

ENVIRONMENTAL HANDBOOK



FORT WALKER
VIRGINIA



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**Environmental Management System
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In accordance with the Fort Walker Sustainable Environmental Management System (SEMs), this is an uncontrolled document printed for reference only. An electronic copy of the uncontrolled document can be found on-line on the Fort Walker website at:

<https://home.army.mil/walker/my-fort/all-services/environmental>

This Environmental document is part of Fort Walker's SEMs. The leadership of the government and the Army has recognized a need for how environmental issues and sustainability concerns are integrated into the military mission. ISO 14001 is an international standard for environmental management systems that focuses on achieving and demonstrating sound environmental performance by controlling the impacts of activities, products, and services on the environment consistent with environmental policy and objectives. PLAN-DO-CHECK-ACT is a basic concept in the ISO world. Based on the ISO 14001 framework, an EMS has five components: Environmental Policy (see Appendix D), Planning, Implementation and Operation, Checking and Corrective Action, and Management Review.

ENVIRONMENTAL HANDBOOK FORT WALKER, VA

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ACRONYMS AND ABBREVIATIONS

AAV	Amphibious Assault Vehicles
ACM	Asbestos Containing Material
ACUB	Army Compatible Use Buffer
ALARACT	All Army Activities
ASP	Ammunition Supply Point
ATP	Army Techniques Publication
BMP	Best Management Practices
CDD	Construction Debris and Demolition
CFC	Chlorofluorocarbon
CFL	Compact Fluorescent Light
CFR	Code of Federal Regulations
CKT	Containerized Kitchen Trailers
CRM	Cultural Resources Manager
CWA	Clean Water Act
DCR	Department of Conservation and Recreation
DEQ	Department of Environmental Quality
DES	Directorate of Emergency Services
DFAC	Dining Facility
DFMWR	Directorate of Family & Morale, Welfare and Recreation
DGIF	Department of Game and Inland Fisheries
DHR	Department of Historic Resources
DMO	Demand Maintenance Order
DOD	Department of Defense
DPTMS	Directorate of Plans, Training, Mobilizations, and Security
DPW	Directorate of Public Works
DRMO	Defense Reutilization and Marketing Office
DOE	Department of Energy
DOI	Department of the Interior
DOT	Department of Transportation
EPA	United States Environmental Protection Agency
ESCP	Erosion and Sedimentation Control Plan
ESRA	Environmentally Sensitive Resource Area
GAA	Grease Automotive and Artillery
GSA	General Service Administration
eMs	Environmental Management System
EPDS	Environmental Preferable Products
ERND	Environmental and Natural Resources Division
EPEAT	Electronic Product Environmental Assessment Tool
FARPS	Forward Arming and Refueling Points
FRH	Flameless Ration Heater
GP	Green Procurement
HAZMAT	Hazardous Material
HID	High Intensity Discharge
IDPCP	Integrated Discharge Prevention and Contingency Plan
INRMP	Integrated Natural Resources Management Plan
IOS	International Organization of Standardization
LED	Light Emitting Diode
LID	Low Impact Development
LBP	Lead-Based Paint

LWP	Lightweight Water Purification
MILCON	Military Construction
MKT	Mobile Kitchen Trailer
MRE	Meals Ready-to-Eat
MSN	Manufacturer's Serial Number
MWD	Military Working Dog
NLT	No Later Than
ODS	Ozone Depleting Substances
O&M	Operation and Maintenance
OMA	Operation and Maintenance Army
ONMP	Operational Noise Management Plan
ODCP	Oil Discharge Contingency Plan
ODS	Ozone Depleting Substances
OSHA	Occupational Safety and Health Administration
NEPA	National Environmental Policy Act
PCB	Polychlorinated Biphenyl
PMO	Provost Marshal Office
POC	Point of Contact
POL	Petroleum, Oil, Lubricant
POV	Privately Owned Vehicle
PPM	Parts Per Million
RCRA	Resource Conservation and Recovery Act
RLD	Responsible Land Disturber
ROWPU	Reverse Osmosis Water Purification Units
RPA	Resource Protection Area
SCU	Secondary Containment Unit
SDS	Safety Data Sheet
SEMS	Sustainable Environmental Management System
SMZ	Streamside Management Zone
SOP	Standard Operating Procedure
SPCC	Spill Prevention, Control, and Countermeasures
SWPPP	Stormwater Pollution Prevention Plan
TBT	Tributyltin
TMDL	Total Maximum Daily Load
TWPS	Tactical Water Purification Systems
UGR-E	Unified Group Ration-Express
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UXO	Unexploded Ordnance
VOC	Volatile Organic Compound
VPDES	Virginia Pollutant Discharge Elimination System
VSMP	Virginia Stormwater Management Permit

Statement of Limitations

This handbook is based on data and information provided by Fort Walker that is generally applicable as of September 2023. This report is to be used for reference only. This handbook does not serve as a regulatory guidance document; therefore, current regulatory guidance should be consulted.

1.0 INTRODUCTION

The Directorate of Public Works (DPW) Environmental and Natural Resources Division (ENRD) manages the environmental program at Fort Walker, Virginia. The ENRD has implemented a Sustainable Environmental Management System (SEMS) that provides the framework to manage all environmental programs and aspects associated with installation operations.


As part of the SEMS, Fort Walker has adopted an Environmental Policy, signed by the Garrison Commander. This Policy is Fort Walker's statement of overall direction and principles of action regarding its environmental responsibility.

This handbook was developed to be extremely user friendly and easy to use and is intended for use by Fort Walker personnel, military units, contractors, vendors and outside organizations utilizing Fort Walker facilities. Each topic, or *Tear Sheet*, has been purposely limited to one page in an effort to provide the most useful information in regards to handling the particular item or circumstance.

The Environmental Handbook is comprised of Fact Sheets which outline:





Possible Areas of Concerns – This area describes what the potential hazards are as they relate to the environment, safety and the handler.


Handling Procedures – Here, steps are outlined describing how to appropriately dispose of or handle the topic of interest and other notes, which will provide useful information. Read all the steps first before beginning the process.

General Information – When the previous areas have not completely alleviated the problem, contact information to include phone numbers and hyperlinks to email them have been provided. Look for the sustainability symbol  at the bottom of each Tear Sheet. This symbol represents Fort Walker's desire to ensure that our Soldiers have the necessary resources available for the future. Sustainability is acting

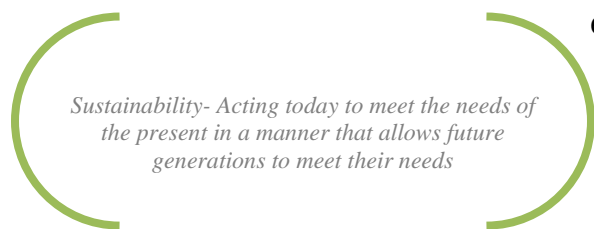
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BATTERIES

POSSIBLE AREAS OF CONCERN	
Batteries are recyclable and may be flammable, reactive, corrosive, and/or toxic depending on the type of battery.	
CHARACTERIZATION	
Nickel metal hydride, nickel-cadmium, magnesium, mercury, lithium-ion, lithium batteries (i.e., radio batteries used by soldiers) are considered universal wastes.	
HANDLING PROCEDURES	
Non-Lead Acid Batteries	
Nickel metal hydride, nickel-cadmium, magnesium, mercury, lithium-ion, lithium batteries (i.e., radio batteries used by soldiers) must be collected and turned in to DPW Warehouse (Bldg. 1237) with the appropriate Safety Data Sheet (SDS) if applicable.	 Lithium Radio Battery
For large quantities, call the ENRD at 804-633-8255 to coordinate battery pick up.	 Lithium, nickel-cadmium (Ni-CD), lithium-ion, nickel metal hydride, magnesium, and mercury batteries must be turned in to the Warehouse (Bldg. 1237).
Alkaline and carbon-zinc batteries shall be recycled at the DPW Warehouse.	
Target Batteries	
Batteries used in targets should be turned in to Range Control.	 Target Battery
Lead Acid Batteries	
Lead acid vehicle batteries shall be taken to DS Maintenance (Bldg. 1290). See lead acid battery Tear Sheet A-40 for additional information.	 Lead Acid Battery
GENERAL INFORMATION	
Refer to the recycling Tear Sheet A-58 for a map of recycling locations. For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).	



today to meet the needs of the present in a manner that allows future generations to meet their needs. Fort Walker has implemented several goals in order to ensure



effective support for the future of the mission, community and environment. Each fact sheet relates to one of these sustainability goals: Mission Enhancement, Net Zero Initiatives, Compliance Leadership, and Community Engagement. Follow the steps as outlined in each

fact sheet and you will be able to see which specific goal you are supporting.

MISSION ENHANCEMENT	• Training Lands and Natural Resource Mgmt, T&E surveys, Forestry, Recreation, Hunting, Fishing, Water Quality, E&S, Ches. Bay
NET ZERO INITIATIVES	• Energy, Fuels, Water Conservation, Waste Diversion, Recycling, Green Procurement, HAZMAT Mgmt, Green Building /LEED Design
COMPLIANCE LEADERSHIP	• Compliance, Monitoring, Permitting, NEPA, Air, EMS, EPAAS, VEEP E4 Designation
COMMUNITY ENGAGEMENT	• Noise Mgmt, Encroachment/ ACUB, Earth Day, Career Day, Recreation, Forestry Contribution to Schools, Air Attainment Area/SIP

2.0 REVISIONS

The Fort Walker ENRD will review this handbook annually. ENRD personnel, as well as, other Fort Walker personnel are encouraged to provide comments and suggestions to improve this handbook. Please submit comments to the ENRD via e-mail at:

usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil

3.0 REGULATORY APPLICABILITY

3.1 Commonwealth of Virginia

Environmental issues at Fort Walker are regulated by multiple agencies within the state of Virginia including but not limited to:

- Virginia Department of Environmental Quality (DEQ);
- Virginia Department of Conservation and Recreation (DCR);
- Virginia Department of Wildlife Resources (DWR);
- Virginia Department of Historic Resources (DHR); and
- Virginia Department of Transportation (DOT).

3.2 Federal

Environmental issues at Fort Walker are also regulated by multiple agencies within federal government including but not limited to:

- United States Environmental Protection Agency (USEPA);
- Department of the Interior (DOI); and
- Occupational Safety and Health Administration (OSHA).

3.3 Military

Fort Walker personnel must comply with AR 200-1, Environmental Protection and Enhancement, and the Fort Walker Environmental Policy. If you would like a copy of the most recent AR 200-1, please contact the ENRD at 804-633-8255.

4.0 ENVIRONMENTAL TOPICS

This section outlines environmental topics covered in this handbook. This handbook is not inclusive of all possible environmental topics but is to serve as guidance for the most common environmental issues encountered at Fort Walker. Tear Sheets are provided in Appendix A.

4.1 Air Quality

4.1.1 Background

The Clean Air Act is a federal law passed to regulate air emissions from stationary and mobile sources on a national level. Air quality standards were developed to protect citizens and the atmosphere from the release of hazardous contaminants.

4.1.2 Applicability at Fort Walker

Protecting air quality at Fort Walker reduces potential impacts to natural resources located on the installation and is part of the U.S. Army Sustainability program created to promote sustainable installations without jeopardizing the quality of training drills.

4.2 Asbestos Containing Material

4.2.1 Background

Any material containing more than one percent asbestos which has been applied to any ceiling, wall, duct, boiler, tank, pipe, structural member, or on any other part of a building or equipment is considered an asbestos containing material (ACM). Serious health risks, including lung disease and cancer, can develop due to inhalation of airborne asbestos particulates typically generated by renovation and demolition activities.

4.2.2 Applicability at Fort Walker

ACM is present in structures at Fort Walker. A variety of products and materials may contain asbestos and proper care should be taken before working in areas suspected of

having potential ACM. Following the proper protocols and procedures when living and working around ACM will reduce the possibility of exposure to asbestos particulates.

4.3 Cultural Resources Management

4.3.1 Background

The National Historic Preservation Act of 1966 was enacted to preserve and protect irreplaceable historic and culturally important properties. The preservation of these properties is meant to strengthen our national heritage and ensure that future generations have an opportunity to enjoy and appreciate the rich heritage of our Nation.

4.3.2 Applicability at Fort Walker

Training areas at Fort Walker contain several types of cultural resources such as historic properties, archeological sites, religious/heritage sites, and unmarked graves. Conservation involves protecting and managing irreplaceable resources such as archaeological sites, historic buildings and structures, landscapes, and objects that are the fabric of our national heritage.

4.4 Hazardous Materials

4.4.1 Background

Hazardous materials are solids, liquids, or gases that can harm people, other living organisms, property, or the environment. Hazardous materials are typically toxic, corrosive, ignitable, explosive, or chemically reactive.

4.4.2 Applicability at Fort Walker

Hazardous materials are used in the daily operation of Fort Walker and should be acquired, used, stored, and disposed of in a manner that reduces the risk of spill and is protective of human health and the environment.

4.5 Hazardous Waste

4.5.1 Background

Wastes (solids, sludge, liquids, and containerized gases other than radioactive and infectious wastes) which due to their chemical activity or toxic, explosive, corrosive, or other characteristics cause danger to health or the environment, whether alone or when coming into contact with other waste.

The Resources Conservation and Recovery Act (RCRA) is a law that provides the general guidelines for waste management and EPA regulations translate the general mandate of RCRA into a set of requirements for the Agency and the regulated community. The RCRA hazardous waste program regulates commercial businesses as well as federal, state, and local government facilities that generate, transport, treat, store, or dispose of hazardous waste.

40 CFR Part 260 contains the RCRA regulations governing hazardous waste identification, classification, generation, management, and disposal.

4.5.2 Applicability at Fort Walker

Hazardous wastes are generated at Fort Walker and pose a serious health risk when not properly controlled. By minimizing generation and limiting the accumulation of

hazardous wastes to specific areas, dangers to human health and the environment can be managed more effectively.

4.6 Lead Containing Paint

4.6.1 Background

Paint or other similar surface coating materials containing lead or lead compounds, in which the lead content (calculated as lead metal) is in excess of 0.50 percent by weight or 5000 ppm, are the HUD guidelines for determining what materials are considered lead containing material (LCM). Although many regulations deal with lead paint in schools and target housing, 29 CFR 1910 and 29 CFR 1926 are the standards that address lead hazards in the general industry and construction industry.

4.6.2 Applicability at Fort Walker

Lead paint may be present on structures built prior to 1980 at the facility and can be dispersed into the environment during repair and renovation activities. Appropriate notice must be given before beginning work and proper care and safety measures should be taken when working in these locations to prevent lead particulates from contaminating air quality and endangering human health.

4.7 Natural Resources Management

4.7.1 Background

Federal laws and Army regulations govern the management of natural resources such as land, air, water, soil, plants, and animals, with a particular focus on how management can negatively impact or enhance the training mission. Population growth and urban development in areas surrounding military installations has led to greater awareness of the importance of protecting natural habitats and protected species on the facility property.

4.7.2 Applicability at Fort Walker

Federal laws such as The Sikes Act and the Endangered Species Act required federal lands to manage and conserve their natural resources including protected species. The U.S. Fish and Wildlife Service and the Virginia Department of Agriculture and Consumer Services are the primary agencies responsible for the conservation of federal and state listed species, respectively. Five threatened and/or endangered species identified by these agencies occur on Fort Walker.

The U.S. Army Sustainability program was created to promote sustainable installations without jeopardizing the training mission. By regulating maintenance activities and employing training procedures to minimize impacts to natural resources located at Fort Walker, the protection of endangered species and habitats can be ensured while still allowing appropriate training exercises and recreational activities to take place.

4.8 Pesticides

4.8.1 Background

Any chemical substance, biological agent, antimicrobial, disinfectant, or device intended for preventing, destroying, repelling, or mitigating any pest is considered a pesticide.

4.8.2 Applicability at Fort Walker

Various types of biological hazards are present at Fort Walker. Identifying and reporting the nuisance plant, insects, or animal species before exposure will help to avoid injury from bites, stings, or skin contact and protect you from the spread of disease.

Due to the dangers associated with pesticide use and contact with nuisance species, all nuisance wildlife issues at Fort Walker are handled by Pest Control.

4.9 Spill Prevention and Response

4.9.1 Background

Spill prevention is the appropriate procedures and materials to adequately contain and/or avoid a spill. Spill prevention is inhibiting or reducing the discharge of pollutants to drainage systems or watercourses from leak and spills.

Spill prevention and response procedures have been developed for Fort Walker based on the requirements of state and federal regulations as well as those established by the facility. Facility procedures have been established and documented in the Integrated Discharge Prevention and Contingency Plan (IDPCP), Storage Tank Management Plan, and the Bulk POL Facility's Stormwater Pollution Prevention Plan (SWPPP).

4.9.2 Applicability at Fort Walker

An IDPCP has been developed for Fort Walker, combining the facility's Spill Prevention, Control, and Countermeasures (SPCC) Plan (40 CFR 112.4(A)) and Oil Discharge Contingency Plan (ODCP; 9 VAC 25-91-170). The purpose of the IDPCP is to clarify responsibilities for operation and maintenance of oil storage tanks and associated piping systems and to ensure that practices and procedures are in place to minimize the risk or occurrence of an event that could introduce oil into navigable waters of the United States in accordance with the associated regulations. The plan identifies the location of fuel storage tanks, the type and capacity of each tank, the presence of nearby waterways, and the safety, inspection, and spill response protocols required of the facility.

Fort Walker has a Storage Tank Management Plan in place which consolidates information for storage tank management and operation and maintenance (O&M). It is organized to facilitate its use for program management and maintaining compliance with applicable regulations, laws, and Facility Sustainable Environmental Management System (SEMS) requirements.

4.10 Solid Wastes

4.10.1 Background

Solid wastes include sanitary wastes, universal wastes, recyclable materials, and medical waste. Solid wastes are generated by all activities taking place at the facility. As with hazardous waste, RCRA provides the general guidelines for solid waste management and the EPA has established requirements of the regulated community. 40 CFR Parts 239 through 259 contain the regulations for solid waste. The federal universal waste regulations are set forth in 40 CFR Part 273.

4.10.2 Applicability at Fort Walker

Solid wastes are generated at Fort Walker and the facility has established a SEMS aimed in part on moderating the amount of solid waste generated and disposed of at the facility which centers on the principle of reduce, reuse, and recycle. The SEMS is an environmental policy and system aimed at achieving specific objectives and targets to protect the environment. Fort Walker established their SEMS based on the Army's overall sustainability goals and objectives.

For the SEMS to be successful, all employees must be knowledgeable participants within the established guidelines.

4.11 Water Quality

4.11.1 Background

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The EPA has set water quality standards for all contaminants in surface waters. It is unlawful to discharge any pollutant from a point source into navigable waters, unless a permit is obtained.

Discharges from the Bulk POL Facility and other collocated sites at Fort Walker are covered under the General Virginia Pollutant Discharge Elimination System (VPDES) Permit (Permit No. VAR051092) for discharges of stormwater associated with industrial activity. Part III of the VPDES Permit (VAR051092) requires the preparation and implementation of a SWPPP for the Bulk POL Facility.

Fort Walker is located within the Chesapeake Bay watershed and is connected by the Rappahannock River and its tributaries. Chesapeake Bay waters are protected, therefore; discharges into storm drains and waterways at the facility are closely monitored.

Wetlands, endangered plants and animal species, and other environmentally sensitive resources are present at Fort Walker. To protect these resources, Resource Protection Areas (RPAs) and riparian buffers have been established to minimize damage from vehicle use, troop movement, and other training exercises.

4.11.2 Applicability at Fort Walker

The Bulk POL Facility's SWPPP has been established for Fort Walker to assist in the prevention of on-site pollutants from contaminating storm water discharges. The Bulk POL Facility's SWPPP identifies potential sources of pollution that may reasonably be expected to affect the quality of stormwater and describes practices that are used to reduce potential of pollutants in stormwater discharges associated with industrial activity at the facility and assures compliance with the terms and conditions of the permit.

Also, project specific SWPPPs associated with construction projects and Environmental Protection Plans have been established at Fort Walker.

APPENDIX A

ENVIRONMENTAL TEAR SHEETS

AEROSOL CANS

POSSIBLE AREAS OF CONCERN

Aerosol cans are under pressure and may be flammable, reactive, corrosive, and/or toxic depending on the contents of the can.

CHARACTERIZATION

All aerosol cans shall be turned in to DPW Warehouse (Bldg. 1237) or established satellites whether empty, partially empty, or malfunctioning. Aerosol cans are recyclable if handled correctly. Empty, partially empty, or malfunctioning aerosol can if not needed anymore are a **Universal Waste** and should never be thrown in the trash.

HANDLING PROCEDURES

- Step 1** Inspect cans for damage or deterioration. Place aerosol cans in a plastic bag for transport.
- Step 2** Turn in to DPW Warehouse (Bldg. 1237) or established satellites and call the Environmental Division at 804-633-8255 for pick up.
- Step 3** Ensure aerosol cans are labeled to identify contents.
- NOTE:** Do not handle leaking aerosol cans with your bare hands. Use appropriate chemical protective gloves and place in a plastic bag before transporting.
- See Tear Sheet A-58 for a map of recycling locations.



