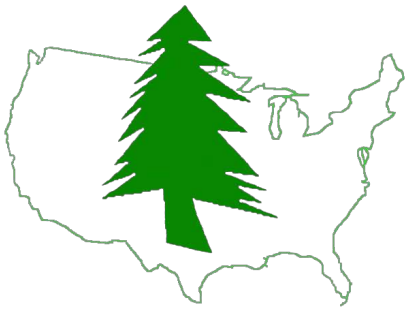
USAG Fort Lee

Environmental Special Conditions 2019

This Standard Operating Procedure is subject to change at any time. It is the user's responsibility to ensure compliance with the most recent revision.

PROTECTING THE LAND WE DEFEND



Directorate of Public Works
825 19th Street, Building 6005
Fort Lee, VA 23801

Environmental Management Division
Room 110
804-734-5014

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Glossary of Abbreviations

AC&R	Air Conditioning and Refrigerant
ACM	Asbestos Containing Material
ARPA	Archaeological Resources Protection Act
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning Engineers
AST	Aboveground Storage Tank
BMP	Best Management Practice
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
CAC	Common Access Card
CO_2	Carbon Dioxide
CFC	Chlorofluorocarbons
CFL	Compact Fluorescent Lamp
C&D	Construction and Demolition
CFR	Code of Federal Regulations
COR	Contracting Officer's Representative
CRM	Cultural Resource Manager
CX	Categorical Exclusion
DA	Department of the Army
VDEQ	Virginia Department of Environmental Quality
DA PAM	Department of the Army Pamphlet
DoD	Department of Defense
DPW-EMD	Directorate of Public Works – Environmental Management Division
E&SC	Erosion and Sediment Control
EA	Environmental Assessment
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EMS	Environmental Management System
EPA	(US) Environmental Protection Agency
FAR	Federal Acquisition Regulation

Glossary of Abbreviations (con't)

GHG	Greenhouse Gas
HAP	Hazardous Air Pollutants
HAZMAT	Hazardous Material
HAZWOPER	Hazardous Waste Operations and Emergency Response
HMCC	Hazardous Material Control Center
HVAC	Heating Ventilation and Air Conditioning
IPMP	Installation Pest Management Plan
IRP	Installation Restoration Program
JP-8	Jet Propellant-8
KO	Contracting Officer
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
MI-EMS	Mission-Integration Environmental Management System
MS4	Municipal Separate Storm Sewer System
MSDS	Material Safety Data Sheet
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOx	Oxides of Nitrogen
O^2	Oxygen
ODC	Ozone Depleting Chemical
ODS	Ozone Depleting Substance
OSHA	Occupational Safety and Health Administration
PACM	Presumed Asbestos Containing Material
PCB	Polychlorinated Biphenyl
PM	Project Manager
PPM	parts per million
POC	Point of Contact

Glossary of Abbreviations (con't)

RCRA	Resource Conservation and Recovery Act
REC	Record of Environmental Consideration
RMP	Refrigerant Management Plan
RPA	Resource Protection Area
SAS	Satellite Area Site
SDS	Safety Data Sheet
SHPO	State Historic Preservation Officer
SOP	Standard Operating Procedures
SMP	Stormwater Management Plan
SWPPP	Integrated Stormwater Pollution Prevention Plan
TCLP	Toxic Characteristic Leaching Procedure
TSS	Temporary Storage Site
UFC	Unified Facilities Criteria
USACE	US Army Corps of Engineers
USAG	US Army Garrison
USGBC	US Green Building Council
USTs	Underground Storage Tanks
UXO	Unexploded Ordnance
VAC	Virginia Administrative Code
VDOT	Virginia Department of Transportation
VOC	Volatile Organic Compound(s)

Foreword

As stated in all United States Army Garrison (USAG) Fort Lee scopes of work/performance work statements and contracts, Contractors shall comply with the most current version of this Environmental Special Conditions Package (hereinafter ESC) in the bidding and execution of contracts for work at USAG Fort Lee. This document was established by USAG Fort Lee's Directorate of Public Works Environmental Management Division (DPW-EMD) to guide those engaging in construction projects and maintenance work within the boundaries of the installation. Federal lands are protected by many statutes, some of which are more restrictive and have protection requirements above and beyond those of the Commonwealth of Virginia or Prince George County. The ESC is also available online https://home.army.mil/lee/index.php/about/Garrison/directorate-public-works/environmental-management

The ESC is meant to identify requirements, in some cases which are unique to USAG Fort Lee, to be met in the performance of work and ensure full compliance with pertinent provisions of Federal, State (Virginia), and local regulations and procedures. The ESC is not intended to be fully inclusive of all regulations. It is the Contractor's responsibility to comply with all Federal, State, and local laws, regulations, or guidance. The Contractor shall also execute Environmental Best Management Practices (BMPs) where applicable. Any fines and penalties that result from actions by the Contractor, its subcontractors, employees, other representatives or agents of the Contractor are the responsibility of the Contractor to pay. These fines/penalties will not be passed on to USAG Fort Lee.

