety program requirements of the VDF or Government. It ensures the planning, implementation, and accomplishment of system safety tasks and activities consistent with the overall program requirements.

**Tolerable risk** – The level of risk associated with a specific hazard below which a hazard does not warrant any expenditure or resources to mitigate. From a legal standpoint it would be considered as a “de minimus” risk, from the Latin phrase “de minimus noncurat lex,” meaning “the law does not concern itself with trifles.”

**Training-related death** – A death associated with a non-combat type exercise or training activity that is designed to develop an individual’s physical ability or to maintain or increase individual / collective skills, and is due to either an accident or the result of natural causes occurring during or within one hour after any training activity where the exercise or activity could be a contributing factor. This does not apply to individuals participating in personal wellness or exercise programs.

**VDF accident** – A VDF accident is defined as an unplanned event, or series of events, which results in one or more of the following:

- a. Occupational illness to VDF personnel.
- b. Injury to on-duty VDF personnel.
- c. Damage to VDF property.
- d. Damage to public or private property, and/or injury or accident to non-VDF personnel caused by VDF operations (i.e., the VDF had a causal or contributing role in the accident).

**VDF property** – Any item of VDF property, or property leased by the VDF for which the VDF has assumed risk of loss, such as aircraft, vehicle, building, structure, system, etc.

**VDF Vehicle** – Any vehicle that is owned, leased, or rented by the Virginia Defense Force. A vehicle that is primarily designed for over-the-road operation. A vehicle whose general purpose is the transportation of cargo or personnel. Examples are passenger cars, station wagons, trucks, ambulances, and buses.

**Workplace** – A place (whether or not within or forming a part of a building, structure, or vehicle) where any person is to work, is working, for the time being works, or customarily works, for gain or reward; and in relation to an employee, includes a place, or part of a place, under the control of the employer.

**Work-related injuries** – Injuries or occupational illnesses incurred while performing duties in an on-duty status.