Aerosol cans with SDS.



Aerosol cans in safety locker

GENERAL INFORMATION

The DPW Hazardous Waste Building 1249 has a can puncturing device which vents and empties aerosol cans. Once the cans are emptied, the DPW recycles the aerosol cans. For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil)



Compliance Leadership & Net Zero

ANIMAL CONTROL

POSSIBLE AREAS OF CONCERN

Animal control guidance is necessary for animals brought onto the installation to ensure the health and safety of people, and their animals as well as the Fort Walker ecosystem.

CHARACTERIZATION

Fort Walker's Animal Control policy provides guidance for pets, livestock and service animals and Army regulation AR 190-12 identifies proper procedure for Military Working Dogs (MWD).

HANDLING PROCEDURES

ALL ANIMALS MUST MEET THESE REQUIREMENTS:

Employees, contractors, or visitors may not bring onto the installation any dog of a breed (including a mixed breed) that are deemed aggressive or potentially aggressive.

- If a Service Member, or Civilian employee has authorization to bring onto the Installation a dog is an aggressive/dangerous or potentially aggressive/dangerous dog, the dog must be muzzled at all times while on the installation.
- Visitors must comply with all applicable state, federal, and local laws and Installation specific requirements associated with the ownership, registration, control and vaccination of pets.

Official training involving live animals will adhere to requirements set forth in DoDi 3216.01 to include ALARACT 173/2013 or the most current guidance or policies.

Department of Justice guidelines implementing the service animal provisions of the Americans with Disabilities Act expressly prohibits exclusion of a service animal "based on assumptions or stereotypes about the animal's breed or how the animal might behave." The Department of Justice interprets service animals to include dogs and, in narrow circumstances, miniature horses.

Uncontrolled/stray dogs and cats will be taken to the County Animal Shelter. If owners are known, they may be notified as long as the animal can be picked up within a reasonable time.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership & Net Zero

ANTIFREEZE (USED)

POSSIBLE AREAS OF CONCERN

Antifreeze typically contains ethylene glycol. However, alternative formulations have been developed using less toxic chemicals. Used antifreeze may contain low concentrations of fuel, oil, and toxic metals such as copper, zinc, lead, cadmium, and chromium. Refer to the Safety Data Sheet (SDS) for specific hazards. If not properly managed and stored, these pollutants will seep into the soil and groundwater potentially harming people and the environment.

CHARACTERIZATION

Used antifreeze may be considered a hazardous waste. If used antifreeze is managed properly and recycled, it is not handled as hazardous waste.

HANDLING PROCEDURES

Step 1 Ensure container is leak proof and properly labeled before adding any used antifreeze. Container must be closed unless adding antifreeze.

Step 2 Place used antifreeze in a drum or leak proof container within secondary containment (i.e. spill pallet).

Step 3 Ensure secondary containment is adequate and is in an area accessible to a pickup truck.

Step 4 Call the Environmental Division at 804-633-8255 to schedule a pick-up of the used antifreeze.

NOTES: Do not drain antifreeze into petroleum, oil, and lubricant (POL) contaminated drip pans. Keep used antifreeze as clean as possible.

If antifreeze is contaminated with fuel or oil, contact the Environmental Division at 804-633-8255 for additional guidance.

If a drum is unavailable, place used antifreeze in a leak-proof container with secondary containment and in the hazardous materials return area (if present).



GENERAL INFORMATION

Spill pallets with used antifreeze recycling drums are generally located at vehicle and equipment maintenance shops including DS Maintenance (Bldg 1290). For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

ASBESTOS CONTAINING MATERIAL

POSSIBLE AREAS OF CONCERN

Asbestos fibers released from a product into the air and inhaled may result in serious health risks including lung disease and cancer.

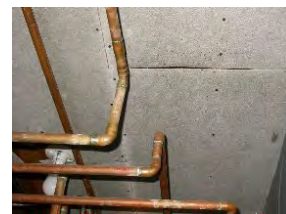
CHARACTERIZATION

Any material containing more than one percent asbestos which has been applied on any ceiling, wall, duct, boiler, tank, pipe, structural member, or on any other part of a building or equipment.

HANDLING PROCEDURES

- The ENRD **needs to review all** work involving the demolition, repair, renovation, or maintenance of building materials to determine presence of asbestos containing material (ACM). This includes review of maintenance orders (DMOs) and self-help work.
- Contact ENRD at 804-633-8255 before initiating any work on ACM or suspect ACM for handling procedures.
- To handle ACM, you must be certified.
- Products containing suspect ACM may include:
 - Insulation (associated with steam pipes, boilers, and furnace ducts)
 - Resilient floor tiles (incl. vinyl tiles, backing on vinyl flooring, adhesives)
 - Acoustical ceiling tiles
 - Door gaskets in furnaces, wood stoves, etc.
 - Soundproofing, fireproofing, or decorative surface coatings sprayed on walls or ceilings
 - Patching, joint compound, and textured paints
 - Cement roof tiles, roofing tars, shingles, and siding
 - Automotive brake pads and linings, clutch facings, and gaskets

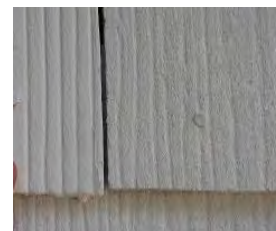
NOTE: Abatement/removal and disposal of all ACM will only be conducted by properly licensed contractors. There will be no disturbance of ACM by unlicensed personnel.



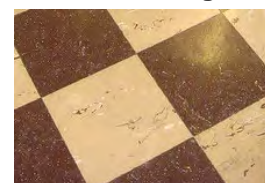
Millboard



Paper Pipe Insulation



Cement Shingles



9x9 Vinyl Composite Tile

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership & Net Zero

BALLASTS AND CAPACITORS CONTAINING PCBs

POSSIBLE AREAS OF CONCERN

Ballasts, capacitors, transformers, and switches used in electrical equipment for fluorescent lights and various appliances that were manufactured through 1979 contain polychlorinated biphenyls (PCBs) and shall not be disposed of in landfills or incinerators.

CHARACTERIZATION

All ballasts and capacitors manufactured through 1979 contain PCBs are considered toxic regulated wastes. Non-PCB ballasts are solid wastes and recyclable.

HANDLING PROCEDURES

Step 1 Store the used ballasts and capacitors until they will be properly processed and recycled. Ballasts and capacitors produced after 1979 that do not contain PCBs will be marked "No PCBs." If the ballast or capacitor is not labeled "No PCBs" and is not date stamped, assume it contains PCBs.



Fluorescent Lamp Ballasts

Step 2 Clear or yellow oil on the surface of the ballast indicates a possible leak of PCBs. Wear rubber gloves and store ballast in a heavy plastic bag.



Ballast Storage

Step 3 Bring ballasts to the DPW Warehouse (Bldg. 1237) or call the ENRD at 804-633-8255 to pick up your ballasts. See Tear Sheet A-58 for recycling locations.

NOTE: Do not dispose of **any** ballasts or capacitors in the trash.

Ballasts and capacitors that do not contain PCBs will be labeled "No PCBs."



Capacitor and Copper Coil

GENERAL INFORMATION

For additional information contact, the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

BATTERIES

POSSIBLE AREAS OF CONCERN

Batteries are recyclable and may be flammable, reactive, corrosive, and/or toxic depending on the type of battery.

CHARACTERIZATION

Nickel metal hydride, nickel-cadmium, magnesium, mercury, lithium-ion, lithium batteries (i.e., radio batteries used by soldiers) are considered universal wastes.

HANDLING PROCEDURES

Non-Lead Acid Batteries

Nickel metal hydride, nickel-cadmium, magnesium, mercury, lithium-ion, lithium batteries (i.e., radio batteries used by soldiers) must be collected and turned in to DPW Warehouse (Bldg. 1237) with the appropriate Safety Data Sheet (SDS) if applicable.

For large quantities, call the ENRD at 804-633-8255 to coordinate battery pick up.

Alkaline and carbon-zinc batteries shall be recycled at the DPW Warehouse.



Lithium Radio Battery

Lithium, nickel-cadmium (Ni-CD), lithium-ion, nickel metal hydride, magnesium, and mercury batteries must be turned in to the Warehouse (Bldg 1237).

Target Batteries

Batteries used in targets should be turned in to Range Control.



Target Battery

Lead Acid Batteries

Lead acid vehicle batteries shall be taken to DS Maintenance (Bldg. 1290). See lead acid battery Tear Sheet A-40 for additional information.



Lead Acid Battery

GENERAL INFORMATION

Refer to the recycling Tear Sheet A-58 for a map of recycling locations. For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



BILGE WATER MANAGEMENT

POSSIBLE AREAS OF CONCERN

Bilge water can be contaminated with oil, fuel, engine coolant, detergents, or bilge cleaners. Contaminated discharge is toxic to aquatic resources and the environment. Bilge water may be considered a hazardous waste and shall not be discharged to surface waters or on to the ground.

CHARACTERIZATION

Boats, Amphibious Assault Vehicles (AAVs), amphibious aircraft, vehicles, and tracks have bilges where water and hazardous liquids may collect.

HANDLING PROCEDURES

- Step 1** Follow Best Management Practices.
- Do not drain oil into bilge.
 - Keep bilge area as dry as possible. Inspect fluid lines regularly and fix all fluid leaks promptly.
 - Use absorbent bilge pads to soak up oil and fuel.
 - Clean bilge areas after engine maintenance.

- Step 2** Coordinate with the ENRD at 804-633-8255 for bilge water removal and disposal. Bilge water can be drained at the Central Vehicle Wash Facility. This facility needs to be scheduled in RFMSS.

NOTES: Do **NOT** discharge bilge fluids to surface waters or on to the ground.



GENERAL INFORMATION

For additional guidance contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

BIOLOGICAL HAZARDS: DANGEROUS PLANTS

POSSIBLE AREAS OF CONCERN

Poison Ivy and Poison Oak plants release the substance urushiol that will cause contact dermatitis when exposed to skin, resulting in itchiness, swelling, inflammation, and blisters. Reactions may become more severe with age or repeated exposure.

CHARACTERIZATION

Recognizing and avoiding dangerous plants will prevent painful skin irritation and possibly scarring.

HANDLING PROCEDURES

1 POISON IVY, POISON OAK, AND POISON SUMAC

- All parts of the plant contain a toxic, oily substance called urushiol which can cause irritation and blistering of the skin.
- The substance may be transferred to skin by direct contact with the plant, contact with tools and clothing that have touched the plant, or by being sent airborne due to mowing or burning of the plant.
- Remember the adage 'leaves of three, let them be' to help identify poison ivy and poison oak plants.



2 PREVENTION

- The best protection is recognition and avoidance of these plants.
- Wear long sleeves and pants to reduce direct contact with these plants.
- Apply a barrier prevention cream containing 5% bentoquatam 15 minutes prior to exposure.
- Thoroughly rinse any tools and materials that may have come in contact with these plants.



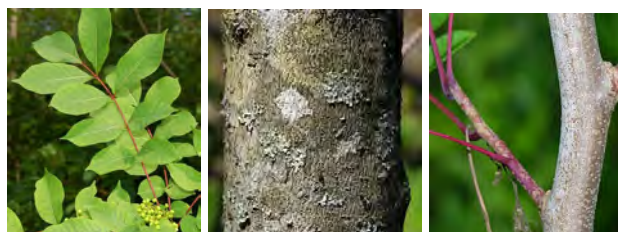
Eastern Poison Ivy and Contact Dermatitis

3 TREATMENT

- Initial treatment is to wash skin within 5-10 minutes of contact with cold, soapy water followed by rubbing alcohol. Rinse thoroughly.
- Wash clothing with hot water.
- Corticosteroid skin creams or ointments may reduce inflammation.
- Wet dressings and soothing anti-itch (antipruritic) or drying lotions may be recommended to reduce other symptoms.
- Contact dermatitis usually clears up without complications within 2 or 3 weeks but may return if further contact cannot be avoided.



Poison Oak and Contact Dermatitis



Poison Sumac Leaf, Old Bark, and New Bark

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



BIOLOGICAL HAZARDS: DoD INSECT REPELLENT SYSTEM

POSSIBLE AREAS OF CONCERN

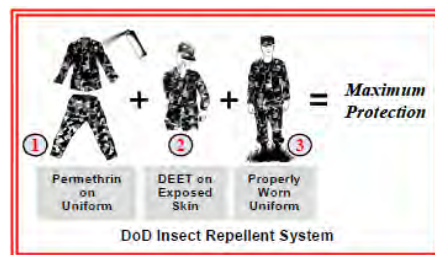
Stinging and biting insects are a nuisance and may carry and transmit diseases.

CHARACTERIZATION

Help prevent the disease, pain, and annoyance caused by the bites and stings from insects by using personal protective measures. Proper use of the DoD Insect Repellent System will prevent or significantly minimize the potential for bites from insects.

HANDLING PROCEDURES

- Step 1**
- Treat uniforms with the standard military clothing repellent permethrin. Units should bring their own permethrin. Treat uniforms prior to deploying.
 - Use the IDA kit (NSN 6840-01-345-0237). One kit treats one uniform and lasts for approximately 50 washes.
 - Treatment using the permethrin aerosol spray (NSN 6840-01-278-1336) lasts approximately 5-6 washes.
 - Follow all label instructions for application.
 - Permethrin should only be used on clothing, netting, tents, and other gear. Do not treat underwear or the inside of the cap.
 - Do not use permethrin on new, flame-resistant uniforms.



- Step 2**
- Apply a thin coat of the standard, military skin repellent DEET lotion to all areas of exposed skin. Do not apply underneath clothing. Avoid the eyes and lips and do not apply over cut, sunburned, or otherwise injured skin.
 - Use 33%, controlled release DEET lotion (NSN 6840-01-284-3982). Camouflage face paint with DEET incorporated is also available (NSN 6840-01-493-7334).
 - Follow label directions. One application protects for up to 12 hours.



- Step 3**
- Wear your uniform properly. It acts as a physical barrier against insects.
 - Tuck pants into boots, wear long sleeves down, tuck undershirt into pants.
 - Close all openings in your clothing that may provide access for insects.
 - Wear your uniform loosely. Mosquitos can bite through fabric pulled tight against the skin.



NOTE: Do not use aftershave, cologne, perfume, or scented deodorant in the field as they may attract insects.

DEET may reduce the effectiveness of sunscreen. Applying sunscreen 30-60 minutes prior to DEET lotion will allow the sunscreen to penetrate and bind to the skin minimizing this effect.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker-id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

BIOLOGICAL HAZARDS: SNAKES, RODENTS, & OTHER ANIMALS

POSSIBLE AREAS OF CONCERN

Venomous and harmless snake species are found in Virginia and could be encountered in fields, woods, and aquatic areas at Fort Walker. Rodents and raccoons may carry and transmit diseases such as rabies.

CHARACTERIZATION

One venomous snake common to Virginia, the Northern Copperhead, is found at Fort Walker. Recognizing and avoiding dangerous animals commonly found in Virginia will prevent injury and the spread of disease.

HANDLING PROCEDURES

NORTHERN COPPERHEAD (VENOMOUS) Dark-colored crossbands shaped like an hourglass (wide on the sides, narrow on the backbone). Look for the hourglass-shaped crossbands to identify. Usually, some of the crossbands are broken and do not connect.

Do not handle any snakes.

COPPERHEAD LOOK-ALIKES (NON-VENOMOUS)

EASTERN HOGNOSE SNAKE: The color and pattern of the eastern hognose varies greatly and may resemble the northern copperhead. Their upturned snout is unique among Virginia's snakes.

NORTHERN WATER SNAKE: The pattern on the northern water snake is always narrow on the sides and wide near the backbone. This is opposite of the pattern found on the copperhead.

CORN SNAKE: The corn snake has a more reddish hue than the copperhead and a blotch pattern that does not extend down the sides to the ground. The pattern remains distinct regardless of age.

IDENTIFYING SNAKE TYPES

- Juvenile venomous snakes (i.e., copperheads) have a yellow tipped tail. Many juvenile species of non-venomous snakes may look like juveniles of venomous snakes except the venomous ones have the yellow-tipped tail.

SNAKE BITES

- Snakes will bite when threatened or stepped on. If encountered, do not approach and move away slowly to avoid disturbance. All snake bites can be dangerous.
- If you are bitten, move away to avoid multiple bites. Get medical help immediately.
- Mark the location and the time of the bite on the person with a Sharpie.
- Create a loose splint to help restrict movement of the area. Keep the affected area below heart level to reduce the flow of venom.
- Apply a bandage, wrapped two to four inches above the bite, to help slow the venom. Do not cut off the flow of blood from a vein or artery.

RODENTS AND RACOONS

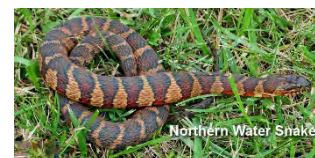
- Do not feed, handle, or keep rodents or raccoons as pets.
- Rodents and raccoons may be attracted to food storage areas and camp sites. Remove trash daily and eliminate water sources. Keep food out of sleeping areas.
- Disinfect areas previously occupied by rodents or raccoons and avoid breathing dust contaminated by their feces and urine which is hazardous to human health.



Northern Copperhead



Eastern Hognose Snake



Northern Water Snake



Black Rat Snake

NOTE: Contact the Service Order Desk at 804-633-8286 to report nuisance wildlife.

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

BIOLOGICAL HAZARDS: STINGING AND BITING INSECTS

POSSIBLE AREAS OF CONCERN

Stinging and biting insects are a nuisance and mosquitos may carry and transmit West Nile Virus.

CHARACTERIZATION

Removal of favorable habitats, nests, and breeding sites will reduce the potential for interaction with stinging and biting insects. Eliminating mosquito breeding sites will help prevent exposure to bites and possible transmission of disease.

HANDLING PROCEDURES

1 MOSQUITOS

- Eliminate mosquito breeding sites by emptying water from targetry, metal ammunition containers, and old tires, covering foxholes, and shaking out tarps and tents.
- Make sure that door and window screens do not have holes.
- Sleep under permethrin-treated tents or netting.



Mosquitos and Possible Breeding Area

2 CHIGGERS

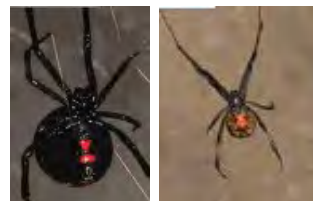
- Tiny mites that attach to areas of tender skin to feed. Itchy bites may be the first indication of chigger infestation.
- A hot bath will kill chigger larvae. Do not scratch bites. Ointments such as benzocaine or calamine lotion may relieve itching.
- Launder infested clothes in hot, soapy water for 30 minutes.



Chigger and Chigger Bites

3 WIDOW SPIDERS

- Widow spiders can be identified by the red or orange hourglass-shaped marking or spots on the underside of the body.
- Remove areas of outdoor clutter that may attract widow spiders.
- Wear gloves, long sleeves shirts, long pants, and boots when working in possible widow spider habitats.



Black and Brown Widow Spiders

4 WASPS (HORNETS AND YELLOW JACKETS) AND BEES

- Do not attempt to remove nests. Wasps may sting multiple times and will aggressively protect their nests.
- Honeybees create wax combs. Do not kill bees or destroy combs. Bees should be reported to the Service Order Desk and removed by beekeepers only.



Bald-Faced Hornet and Nest

NOTE: Refer to DOD Insect Repellent System Tear Sheet A-9 for additional information.

Contact Service Order Desk at 804-633-8286 to treat an infestation.



Yellow Jacket and Nest

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

BIOLOGICAL HAZARDS: TICKS AND TICK BITES

POSSIBLE AREAS OF CONCERN

Ticks carry and transmit a variety of disease-carrying organisms. Different species of ticks are vectors for different pathogens. The most common species to bite humans are detailed below.

CHARACTERIZATION

Recognizing and correctly removing ticks from clothing and skin will help prevent possible infection.

HANDLING PROCEDURES

Step 1 USE THE DoD INSECT REPELLENT SYSTEM

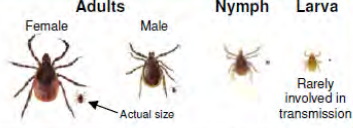
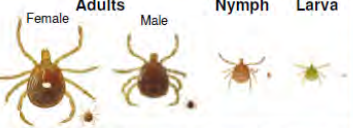
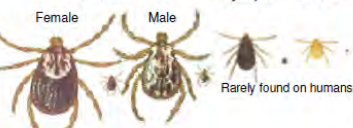
- Treat older uniforms with permethrin clothing repellent BEFORE putting them on. (Do not use permethrin on new, flame-resistant uniforms.)
- Apply standard military 33% DEET, long-lasting insect repellent lotion to exposed skin for 12-hour protection.
- Tuck pants into boots, wear long sleeves down, tuck undershirt into pants.
- Refer to Tear Sheet A-9 for additional information.