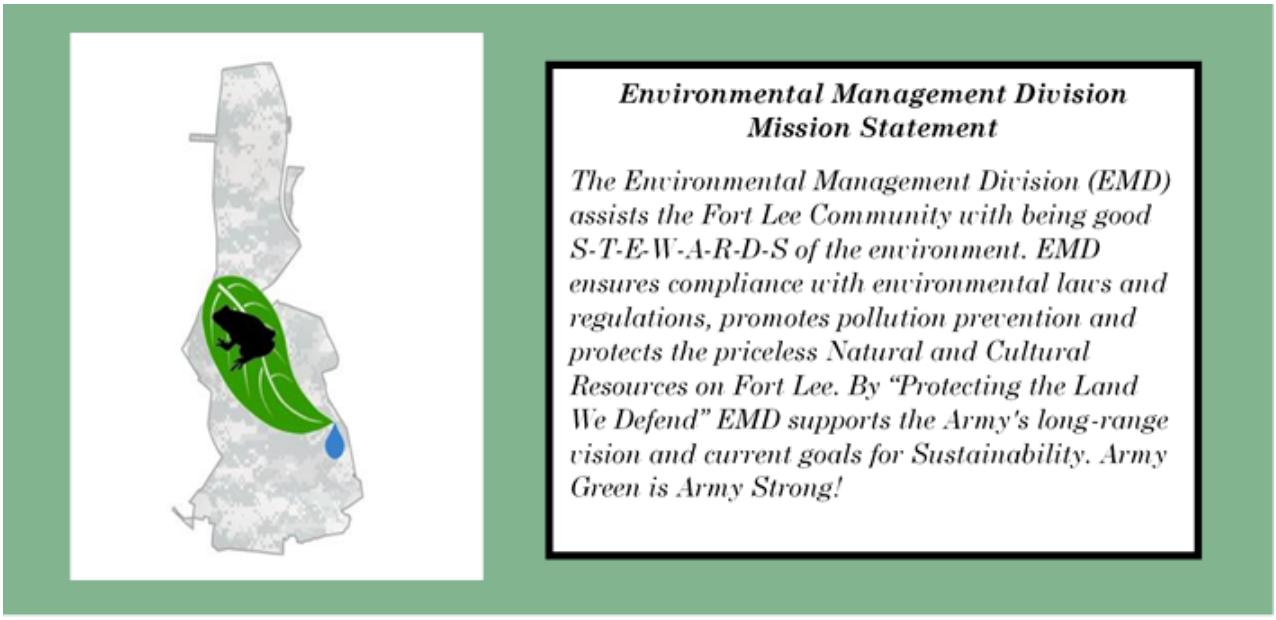
Additionally, the Contractor, or its designated representative, shall act as an Environmental Officer on all work performed under an awarded contract. The Government's Contracting Officer (KO), or designated representative, shall notify the contractor of any non-compliance with environmental requirements and any corrective action to be taken. Such notice, when delivered to the Contractor, or its representative on the work site or place of performance, shall be deemed sufficient for this purpose.

Anyone performing work at USAG Fort Lee is required to coordinate with the Government's point of contact (POC) for a given project, usually the Project Manager (PM) or Contracting Officer's Representative (COR), to ensure timely submittal of a complete and accurate Department of the Army (DA) Form 4283 (Facilities Engineering Work Request) or other project documentation to the ***DPW Business Operations and Integration Division (BOID)*** so that it may be properly tracked and routed through DPW's project review management system.

Refer to the section on Environmental Document Submittal Procedures for more information.

Objective

It is the duty of USAG Fort Lee's environmental specialists to ensure that all projects that take place on USAG Fort Lee property meet Federal, State, Local and Army requirements. This document contains fundamental provisions that pertain to common construction, renovation, repair and demolition activity which regularly occurs at USAG Fort Lee. Special projects may have additional requirements not mentioned in this SOP and as such, will require a more detailed review by environmental staff in order to ensure that all aspects of the environment are protected.



It is the Contractor's responsibility to ensure that all of the requirements within this SOP are adequately addressed and that all requested submittals are received and approved by the DPW-EMD. There are a number of submittals noted within this document that are required to be delivered to DPW-EMD. Failure to adhere to these requirements will delay final payment to the Contractor, and possibly require the contractor to uninstall out of spec equipment or re-design and correct any components of the project that do not pass final inspections.

A reference to this SOP must be included in all Performance Work Statements, Scope of Works, and Contract Proposals for work at USAG Fort Lee. A project submittal will not be approved by the DPW-EMD without including such reference.

This document is reviewed and updated annually to reflect changes in regulations and policies. Achieving compliance with laws and regulations is a team effort at USAG Fort Lee and close integrated collaboration between Contractors and environmental staff is key to protecting the environment in which our families work, live and play. In accordance with the National Environmental Policy Act (NEPA), this program area is imperative to "encourage productive

and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere, and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation."

NEPA is the underlying national charter for protecting the environment. It was enacted on January 1, 1970 and is referred to as the "Environmental Magna Carta." Each Federal agency has its own implementing procedures which adapt the regulations to address agency specific missions and decision-making authority. The NEPA process begins when an agency proposes to take an action (this can include proposals to adopt rules and regulations, formal plans that direct future actions, programs and specific projects). Once a proposal is conceptualized and any reasonable alternatives have been developed, the agency must determine if the action has the potential to affect the quality of the human environment. This process results in one of three levels of NEPA analysis. Agencies may:

- Record of Environmental Consideration (REC) = application of a Categorical Exclusion (CX);
- FONSI = preparation of an Environmental Assessment (EA); or
- Record of Decision (ROD) = preparation of an Environmental Impact Statement (EIS).

The majority of USAG Fort Lee actions do not require an EA or EIS and can be documented with a Record of Environmental Consideration (REC) using a CX, which are listed in 32 Code of Federal Regulations (CFR) Part 651 Appendix B. However, it is important to note that CX's are sometimes not applicable because NEPA does not replace or supersede the requirements of certain other laws or regulations, such as the National Historic Preservation Act.

Ultimately, the level of NEPA analysis and documentation for each project is determined by the Chief of the DPW-EMD or designated representative, who utilizes processes outlined in NEPA to ensure that all requirements are being addressed. Part of this process includes using information from subject matter experts to determine the environmental effects of every project proposed to occur on USAG Fort Lee property.

Any modifications to USAG Fort Lee property or its environment must be executed in a manner that prevents pollution, protects the environment, conserves natural resources and avoids historic properties. All procedures must follow the requirements specified in this this SOP and be in joint effort with the DPW.

Policies

Organizations, tenants, and military units shall review their policies, procedures, and regulations accordingly and revise them as necessary to ensure full compliance with the purposes and provisions of this SOP for actions requiring either federal dollars or federal property.

Where contractor activities on federal property affect an agency's environmental management aspects, USAG Fort Lee's Mission-Integration Environmental Management System (MI-EMS) requirements shall be included in contracts to ensure proper implementation and execution of Environmental Management System (EMS) roles and responsibilities. Applicable policies and regulations are noted throughout, but not limited to those referenced in this document.

Approved language for all contracts executed for work performed at USAG Fort Lee is presented in Appendix A. All new and revised contracts are to be thoroughly reviewed by DPW-EMD specialists to ensure full compliance with environmental laws, regulations, policies, and mandates. This language is subject to change based on the various local, state, and federal laws.

Implementation

All work performed within USAG Fort Lee boundaries shall be carried out in accordance with all applicable federal, state, and local laws, ordinances, regulations, Executive Orders, court orders, and other types of rules or rulings including USAG Fort Lee policies.

The following shall be submitted as guidance, not all inclusive, in accordance with USAG Fort Lee submittal procedures:

- Copies & signatures of all licenses and permits (i.e. signed VDEQ permit authorization)
- Permit fees; copy of checks
- Calculations and methods identified
- Certified reviewed plans and P.E. stamp
- The Plan Reviewer's Certification
- Map with verified constraint boundaries adjacent to or within the project limits
- Map with verified wetlands and the 100 Resource Protection Area (RPA) Buffer that exists adjacent to or within the project limits

Training

USAG Fort Lee's MI-EMS requires Environmental General Awareness Training (EGAT) fence line-to-fence line and implementation at all appropriate levels. Federal Policy mandates that Project Managers, Prime Contractor Points-of-Contact, and the on-site Project Superintendent shall ensure all workers on USAG Fort Lee meet this requirement. The EGAT will be completed within 30 calendar days and the results reported to EMD by email (usarmy.lee.imcom.mbx.leee-dpw-environment-management@mail.mil) NLT 45 calendar days of new employees commencing performance. These emails shall be submitted to the EMS Coordinator for inclusion in the annual Environmental Management Review meeting. Having a copy of the quick reference handout on your desk/desktop (from EGAT) is also recommended.

Additionally, the International Organization for Standardization developed the ISO 14001 standard to provide a set of internationally recognized criteria for Environmental Management Systems. The Army adopted the ISO 14001 standard because it provides a proven, systematic approach to managing the environmental risks associated with an organization's activities, products, training and services. ISO 14001 offers some flexibility, allowing an organization to pursue its own performance goals as long as they are consistent with environmental policy. Under this standard, organizations commit to continuous improvement, prevention of pollution and compliance with legal requirements.

Environmental Document Submittal Procedures

For environmental issues, the DPW-EMD serves as USAG Fort Lee's repository for copies of permits obtained by contractors as required by environmental regulatory agencies such as the United States Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (VDEQ). Upon request, copies of permit applications, mandatory notification requirements (to include spills and releases), mandatory reports, and proof of compliance actions (including records, checklists, logs, etc.) are required to be submitted to the DPW-EMD. Unless otherwise noted, submittals shall be provided to the DPW-EMD Administrative Assistant, Building 6005 Room 110, 804-734-5014.

Environmental Protection Plans

The Contractor will establish and implement an Environmental Protection Plan (EPP), which is a single document comprised of several smaller documents addressing the topics of air pollution, asbestos/lead abatement, erosion and sediment control, pest management, spill control, stormwater pollution prevention, unexploded ordnance/munitions, explosive of concern, hazardous materials management, waste management and cultural and natural resources. Within 30 calendar days from contract award, the Contractor shall submit to the KO or designated Government representative, a comprehensive EPP which describes the policies and procedures being implemented to ensure compliance in each of the above areas. All matters in reference to environmental protection shall be coordinated with the KO (or designated Government representative) and the DPW-EMD. No site work may be performed prior to DPW-EMD receipt and approval of the EPP.

The Contractor shall also comply with AR 200-1, and all regulating entities regarding pollution control, clean air, clean water, toxic substance control, resource conservation and recovery, natural resources, cultural resources, the Installation Spill Contingency Plan, the Installation Hazardous Waste Management Plan, SWPPP, Qualified Recycling Program, Installation Pest Management Plan (IPMP), Refrigerant Management Plan (RMP), Green Procurement Plan, as well as any other Federal, State, and local programs and policies and construction standards.