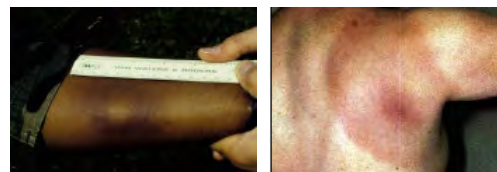
Step 2 CHECK FOR TICKS FREQUENTLY

- After going indoors, take a shower and check your skin carefully.
- Place clothes in the dryer for 20-30 minutes to kill any remaining ticks.

Step 3 HOW TO REMOVE ATTACHED TICKS

- Use tweezers to grasp the tick's mouthparts up against the skin.
- Pull back firmly and steadily.
- Remove any embedded mouthparts as you would a splinter.
- Do not squeeze the body of the tick as this could release infected fluids into the skin.
- Do not use petroleum jelly, fingernail polish, or a lighted match to remove a tick.
- Wash the bite area and apply antiseptic.
- Preserve the tick in a well-sealed container in the freezer for a month.
- Seek medical help if you develop flu-like symptoms or rash after a tick bite. Take the tick with you to the doctor.

Tick Species				Disease
Adults	Female	Male	Nymph	Larva
				Lyme disease Human granulocytic anaplasmosis (HGA) aka Human granulocytic ehrlichiosis (HGE) Babesiosis
<i>Ixodes scapularis</i> (blacklegged tick, a.k.a. the deer tick)				
Adults	Female	Male	Nymph	Larva
				Human monocytic ehrlichiosis (HME) Southern tick-associated rash illness (STARI) Ewingii ehrlichiosis in humans and Canine granulocytic ehrlichiosis in dogs
<i>Amblyomma americanum</i> (lone star tick)				
Adults	Female	Male	Nymph	Larva
				Rocky Mountain spotted fever (RMSF)
<i>Dermacentor variabilis</i> (American dog tick)				



Erythema rash (early symptom of lyme disease)



Rocky Mountain Spotted Fever
Rashes from Infected Tick Bites

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

CARDBOARD

POSSIBLE AREAS OF CONCERN

Cardboard is a recyclable solid waste and **should not** be disposed of in general trash dumpsters. Landfill disposal can be reduced by recycling cardboard.

Contractors and vendors **are not** to dispose of any recyclables in government-owned recycling dumpsters. Contract recycling requirements must be met using off-post recycler.

CHARACTERIZATION

Cardboard is a recyclable material and should be collected in cardboard-only dumpsters for processing (see dumpster locations below).

HANDLING PROCEDURES

Step 1 Place flattened, empty containers in specifically marked dumpsters.

Step 2 Close lid of container.

NOTES: Cardboard should be deposited in the “cardboard only” dumpsters.

No smoking at or near the dumpsters.

Cardboard recycling dumpsters are in the following areas:

- Roads and grounds (Bldg. 1214)
- Headquarters Parking Lot
- ASP (Bldg. 2001)
- Wood and Metal Scrap Yard
- Warrior TTB Barracks and various other barrack locations

See Tear Sheet A-58 for a map of recycling locations.

Cardboard recycling dumpsters will be delivered to troops during training. To coordinate a dumpster drop off, call the Service Order Desk at 804-633-8286.



Cardboard Only Dumpster



Flattened Cardboard

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership & Net Zero

CAR WASH FACILITY (NON-TACTICAL VEHICLES)

POSSIBLE AREAS OF CONCERN

The car wash facility, located within Headquarters, is the approved location for routine washing of privately owned vehicles (POV) and non-tactical vehicles. This facility is connected to the wastewater collection system and the use of soap is authorized at this location. Phosphorous-free detergent may be used once prior approval is obtained from the ENRD. For tenants with facilities that have wash points connected to the wastewater collection system, non-tactical vehicles and equipment may also be washed at these locations. Washing vehicles in areas other than the car wash facility could contaminate surface water, adversely impact aqueous habitats, and result in Clean Water Act violations.

CHARACTERIZATION

The washing of General Service Administration (GSA) vehicles and POVs at unapproved locations other than the car wash facility is prohibited.

HANDLING PROCEDURES

- Follow the instructions for the proper use and operation of the car wash facility.
- The washing of non-tactical vehicles (GSA and POV) at unapproved locations is prohibited.
- Contact Directorate of Family, Morale, Welfare and Recreation (DFMWR) at 804-633-8219 for additional information.
- Tactical vehicles can only be washed at the Central Vehicle Wash Facility. Refer to Tear Sheet A-15 for more information.

NOTE: Under no circumstances shall any unauthorized substance be discharged directly into the storm drains at the car wash facility.



GENERAL INFORMATION

For more information, contact the ENRD by phone at 804-633-8255 or via e-mail at (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement & Net Zero

CENTRAL VEHICLE WASH FACILITY

POSSIBLE AREAS OF CONCERN

Gray water produced from the central vehicle wash racks may contain fuel, oils, and other contaminants that could affect surface water quality and adversely impact aqueous habitats.

CHARACTERIZATION

The Central Vehicle Wash Facility is the authorized facility for washing tactical vehicles and equipment. Care must be taken to ensure that all gray water is processed through the oil water separator and no runoff impacts surface water quality. For tenants with facilities that have wash points connected to the wastewater collection system, tactical vehicles and equipment may also be washed at these locations.

HANDLING PROCEDURES

Step 1 The vehicle wash racks will be used to remove mud and dirt from tactical vehicles and equipment.

Step 2 No detergents shall be used at any time.

Step 3 No fueling, fuel transfer, engine washing or oil changing is permitted on the wash racks at any time. Vehicles leaking oil are not permitted.

NOTE: The washing of tactical vehicles and equipment at unapproved locations is strictly prohibited.

Facility scheduling is managed by DPTMS Range Control, at 804-633-8224. Alternatively call DPW Operations & Maintenance at 804-633-8234. The facility must be scheduled through RFMSS. This facility is self-help only.

A non-tactical vehicle car wash facility is located within headquarters. Refer to Tear Sheet A-14 for more information.



GENERAL INFORMATION

For more information, contact the ENRD by phone at 804-633-8255 or via e-mail at (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement & Net Zero

COMMINGLED RECYCLABLES (Glass, Plastic, Aluminum, Paper and Steel)

POSSIBLE AREAS OF CONCERN

Glass, aluminum and steel cans, and plastic are recyclable and should be collected in the recycling bins located on-site or deposited in commingled recyclables dumpsters (see locations below). Landfill disposal will be reduced by recycling.

CHARACTERIZATION

Glass, aluminum, plastic, paper and steel recyclables shall be collected and recycled at Fort Walker. **Do not** dispose of electronics with the commingled recyclables.

HANDLING PROCEDURES

Step 1 Rinse and collect plastic and glass bottles, aluminum cans, etc., in the recyclables bins located within your building.

Step 2 If a mixed recycling bin is not available, deposit commingled recyclables in mixed recycling dumpsters.

NOTES: Commingled recycling dumpsters are located in the following areas:

- Headquarters Parking Lot
- EP-4 Parking Lot
- Warrior TTB Barracks (Bldg. 1664)

See Tear Sheet A-58 for a map of recycling locations.

Although aerosol cans are steel, they should not be included with mixed recyclables. See Aerosol Cans Tear Sheet A-1 for disposal information.



Commingled Recycling Bins



Commingled Recycling Dumpster



Dumpster Identification

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership & Net Zero

CONCERTINA WIRE

POSSIBLE AREAS OF CONCERN

Concertina wire is made of galvanized or stainless steel and is recyclable; thereby reducing the volume of solid waste disposed of in a landfill.

CHARACTERIZATION

Concertina wire shall be recycled.

HANDLING PROCEDURES

Step 1 Use heavy duty leather gloves when handling concertina wire.

Step 2 Collect concertina wire to be recycled at designated area at Scrap Yard.

Step 3 Contact the ENRD at 804-633-8255 for disposal of concertina wire.

NOTES: Concertina wire recycling location is:

- Scrap Yard

See Tear Sheet A-58 for a map showing the scrap yard location.

Please call in a Service Order to the Service Order Desk (804-633-8286) if assistance is needed in removing concertina wire.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero & Mission Enhancement

CONCRETE/ASPHALT RECYCLING

POSSIBLE AREAS OF CONCERN

Concrete and asphalt shall be recycled and reused. Landfill disposal will be reduced by recycling.

CHARACTERIZATION

Concrete and asphalt are recyclable solid waste and shall be collected and turned in to a Construction Debris and Demolition (CDD) recycler.

HANDLING PROCEDURES

Step 1 Concrete and asphalt shall be collected and turned in to a CDD recycler.

Step 2 Contractors must provide receipts and weight tickets to the Environmental Division for recycled material.

NOTES: Do not to dispose of concrete and asphalt in general refuse dumpsters.

Contractors are required to meet contract requirements for recycling.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

CONSTRUCTION EROSION AND SEDIMENT CONTROL

POSSIBLE AREAS OF CONCERN

Soil erosion is the process of detachment and transportation of soil materials by water, wind, ice, and gravity. Accelerated soil erosion from man's use of land accounts for 70 percent of total sediment in the United States. Forestry, agriculture, and construction are the major activities that cause accelerated erosion. Major problems can occur when large amounts of sediment enter waterways.

CHARACTERIZATION

Fort Walker is located in the Chesapeake Bay Watershed and all proposed land disturbances greater than 2,500 square feet are regulated. An Erosion and Sedimentation Control Plan (ESCP), Virginia Stormwater Management Permit (VSMP), Stormwater Pollution Prevention Plan (SWPPP), Energy Independence Security Act (EISA) Section 438 compliance are required prior to the approval of any land disturbance greater than 2,500 square feet. **(NOTE: All land disturbance activities regardless of size must be coordinated and approved by the Fort Walker ENRD before disturbance begins).**

All land-disturbing activities undertaken on federal lands in the Commonwealth of Virginia must comply with Virginia's Erosion and Sediment Control and Virginia Stormwater Management Program (VSMP) regulations as amended.

HANDLING PROCEDURES

Step 1 Submit a complete E&S Control Plan, Stormwater Management Plan, SWPPP, and EISA Section 438 compliance plan along with the Work Order or Project for review and approval.

Step 2 Activities must comply with E&S Control regulations, EISA Section 438, and VSMP permit. No work is to be done within 100-feet of all wetlands, streams, ponds and impoundments.

Step 3 Provide the name of an individual holding a valid Responsible Land Disturber (RLD) Certificate who is responsible for the land disturbing activity prior to engaging in the activity.

NOTE: Do not begin activities until the Work Order or Digging Permit has been approved.

Dig permits shall be obtained prior to beginning work. Follow all permit requirements. See Tear Sheet A-21 for additional information on dig permits and utility location.

Follow the Fort Walker Seeding Standard Operation Procedures (SOP) manual whenever seeding, liming, fertilizing, and mulching activities are conducted. Native species shall only be used. Any non-native species (other than what is included in the Fort Walker Seeding SOP manual), must be approved by the ENRD before being planted. Refer to Tear Sheet A-62 for more information.

Contractor Checklist: If your project has a land disturbance, have the following been completed?

(including but not limited to)

Approved DPW Work Order or Service Order? • Approved DPW Dig Permit?

DEQ approved E&S Control Plan? • DEQ approved Stormwater Management Plan?

Complete SWPPP onsite? • Copy of CGP permit & RLD certificate in the SWPPP?

If working near ponds, streams, and wetlands additional ENRD and regulatory coordination and permits required.

If the answer to any of the above is no, DO NOT start work! You could be breaking local, state, and federal laws and army policy. Play it safe. Call 804-633-8255 for assistance.

Minimum Standards:

- | | |
|---|--|
| (1) Soil Stabilization | (11) Stormwater Conveyance Protection |
| (2) Soil Stockpile Stabilization | (12) Work in Live Watercourse |
| (3) Permanent Stabilization | (13) Crossing Live Watercourse |
| (4) Sediment Basins and Traps | (14) Regulation of Watercourse Crossing |
| (5) Stabilization of Earthen Structures | (15) Stabilization of Watercourse |
| (6) Sediment Traps and Sediment Basins | (16) Underground Utility Line Installation |
| (7) Cut and Fill Slopes Design and Construction | (17) Vehicular Sediment Tracking |
| (8) Concentrated Runoff Down Slopes | (18) Removal of Temporary Measures |
| (9) Slope Maintenance | (19) Stormwater Management |
| (10) Storm Sewer Inlet Protection | |



Silt Fence, rip rap, and hay stabilization



Silt Fence and soil stabilization



Hay bales and vegetative stabilization

GENERAL INFORMATION

Contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil) for additional guidance on whether specific activities are defined as land-disturbing activities.



CULTURAL RESOURCE CONSERVATION

POSSIBLE AREAS OF CONCERN

Examples of cultural resources at Fort Walker include archaeological sites, the Liberty Church, and the Travis Lake Historic District. These historical landmarks are protected by the National Historic Preservation Act of 1966.

CHARACTERIZATION

Training areas at Fort Walker contain several types of cultural resources such as historic properties, archeological sites, religious/heritage sites, and unmarked graves.

Conservation involves protecting and managing irreplaceable resources such as archaeological sites, historic buildings and structures, landscapes, and objects that are the fabric of our national heritage.

CONSERVATION PROCEDURES

If an archeological site, human remains, or objects of historical or cultural significance are discovered:

Step 1 Immediately contact the ENRD at 804-633-8255.

Step 2 Halt all activities within a 100-foot radius of the location.

Step 3 Secure the area from further use or disturbance pending inspection.

NOTES: Prior to digging, ensure you have an approved dig permit.

Recreational use of metal detectors within Fort Walker is prohibited.

All relic hunting is prohibited.

Do not collect artifacts from archeological sites on federal property. It is prohibited and criminal penalties can be imposed.

If you observe someone collecting artifacts, report it to the Provost Marshall Office at 804-633-8501 and ENRD at 804-633-8255.



Corner Basement Wall



Liberty Church – 1850s



Artifact - Iron Pot

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

DIG PERMIT/UTILITY LOCATION PROCESS

POSSIBLE AREAS OF CONCERN

Marking utilities prevents possible damage to underground utility lines, injury, property damage, and service outages.

CHARACTERIZATION

A qualified individual will mark underground utilities to protect you against the danger of accidental contact with wires, water lines, gas lines, or electrical equipment.

HANDLING PROCEDURES

Step 1 Dig permits shall be obtained prior beginning work (e.g. grounding rods, fighting positions, etc.). Follow all permit requirements.

Step 2 Anyone planning to dig must notify the Service Order Desk at 804-633-8286 or at usarmy.fort-walker.imcom-atlantic.list.dpw-boi@army.mil at least 14 days prior to digging (excluding weekends and holidays).

Step 3 Do not begin excavation activities in the area before utilities are located.

Step 3 Any utilities in the permitted dig area will be marked.

Step 4 Respect the markings as you proceed with your work.

NOTES: Contact the Service Order Desk at 804-633-8286 for information.



No Dig Warning

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

DRIP/DRAIN PANS

POSSIBLE AREAS OF CONCERN

Fuels and oils can potentially contaminate soil, stormwater, surface water, and groundwater.

CHARACTERIZATION

Army tactical vehicle operator training basic standards for Environmental Considerations require that drip pans remain under parked vehicles (Army Training Circular, TC 21-305-11).

Army maintenance procedures will be used to classify leaks and drip pans will only be used on vehicles (other than tactical vehicles) that are determined to have a Class II or Class III leak. This policy requires that a strong preventative maintenance program be in place at each motor pool which addresses technically inspecting all vehicles and equipment at the motor pool for conditions that could lead to leaks or spills of hazardous or Petroleum, Oil, and Lubricant (POL) materials. All incoming vehicles and equipment should be inspected for fluid leaks and drips as called for in appropriate technical manuals and motor pool Standard Operating Procedures (SOPs). As part of the preventative maintenance program, fluid leaks and/or drips should be reported and scheduled for repairs immediately.

HANDLING PROCEDURES

- If equipment is leaking, work orders for repair should be submitted. Leaks of vehicles and equipment should be contained with drip pans/containment device as a temporary measure.
- When pans are used for draining equipment, POL product must be poured in used oil container.
- Drip pans should be emptied after each rain event if applicable. If any POL sheen is visible in the drip pan, an oil only absorbent pad must be used to absorb any POL residue before emptying drip pan. Call ENRD at 804-633-8255 for contaminated absorbent pad disposal.
- Drip pans with oil and water should not be poured into Used Oil containers, contact the ENRD at 804-633-8255 for instructions.

Note: This guidance applies to both permanent motor pools and all other temporary/ transient training activities.

Drip pans must remain under parked tactical vehicles (Army Training Circular, TC 21-305-11).



Drip Pan

Leak Classification System:

- Class I - Seepage of fluid not great enough to form drops.
- Class II - Seepage of fluid great enough to form drops, but not great enough to cause the drops to fall during inspection.
- Class III - Seepage of fluid great enough to form drops and drip during inspection.

GENERAL INFORMATION

For more information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero & Mission Enhancement

ELECTRONICS RECYCLING

POSSIBLE AREAS OF CONCERN

All Electronics shall be recycled. Computers, scanners, laptops, printers, fax machines, copiers, cell phones, radios, TV's, power chargers and other office equipment contain scrap metal and wiring that can be reused as well as toxic components and substances (i.e., lead or mercury) shall be processed properly. Disposing of electronics in landfills can pollute soil and groundwater. Recycling of electronics is important for precious metal recovery.

CHARACTERIZATION

Electronics should be collected and recycled.

HANDLING PROCEDURES

Step 1 Collect electronics and turn in to the Property Book Warehouse with Form 3161 (Bldg. 1217).

NOTE: A two-person lift is required for objects above 30 pounds or use a dolly or hand truck.

See Tear Sheet A-58 for a map of recycling locations.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

ENERGY CONSERVATION

POSSIBLE AREAS OF CONCERN

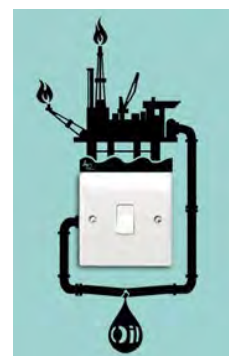
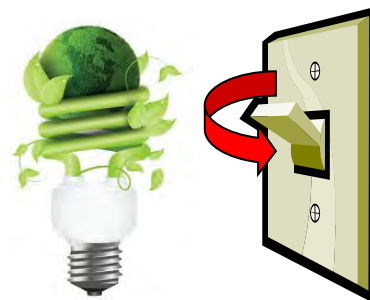
Unnecessary or excessive energy usage potentially harms the environment and increases operating costs.

CHARACTERIZATION

Fort Walker's goal is to reduce energy intensity (energy use per square foot of building) by **2.5% a year** for 10 years (FY16-FY25), using a baseline year of FY15.

CONSERVATION PRACTICES

- Maintain the most efficient settings on your thermostat. 74 degrees for cooling, and 70 degrees for heating.
- Use only LED light bulbs.
- All purchased appliances and electronics are required to have the Energy Star label unless shown not to be life cycle cost-effective or unavailable.
- Turn off lights and other devices when not in use. Unplug rarely used appliances, device chargers, and power cords when not in use.
- Report all exterior light fixtures that remain on during the day that are not switch operated (ex: site lighting and building wall packs).
- Close windows and doors if heating/cooling systems are being used.
- Personal space heaters and air conditioners are prohibited.
- Inspect work areas and report potential energy wasting sources or offer energy-efficient improvement recommendations.
- Do not leave parked vehicles and equipment idling.



NOTE: If permitted to use Fort Walker electricity or water, always practice conservation.

GENERAL INFORMATION

If you have any energy and water savings recommendations or concerns, please contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

FIELD MESS/KITCHEN SITES

POSSIBLE AREAS OF CONCERN

Gray water produced from mobile kitchen trailers (MKT) or containerized kitchen trailers (CKT) sites may contain detergents, food scraps, grease, and other contaminants that could affect surface water quality, impact aqueous habitats, and adjacent ecosystems. Other potential areas of concern include kitchen grease, solid wastes, and recycling (see Tear Sheets A-39, A-64, and A-59, respectively, for additional information).

CHARACTERIZATION

When MKT/CKT sites are necessary, care must be taken to ensure that surface waters are not affected, no erosion takes place, and all gray water is containerized. Gray water from MKTs operations shall not be discharged to the environment (See Tear Sheet A-31, A-31A).

HANDLING PROCEDURES

Step 1 Units are strongly encouraged to use the pre-existing mess tent sites that are connected to the wastewater collection system.

Step 2 If pre-existing sites cannot be used, units shall be required to containerize their gray water.

Step 3 Units shall arrange for container rentals and pump and haul support through the DPW. Units shall call ENRD at 804-633-8255 for manhole access.

NOTE: Do not put anything in the manhole/wastewater collection system other than water and/cleanup water associated with meal plans. Do not pour grease or throw any trash/debris into the manhole.



GENERAL INFORMATION

When pre-existing sites cannot be used, the placement of MKT sites must be coordinated through the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

FIRE EXTINGUISHER RECYCLING

POSSIBLE AREAS OF CONCERN

Fire extinguishers contain products under pressure that are considered hazardous materials and may be reactive, corrosive, and/or toxic depending on the type of extinguisher.

CHARACTERIZATION

All fire extinguishers shall be turned over to ENRD for disposal whether full, partially used, empty, malfunctioning, or expired. Exhausted fire extinguisher bottles shall be recycled if handled correctly.