Project plans shall include pollution prevention provisions such as the elimination and minimization of oil and pollutant releases, address solid waste management (including

hazardous waste, C&D debris) and all other potential impacts that Contractor activities may have on environmental quality. Environmental constraint maps are available by request from the DPW-EMD, Building 6005, Room 110.

PMs can reduce delay to projects by:

- Emphasizing interagency cooperation prior to the preparation of environmental reports rather than submission of inadequate information resulting in the return of documents requiring amendments.
- Using the scoping process for an early identification of project-specific issues.
- Noting that USAG Fort Lee must follow Federal, Department of the Army, State, Local and USAG Fort Lee policies and regulations. When more than one agency has jurisdiction, the most stringent regulation or policy applies.
- Combining environmental documents with supporting documents such as maps, drawings, specifications, and written statements.

Non-Compliance, Fines and Inspections

Informal and formal enforcement actions (e.g. citations and notices of violation) issued by regulatory authorities against the Contractor and/or Government-owned Contractor Operated facilities found to be in noncompliance with environmental requirements will be resolved by the Contractor through coordination with the KO (or designated Government representative), the DPW-EMD and issuing office of the affected Federal, State, or local environmental agency.

In accordance with Federal Acquisition Regulation (FAR) 31.205-15 (fines, penalties and mischarging costs), the Contractor will be solely responsible for paying any penalties levied for noncompliance resulting from the action or inaction of the Contractor or the contractor's employees. The Contractor shall also be solely responsible for non-compliance resulting from the action or inaction of the owner(s) or employee(s) of firms with whom the Contractor has sub-contracts or agreements, in order to fulfill requirements of or related to their contract with or for work at USAG Fort Lee.

Environmental Program Areas

The Directorate of Public Works-Environmental Management Division (DPW-EMD) focuses on four major areas: Compliance, Conservation, Pollution Prevention and Restoration. The DPW-EMD provides the means necessary to meet the Army's mission of protecting the environment by utilizing an integrated environmental and training platform. Protection and preservation of the environment ensures that USAG Fort Lee will remain a major Army asset with the flexibility to meet future mission needs. Nearly all actions have environmental impacts and it is the DPW-EMD's mission to supply the best advice and guidance to Army decision makers. Additional duties include creating sustainable programs and operations and offer solutions which minimize impacts of training and mission success.

COMPLIANCE

This program area encompasses Air Quality, Asbestos, Lead, Refrigerants, Hazardous Materials, Hazardous Waste, Solid Waste and Stormwater. The requirements for each are discussed below.

Air Quality

Fixed, installed real property that produces or has the potential to produce any of the six criteria pollutants, hazardous air pollutants (HAPs), greenhouse gases (GHG), or fugitive ozone depleting chemical (ODC) emissions into the atmosphere constitutes an emissions unit at USAG Fort Lee, and is subject to regulations set forth under the Clean Air Act. All emissions units on Department of the Army property, USAG Fort Lee, must meet all applicable requirements and performance standards, as specified by USAG Fort Lee's Garrison Commander, through USAG Fort Lee's DPW-EMD. DPW-EMD will make final recommendations on whether environmental regulatory, stewardship, sustainable and technical aspects of current and future operations are sufficient to meet the intent of the Clean Air Act and USAG Fort Lee's specific sustainability goals and strategies. Only projects found by the DPW-EMD Air Quality Program to demonstrate compatibility with the aforesaid aspects are eligible for approval and may proceed through procurement and construction.

Regulatory requirements pertaining to non-stationary mobile sources are also enforced by the Environmental Special Conditions requirements below. Any owner/operator of a stationary or mobile source on USAG Fort Lee property has a duty to understand and adhere to the applicable legal requirements to protect human health and the environment. The following requirements do not set forth all existing stationary and/or mobile source Clean Air Act regulatory requirements for which the owner/operator may be subject. Adherence to these Environmental Special Conditions requirements does not imply adherence to all applicable requirements set forth under the Clean Air Act to which the entity may be subject.

Air Emission Producing Units

Stationary sources of air pollutants are required to be permitted, and their use and throughputs tracked in accordance with Fort Lee's Air Permit to ensure that USAG Fort Lee remains in compliance with all Federal, State, local and Army regulations. The installation is quantitatively limited by the amount of pollutants emitted from its sources.

The following equipment list contains examples of common stationary sources which emit regulated criteria pollutants and GHGs, and as such, requires written approval from DPW-EMD PRIOR to procurement:

- Natural Gas-Fired Heating Equipment (including but not limited to boilers, water heaters, furnaces, unit heaters, space heaters)

- Compression / Spark Ignition Reciprocating Internal Combustion Engines (including but not limited to non-emergency / emergency generators, fire pumps, light sets, popper / deformer generators)
- Paint Booth Equipment / Blasting Equipment
- Fire Fighting Training Equipment
- Welding Equipment
- Solvent Cleaners (including but not limited to parts washers and weapons cleaners)
- Underground Storage Tanks (USTs) (including but not limited to those storing gasoline, MOGAS, E-85, JP-8, No. 2 distillate oil, diesel fuel, or biodiesel)
- Aboveground Storage Tanks (ASTs) (including but not limited to those storing all of the above fuel types)
- Woodworking Equipment
- Pumps
- Engine Testing / Heating Equipment (not including kitchen, dining facility, laundry equipment) or portable heaters, unless said portable heater will remain in operating mode in one location for 12 months or more.
- X-Ray Operations
- Landfills
- Make-Up Air Unit
- Roof-Top Units
- Any other equipment that emits pollutants regulated under the Clean Air Act