HANDLING PROCEDURES

- Step 1** Collect all fire extinguishers to be recycled.
- Step 2** Drop off at DPW Warehouse (Bldg. 1237) or call the ENRD at 804-633-8255 for pick up and disposal of all fire extinguishers.
- NOTE:** Do not attempt to discharge unused or expired fire extinguishers yourself.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership & Net Zero

FORWARD ARMING AND REFUELING POINTS (FARPS)

POSSIBLE AREAS OF CONCERN

Mobile refueling points have the potential to result in the release of petroleum products to the environment impacting habitat and wildlife.

CHARACTERIZATION

FARPs generally consist of 3,000-gallon bladders on mobile secondary containment with a series of manifolded lines/valves to provide fuel to aircrafts and other support vehicles.

HANDLING PROCEDURES

- Step 1** Place secondary containment on ground. Keep fuel cans under cover.
- Step 2** Inspect secondary containment integrity.
- Step 3** Place bladder within secondary containment.
- Step 4** Ensure all piping, valves, and hoses are placed within secondary containment.
- Step 5** ENRD (804-633-8255) must inspect prepared site before training occurs.
- Step 6** Commence training activities.

NOTES: Procedures apply to airfields only. For typical ground refueling, utilize Earth Berm Training Sites. See Tear Sheet A-56.

Practice good housekeeping.

Ensure that spill kit is located on site.

In case of a spill, call Directorate of Emergency Services (DES) Central Dispatch at 804-633-8911. See Tear Sheets A-66, A-67 and A-68 for Spill Prevention, Notification and Response, respectively.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero & Mission Enhancement

FUEL BURNING EQUIPMENT, VEHICLE EMISSIONS AND AIR QUALITY

POSSIBLE AREAS OF CONCERN

Fuel burning equipment (such as emergency generators and boilers) and vehicle emissions emit air pollutants such as sulfur dioxide, nitrogen oxides, particulate matter, carbon monoxide, and volatile organic compounds.

CHARACTERIZATION

Air quality will be protected and improved by reducing emissions from vehicles, generators, boilers, etc.

PRACTICES AND PROCEDURES

- Do not leave vehicles or equipment idling.
- Minimize air impacts through proper equipment procurement, coordination, and maintenance.
- Notify the ENRD by phone at 804-633-8255 of any equipment malfunctions or failures.
- Notify the ENRD prior to modifying an existing source (boiler, generator, etc.) or **bringing new equipment on-site**. (Notification should be given well in advance to allow time for compliance determination)
- Use dust control measures (wetting methods) during construction or demo activities. Keep speeds down on dirt and gravel roads.



Vehicle



Emergency Generator

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership

FUEL STORAGE TANKS

POSSIBLE AREAS OF CONCERN

Fuel releases from storage tanks may cause concerns to human health and safety and negative effects on the environment.

CHARACTERIZATION

Potential releases (i.e. localized alarms) and visible releases from storage tanks must be reported.

HANDLING PROCEDURES

- If you hear a localized alarm at a storage tank location, call the Service Order Desk at 804-633-8286. After hours, call the Directorate of Emergency Services (DES) at 804-633-8911.
- If you see a visual leak gauge that indicates a leak at an aboveground storage tank location (see photo to right), call the Service Order Desk at 804-633-8286. After hours, call the Directorate of Emergency Services (DES) at 804-633-8911.
- If you see a visible release from a storage tank, report it immediately to the Directorate of Emergency Services (DES) at 804-633-8911 **AND** ENRD at 804-633-8255.

NOTE: For additional information on Spill Quick Notification and Spill Response see Tear Sheets A-67, and A-68 respectively.



Aboveground Storage Tank



Visual Leak Gauge



Electronic
Leak
Detection
Systems



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

FURNITURE AND APPLIANCES RECYCLING (GOVERNMENT)

POSSIBLE AREAS OF CONCERN

Furniture and appliances require proper handling and disposal. Do not discard these items in dumpsters. Excess and surplus property will be reprocessed to reduce waste going to landfills and the need to purchase new materials.

Furniture and appliances may contain scrap metal, wood, wiring, and other materials that can be reclaimed as well as chemically treated components and toxic substances (i.e., mercury or refrigerant) that should be processed properly. Disposing of furniture and appliances in landfills may cause contamination of soil and groundwater.

CHARACTERIZATION

All furniture and appliance assets of Fort Walker shall be returned to the Property Book Warehouse for processing and disposal.

HANDLING PROCEDURES

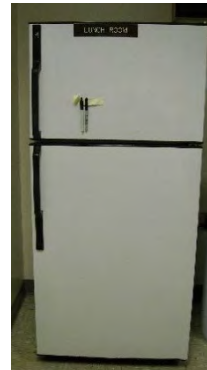
Step 1 Do not dispose of appliances or furniture in dumpsters.

Step 2 Collect damaged or surplus furniture and appliances and return to the Property Book Warehouse (Bldg. 1217).

NOTE: The use of safety lifting techniques, gloves, and steel toed shoes is required. Mechanical lifting is required for heavy objects.

See Tear Sheet A-58 for a map of showing the Property Book Warehouse location.

Contact the Property Book Warehouse at 804-633-8430 for more information.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

GRAY WATER MANAGEMENT

POSSIBLE AREAS OF CONCERN

Gray water may contain contaminants that could affect surface water quality, contribute to erosion, and impact aqueous habitats and adjacent ecosystems.

CHARACTERIZATION

Gray water includes water from showers, laundry, kitchen operations, vehicle wash racks, and handwash devices.

HANDLING PROCEDURES

- Step 1** Follow Best Management Practices.
- Do **NOT** discharge gray water to surface waters or on to the ground.
 - If possible, discharge gray water to the wastewater treatment plant, sanitary sewer or manhole. Pre-existing mess tent sites and shower/laundry operations connected to the water treatment plant and sanitary sewer are available.
 - If pre-existing sites cannot be used, gray water is required to be containerized.
 - Backwash, brine, wastewater, and unused chlorinated water from water purification systems shall be containerized.
 - Tactical vehicle washing shall only occur at the Central Vehicle Wash Facility. See Tear Sheet A-15 for more information.



Mobile Kitchen Trailer



Onion Bladder

- Step 2** Arrange for container rentals and pump and haul support through local vendors. If you need recommendations, contact the DPW at 804-633-8234.

- Step 3** Coordinate with the ENRD at 804-633-8255 prior to disposal.

- NOTES:**
- Engine flushing and exterior washing of aircraft (UAVs, helicopters, etc.) are **not** allowed. Units need to schedule maintenance requirements for engine flushing either prior to or after training at Fort Walker at other approved offsite locations.
 - Contact the ENRD if you are unsure of how to manage gray water.

GENERAL INFORMATION

For additional guidance and to coordinate drum support, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero & Mission Enhancement

Armor TTB Manhole Locations for MKTs/Gray Water Disposal



1:1,000

0 0.02 0.04 0.07 Kilometers

0 0.02 0.04 0.07 Miles

Environmental Office
Environment & Natural Resources Division
Directorate of Public Works
Fort Walker, Virginia



Publication Date: 07 September, 2023

Artillery TTB Manhole Locations for MKTs/Gray Water Disposal



1:1,500

0 0.03 0.06 0.11 Kilometers

0 0.03 0.06 0.11 Miles

Environmental Office
Environment & Natural Resources Division
Directorate of Public Works
Fort Walker, Virginia



Publication Date: 07 September, 2023

Infantry TTB Manhole Locations for MKTs/Gray Water Disposal



THOMAS

1433

- Manhole, Abandoned
- Manhole, In Service
- Wastewater Line
- Road

1:1,100

0 0.02 0.04 0.08 Kilometers

0 0.02 0.04 0.08 Miles

Environmental Office
Environment & Natural Resources Division
Directorate of Public Works
Fort Walker, Virginia



Publication Date: 07 September, 2023

Quartermaster TTB Manhole Locations for MKTs/Gray Water Disposal



1:1,400

0 0.03 0.05 0.1 Kilometers

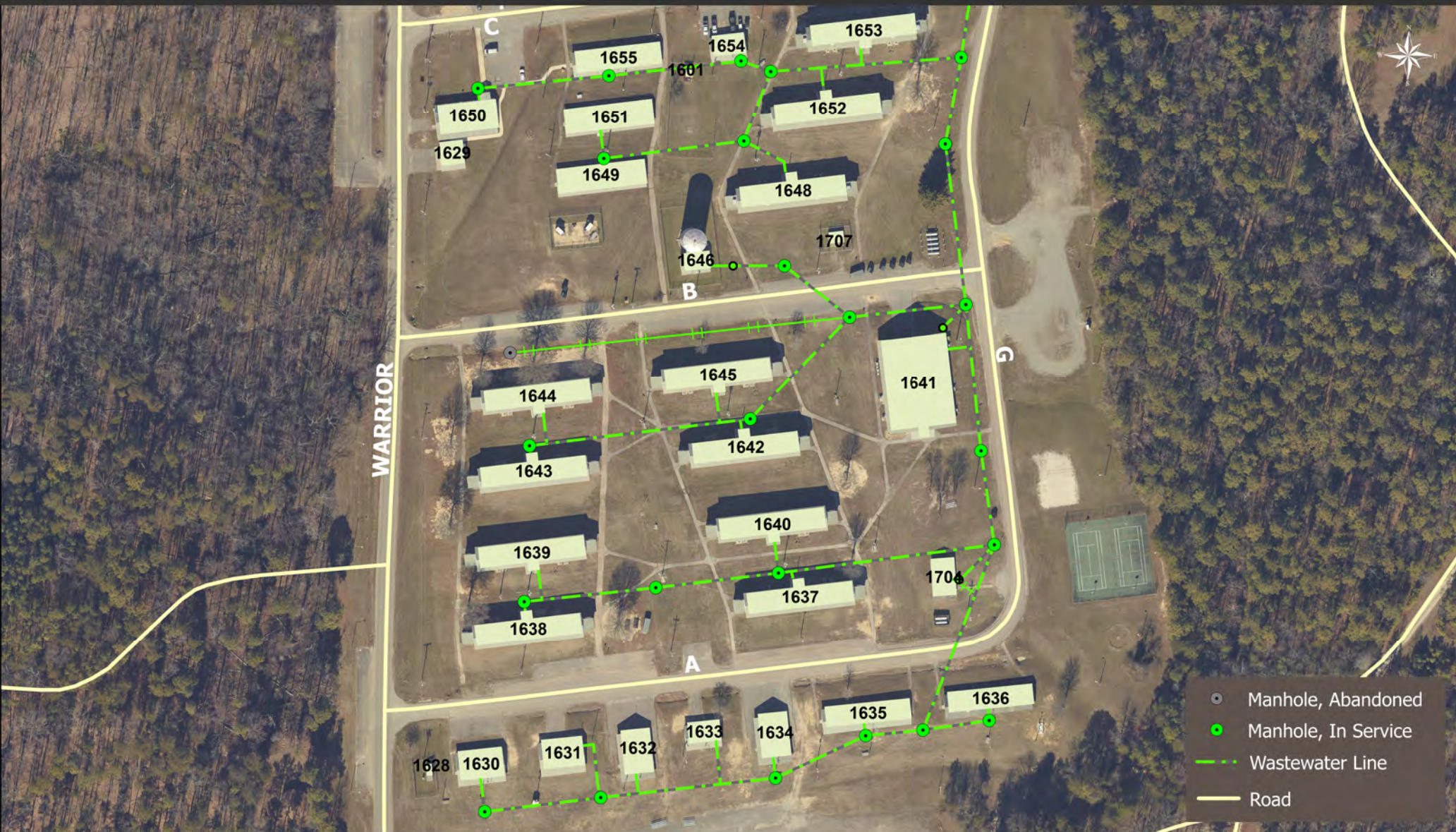
0 0.03 0.05 0.1 Miles

Environmental Office
Environment & Natural Resources Division
Directorate of Public Works
Fort Walker, Virginia



Publication Date: 07 September, 2023

Warrior 1st BN Manhole Locations for MKTs/Gray Water Disposal



1:2,200

0 0.04 0.09 0.17
Kilometers

0 0.04 0.08 0.16
Miles

Environmental Office
Environment & Natural Resources Division
Directorate of Public Works
Fort Walker, Virginia



Publication Date: 07 September, 2023

Warrior 2nd BN Manhole Locations for MKTs/Gray Water Disposal



1:1,614

0 0.03 0.06 0.12 Kilometers

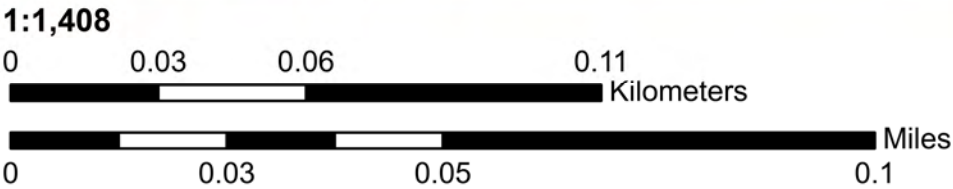
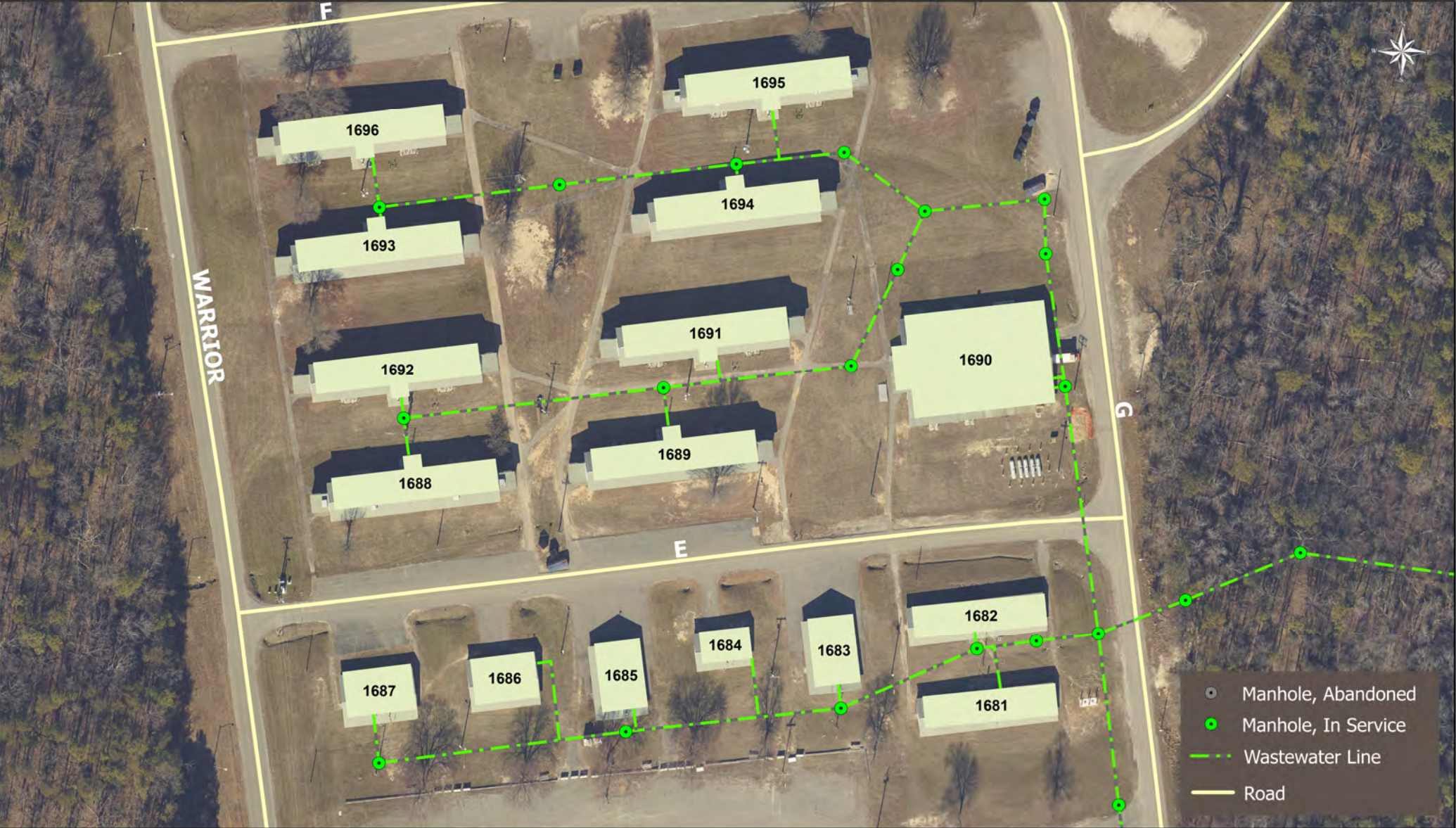
0 0.03 0.06 0.11 Miles

Environmental Office
Environment & Natural Resources Division
Directorate of Public Works
Fort Walker, Virginia



Publication Date: 07 September, 2023

Warrior 3rd BN Manhole Locations for MKTs/Gray Water Disposal



GREASE (MAINTENANCE)

POSSIBLE AREAS OF CONCERN

Grease Automotive and Artillery (GAA) contains petroleum hydrocarbons and additives. Refer to the SDS for specific hazards.

CHARACTERIZATION

Grease contaminated with dirt, water, or other materials is a non-hazardous industrial waste due to the petroleum constituents.

HANDLING PROCEDURES

- Step 1** Contact ENRD for collection drum.
- Step 2** Place empty containers and contaminated materials (i.e. greasy rags) in the provided drum.
- Step 3** Mark containers to identify contents.
- Step 4** Make sure container is closed and placed to prevent spills.

NOTE: When using small quantities of grease from cartridges, remove the entire tube top and replace. Do not pop or open the pull tab section.



GENERAL INFORMATION

For additional information contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.bbx.enrd-mailbox@army.mil).



Net Zero

GREEN PROCUREMENT

POSSIBLE AREAS OF CONCERN

“Green” purchasing enhances and sustains mission readiness through cost effective acquisition that achieves compliance and reduces resource consumption and solid and hazardous waste generation.

CHARACTERIZATION

Green Procurement (GP) minimizes negative environmental effects using environmentally friendly products in the following categories:

- Recycled content products
- Biobased products
- Energy and water efficient products
- Electronics w/ Envir. Preferable Attributes (EPEAT)
- Low or Non-Toxic and hazardous chemicals
- Non-ozone-depleting substances (ODS)
- Environmentally preferable products (EPPs)
- Alternative fuels and alternatively fueled vehicles
- High performance and sustainable buildings



HANDLING PROCEDURES

1. **Seek out and request green products** when developing contract requirements or purchasing from vendors and online catalogs.
2. **Use On-line Ordering Green Product Designations** (i.e. Green Leaf).
3. **Purchase compliant designated items** to the maximum extent possible within the constraints of price, performance, and product availability.
4. **Comply with recordkeeping** and internal reporting procedures developed by the Fort Walker GP team.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

HABITAT PROTECTION

POSSIBLE AREAS OF CONCERN

Negative impacts to ecological habitats found at Fort Walker.

CHARACTERIZATION

Implement strategies for long-term, sustainable management of installation resources in support of the training mission.

HABITAT PROTECTION PRACTICES

- Follow instructions on posted signs. Be aware of these signs as you conduct your work at the facility.
- Do not use plants less than 1 foot tall as camouflage. Pine and hardwood saplings may be utilized for camouflage, but it is recommended that netting and associate systems are used rather than destroying trees. Remove all cords and wires from around trees before leaving an area (see girdling picture to right).
- Vehicles are only authorized to cross streams at established crossing points. Units are prohibited from traveling through or near ponds, marshes, streams, and other wet, low-lying areas.
- Do not discharge oil, chemicals, debris, etc. into storm drains, stormwater ditches, or waterways. See Tear Sheet A-69 for additional guidance.
- Logging activities are restricted in all wetlands to limit disturbance within riparian protection areas (RPAs).
- Prescribed burns are conducted upon approval for wildland fuel management, vegetation control, post-logging site preparation, and ecosystem management. See Tear Sheet A-51 for additional guidance.
- Implement and maintain appropriate erosion and sediment controls for all regulated land disturbing activities. See Tear Sheet A-19 for more information.
- Coordinate all land or water disturbing activities through the ENRD.



Sample Sign



Girdling



Tributary of Chesapeake Bay Watershed



Erosion and Sediment Control

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



HAZARDOUS MATERIALS

POSSIBLE AREAS OF CONCERN

Hazardous materials used or stored incorrectly pose a serious risk to individuals & the environment.

CHARACTERIZATION

Many hazardous materials & substances are used in the daily operation of the installation. Hazardous materials used on Fort Walker include but are not limited to pesticides, cleaning chemicals, solvents/degreasers, adhesives, paints and paint thinner, and aerosol cans.

HANDLING PROCEDURES

- Coordinate with ENRD before bringing hazardous materials on-site. Provide a list of hazardous materials to be used & copies of Safety Data Sheets (SDSs). Hazardous material requests must be verified, approved, and processed through a HAZMART.
- Personnel at Fort Walker should acquire and manage hazardous materials through HAZMART located at the DPW Warehouse (Bldg. 1237).
- All hazardous materials are affixed with a yellow SDS label (see photo to right). These labels contain the SDS number. SDSs are available in the SDS book located in work area. See SDS Tear Sheet A-61 for additional information regarding SDSs.
- Return all unused hazardous materials and empty containers to the HAZMART located at the DPW Warehouse (Bldg. 1237). **Do not** dispose of hazardous materials or containers in general trash dumpsters. Hazardous materials containers may also be returned to hazardous materials area.
- Use environmentally safe alternatives when possible.
- Hazardous materials stored outdoors should be in a covered location with secondary containment to prevent spills.
- Report all spills, regardless of size. Call the Directorate of Emergency Services (DES) at 804-633-8911.



HAZMART Storage



Yellow SDS Label



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

HAZARDOUS WASTE

POSSIBLE AREAS OF CONCERN

Hazardous wastes when not properly managed pose a serious risk to people and the environment. Potentially hazardous wastes include parts cleaners, used solvent, out-of-specification hazardous materials, hazardous materials with expired shelf-life, selected spent munitions removed from the Range, and NBC mask filters. Unused hazardous materials shall be turned in so that it does not become a hazardous waste.

CHARACTERIZATION

Hazardous wastes are identified in 40-CFR Part 261. Wastes that are not listed but possess one the following four characteristics ignitability, corrosivity, reactivity, or toxicity may still be considered a hazardous waste.

HANDLING PROCEDURES

- Minimize generation of hazardous waste.
- **Do not** put hazardous waste into general trash dumpsters.
- Hazardous wastes should be stored in hazardous waste accumulation areas.
- Ensure hazardous wastes are properly labeled with the contents and accumulation start date.
- Hazardous wastes must be properly disposed of within 90 days of the accumulation start date.
- Hazardous waste manifests must be completed by authorize and trained personnel for disposal and needs to be signed by DPW Environmental Personnel.
- Hazardous waste pick-up and disposal must be coordinated through the ENRD at 804-633-8255.



GENERAL INFORMATION

For additional information or if you are unsure how to dispose of a waste, contact ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

HAZMAT LOCKERS (PROCEDURES)

POSSIBLE AREAS OF CONCERN

Procedures for hazardous materials storage lockers for all units and activities requiring access to and storage of hazardous materials.

CHARACTERIZATION

Hazardous materials include but are not limited to pesticides, cleaning chemicals, solvents/degreasers, adhesives, paints and paint thinner, and aerosol cans.

HANDLING PROCEDURES

- Step 1** Directorate/Tenant/Unit will appoint a HAZMAT Custodian.
 - Step 2** Return unserviceable, contaminated, or empty containers to DPW Warehouse (Bldg. 1237).
 - Step 3** Corrosives do not belong in the flammable locker. They shall be stored in a corrosive locker.
 - Step 4** An inventory list is to be posted on the outside of any flammable and corrosive lockers.
 - Step 5** When storing chemicals make sure they are compatible.
 - Step 6** Keep track of shelf life of the material and turn in expired materials to the DPW Warehouse (Bldg. 1237).
 - Step 7** Ensure Hazmat locker storage areas are secured when not in use.
- NOTE:** Do not store used batteries in return lockers. Refer to Tear Sheets A-6 and A-40 for more information on batteries.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

HISTORIC ARCHITECTURAL RESOURCES MANAGEMENT

POSSIBLE AREAS OF CONCERN

Historic architectural resources at Fort Walker include any standing structure, bridge, or cemetery 50 years of age or older.

CHARACTERIZATION

Any proposed undertaking (such as sign posting, construction, addition, excavation, or demolition) within or immediately adjacent to historic districts or historic structures will be reviewed by the Cultural Resource Manager (CRM) to ensure adherence to the Secretary of Interior's Standards for the Treatment of Historic Properties (36 CFR 68).

HANDLING PROCEDURES

- Pre-project plans of the undertaking will be reviewed by the CRM, prior to implementation.
- An undertaking will not begin until the Chief, ENRD has either (1) verified that the project will have no adverse effect on the historic resource or (2) approved a proposed plan to mitigate any adverse effects to the historic resource.
- Do not excavate within or around an historic structure or district without an approved dig permit.
- Do not remove, damage, or otherwise alter any element of an historic structure unless the action has been approved by the Cultural Resources Manager.
- Mistreatment of an architectural resource should be immediately reported to Provost Marshal Office (804-633-8501) and ENRD (804-633-8255). Vandalism and unauthorized artifact collection on federal property may result in criminal penalties.



Early 20th –century structure



Liberty Church, built in the 1850s



The Lodge in Travis Lake Historic District

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

KITCHEN GREASE/OIL

POSSIBLE AREAS OF CONCERN

Kitchen grease spills and overflows may pose health and environmental hazards as well as pollute our waterways. Kitchen grease can be used to make products that range from biodiesel fuel to candle tallow.

CHARACTERIZATION

Kitchen grease shall be recycled. A 55-gallon drum can be requested for field operations/Mobile Kitchen Trailers (MKTs) through ENRD 804-633-8255.

HANDLING PROCEDURES

Step 1 Pour kitchen grease into appropriately labeled container or 55-gallon drum labeled "Kitchen Grease" or "Spent Cooking Oil".

Step 2 Keep area around drums clean, dry and free of trash, grease, and other similar materials.

Step 3 Kitchen grease is picked up periodically by a contractor. Call ENRD if the container is becoming full.

NOTE: Kitchen grease recycling is located at the Warrior TTB Barracks Mess Halls/Dining Facilities (DFACs) and the Guadalcanal Mess Hall.

Grease container should remain closed unless grease is being added to the container.

No other oils or grease other than kitchen grease or oils are to be placed in the containers.



Kitchen Grease Containers



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



LEAD-ACID BATTERIES

POSSIBLE AREAS OF CONCERN

Lead-acid batteries are recyclable and may be flammable, reactive, corrosive, and/or toxic depending on the type of battery. Lead-acid batteries contain lead, lead oxide, and sulfuric acid.

CHARACTERIZATION

Lead-acid batteries are hazardous due to their lead content and are managed as universal waste. It is illegal to dispose of a lead-acid battery in a landfill.

HANDLING PROCEDURES

Step 1 Caps should remain in place.

Step 2 Batteries should be taken to DS Maintenance (Bldg 1290).

- Obtain key for appropriate storage building from DS Maintenance Office (A battery storage building is located at DS Maintenance).
- Range Control batteries go back to Range Control.
- Enter required information into the log book provided within the storage area.
- Lock storage building and return key to DS Maintenance Office.

NOTES: New and used batteries must be stored in a covered building or locker marked for battery storage (Corrosive).

If batteries break/spill on the ground or if there is a question about disposal, contact ENRD at 804-633-8255 for guidance.

Lead-acid battery terminals should be taped to prevent electrical shorting. Metal strapping should not be used to strap batteries to pallets.



Typical Used Battery Storage Building at DS Maintenance (Bldg 1290)



Exide (pictured above), car, lawn mower, and other lead-acid vehicular batteries should be taken to DS Maintenance for recycling.

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



LEAD-BASED PAINT

POSSIBLE AREAS OF CONCERN

Lead is a toxic metal that can damage the central nervous system (especially in young children) and cause blood and brain disorders. Lead poisoning can occur when the lead is dispersed from sanding lead-based paint (LBP) prior to repainting and during renovation and demolition activities.

CHARACTERIZATION

Paint or other similar surface coating materials containing lead or lead compounds and in which the lead content (calculated as lead metal) is in excess of 0.50 percent by weight.

HANDLING PROCEDURES

- Buildings constructed before 1978 must have a LBP survey prior to any disturbance of surfaces potentially coated with LBP. Buildings constructed after 1978 should not have any LBPs.
- The ENRD **needs to review** any projects involving the demolition, repair, renovation, or maintenance of painted building materials.
- Contact ENRD at 804-633-8255 prior to conducting work involving potential LBP.
- The ENRD **does not need to review** the following types of project with respect to lead containing paint:
 - Projects where only nailing, drilling small holes, etc. is involved.
 - Installation of air conditioners.
 - New construction (no demolition involved).

NOTE: LBP removal and disposal will only be performed by a licensed contractor. There will be no disturbance of LBP by any unlicensed personnel.



"Alligatored" lead paint



Lead Paint Removal



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



LIGHT BULBS

POSSIBLE AREAS OF CONCERN

Fluorescent tubes, Energy-efficient Compact Fluorescent Light (CFL) bulbs, Halogen bulbs, High Intensity Discharge (HID) bulbs, Sodium bulbs, contain hazardous materials and shall not be disposed of in landfills and turned into the DPW Warehouse.

CHARACTERIZATION

Fluorescent tubes, CFL bulbs, Halogen bulbs, HID bulbs, and Sodium bulbs are considered universal wastes.

HANDLING PROCEDURES

Step 1 Store the used, unbroken bulb(s) until they will be properly processed and recycled.

Step 2 Bring your bulbs to the DPW Warehouse (Bldg. 1237) or call the ENRD at 804-633-8255 for pick up.

NOTES: Do not dispose of CFL bulbs or mercury containing fluorescent tubes in the trash.
Fluorescent tubes containing mercury are marked with an Hg.

Cleaning Up A Broken Bulb

1. Before Cleanup

- Have people & pets leave the room.
- Air out the room for 5-10 minutes by opening a window or door to the outdoor environment.
- Shut off central forced air heating/air conditioning.
- Collect the materials needed to clean up broken bulb.

2. During Cleanup

- **DO NOT VACUUM.** Be thorough in collecting broken glass and visible powder.
- Place cleanup materials in a sealable container.

3. After Cleanup

- Promptly place all bulb debris and cleanup materials outdoors in a trash container or protected area until materials can be disposed of properly. Avoid leaving any bulb fragments or cleanup materials indoors.
- If practical, continue to air out the room where the bulb was broken and leave the heating/air conditioning system shut off for several hours.



Fluorescent Tubes



Compact Fluorescent Light (CFL) Bulb

GENERAL INFORMATION

For additional information contact, the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership & Net Zero

LOGGING/LOGGER'S IN-BRIEF

POSSIBLE AREAS OF CONCERN

In addition to the positive benefits of timber harvesting and prescribed burning, logging operations may have multiple negative impacts to wildlife, their habitats, and surface water quality.

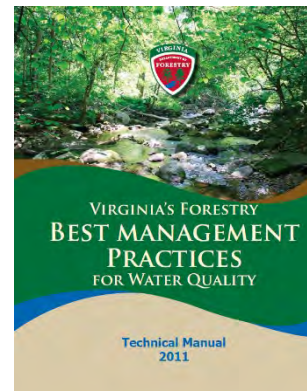
CHARACTERIZATION

Care must be taken to minimize the impacts including implementing erosion and sediment control measures, adhering to secondary containment/spill prevention and response procedures, and awareness of wetland, cultural resource, and threatened or endangered species locations.

HANDLING PROCEDURES

Step 1 Comply with:

- Virginia's Forestry Best Management Practices for Water Quality Technical Manual 2011.
- Adhere to all harvest contract specifications related to Best Management Practices (BMPs), skid trail rutting, residual tree damage, logging debris and other specifications
- Applicable hazardous material regulations. Have Safety Data Sheets (SDSs) readily available. See Tear Sheet A-61 for additional information.
- Solid waste management guidelines. Implement good housekeeping practices. See Tear Sheet A-64 for additional information.
- Erosion and Sediment Control requirements. See Tear Sheet A-19 for additional information.
- Chesapeake Bay Preservation Act. **Stay out of all wetlands and streams.**
- The Chesapeake Bay Preservation Act and Fort Walker's Integrated Natural Resource Management Plan (INRMP) define Resource Protection Areas (RPAs) as 100-ft buffers around streams, wetlands, and aquatic habitats. Exceptions to the width of this buffer (e.g., 50-ft Streamside Management Zone) must be approved by the ENRD Chief.



Step 2 Actively manage Petroleum, Oil, and Lubricants (POLs).

- Designate an area where vehicle and equipment fueling will occur.
- Be familiar with spill prevention, quick notification, and response procedures. See Tear Sheets A-65, A-66, A-67, and A-68.

NOTES: Contact ENRD if anything is found that may be considered a cultural resource. See Tear Sheet A-20
In case of spill, gasoline contaminated soils and associated clean up materials must be stored separately from other petroleum contaminated soils and materials. Report all spill immediately to Directorate of Emergency Services (DES) Central Dispatch at 804-633-8911.

Be aware of and respect riparian buffers; coordinate with the Forestry Office immediately if soil disturbance, erosion, or tree felling occurs within riparian buffers.

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

MOBILE SHOWER OPERATIONS

POSSIBLE AREAS OF CONCERN

Gray water produced from mobile shower operations may contain soaps and other contaminants that could affect surface water quality, contribute to erosion, and impact aqueous habitats.

CHARACTERIZATION

When field shower sites are necessary, care must be taken to ensure that surface waters are not affected, no erosion takes place, and all gray water is containerized (see Tear Sheet A-31).

HANDLING PROCEDURES

- Step 1** Pre-existing field shower slabs that drain into the sanitary sewer should be used.
- Step 2** If pre-existing sites cannot be used, coordinate the field shower sites locations with the ENRD.
- Step 3** Units shall arrange for container rentals and pump and haul support through local vendors. If you need recommendations, contact the DPW at 804-633-8234 for contract support.



NOTE: Army Techniques Publication (ATP) 4-42 provides guidance for constructing and maintaining field hand washing and shower devices. There will be no field sanitation permitted on the garrison. Please coordinate with a local vendor for latrine usage during the training event.

GENERAL INFORMATION

When existing sites cannot be used, placement of field shower sites must also be coordinated through the ENRD. Contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

MOBILE WATER PURIFICATION OPERATIONS

POSSIBLE AREAS OF CONCERN

Chlorine residual in excess of 3 PPM and other chemicals that are added/used during field water operations may have an impact on the environment. Use, storage, and transportation of bulk treatment chemicals may create a hazard to individuals and the environment. Brine and backwash from the purification process shall **NOT** be released to the environment. All backwash, brine, and other wastewater byproducts shall be containerized.

CHARACTERIZATION

Any water field missions must be approved by the DPW ENRD. These missions may include, Reverse Osmosis Water Purification Units (ROWPU), Tactical Water Purification Systems (TWPS), Lightweight Water Purification (LWP) Systems, and any method or technologies required to produce potable water.

HANDLING PROCEDURES

Step 1 Coordinate with ENRD to arrange for container rentals and pump and haul support through local vendors. If you need recommendations, contact the DPW at 804-633-8234.

Step 2 Coordinate disposal of unused, potable, chlorinated water disposal with the ENRD.

NOTE: Under no circumstances shall any substance be discharged directly into any surface water bodies or on to the ground. Draining should occur on level terrain and at a minimum of 100ft distance from any surface water.



GENERAL INFORMATION

Buzzards Roost Pond and Lonesome Gulch Pond are the approved and designated water bodies for potable water purification training.

For additional guidance and information regarding water purification activities, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

MRE & UGR-E HEATERS

POSSIBLE AREAS OF CONCERN

Meals Ready-to-Eat (MRE) & Unified Group Ration-Express (UGR-E), which contain Flameless Ration Heaters (FRHs), consists of a plastic bag containing a piece of fiberboard and powdered magnesium or magnesium alloys (a water reactive chemical) along with other materials.

CHARACTERIZATION

EPA had determined that individual MREs and UGR-Es containing FRHs are not hazardous wastes and may be disposed of as non-hazardous solid wastes. This finding applies to all FRHs packed with MREs and UGR-Es issued or in stock.

HANDLING PROCEDURES

- Used FRHs from MREs and UGR-Es will be disposed of with normal trash.
- FRHs should be activated before discarding in dumpster to avoid possible reactions and fires.

DISPOSAL PROCEDURE:

1. Disposal of single, unused MRE and UGR-Es is considered household hazardous waste and can be disposed of with normal trash.
2. Bulk amounts of unused FRHs are considered hazardous waste and **MUST not be placed in the trash.** Contact the ENRD at 804-633-8255 for proper disposal.



GENERAL INFORMATION

For questions about disposal or for additional information, contact ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



MUNITIONS AND UNEXPLODED ORDNANCE (UXO)

POSSIBLE AREAS OF CONCERN

Trash, ponds, waterways, and drainage ditches may be contaminated with ammunition, simulators, brass, smoke grenade residue that can harm people and the environment.

CHARACTERIZATION

Training activities result in the generation of expended munitions and unexploded ordnance (UXOs). Expended munitions and UXOs **are not** to be disposed of in general trash dumpsters.

SAFETY PROCEDURES

If you encounter munitions and/or UXO:



- when you may have encountered a munition and that munitions are dangerous.
- do not approach, touch, move or disturb it, but carefully leave the area.
- call Range Operations at 804-633-8224 or police at x8911

NOTE: Amnesty Program: Ammunition found on post, live-fire ammunition, up to and including .50 caliber, can be turned into ASP without fear of prosecution.



GENERAL INFORMATION

For additional information, contact the Ammunition Supply Point (ASP) at 804-633-8801.



Mission Enhancement

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) AND PROJECT REVIEW

POSSIBLE AREAS OF CONCERN

Projects and activities that have the potential to adversely impact sensitive resources.

PURPOSE

The National Environmental Policy Act (NEPA) requires the federal government to follow an environmental analysis process to reach a decision on which course of action to take, it does NOT mandate that the most environmental preferred course of action be taken. It CANNOT be an "after the fact" justification for implementation of decisions already made. Failure to comply with NEPA will result in a court enjoining, restraining, or delaying the Army from proceeding with its selected action.

NEPA PROCEDURES

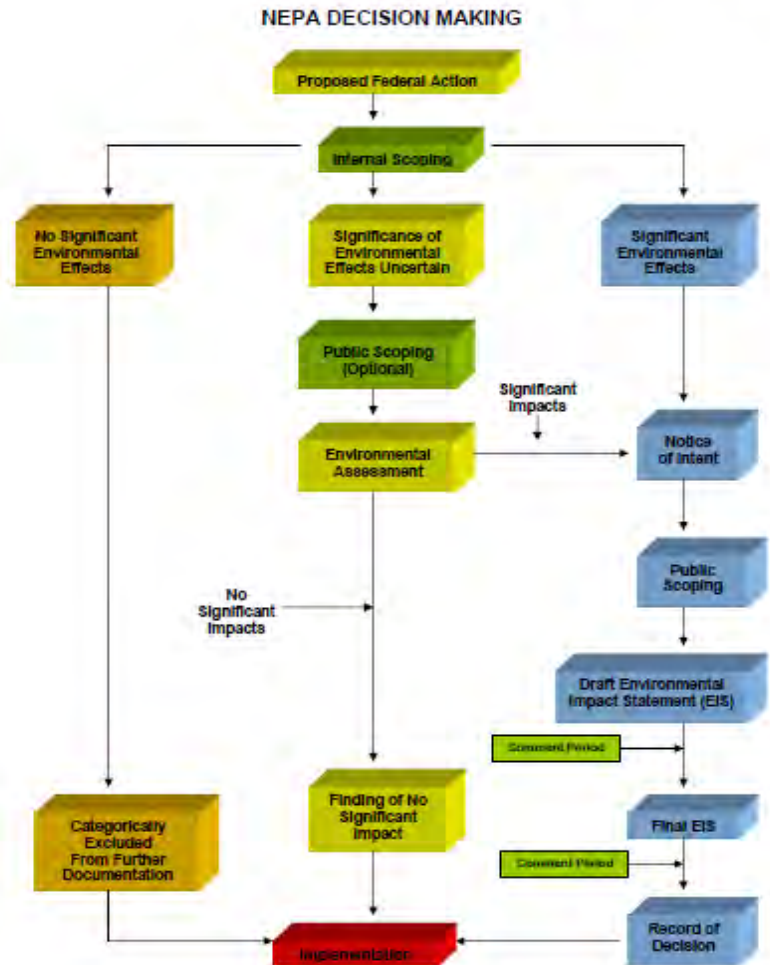
Step 1 Complete the environmental checklist/questionnaire. ALL Fort Walker projects will have an environmental checklist.

Step 2 An Environmental Checklist must be completed NLT Planning Charrette (MILCON) or Pre-Design meeting (OMA) and submitted to Environmental Division by the Project Point of Contact (POC).

Step 3 Obtain required reviews by the ENRD. Each submittal for environmental review will be given a minimum 15-working day review period.

Step 4 No project is cleared for construction until the NEPA Analysis is completed and all permits, letters, requirements, consultations and mitigation activities have been met and/or obtained.

Note: Contact the ENRD at 804-633-8255 with questions.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

NATURAL RESOURCE CONSERVATION

POSSIBLE AREAS OF CONCERN

The conservation and management of natural resources such as land, water, soil, plants and animals, with a particular focus on how management affects the quality of life for both present and future generations. Fort Walker harbors sensitive resources such as threatened and endangered species, wetlands, and unique habitats.

CHARACTERIZATION

Fort Walker's natural resources management goals are to support the military mission by providing sustainable and viable lands and maintain compliance with federal and state laws and regulations. Be aware of your surroundings and familiarize yourself with the natural resources present at the installation.