Air Emission Producing Unit Procurement and/or Installation Process

Prior to procurement and/or installation, all proposed emissions units operated by USAG Fort Lee, a tenant organization, or other duly assigned non-USAG Fort Lee operational entity must be reviewed and approved by the DPW-EMD Air Quality Manager. Approval is acquired through the submission of a formal request to DPW-EMD with the project details, and the proposed product specification sheet. Failure to obtain said pre-procurement formal approval from DPW-EMD may result in equipment retrofit, uninstall or removal from USAG Fort Lee property at the cost of the contractor. To ensure the emissions unit meets USAG Fort Lee's air quality regulatory requirements, the applicable point of contact (Government PM, Tenant Organization POC, or Contractor) will submit the product specifications via email or hand deliver to DPW-EMD.

Air Emission Producing Units Owned by USAG Fort Lee

Emissions units for which USAG Fort Lee assumes full ownership with complete guidance, management, and operational control are required to be included in USAG Fort Lee Air Permit. Prior to procurement, each proposed emissions unit to be operated at USAG Fort Lee, by the Garrison or by a Contractor, must have an official request submitted for review and receive written approval from the DPW-EMD Air Quality Program.

Air Emission Producing Units Owned by Tenants/Other Organizations

Only emissions units for which USAG Fort Lee assumes full ownership and complete guidance, management, and operational control are authorized to be included in USAG Fort Lee Air Permit. Emissions units associated with the following tenant organizations are NOT included on USAG Fort Lee Air Permit:

- U.S. Air Force/Navy
- U.S. Marine Corps
- Army Air Force & Exchange Service
- Defense Contract Management Agency
- Defense Commissary Agency
- Old Dominion Utility Service
- Virginia American Water Company
- AT&T New Cingular Wireless
- Petersburg Cellular Partnership / Verizon Wireless
- Power Secure
- USAG Fort Lee Commonwealth Communities (Pinnacle Properties LLC)
- T-Mobile Wireless

Since the above entities constitute public/private organizations separate and distinct from the USAG Fort Lee, USAG Fort Lee assumes no legal responsibility for the emissions units operated by or on behalf of the aforementioned organizations, or any future organization that proposes the installation of an emissions unit at USAG Fort Lee. Although legal title to the property on which USAG Fort Lee tenant organizations' facilities are located is held by the United States Government and carried on USAG Fort Lee's property book, operational control of the individual units are held by that tenant organization regardless of installed equipment, property book, ownership considerations, assignment, or other circumstances. All units installed by tenant organizations must still adhere to all federal, state, and local laws, as well as Fort Lee's ESC. Failure to submit technical data regarding emissions of proposed units, and receiving approval

from DPW-EMD-AQ to proceed with procurement and install could result in unit retrofit at the cost of the contractor, or complete removal from Fort Lee property.

Low Nitrogen Oxides (NOx): Furnace/Boilers/Unit Heaters/Make-up Air Units/Other External Combustion Units

The emissions units covered in this section must be high-efficiency units and fired with only natural gas. Under no circumstance will these emissions units be equipped with the capability of burning No. 2 distillate fuel oil or any other distillate, residual fuel oil type. They shall be equipped with a low nitrogen oxide (NOx) burner system for guaranteed NOx performance when using natural gas at no greater than 30 parts per million (ppm), dry volume basis and corrected to 3% excess oxygen (O_2).

Prior to equipment purchase, low NOx certification must be obtained and sent to the DPW-EMD Air Quality Program Manager or by calling 804-734-5061 to arrange hand delivery. Reference that the equipment is on a South Coast Air Quality Management District (SCAQMD) low-NOx list or that it is in compliance with Rule 1146.2 is not adequate to demonstrate compliance with this performance standard. The SCAQMD standard states that any unit that is in compliance under Rule 1146.2 is required to possess stack testing data for each unit. A sticker indicating NOx emissions performance is also not adequate to demonstrate compliance with this performance standard.

If quantitative low-NOx documentation that is technically-sufficient to meet the DPW-EMD's requirements is not obtainable from the manufacturer after equipment installation is completed, the Contractor must provide the services, at its cost, of a field representative for stack testing. The Contractor shall provide the DPW-EMD Air Quality Program with a copy of these stack testing results adequate to demonstrate compliance with the 30 ppm NOx guarantee within five (5) business days after commissioning the unit.

Volatile Organic Compounds (VOC)

All coatings and solvents used in the performance of this contract shall meet required performance specifications and not exceed the volatile organic compound (VOC) limits of the Air Pollution Control Districts where they are used.

VOC Work Practice Standards

Solvent products which contain VOCs shall not be intentionally spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.

If the Contractor anticipates a significant amount of VOC containing material to be used during the course of a project, they shall maintain Material Safety Data Sheets (MSDS) or other vendor information on site demonstrating the VOC content substance used.