MANAGEMENT PRACTICES

- **Environmentally Sensitive Resource Areas (ESRA):** Limited or no disturbance permitted in these areas. These areas are designated as shown to the right. Be aware of these signs as you conduct your work at the facility.
- Obtain an approved Hot Work Permit (DA Form 5383) from Fire Department for ALL open burning activities. **Open burning is prohibited within 660 feet of bald eagle nests between December 15th and July 15th.** See Tear Sheet A-52 for additional information.
- Minimize vehicle movement across streams and avoid all wetlands and buffers.
- Hunting, trapping, fishing, logging, and firewood cutting are regulated activities at Fort Walker. Refer to Tear Sheet A-59 for additional information.
- Do not discharge oil, chemicals, debris, gray water, wastewater, etc. into storm drains, stormwater ditches, or waterways. See Tear Sheet A-31 for additional information.
- Do not use plants less than 1-foot tall as camouflage. Pine and hardwood saplings may be utilized for camouflage, but it is recommended that netting and associate systems are used rather than destroying trees. Remove all cords and wires from around trees before leaving an area (see girdling picture to right).
- **Firewood Cutting:** Permits for firewood cutting are available through iSportsman. A time-of-year restriction on the cutting of trees greater than 4" in diameter is in effect from 15 April through 15 September to ensure compliance with endangered bat species protections. For additional information, refer to APH Regulation 200-11 or call Forestry at 804-633-8409.

NOTE: Coordinate all land and water disturbing activities through the ENRD at 804-633-8255. Prior to the start of construction activities, consult with the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



ESRA Sign



Open Burn Area



Forestry



Girdling

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

NOISE

POSSIBLE AREAS OF CONCERN

Population growth and urban development in Caroline County is encroaching on the Fort Walker facility border. Noise from training activities and daily operations is becoming a cause of concern for nearby citizens and communities.

CHARACTERIZATION

The primary strategies for protecting the mission of military installations from the problems of noise incompatibility are long-range land use planning and being a responsible neighbor to surrounding communities.

Fort Walker has developed an Operational Noise Management Plan (ONMP) to address these issues in a proactive manner. The ONMP includes land use planning, education of both military and civilian communities, management of noise complaints, mitigation of the noise and vibration, and noise abatement best management practices (BMPs) aimed at being a responsible neighbor to the surrounding communities.

NOISE ABATEMENT BEST MANAGEMENT PRACTICES

- Step 1** Identify noise hazards at the facility.
- Step 2** Continue to establish Army Compatible Use Buffers (ACUBs) around the facility to protect citizens and wildlife from noise hazards generated from facility operations and training activities.
- Step 3** Protect wildlife at the facility from disturbances caused by the noise generated by training and construction operations.
- Step 4** Determine alternative methods, times, or locations for training activities to limit disturbance to nearby communities and wildlife.
- Step 5** Provide DPTMS with updates on scheduling training drills and other disturbance causing events before they occur. The Public Affairs Office will establish lines of communication between the installation and the local community.
- NOTE:** Noise is not a legally mandated compliance requirement and there are no national noise limit laws or regulations that apply to military weapons or equipment that are designed for combat use.



Noise Monitor

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Community Engagement

OPEN BURNING

POSSIBLE AREAS OF CONCERN

Minimizing negative air impacts from open burning activities at the facility through proper coordination and preparation.

CHARACTERIZATION

Air quality is the measurement of the pollutants in the air; a description of the healthiness and safety of the atmosphere. Common air contaminants include ground-level ozone, particulates, sulfur dioxide, carbon monoxide, and nitrogen dioxide.

Air quality is protected by permitting all open burning activities at the facility.

MANAGEMENT PROCEDURES

Step 1 An approved Hot Work Permit (DA Form 5383) must be obtained from the Fire Department before **ALL** open burning activities.

Step 2 Prepare and implement a Smoke Management Plan for **ALL** prescribed burns.

Step 3 Follow all permit requirements.

Step 4 Report **ALL** fires to Directorate of Emergency Services (DES) central dispatch at 804-633-8888. Include grid coordinates in your report.

Step 5 Have firefighting equipment in the field.

Step 6 Burn used propellant bags in designated areas only.

Step 7 Slow down and turn on vehicle headlights in areas where smoke is visible on roadways.

Step 8 Avoid burning during high level ozone days

NOTE:

- Approved open burning activities near bald eagle areas can only occur between July 16th and December 14th.
- Any burning that is to occur 15 April - 15 September needs approval from DPW ENRD to ensure the area has been surveyed for federally protected bats (see Tear Sheet A-71).



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership

OZONE-DEPLETING SUBSTANCES

POSSIBLE AREAS OF CONCERN

Chlorofluorocarbons (CFCs), Hydrochlorofluorocarbons (HCFC's), and other ozone-depleting substances (ODSs) are responsible for ozone depletion and global warming.

CHARACTERIZATION

Proper handling and disposal of refrigerants, fire suppressants, sterilants, and other ODSs will minimize the risk of releases to the atmosphere.

HANDLING PROCEDURES

Step 1 Technicians that use or recover refrigerant must be properly certified for the type of equipment they service. Safety Data Sheets (SDSs) should be available on-site for product safety reference.

Step 2 Store ozone-depleting substances properly and limit the quantities to only the necessary amount.

By properly recovering, recycling, and reclaiming refrigerant, leaks will be reduced, resulting in minimized risks and consequences of a release to the atmosphere.

Step 3 Turn unused material and empty containers to DPW Warehouse (Bldg. 1237).

Step 4 Utilize non-ozone depleting, substitute products when acceptable.

NOTE: R-410A (also known as Puron or AZ-20) does not contain chlorine, is considered ozone-friendly while producing the same cooling effects and is the top choice to replace ozone-depleting HCFC-22. Manufacture of new equipment containing HCFC-22 was banned after the end of 2010.



HCFC-22 is a known ozone-depleting hydrochlorofluorocarbon (HCFC) refrigerant



R-410A (Puron or AZ-20) refrigerant

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Compliance Leadership & Net Zero

PAINT & PAINT RELATED MATERIAL

POSSIBLE AREAS OF CONCERN

Paints and paint-related material may contain chemicals that are hazardous. Refer to the SDS for specific hazards.

CHARACTERIZATION

Oil-based Paint and Stain; Latex (Water)-Based Paint and Stain.

HANDLING PROCEDURES

- **All** used/empty paint cans, aerosols, and /or tarps, rollers, brushes, gloves and stir sticks, **MUST** be turned in to the DPW Warehouse (Bldg. 1237 or call 804-633-8316).
- If you choose to keep the paint, it must be stored in a climate-controlled containment area. (Avoid freezing and high temperatures).
- Do **not** put paint & related material into general trash dumpsters.
- Paint materials/brushes/rollers must **not** be cleaned in parts washers.
- Do **not let** paint related waste go into storm drains or septic systems.
- Vehicle painting is prohibited on post
Unless specifically authorized, any painting operation must be approved by ENRD
 - Paint that contains Tributyltin (TBT) is prohibited on post.
- Where applicable, use low or zero Volatile Organic Compound (VOC) paints.



Oil based paint and stain residue must be turned into the DPW Warehouse



Yellow SDS label

Paint/related material pick up and disposal can be coordinated through the ENRD office.

GENERAL INFORMATION

For additional information or if you are unsure how to dispose of a particular waste, contact ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

PARTS WASHERS

POSSIBLE AREAS OF CONCERN

Solvent and solvent-related materials may contain chemicals that are flammable or toxic. Refer to the Safety Data Sheets (SDS) Tear Sheet A-61 for specific hazards.

CHARACTERIZATION

Solvents are used in maintenance operations for parts cleaning and surface preparation. All parts washer fluid at Fort Walker is considered hazardous waste.

HANDLING PROCEDURES

Step 1 Equipment or parts should be pre-cleaned before using parts washing equipment, i.e., removal of excess grease and dirt.

Step 2 Only parts or weapons are to be cleaned in these machines (Do not mix use).

Step 3 SDSs must be available for the solvent used. Utilize proper personal protective equipment when using parts washer.

Step 4 Periodically inspect parts washer for leaks.

Step 5 Do not contaminate parts washer solvent with other chemicals (i.e., paint, paint cleaning solvents, petroleum, oil, and lubricant (POL) products, gasoline, etc.).

Step 6 Do not move or block access to parts washing equipment.

NOTES: Lids on all parts washers must be closed when not in use. Labels should be on the washers indicating they be kept closed.

Rags, wiping materials, and other items used for cleaning operations with these solvents should be bagged, labeled, and shall be given to the ENRD for proper disposal or placed in the container beside the parts washer marked for hazardous waste contaminated rags.



Parts Washer



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

PESTICIDES AND PEST MANAGEMENT

POSSIBLE AREAS OF CONCERN

Improper use of pesticides, herbicides, and rodenticides may have negative impacts to human health and the environment.

CHARACTERIZATION

Pesticides include any chemical substance, biological agent, antimicrobial, disinfectant, or device intended for preventing, destroying, repelling, or mitigating any pest.

All pest management activities are handled by authorized and trained personnel from the DPW ENRD (Entomology) in accordance with the approved Installation Pesticide Management Plan (IPMP).

MANAGEMENT PROCEDURES

- **Do not** apply pesticides yourself.
- All pest management is handled by DPW ENRD Entomology located adjacent to EP4.
- Contact the Service Order Desk at 804-633-8286 to treat an infestation or nuisance wildlife issues. Do not handle/harass wildlife including nests or eggs.
- Pesticides are considered a universal waste; therefore, contact the ENRD at 804-633-8255 for pick-up of pesticide materials.

NOTE: **Do not** purchase or apply pesticides yourself.
See Tear Sheets A-9 for additional information on the DoD Insect Repellent System.



Bald Faced Hornets' Nest



Pest Management Group Supplies

GENERAL INFORMATION

For additional information, contact DPW ENRD Entomology at 804-633-8457.

For pick-up of pesticide materials, contact ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero/Mission Enhancement

POL BERM OPERATIONS – EARTH BERM TRAINING SITES

POSSIBLE AREAS OF CONCERN

Secondary containment earth berms are present at the Petroleum, Oil, and Lubricant (POL) training sites. Fueling training activities at these sites have the potential to result in the release of petroleum products to the environment potentially impacting habitat and wildlife. ENRD supervision is required.

CHARACTERIZATION

Use of secondary containment during training activities is mandatory.

HANDLING PROCEDURES

Step 1 The earthen berms are equipped with ball valve release valves. Verify the ball valve is closed prior to commencing training activities.

Step 2 Install liner within earth berm

Step 3 Place bladder within earth berm and liner.

Step 4 Provide secondary containment for fueling hoses.

Step 5 ENRD (804-633-8255) must inspect prepared site before offloading occurs.

Step 6 Offload fuel from truck to bladder.

Step 7 Offload fuel from bladder to truck.

NOTES: Ensure that spill kit is located on site. Trained personnel perform maintenance checks on the berms periodically. If a deficiency is noted while training, do not use the earth berm and contact ENRD by phone at 804-633-8255. See Tear Sheets A-66, A-67, and A-68 for Spill Prevention, Notification and Response, respectively.



POL Earth Berms



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement & Net Zero

PRINTER AND COPIER CARTRIDGES

POSSIBLE AREAS OF CONCERN

Printer cartridges and copier toner cartridges shall be recycled. Recycling decreases the volume of waste disposed of in a landfill.

CHARACTERIZATION

Printer cartridges and copier toner cartridges shall be recycled. Bring cartridges to the DPW Warehouse (Bldg. 1237).

HANDLING PROCEDURES

- Step 1** Save the original box the cartridge or toner came in.
- Step 2** Place the cartridge or toner in its original box.
- Step 3** If a return label is not provided in the original box, go to the manufacturer's website and obtain a return label.
- Step 4** Affix the return label to the original box the cartridge or toner came in.
- Step 5** Then send it to the DPW Warehouse (Bldg. 1237).

NOTE: See Tear Sheet A-58 for a map of recycling locations



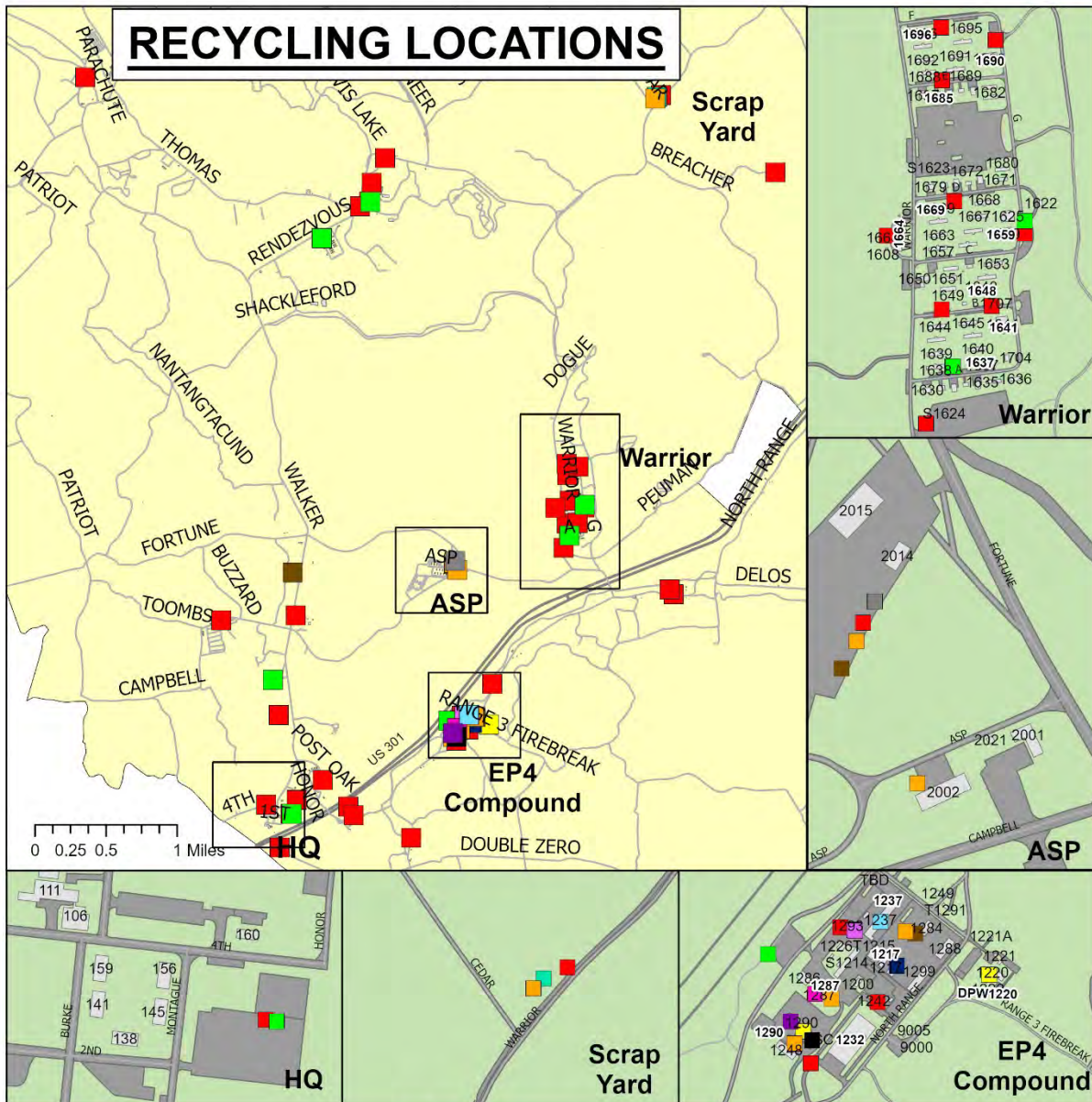
Printer/Toner Cartridges

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero



Batteries:

- >Small (Alkaline, Lithium): Environmental, Bldg 1220
- >Large (Vehicle): DS Maintenance, Bldg 1290

Cardboard:

- Cardboard Only Dumpsters are located at:
- >HQ, Parking Lot
- >ASP, Bldg 2014
- >TSC, Bldg 1232
- >Scrap Yard
- >Warrior & other various barracks locations

Commingled Recyclables:

- Designated blue office bins and dumpsters located at:
- >HQ, Parking Lot
- >EP4 Parking Lot
- >Warrior TTB, Bldg 1659

Appliances & Electronics:

- >Property Book Warehouse, Bldg 1217

Vehicle Fluids:

- >DS Maintenance, Bldg 1290

Scrap Metal:

- >Scrap Yard
- >DS Maintenance, Bldg 1290
- >ASP, Bldgs 2014 & 2002
- >EP4, Bldg 1287

Scrap Wire and Brass Fittings:

- >Utility Shop, Bldg 1287

Spent Ammunition Casings:

- >ASP, Bldg 2001

Used Printer Cartridges, Aerosol Cans, and Light Bulbs:

- >DPW Warehouse, Bldg 1237

Used Tires:

- >DS Maintenance, Bldg 1290

Wooden Pallets:

- >ASP Pallets: ASP Bldg 2001
- >Property Book Warehouse, Bldg 1217

REGULATED RECREATIONAL ACTIVITIES

POSSIBLE AREAS OF CONCERN

While recreational activities are allowed at Fort Walker, they must be carried out with regard toward protecting natural habitats and wetlands at the facility.

CHARACTERIZATION

Documentation and registration is required for recreational hunters and anglers wishing to use the facility grounds and waterways.

REQUIREMENTS AND PROCEDURES

HUNTING, TRAPPING, AND FISHING



- All recreational activities are scheduled through iSportsman at <https://walker.isportsman.net/>.
- All hunters and trappers, including active duty military personnel, **must** possess a valid Virginia hunting/trapping license, Fort Walker hunting/trapping permit, and Hunting Safety Certificate. Hunters and trappers **must** complete a criminal background check and register their weapons and vehicles before entering the facility.
- All anglers, including active duty military personnel, **must** possess a valid Virginia fishing license and Fort Walker fishing permit. All anglers **must** complete a criminal background check and register their vehicles before entering the facility.
- The disposal of animal carcasses only permitted in designated areas.
- Vehicles shall only be operated on roads designated on the Hunting Area Recreation Map. Off-road vehicle travel is prohibited. Hunters must travel directly to their designated hunting site.
- For more information on hunting, trapping and fishing permits, fees, and regulations, call the Fort Walker Fish and Wildlife Branch at 804-633-8984.
- Fishing, hunting, and trapping updates and current regulations can be found online at <https://walker.isportsman.net/>.

NOTE:

For information on all other recreational activities (cycling, hiking, kayaking etc.) contact Directorate of Family & Morale, Welfare and Recreation (DFMWR) at 804-633-8207.

Environmentally Sensitive Resource Areas

- These areas are designated as shown to the right.
- Be aware of these signs during your activity at the facility.
- Do not enter areas marked with the sign shown to the right.



GENERAL INFORMATION

For additional information, contact the offices identified above or the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

SAFETY DATA SHEETS (SDSs)

POSSIBLE AREAS OF CONCERN

If hazardous materials are used incorrectly, they pose a serious health risk to individuals and jeopardize the environment.

CHARACTERIZATION

Many hazardous materials and substances are used in the daily operation of the installation. Hazardous materials are required to have material safety data sheets.

HANDLING PROCEDURES

STEP 1 Ensure that you have access to a Safety Data Sheet (SDS) for each chemical or product you will be using.

SDSs include safety information about the chemical or product you are working with, including:

- Product composition
- Health hazards
- Recommended personal protective equipment (PPE)
- Release hazards
- Environmental hazards

STEP 2 Refer to the SDS book located in the work area for product hazards and safe use information.

STEP 3 If you cannot find the SDS in the book, refer to the yellow label adhered to the product to locate the MSN number.

STEP 4 When you have the Manufacturer's Serial Number (MSN) number, and the name of manufacturer contact ENRD at 804-633-8255 to obtain the SDS.

NOTE: Your supervisor is responsible for updating the SDS book, making the SDS book accessible, and ensuring the proper PPE is available and used by personnel.

Refer to the Tear Sheet A-35 for additional guidance regarding Hazardous Materials.



Yellow SDS Labels



Close-up of Yellow SDS Label



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

SCRAP METAL, SCRAP WIRE, AND BRASS FITTINGS

POSSIBLE AREAS OF CONCERN

Scrap metal, scrap wire, and brass fittings shall be recycled; thereby reducing the volume of solid waste disposed of in a landfill.

CHARACTERIZATION

Scrap metal, scrap wire, and brass fittings shall be recycled.

HANDLING PROCEDURES

Step 1 Collect scrap metal, scrap wire, and brass fittings.

Step 2 Take the materials to the appropriate recycling location.

NOTES: Scrap metal recycling locations are:

- Scrap Yard
- DS Maintenance (Bldg. 1290)

Scrap Metal Definitions:

- Heavy metal = thick, bulky, iron and heavy (>30 lbs.)
- Light Metal = thinner easy to manage by one person (<30 lbs.)

Scrap wire and brass fittings recycling location is:

- Utility Shop (Bldg. 1287)

See Tear Sheet A-58 for a map of recycling locations.

Aerosol cans must be turned in to DPW Warehouse (Bldg. 1237). See Tear Sheet A-1.



Scrap Metal
Recycling Containers
and Sample Contents



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



SEEDING: STANDARD OPERATING PPROCEDURES

POSSIBLE AREAS OF CONCERN

Soil erosion is accelerated by man's disruption of land which accounts for 70 percent of total sediment in the United States. Forestry, agriculture, and construction cause accelerated erosion when not properly managed and serious problems can occur when large amounts of sediment enter waterways.

CHARACTERIZATION

Provide a standard operating procedure for all temporary or permanent seeding that is conducted for any land-disturbing activity at Fort Walker, with the exception of those managed as wildlife enhancement areas.

HANDLING PROCEDURES

1. All land-disturbing activities greater than or equal to 2,500 ft² must comply with the 19 minimum standards specified in Section 4VAC25-840-40 of the regulations that are applicable to the project.
2. Follow Fort Walker guidelines outlined below for seeding operations:
 - The seeding area will be tilled to a depth of 4 inches where site conditions allow.
 - A soil test shall be conducted to determine proper amount of lime and fertilizer to apply. If no soil test is completed, lime and fertilizer shall be applied as outlined below. Lime and fertilizer will be worked into the top 2 to 4 inches of soil prior to seeding and are generally applied at 2,000 lbs/acre (46 lbs/1,000 ft²) and 1,000 lbs/acre (23 lbs/1,000 ft²), respectively.
 - All seed mixtures must be certified by the ENRD to ensure compliance.
 - Site conditions for a specific project may warrant a different seed mixture. Any variation of seed mixtures to be applied differing from those outlined below shall be reviewed and considered on a case by case basis by the ENRD.
 - All sod types shall be approved by the Environmental/Natural Resources Division prior to purchase.
 - Acceptable planting methods include broadcast, drill, and/or hydroseeding. Planting methods will be determined by site conditions and which method(s) will provide best germination and faster growth rates. Post raking or cultipacking is required if seed is planted using broad cast spreader (where site conditions allow).
 - Refer to the following table for Fort Walker seeding protocols:

SEED MIXTURE	SEEDING RATE	SEEDING CLASSIFICATION	PLANTING AREA	PLANTING TIME OF YEAR
Summer Mix 100% Millet (browntop or german)	(50 lbs/acre)/ (1 lbs/1,000 ft ²)	Temporary	Any area that needs seeding during the summer months for temporary cover. Must be reseeded in the next growing season with the correct seed mix and planting times listed in the permanent seeding classification	Summer Mix (1 June - 15 Aug)
Winter Mix 100% annual ryegrass or 100% winter wheat	(50 lbs/acre)/ (1 lbs/1,000 ft ²)	Temporary	Any area that needs seeding during the winter months for temporary cover. Must be reseeded in the next growing season with the correct seed mix and planting times listed below as permanent seeding classification	Winter Mix (16 Oct - 31 Mar)
High Maintenance (> 3:1 Slope) 50% creeping red fescue 15% perennial rye grass 35% annual ryegrass	(200 lbs/acre)/ 4 lbs/1,000 ft ²)	Permanent	Areas that will be mowed frequently, limed and fertilized regularly, and will either receive intense use or require maintaining to an aesthetic standard (e.g. lawns, around buildings)	1 April - 31 May 16 Aug - 15 Oct
High Maintenance (< 3:1 Slope) 50% creeping red fescue 25% perennial rye grass 25% annual ryegrass	(200 lbs/acre)/ 4 lbs/1,000 ft ²)	Permanent	Areas that will be mowed frequently, limed and fertilized regularly, and will either receive intense use or require maintaining to an aesthetic standard (e.g. lawns, around buildings)	1 April - 31 May 16 Aug - 15 Oct
Low Maintenance (< 3:1 Slope) 35% annual ryegrass 35% perennial ryegrass 30% creeping red fescue	(200 lbs/acre)/ (4 lbs/1,000 ft ²)	Permanent	Areas that will be mowed infrequently or not at all; lime and fertilizer may not be applied on a regular basis; the areas will not be subjected to intense use; nor required to have a uniform appearance (e.g. log landings, firebreaks, skid trails, landing zones, ranges, firing points)	1 April - 31 May 16 Aug - 15 Oct
Low Maintenance (> 3:1 Slope) 45% annual ryegrass 30% perennial ryegrass 25% creeping red fescue	(200 lbs/acre)/ (4 lbs/1,000 ft ²)	Permanent	Areas that will be mowed infrequently or not at all; lime and fertilizer may not be applied on a regular basis; the areas will not be subjected to intense use; nor required to have a uniform appearance (e.g. log landings, firebreaks, skid trails, landing zones, ranges, firing points)	1 April - 31 May 16 Aug - 15 Oct

3. Mulch must be applied in accordance with the Virginia Erosion and Sedimentation Control Handbook, Mulching Standard and Specification Sec. 3.35.
4. Upon completion, the ENRD shall be notified to inspect the project. Point of contact usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil or 804-633-8255. Additional inspections will be conducted to ensure effective erosion and sediment control and deficiencies will be coordinated with personnel who conducted the seeding.

NOTE: All land-disturbing activities undertaken on federal lands in the Commonwealth of Virginia must comply with the Virginia's Erosion and Sediment Control program that is managed by the Virginia Department of Environmental Quality. Additional guidelines can be found in the Virginia Erosion and Sedimentation Control Handbook, Third Edition 1992 at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/Publications/ESCHandbook.aspx>

GENERAL INFORMATION

Contact the ENRD at 804-633-8255 or usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil for additional guidance on whether specific activities are defined as

land-disturbing activities.  **Net Zero**

SOLID WASTE

POSSIBLE AREAS OF CONCERN

Mismanagement of solid wastes can result in marine and woodland debris impacting wildlife and the environment. It can also result in the missed opportunity to reuse and recycle, thereby increasing landfill disposal costs.

CHARACTERIZATION

Solid wastes are produced by all at Fort Walker.

TYPES OF SOLID WASTE AND HANDLING PROCEDURES

- **Sanitary Waste/ General Refuse** – non-recyclable solid wastes shall be disposed of in approved general refuse dumpster

- food items
- non-recyclable items

Note: Contractor solid waste shall be disposed of off-site and **no personal household trash shall be disposed of at Fort Walker.**

- **Range Demolition Debris** – See Appendix D
- **Recyclable Materials** – recyclable materials shall be disposed of in approved recycling locations

- | | |
|--|--|
| ○ cardboard (A-13) | ○ antifreeze (A-3) |
| ○ comingled recyclables: metal, plastic, glass containers, paper, and magazines (A-16) | ○ used oil (A-73) |
| ○ electronics (A-23) | ○ wood pallets (A-78) |
| ○ printer cartridges (A-57) | ○ concrete and asphalt (A-18) |
| ○ kitchen grease (A-39) | ○ scrap metal (A-61) |
| ○ used tires (A-74) | ○ scrap wire and brass fittings (A-61) |
| ○ aerosol cans (A-1) | ○ spent ammunition casings (A-64) |

Note: See Tear Sheet A-59 for recycling locations and individual Tear Sheets for specific recyclables.

- **Universal Wastes** – Coordinate and turn in to the Environmental and Natural Resources Division.
 - all batteries (A-6)
 - pesticides (A-55)
 - light bulbs (A-42)
 - mercury containing equipment (A-36)
- **Medical Waste** – Coordinate disposal through the Health Clinic (Bldg. 1650) at 804-633-8339/8370.



Sanitary Waste/General Refuse Dumpster



Comingled Recyclables Dumpster



Universal Wastes

GENERAL INFORMATION

For additional information or if you are unsure how to dispose of a waste, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



SPENT AMMUNITION/BRASS CASINGS

POSSIBLE AREAS OF CONCERN

Trash may become contaminated with ammunition, simulators, brass, and/or smoke grenade residue that can harm people and the environment. Training exercises generate live and expended ammunition. This ammunition and residue must be returned for the safety of all Fort Walker personnel. Ammunition/Brass/Unexploded ordinance (UXO) must not be discarded in dumpsters or other receptacles.

CHARACTERIZATION

Spent ammunition/brass casings shall be recycled at the Ammunition Supply Point (ASP).

HANDLING PROCEDURES

Step 1 Ammunition and/or UXO found should not be moved but marked by a stake with engineer tape and reported to the Directorate of Plans, Training, Mobilization, and Security (DPTMS), and Range Control immediately for proper removal.



Step 2 All ammunition related items that are no longer dangerous or considered safe to handle must be returned to the ASP (Bldg. 2001), i.e. brass, packaging (inner and outer packs as well as anything inside the outer pack), used smoke grenades, etc.

NOTE: See Tear Sheet A-58 for a map of recycling locations.

GENERAL INFORMATION

For additional information, contact the Environmental and Natural Resources Division by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

SPILL KIT MATERIALS

POSSIBLE AREAS OF CONCERN

Spills from petroleum, oil, or lubricant products (POLs) and hazardous materials may cause problems if not properly cleaned up and disposed.

CHARACTERIZATION

Some absorbent materials may become hazardous waste when used. Contact the ENRD at 804-633-8255 to pick up used spill kit materials.

HANDLING PROCEDURES

Typical Spill Kit Inventory List

1	48" L x 31" W x 38" H PIG® Storage Chest
1	8" x 10' PIG® Oil-Only Boom
2	5" x 10' PIG® Oil-Only Booms
8	3" x 10' PIG® Oil-Only Booms
4	PIG® Sump Skimmer Pillow
1	5 lb. Bag PIG® Spaghetti Strips
100	PIG® Oil-Only Mat Pads
15	Temporary Disposal Bags and Ties
1	Emergency Response Guidebook
1	Instruction Manual
6	Tamper-proof Labels



Spills happen regardless of how much you try to avoid them, let us help prepare you!



White Pads: Hydrocarbons/POL only; will not pick up water.

Gray/Green Pads: All fluids (hydrocarbons, aggressive chemicals, acids, bases, pesticides).

GENERAL INFORMATION

Contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil) for additional information or to restock spill kits.



SPILL PREVENTION

POSSIBLE AREAS OF CONCERN

Improper spill prevention may result in a release causing a potential concern for human health and safety and negative impacts to the environment.

CHARACTERIZATION

Spill prevention devices should be readily available and used by all personnel.

HANDLING PROCEDURES

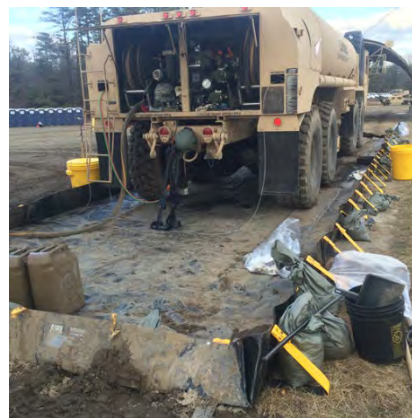
- Personnel must use covered secondary containment for Petroleum, Oil, and Lubricants (POLs) (ex. Spill pallets and mobile secondary containment).
- Locate portable fuel storage at least 100 meters from surface water and critical environmental areas.
- Use funnels when filling containers.
- Use drip pans. See Tear Sheet A-22.
- Use compatible containers for materials stored.
- Monitor fuel operations at all times and have spill kit ready.



Spill Pallet



Drip Pan



Mobile Secondary Containment

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero & Mission Enhancement

SPILL QUICK NOTIFICATION

POSSIBLE AREAS OF CONCERN

Improper spill notification may result in a release causing a potential concern for human health and safety and negative impacts to the environment.

CHARACTERIZATION

All petroleum or hazardous materials spills shall be reported as outlined below.

NOTIFICATION PROCEDURES

Step 1 **Call** the Directorate of Emergency Services (DES) at **804-633-8911/8888/8239**.

Step 2 Initiate safe spill control and clean-up procedures. See Tear Sheet A-69 and FWVA Regulation 200-2 for additional guidance.

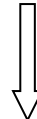
Step 3 Call the ENRD at 804-633-8255 **AND** Range Control 804-633-8224.

NOTE: See Tear Sheet A-68 for additional spill response information.



QUICK NOTIFICATION

Spill Occurs



Call DES 804-633-8911



Call Environmental Division 804-633-8255

AND
Range Control
804-633-8224

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero & Mission Enhancement

SPILL RESPONSE

POSSIBLE AREAS OF CONCERN

Failure to properly clean up spills violates State and Federal regulations, causes concerns to human health and safety, and negatively effects the environment.

CHARACTERIZATION

Improper discharge of petroleum, oil, or lubricant (POL) products or hazardous materials.

RESPONSE PROCEDURES

- Step 1**
- **Call the Directorate of Emergency Services** (DES) Central Dispatch at **804-633-8911/8888/8239** to report the spill.
 - Simultaneously initiate safe spill control and clean-up actions.
 - Provide the following information to DES:
 - Name and contact information.
 - Location of spill.
 - Time the spill occurred or was first observed
 - Type of product spilled (petroleum, fuel, solvent, oxidizers, acids, flammable material, sewage, or any unknowns).
 - The estimated volume of the spill, or if it is still continuing, and the rate of release.
 - Description of the affected area and surrounding area (creeks, ponds, drainage swales, any water body, storm drains, sewer system, buildings, and other structures).
 - The cause of the spill if known.
 - Action already taken to control the spill and clean up the spill, if any.
 - Persons already notified, if any.



Spill Kit



Step 2 Call ENRD at 804-633-8255 **AND** Range Control at 804-633-8224 to report the spill.

NOTE: If **safe** for you to begin spill control and clean-up actions:

- Locate and check SDS to determine health and physical hazards.
- Ensure personnel have the proper personal protective equipment.
- Contain the spill (plug leaks or set container upright).
- Use the spill absorbent and appropriate spill pads/booms to contain spill.
- Sweep up absorbent and properly dispose of contaminated pads/booms.
- Turn in contaminated absorbent materials to the Environmental Division.

NEVER attempt to clean a spill without using the proper protective gear (gloves, goggles, etc.) Safety is top priority. Refer to SDS section 8 (Exposure Control and Personal Protection).

NEVER conceal spills. Failure to report spills may result in fines from the Virginia Department of Environmental Quality (DEQ), the Environmental Protection Agency (EPA), as well as civil/criminal penalties for willful neglect.

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero & Mission Enhancement

STORMWATER MANAGEMENT

POSSIBLE AREAS OF CONCERN

Fort Walker is located in the Chesapeake Bay Watershed and all proposed land disturbances greater than 2,500 square feet are regulated. An Erosion and Sedimentation Control Plan, Virginia Stormwater Management Permit (VSMP), Stormwater Pollution Prevention Plan, and Energy and Independence and Security Act (EISA) Section 438 compliance are required prior to the approval of any land disturbance.

EISA Section 438 requires that any federal development and redevelopment projects with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow. Green infrastructure, Low Impact Development (LID), and Sustainable site design shall be used to comply with stormwater requirements.

Stormwater runoff accumulates debris, chemicals, sediment, or other pollutants as it flows over the land or impervious surfaces that could adversely affect water quality and cause land erosion if left uncontrolled.

CHARACTERIZATION

Stormwater runoff is generated when precipitation from rain and snowmelt flows over land or impervious surfaces and does not percolate into the ground. Sediment and nutrients (nitrogen & phosphorus are defined as pollutants by the Commonwealth of Virginia and the Clean Water Act.

HANDLING PROCEDURES

Step 1 Use Green Infrastructure, LID Best Management Practices (BMPs) strategies and treatment trains to manage all post construction stormwater. Proper design and construction are critical to the success of stormwater management.

Step 2 Projects shall not be approved until complete and accurate stormwater calculations and bmp designs have been approved by ENRD.

Must comply with:

- VSMP permit
- EISA Section 438
- Army Sustainable Design Policy
- LID-BMPs – including micromanagement strategies and treatment trains to address water quantity and quality requirements.
- Chesapeake Bay Total Maximum Daily Load (TMDL)
- Leadership in Energy and Environmental Design (LEED) compliance

Contractor Checklist: If your project has a land disturbance, have the following been completed? (including but not limited to)

Approved DPW Work Order or Service Order? • Approved DPW Dig Permit?

DEQ approved E&S Control Plan? • DEQ approved Stormwater Management Plan?

Complete SWPPP onsite? • Copy of VSMP permit & RLD certificate in the SWPPP?

If working near ponds, streams, and wetlands additional ENRD and regulatory coordination and permits required.

If the answer to any of the above is no, DO NOT start work! You could be breaking local, state, and federal laws and army policy. Play it safe. Call 804-633-8255 for assistance.



Examples of stormwater BMPs

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).

 **Net Zero**

SUSTAINABLE ENVIRONMENTAL MANAGEMENT SYSTEM (SEMS)

OVERVIEW

The SEMS combines the International Organization for Standardization's (ISO) 14001 *Environmental Management Systems (EMS)* into the Installation's Sustainability program to create the Sustainable Environmental Management System (SEMS). The SEMS integrates environmental considerations and accountability into day-to-day decision making and long-term planning working toward the Army goal of a Net-Zero installation. Each person working at Fort Walker, including full-time, part-time, and contract employees must be aware of and follow the SEMS.

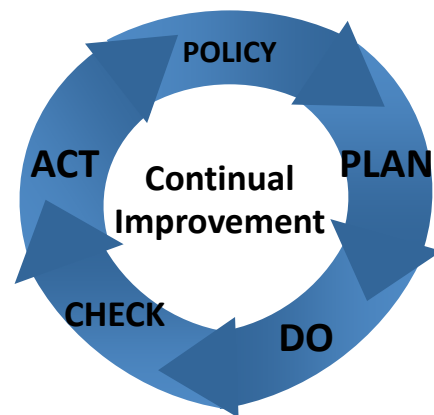
WHAT YOU NEED TO KNOW

- Everyone has a part in our SEMS
- Follow Fort Walker Environmental Policy
- Do my job in a way that protects the environment
 - Are you using resources efficiently?
 - Are you reducing waste?
 - Can you reuse material?
 - Can it be recycled?
 - Are you disposing of waste properly?

Remember the 3 R's



- Reduce
- Reuse
- Recycle



The
Environmental
Management
System

ENVIRONMENTAL ASPECTS

The core environmental aspects are Energy and Water Consumption, Hazardous Material, Hazardous Waste, Solid Waste, Erosion and Sediment Control, Stormwater Discharge, Munitions, Noise, Air Emissions, Storage Tanks, Spills, and Natural and Cultural Resource Conservation.

GENERAL INFORMATION

More information on these topics, consult the Environmental Handbook or contact the ENRD by phone at 804-633-8255 or via e-mail

(usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

THREATENED & ENDANGERED SPECIES: BATS

POSSIBLE AREAS OF CONCERN

Fort Walker harbors several federal and state protected bat species.

CHARACTERIZATION

AR 200-1, the *Endangered Species Act*, Fort Walker Environmental Policy, and additional legislation require Fort Walker to develop and implement strategies to protect threatened and endangered species.

SPECIES DESCRIPTION



Northern Long-Eared Bat

- (*Myotis septentrionalis*)
- Federal status: Listed Threatened
- State status: Listed Threatened



Indiana Bat

- (*Myotis sodalis*)
- Federal status: Listed Endangered
- State Status: Listed Endangered

- DO NOT handle any bats. Call Fish & Wildlife at 804-633-8984 or DPW ENRD Entomology at 804-633-8457 if any bats are found in a building and need removal.
- ALL tree cutting, tree limbing, construction and demolition needs to be coordinated in advance with the DPW ENRD Fish & Wildlife.
- DO NOT use military smoke / obscurants in prohibited areas.
- You can be held *personally liable* for an endangered species disturbance.
- Always follow the established workflow process—make sure your project is reviewed by the ENRD.
- Avoid disturbance when threatened or endangered species are present.

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Mission Enhancement

THREATENED & ENDANGERED SPECIES: PLANTS

POSSIBLE AREAS OF CONCERN

Fort Walker harbors four federal and/or state protected species.

CHARACTERIZATION

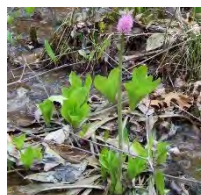
AR 200-1, the *Endangered Species Act*, Fort Walker Environmental Policy, and additional legislation require Fort Walker to develop and implement strategies to protect threatened and endangered species.

SPECIES DESCRIPTION



Small Whorled Pogonia (*Isotria medeoloides*)

Federal status: Listed Threatened
State status: Listed Endangered



Swamp Pink (*Helonias bullata*)

Federal status: Listed Threatened
State status: Listed Endangered



New Jersey Rush (*Juncus caesariensis*)

Federal status: Not listed
State status: Listed Threatened

NOTE:

- Notify the ENRD at 804-633-8255 prior to any construction, demolition, or tree clearing.
- You can be held *personally liable* for an endangered species disturbance.
- Always follow the established workflow process—make sure your project is reviewed by the ENRD.
- Avoid disturbance when threatened or endangered species are present.

Environmentally Sensitive Resource Areas

- These areas are NOT off-limits to training - foot traffic and similar activities are permitted.
- Perimeters are designated as shown to the right.
- Be aware of these signs during your activities.
- Do not dig or bivouac within the perimeter of the signs.