Solvent Use

Depending on the type of solvent cleaning equipment, USAG Fort Lee will be subject to 9 VAC 5-40-3260 (Rule 4-24), Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents. As part of an effective ozone pollution control strategy, operations that utilize solvent containing materials (e.g., hand wiping, immersion, or vapor degreasing for surface cleaning, paint clean up, and general maintenance activities) should employ pollution prevention measures such as use of non- or low-VOC content solvents. In addition, HAP emissions can be reduced by substituting very low HAP (less than five percent) or HAP-free/exempt products. A HAP-free water-reducible product should be used for cleaning paint guns and lines. Notably, the decision and authority to use an alternative product must follow the appropriate implementation route. Although methyl ethyl ketone was recently delisted as HAP, it is not to be considered a viable alternative solvent. Ozone Depleting Substances (ODS) containing solvents shall not be used without the approval of the Environmental Support Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology).

Fugitive Dust Emission Controls

Contractors and government personnel shall not cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable and approved precautions include, but are not limited to:

- Use, where possible, water or approved chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, application of gravel or the clearing / grubbing of land. Water must be on site daily prior to beginning work.
- Application of asphalt / gravel, water, or approved chemicals on dirt roads, material stockpiles and other surfaces which may create airborne dust and maintaining them in a dirt free condition.
- Installation and use of hoods, fans and fabric filters to trap, catch, enclose and vent the handling of dusty materials. Adequate containment methods approved by the DPW-EMD shall be employed during sandblasting or other similar operations.
- Open equipment for conveying or transporting materials likely to create objectionable air pollution when loaded with dusty materials shall be covered or treated in an equally effective manner at all times when in motion or awaiting transportation.

- Ensure prompt removal of spilled, tracked dirt, dried sediments or other materials from paved streets resulting from soil erosion (9 VAC 5-40-90).

Emergency/Non-Emergency Generators

Regardless of the engine's power or date of manufacture, all generators shall be in accordance with 40 CFR 60, Subpart IIII and JJJJ, and be certified to Tier 4i emission standards.

No compression ignition or spark ignition internal combustion engine (CI/SI) shall be installed at USAG Fort Lee that is unable to demonstrate compliance with the tiered emission limits set forth by New Source Performance Standards Subpart IIII or Subpart JJJJ corresponding to either the actual year of physical installation or a year subsequent to the actual year of physical installation, unless the emission standards for a previous model year are equivalent in magnitude. This requirement applies to emergency, non-emergency, or any combination of units.

Fuel Requirements

All diesel stationary engines with a displacement of less than 30 liters per cylinder must use diesel fuel with a maximum sulfur content of 15 parts per million. Fuel suppliers must provide documentation upon delivery that fuel meets specific American Society for Testing and Materials as stated in the Air Permit.

Pollutant Emitting Equipment/Vehicles

All pollutant-emitting equipment shall operate in strict accordance with Virginia Regulation 9 VAC 5-40-5670, PART II Emission Standards and ARTICLE 41 Emission Standards for Mobile Sources (Rule 4-41).

In the event a unit fails to meet these criteria by emitting smoke during times other than immediate start-up or shut- down, the operator must shutdown the unit immediately and in a manner that ensures safety. The operator must ensure that repairs are made by a qualified technician, or replace the unit with one that can be operated in a manner that adheres to this regulation.

Anti-Idling Policy

USAG Fort Lee's Energy Conservation Measures Policy states that the maximum amount of idling time for vehicles should not exceed 30 seconds. In most gasoline engines, the amount of gasoline used to start the engine is equal to the amount of gasoline used to idle for 30 seconds. This means that fuel used to idle after 30 seconds is considered wasting precious resources and also leads to unnecessary contributions to air pollution. With exception of diesel-powered vehicles, such as tour buses and fire/emergency service vehicles, State law requires that vehicles used during commercial and public service (which includes every government vehicle on the

installation) shall not idle for more than three minutes. For diesel-powered vehicles, idling is limited to ten minutes. Not only does unnecessary idling of vehicles waste fuel and impair air quality, it is against both State law and Army regulation.

Ozone Depleting Substances and Chemicals
The Contractor shall comply with the EPA regulations issued under Title VI, Sections 601-608 of the Clean Air Act pertaining to ODS and the Montreal Protocol.

The Contractor shall not utilize or install Class I ODS equipment on USAG Fort Lee, Virginia. Contracts may not include any specification, standard, drawing, or other document that requires the use of a Class I ODS in the design, manufacture, test, operation or maintenance of any system, subsystem, item, component, or process. This includes the delivery of any items of supply that contains a Class I ODS or any service that features the use of a Class I ODS.

Asbestos

Asbestos containing materials (ACM) or lead based paint (LBP) will not be used on USAG Fort Lee projects. Contact the DPW-EMD to determine the extent of ACM or lead present in existing facilities impacted by a project. Contractors will coordinate with the DPW-EMD Asbestos/Lead Specialist and shall be included in the Asbestos/Lead testing protocol to determine the appropriate tests needed based on the scope of work. If asbestos not previously known to exist is exposed, the Contractor shall cease work in the affected area immediately and notify the KO and DPW-EMD.

For questions about Asbestos or Lead Testing please contact the Fort Lee Air Program Specialist at:

804-734-5123

Hazardous Material Inspection prior to renovation and demolition:
Federal, state, and local laws require a thorough inspection for asbestos prior to any renovation or demolition, **regardless of the age of the building**! These laws are not new. The federal law that requires asbestos Air Pollutants):

NESHAP (40 CFR 61.145) states in part, “thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of hazardous materials.” The law does not specify any limit on the age of the building, nor does it limit the type or size of the activity. By definition (61.141), any activity that alters one or more facility components in any way is a renovation. These requirements will be tested with the same requirements as listed below.