GENERAL INFORMATION

If you have any questions, please contact the Environmental & Natural Resources Division by phone at 804-633-8255 or e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



USED OIL

POSSIBLE AREAS OF CONCERN

Used oil is any oil that has been refined from crude oil or any synthetic oil that is used, and as a result of such use, is contaminated by physical or chemical impurities potentially including traces of metal such as chromium, cadmium and lead.

CHARACTERIZATION

Used petroleum-based and synthetic oils are non-hazardous industrial waste and are collected on the installation for recycling. In general, used includes crankcase oil, machine lubricating oil, cutting oil, hydraulic oil, heat treating oil, and compressor oil. Used oil may be conditionally excluded from hazardous waste regulation when recycled.

HANDLING PROCEDURES

Step 1 Establish Petroleum, Oil, and Lubricant (POL) point by contacting the ENRD at 804-633-8255.

Step 2 If necessary, obtain a 55-gallon metal drum and Secondary Containment Unit (SCU).

Step 3 Ensure the drums are marked "Used Oil."

Step 4 Ensure the drum has secondary containment. Place Used Oil in the drum. Keep the drum closed except when adding or removing contents.

Step 5 Contact ENRD at 804-633-8255 for disposal.

NOTES: Do not mix Used Oil with antifreeze. If antifreeze is contaminated with Oil, contact the ENRD at 804-633-8255 for guidance.

Drip pans/secondary containment units with oil and water should not be poured into Used Oil containers, contact the ENRD at 804-633-8255 for instructions.

No solvents or other hazardous waste can be mixed with Used Oil. If hazardous waste (brake cleaner, parts/weapons cleaner solvent, etc.) has been mixed with the oil, contact the ENRD at 804-633-8255.

Incidental amounts of fuels such as JP-8 and diesel may be combined with the Used Oil. For used filters (oil, diesel, hydraulic fluid) contact the ENRD at 804-633-8255 for disposal instructions.

Do NOT place gasoline or Coleman Fuel in Used Oil containers. Disposal of these products must be coordinated through the ENRD at 804-633-8255.



GENERAL INFORMATION

For additional information, contact the Environmental and Natural Resources Division by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



USED TIRES

POSSIBLE AREAS OF CONCERN

Used tires are not to be disposed of in a landfill. Used tires must be recycled.

CHARACTERIZATION

Tires are recyclable.

HANDLING PROCEDURES

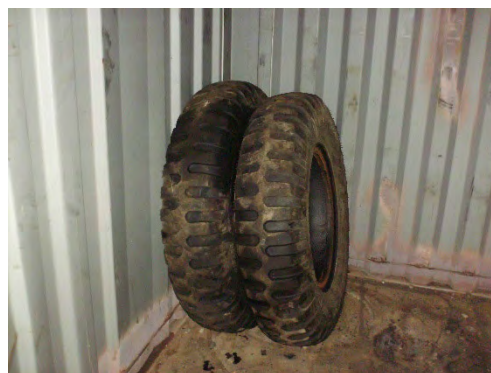
Step 1 Take used tires to DS Maintenance (Bldg. 1290).

NOTE: See Tear Sheet A-58 for a map of recycling locations.

Please call in a Service Order to the Service Order Desk at 804-633-8286 if assistance is needed in moving tires.



Used Tire Storage Unit



Used Tires

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

VEHICLE USE (TRACKED AND CONSTRUCTION)

POSSIBLE AREAS OF CONCERN

Fugitive dust creation from tracked and construction vehicle use.

CHARACTERIZATION

Air quality is the measurement of the pollutants in the air; a description of the healthiness and safety of the atmosphere. Particulates (present in fugitive dust) are a common air contaminant.

Air quality shall be protected and improved by limiting particulates disturbed by tracked and construction vehicles.

MANAGEMENT PROCEDURES

- Stay **out** of wetland areas.
- Stay on roads, trails, and designated open maneuver areas.
- Limit roadside damage from turns.
- Obey posted speed limits.
If speed limit is not posted, travel at 25 MPH.
- Tracked vehicles may cross paved roads only at designated crossing areas.
- Construction work must be performed with the appropriate dust control measures in place for vehicles disturbing both the soil and debris, including but not limited to:
 - Cover loose material in transport
 - Wash down vehicles and/or paved roadways adjacent to construction site
 - Prompt removal of spilled or tracked dirt
- Implement and maintain appropriate erosion and sediment controls for all regulated land disturbing activities.
- Appropriate environmental documentation must be obtained, and an approved dig permit is required prior to digging.



NOTE: Military convoys crossing Route 301 that require MP assistance to control traffic should contact the Directorate of Emergency Services (DES) central dispatch at 804-633-8888. See Tear Sheet A-28 for vehicle emissions.

Water for Dust Control

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



WATER CONSERVATION

POSSIBLE AREAS OF CONCERN

Water conservation is the most cost-effective and environmentally sound way to reduce our demand for water. This stretches our supplies farther, and protects our natural resources. Unnecessary or excessive water usage increases energy consumption, operating costs, and impacts the environment.

CHARACTERIZATION

Fort Walker's goal is to reduce water intensity (water used per square foot of building) by **2% a year** for 10 years (FY16-FY25), as compared to the baseline year of FY07.

CONSERVATION PRACTICES

- Take shorter showers.
- Turn off faucets when left unattended, while brushing teeth, or performing other tasks.
- Report all dripping, leaking, or continuously running fixtures (i.e., leaking faucets, toilets, urinals, etc.)
- Replace leaking hoses.
- All purchased water fixtures (shower heads, faucets, toilets etc.) are required to have the WaterSense label unless shown not to be life cycle cost-effective or unavailable.

NOTE: If permitted to use Fort Walker water, always practice conservation. Better use of our water and fiscal resources helps to ensure a more sustainable future for our mission and our community. Refer to the Energy and Water Conservation brochure available from the ENRD for more tips.



GENERAL INFORMATION

If you have any energy and water savings recommendations or concerns, please contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero & Mission Enhancement

WEAPONS CLEANER

POSSIBLE AREAS OF CONCERN

Solvent and solvent-related materials may contain chemicals that are flammable or toxic. Refer to the safety data sheet (SDS) for specific hazards.

CHARACTERIZATION

Solvents are used in weapons cleaners. Solvents used in weapons cleaners at Fort Walker are recycled. If not recycled, the solvent may be considered a hazardous waste.

HANDLING PROCEDURES

- Step 1** Weapons should be pre-cleaned before using weapons cleaning equipment, i.e. removal of excess dirt.
- Step 2** Only weapons are to be cleaned in these machines (Do not mix use).
- Step 3** SDSs must be available for the solvent used. Utilize proper personal protective equipment when using parts washer.
- Step 4** Periodically inspect weapons cleaner for leaks.
- Step 5** Do not contaminate weapons cleaner solvent with other chemicals (i.e., paint, paint cleaning solvents, POL products, gasoline, etc.).
- Step 6** Do not move or block access to weapons cleaning equipment.

NOTES: Lids on all weapons cleaner equipment must be closed when not in use. Labels should be on the weapons cleaner equipment indicating they be kept closed.

Rags, wiping materials, and other items used for cleaning operations with these solvents should be bagged, labeled, and shall be given to the ENRD at 804-633-8255 for proper disposal or in designated drum.

See Tear Sheet A-60 for additional general information regarding SDSs.



Weapons Cleaner



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



WOOD PALLETS

POSSIBLE AREAS OF CONCERN

Wood pallets are reusable and recyclable.

CHARACTERIZATION

Wood pallets are considered a solid waste. Pallets shall be recycled or reused by personnel and soldiers at the facility.

HANDLING PROCEDURES

Step 1 Wood pallets except ASP pallets should be turned in to Property Book Warehouse (Bldg. 1217).

Step 2 ASP pallets should be returned to ASP (Bldg. 2001).

NOTES: Leather gloves, long sleeved shirts and pants should be worn while handling the pallets.
Wood pallets should be neatly stacked.
See Tear Sheet A-58 for a map of recycling locations.
Contractors **should not** dispose of wood pallets at government disposal areas.
Contractors must recycle off post.



GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).



Net Zero

WILDLIFE

POSSIBLE AREAS OF CONCERN

All species of wildlife are protected by Federal and/or state law and Army Regulation. Do not feed or handle wildlife.

CHARACTERIZATION

The Fish and Wildlife Branch of the ENRD is committed to maintain existing wildlife and natural habitats through sound management practices to ensure compliance with all Federal and State Environmental laws and regulations.

MANAGEMENT PRACTICES

- Avoid bird nests and animal dens so parents will not abandon their young and predators will not be attracted by your presence.
- Migratory birds are a protected resource - do not touch or remove a bird's nest or eggs at any time of year. Vegetation management (including mowing) must be coordinated with DPW ENRD at 804-633-8255 to avoid impacts to birds and their nests.
- Bald eagles are a protected resource – hovering and close flyovers of bald eagles' nests (within 1,000 feet) are prohibited. Certain activities are prohibited near nests during the breeding season – coordinate with DPW ENRD at 804-633-8255 on vegetation management and all ground disturbing activities to avoid impacts to bald eagles.
- Do not feed wildlife. Keep the wild in wildlife. Taming wildlife can make them eventually become aggressive to humans.
- Do not approach or harass wildlife, especially in the spring. Most species of wildlife are susceptible to stress caused mortality. Handling wildlife for even short periods can cause a type of shock that eventually results in death.
- Report any roosting bats in attics or pavilions, or bats that appear to be sick.
- If you believe you have found an injured or a young orphaned animal (including bald eagles), **PLEASE** call the Fish & Wildlife Branch at 804-633-8984. Leave young/juvenile birds and animals where you found them as the parents are most likely close by. Parents often leave their young for long periods of time.

NOTE: If you have any issues or concerns with wildlife, call the Fish & Wildlife Office at 804-633-8984/8750, or via e-mail: usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil



If you care...leave them there!



Stop! Don't touch



Take pictures, not action!

GENERAL INFORMATION

For additional information, contact the ENRD by phone at 804-633-8255 or via e-mail (usarmy.fort-walker.id-sustainment.mbx.enrd-mailbox@army.mil).




Mission Enhancement

APPENDIX B

IMPORTANT PHONE NUMBERS

 Important Phone Numbers	Phone
Environmental and Natural Resources Division Main	804-633-8255
Air Quality	804-633-8489
Asbestos/Lead/PCBs	804-633-8975
Compliance	804-633-8152
Cultural Resources	804-633-8761
Energy Conservation	804-633-8975
Erosion and Sediment Control	804-633-8708
Forestry	804-633-8409
Hazardous Materials	804-633-8726
Hazardous Waste	804-633-8726
Natural Resources	804-633-8465
Noise	804-633-8152
Pest Management	804-633-8457
Recycling	804-633-8354
NEPA/Planning/Sustainability	804-633-8417
Pollution Prevention	804-633-8152
Solid Waste	804-633-8726
Spill/Storage Tanks	804-633-8911/8888 804-633-8255
Storage Tanks	804-633-8708
Stormwater Management	804-633-8708
Water Conservation	804-633-8975
Water Quality	804-633-8708
Wildlife	804-633-8984

 Additional Contacts	Phone
Range Control	804-633-8224
Service Desk	804-633-8286
Dept. of Emergency Services	804-633-8911/8888
Provost Marshall	804-633-8501

APPENDIX C

FORT WALKER INERT CERTIFICATION PROCESS

FORT WALKER INERT CERTIFICATION PROCESS

Demolition debris disposal falls under the following regs.: DoDI 4140.62, "Management and Disposition of Material Potentially Presenting an Explosive Hazard", and FAPH 385-64 ISO Explosive Safety Mngt-PLAN (MMR-MPPEH)

Will debris/targets be generated from demolition training?
(anything above .50cal "small arms")

YES

NO

No further action required
("small arms" .50 cal and less)

Unit will need to complete an Ammunition, Explosives, Dangerous Articles (AEDA) Appointment Letter prior to arrival at FWVA (Attachment 1). Debris from these training events will need unit to provide a Defense Logistics Agency Inert Certification/Verification (Cert/Vert) prior to being hauled out of the range complex (Attachment 2). The AEDA authorizes the "cert/vert". AEDA shall be submitted to Range Safety prior to arrival at FWVA.

Unit shall communicate to Mr. Dave Faunteroy (Mr. Brooks Cecil cc'd) date and time unit will clear range location as soon as information becomes available

For demolition debris disposal, unit shall contact the FWVA Service Order Desk to arrange for roll off dumpster delivery at the start of training, as well as communicate pick up date and time

At time of dumpster pick up, unit shall give driver signed Cert/Vert to complete chain of custody. If you have any questions regarding these requirements, please contact Mr. Dave Faunteroy and Mr. Brooks Cecil (cc'd)

Unit shall coordinate with Range Safety for documents and material pickup

Vehicle Demolition

Coordination for vehicle demolition shall be done well in advance of unit arrival. All vehicles for demolition must go to DS Maintenance upon arrival at FWVA to have all fluids removed. Let Mr. Dave Faunteroy and Mr. Brooks Cecil know how many vehicles will be demolished and ensure all vehicles for demolition are certified free of fluids and POLs prior to training.

POINT OF CONTACTS:

1. **Certifier and Verifier:** UNIT NAME will need to have their OIC on site for the range clearance
2. **Range Ops-Range Safety Officer:** Mr. Dave Faunteroy 804-633-8200 (david.l.faunteroy.civ@army.mil)
3. **ASP/QASAS:** Mr. John Lambert 804-633-8205/8201 (john.j.lambert12.civ@army.mil)
4. **Environmental:** Mr. Brooks Cecil 804-633-8354 (steven.b.cecil.civ@army.mil)
5. **Service Order Desk:** Ms. Sarah Bradley 804-633-8286 (usarmy.fort-walker.imcom-atlantic.list.dpw-boi@army.mil)
6. **Roads and Grounds:** Mr. Patrick Jones (james.p.jones18.civ@army.mil) or Mr. Jeff Cowie 804-633-8419/8415 (jeffrey.cowie2.civ@army.mil)
7. **DS Maintenance:** Mr. Eric Fraley 804-633-8440/8479 (eric.s.fraley.civ@army.mil)

PLACE ON YOUR LETTERHEAD**Updated: 14 March 2012****Subject: Appointment Letter AEDA Inspector Certifier and Verifier****Authority: DOD 4160.28 Defense Demilitarization Manual; DLA Disposition Services Instruction 4160.14**

The individuals below are appointed to act as AEDA Certifier and Verifier for **NAME OF YOUR ACTIVITY** to include all units within the command of this office. The appointments will be valid until amended.

DoDAACS: _____

Inert Inspection Certifier: This/These individual(s) is (are) technically qualified to perform inspection of AEDA material and related items for the purpose of the DLA Disposition Services site Inert Certifications in accordance with the DOD 4160.28.

Name	Signature	Grade/Rank
_____	_____	_____
_____	_____	_____
_____	_____	_____

Inert Inspection Verifier: This/These individual(s) is (are) technically qualified U.S Government representative(s) American Citizen(s) designated by the responsible commander to verify the inspection of AEDA material and related items for the purpose of DLA Disposition Services site Inert Certifications.

Name	Signature	Grade/Rank
_____	_____	_____
_____	_____	_____
_____	_____	_____

Appointing Official's Name: _____**Signature:** _____**Title:** _____**Date:** _____

Title:	Material Documented As Safe (MDAS) Certificate	
Requirements:	<p>The explosives safety status of MPPEH shall be determined by one of two methods:</p> <p>(a) 100-percent visual inspection and an independent 100-percent re-inspection by qualified personnel or</p> <p>(b) processing by a DDESB-approved method with appropriate post-processing inspection (e.g., sampling, etc.) of the material. A certification/verification statement as shown shall be signed and dated by a DoD contracted person or a Government employee. This documentation is only valid if the material listed is properly segregated and secured, and the chain-of-custody is maintained until the material's release from DoD control.</p>	
DTID:		QTY:
NSN or Description:		
Certification Statement:		
<p>The material listed on this form has been inspected or processed by DDESB-approved means, as required by DoD policy, and to the best of my knowledge and belief does not pose an explosive hazard.</p> <p>Signature: _____</p> <p>Date _____</p> <p>Printed Name/Position (Grade/Rank): _____</p> <p>Organization and Address: _____</p> <p>Phone (COM/DSN/FAX)/E-Mail Address: _____</p> <p>=====</p> <p>Signature: _____</p> <p>Date _____</p> <p>Printed Name/Position (Grade/Rank): _____</p> <p>Organization and Address: _____</p> <p>Phone (COM/DSN/FAX)/E-Mail Address: _____</p> <p>=====</p> <p>Recommend this material be released for: (check all that apply)</p> <p><input type="checkbox"/> Recycling</p> <p><input type="checkbox"/> Unrestricted Use</p> <p><input type="checkbox"/> Disposal</p> <p><input type="checkbox"/> Other</p> <p>(Describe): _____</p>		
Reference:	DoDI 4140.62, "Management and Disposition of Material Potentially Presenting an Explosive Hazard", current edition	

APPENDIX D

FORT WALKER ENVIRONMENTAL POLICY



DEPARTMENT OF THE ARMY
US ARMY IMCOM DIRECTORATE - SUSTAINMENT
HEADQUARTERS, US ARMY GARRISON FORT A.P. HILL
18436 4TH STREET
FORT A.P. HILL, VIRGINIA 22427-3114

AMIM-PHG-ZA

MEMORANDUM FOR U.S Army Garrison, Fort A.P. Hill

SUBJECT: Garrison Policy #18: Sustainability and the Environment

1. References.

- a. Executive Order 14057, Catalyzing Clean Energy Industries and Jobs through Federal Sustainability, December 2021.
- b. Department of Defense Instruction (DoDI) 4170.11, Installation Energy Management, 11 December 2009, with 31 August 2018 Change.
- c. Department of Defense Instruction (DoDI) 4715.17, Environmental Management Systems, 31 August 2018.
- d. Department of Defense Sustainability Report and Implementation Plan, FY20.
- e. International Organization for Standardization (ISO) 14001, Environmental Management Systems – Specification with Guidance for Use. 2004.
- f. Army Regulation 200-1, Environmental Protection and Enhancement, 13 December 2007.
- g. Army Regulation 420-1, Army Facilities Management, 12 February 2008, with 24 August 2012 Change.
- h. US Army Garrison Fort A.P. Hill Environmental Handbook, January 2022.
<https://home.army.mil/aphill/index.php/my-fort/all-services/environmental>

2. Purpose. The purpose of this policy is to outline the basic doctrine for assuring environmental excellence fence-line to fence-line at the United States Garrison Fort A.P. Hill.

3. Applicability. This policy applies to all who work, train, and visit the Garrison. This includes Reserve and Active component units, agencies, activities and contractors working either permanently or temporarily on Fort A.P. Hill.

4. Policy. The United States Army's strategy to maintain environmental readiness by integrating environmental values into the US Army mission in order to "Sustain the Mission, Secure the Future". The Fort A.P. Hill's Strategic Plan supports the Army's environmental strategy by charting the Garrison's Sustainable Environmental Management System (SEMS). SEMS integrates execution of our Mission with an emphasis on maintaining our Natural Resources and protecting the Environment.

5. Procedures. When reasonable and appropriate, the Garrison will perform this mission in consonance with our stewardship responsibility to conserve and protect the environment, and our cultural and natural resources. All personnel will conduct themselves in accordance with the following principles. In accomplishing our mission, we commit to:

a. Integrate sound environmental practices into all our operations and business decisions. Continue our commitment to integrating sustainability into our day-to-day course of business and all decisions across the organization pertaining to design, investments, prioritization of activities and stewardship of resources.

b. Establish multi-directorate representation to provide sustainability-based input to the Installation Strategic Plan and develop initiatives that accomplish Installation Strategic Goals, and coordinate DOD and Army and sustainability long-term goals and short-term objectives.

c. Promote IMCOM sustainability principles (mission excellence, community collaboration, environmental stewardship, economic benefit, and systems thinking).

d. Continually assess our activities, products and services to determine their effect on the environment. Identify significant environmental impacts and ensure that they are considered when establishing our objectives and targets in our environmental management programs.

e. Ensure implementation of green procurement initiatives, pollution prevention measures and waste minimization programs.

f. Establish quantifiable goals for environmental performance.

g. Enhance overall energy security, resilience and sustainability.

h. Conduct regular management reviews to continually assess our progress toward our environmental goals.

i. Educate our employees about their responsibilities under this policy and recognize them for outstanding participation.

AMIM-PHG-ZA

SUBJECT: Garrison Policy #18: Sustainability and the Environment

j. Sustain our partnership with local, state and federal regulatory agencies to continue compliance with existing and new regulations, legislation, and other requirements.

k. Ensure the community's awareness of our environmental policy through press releases, public meetings, and the world-wide-web.

l. Enhance mission sustainability by focusing on readiness requirements as well as compliance.

6. Proponent. The proponent for this is the Directorate of Public Works (DPW) Environmental and Natural Resources Division. The POC is the Environmental and Natural Resources Chief, 804-633-8255.



JASON P. DUFFY
LTC, SF
Commanding