Testing procedures for lead and asbestos shall adhere to the following:

- The DPW-EMD shall be notified in advance of testing/sampling of ACM or LBP in order to have the option of being on site for witnessing.
- All testing shall be performed by a third-party contractor that is trained, certified and licensed in the Commonwealth of Virginia as an Inspector.
- The third-party contractor must be contracted by the Prime Contractor and have no affiliation to the abatement contractor.
- All samples shall be accompanied by a Chain of Custody (COC).
- The DPW-EMD shall receive a copy of the COC and lab results.

Failure to follow the procedures above may result in the rejection of sample results.

Asbestos Abatement Plans

USAG Fort Lee complies with all regulations involving asbestos and requires contractors to submit an Asbestos Abatement Plan if there is the possibility of asbestos to exist, or if there are current surveys that indicate it is present.

The Contractor will submit the Asbestos Abatement Plan, revisions, and all other associated documentation requested by the DPW-EMD to the COR as part of the EPP prior to the initiation of work. No work can begin until the plan is reviewed and approved by the DPW-EMD Asbestos/Lead Specialist.

Asbestos Abatement Plans must include, but are not limited to the following elements:

- Location, quantity, and description of how abatement is to be performed.
- Schedule the Contractor will use to comply with notification deadlines, requirements.
- Contractor's and Sub-contractor's current licensing, certifications, fit test, safety requirements and air sampling documentation.
- The DPW-EMD approved third-party contractor who will be conducting the environmental sampling and monitoring should be onsite at all times during the duration of abatement procedures.
- Drawings which include the locations of units on-site such as negative air machines, decontamination units, and waste dumpsters.

Landfill Certifications

As soon as practicable, the Contractor will submit final air clearance results to the KO for forwarding to the DPW-EMD. Upon review and approval of final air clearance results, the DPW-EMD will notify the COR that the final sample results meet the applicable performance standards. This approval will then be forwarded to the Contractor that USAG Fort Lee has accepted the results. This formal communication must occur prior to containment teardown to allow area re-occupancy. Breakdown of containment features prior to receiving approval of final air clearance results originating from the DPW-EMD may result in the re-establishment of the containment at the cost to the contractor.

Asbestos Awareness Training Requirements

The Contractor will adhere to the following requirements for individuals who are in contact but not removing ACM.

The Contractor shall provide, at no cost to the Government, for those Contractor employees who may perform housekeeping operations in an area which contains ACM or Presumed Asbestos Containing Material (PACM), an asbestos awareness training course.

The training shall be as needed but no less than once per year and consist of a minimum 30-45 minute awareness training course; and

The training course shall, at a minimum, contain the following elements:

- Health effects of asbestos.
- Locations of ACM and PACM in the building/facility.
- Recognition of ACM and PACM damage and deterioration.
- Requirements in this standard relating to housekeeping.
- Proper response to fiber release episodes.

Asbestos Abatement or Removal Notification

If the project requires the removal of ACM, the Contractor is responsible for the proper disposal of asbestos waste and debris. The Contractor is subject to Occupational Safety and Health Administration (OSHA), EPA and Commonwealth of Virginia compliance and inspections before, during and after asbestos abatement. The Contractor must perform asbestos removal work in accordance with these specifications and EPA's National Emissions Standards for Hazardous Air Pollutants for asbestos, and any subsequent updates thereto. Notifications are required to be submitted to state and EPA Region 3 notifications at least 20 days prior to starting any asbestos abatement or removal. A copy of the notification shall be submitted to the KO and DPW-EMD Asbestos/Lead Specialist.

For questions about Asbestos or Lead please contact the Fort Lee Air Quality Specialist at:

804-734-5123

Asbestos Manifests

If the project requires asbestos removal, all asbestos waste manifests shall be signed by the DPW-EMD prior to the removal of such waste from USAG Fort Lee. A copy of the completed manifest (signed by the receiving landfill) shall be submitted to the DPW-EMD within 10 days of removal of the waste from the Installation.

Lead

USAG Fort Lee assumes that all buildings built prior to 1978 contain lead, but buildings built after this date may also have such elements. While lead is known to exist in certain locations based on the age of the building, there have been cases where lead not previously known to exist is exposed. **If lead is found during any phase of a project, the Contractor shall immediately cease work in the affected area and notify the KO and DPW-EMD.**

USAG Fort Lee complies with all regulations involving lead disturbance that include but not limited to renovation, abatement, and disposal and requires contractors to submit a Lead Disturbance/Abatement Plan if there is the possibility of lead to exist, or if there are current surveys that indicate its presence.

The Contractor will submit the Lead Disturbance/Abatement Plan, revisions, and all other associated documentation requested by the DPW-EMD to the COR and the Installation Asbestos/Lead Specialist prior to the initiation of work. No work can begin until the plan is reviewed and approved by the DPW-EMD Asbestos/Lead Specialist.

If the project requires lead disturbance, renovation, removal, or abatement, the Contractor will submit work plans to include, but not limited to, the following elements:

- Location, quantity, and description of how abatement is to be performed.
- Schedule the Contractor will use to comply with notification deadlines, requirements.
- Contractor and Subcontractor current licensing, certifications, fit test, safety requirements and air sampling documentation.
- The DPW-EMD approved third-party contractor who will be conducting the environmental and clearance sampling. A project monitor will be onsite at all times during the duration of abatement procedures.
- Drawings which include the locations of units on-site such as negative air machines, decontamination units, and waste dumpsters.

Lead Training Awareness Requirements

The Contractor will adhere to the following requirements for individuals who may be in contact with but not removing lead-containing material.

The Contractor shall provide, at no cost to the Government, a lead awareness training course to all workers.

The training shall be as needed but no less than once per year and consist of a minimum 30-45 minute lead awareness training course; and

The training course shall, at a minimum, contain the following elements:

- Identify activities covered by the OSHA lead standards.

- Recognize the dangers of lead exposure and the features of a medical surveillance program.
- Recognize the purpose of and the elements of an exposure control plan.
- Recognize requirements of the Construction Lead Standard.
- Recognize the importance of respiratory protection, proper hygiene and housekeeping procedures.
- Identify key features of a medical removal program.

Lead Clearance and Re-occupancy

As soon as practicable, Contractor will submit final wipe sample results to the KO for forwarding to the DPW-EMD. Upon review of final wipe sample results, the DPW-EMD will notify the COR whereupon the Contractor will receive formal communication originated by DPW-EMD that sample results meet the applicable performance standards prior to containment teardown for work area re-occupancy.

Lead Disposal

Lead waste and lead contaminated debris must be sampled to determine the quantitative level of lead. This may be determined by using lead totals. However, if sampled totals exceed 20 times the Toxic Characteristic Leaching Procedure (TCLP) limit, then a TCLP must be performed. The DPW-EMD will inform the Contractor on management procedures. If wastes are determined to be hazardous by TCLP, the containers cannot leave the installation until a completed manifest is reviewed and signed by the DPW-EMD. If the Contractor knows that the quantity of hazardous waste generated will be less than 55 gallons, he/she must arrange to have that material removed from the installation within 72 hours of generation. If this cannot be accomplished, the Contractor must contact the Hazardous Waste Manager to arrange storage of full drums of lead-contaminated waste at the USAG Fort Lee hazardous waste facility site for no more than 90 days. The drums must be in good condition, labeled properly and tightly sealed. Storage of Contractor's containers will only be provided on an emergency basis. If large quantities of debris (> 5 yards) will be generated, the contractor must coordinate with the Hazardous Waste Manager who will identify a Temporary Storage Site (TSS) to store the material. The designation of a TSS increases the regulatory requirements which the contractor is obligated to comply.

Refrigerant

Contractors shall be responsible and accountable for compliance with the EPA Clean Air Act Section 608, 40 CFR Part 82 for all general air conditioning and refrigerant (AC&R) related work. A selection of specific responsibilities is listed below:

- Contractor shall ensure that all contracted employees are made aware of the regulatory content of 40 CFR Part 82 prior to beginning work on AC&R equipment.

- Contractor shall comply with all requirements set forth within the most recent version of USAG Fort Lee's Refrigerant Management Plan.
- Contractor shall allow only EPA-certified technicians with a Universal level of expertise and use only EPA-certified and registered recovery/recycle units to perform work on USAG Fort Lee AC&R equipment.

Contractor shall maintain on file and submit upon request:

- Documents with the information to confirm EPA Certification of all service technicians (Copies of EPA Certification Cards are acceptable).
- A current list of recovery/recycling units in use.
- A statement from the Contractor that the recovery units are operating to EPA standards and that units are properly registered with the EPA.
- All service order data for AC&R equipment including equipment ID number and/or serial number, equipment manufacturer and model number, location of equipment, refrigerant type, date of service, and service, repair or disposal description. Leak calculations shall also be submitted if applicable.

Contractor will comply with all applicable sections of the Department of Defense (DoD) Ozone-Depleting Substances Turn-In Procedures, hereinafter referred to as DoD Procedures. The Contractor will follow the DoD Procedures in any case where the following ODC/ODS are present and require recovery: Chlorofluorocarbons (CFCs) 11, 12, 114, 500, 502; Halons 1202, 1211, 1301; and HCFC-22 (i.e. R-22).

Refer to the USAG Fort Lee RMP for more details on procedures and specifications pertaining to refrigerants.

Contractor shall hold USAG Fort Lee harmless from all regulatory action as a result of their failure to perform service that meets all requirements of federal regulations.

Hazardous Materials

The Contractor will maintain and provide an accurate consumption list and inventory of its Hazardous Materials (HAZMAT) to the Hazardous Material Control Center (HMCC) (804-734-5243), the DPW-EMD and the Installation Safety Office as required by the Community Right-to-Know Act. There are several categories of HAZMAT present at USAG Fort Lee; these include, but are not limited to the following:

- Pesticides
- Paints
- Solvents
- Petroleum, Oils and Lubricants

HAZMAT listed in the Installation Chemical Inventory maintained by the Installation Safety Office and is subject to OSHA Workers' Rights and Emergency Planning and Community Right-to-Know Act. The Contractor will comply with the Installation Hazard Communication Standard Program and Hazardous Communication Policy. Please call the DPW-EMD for the most current policy.

Prior to bringing any HAZMAT on to USAG Fort Lee, a detailed summary of the HAZMAT must be provided to the HMCC. All contractors are required to report the use of all hazardous materials to the government for all projects and contracts including service contracts executed by or on behalf of USAG Fort Lee. In accordance with FAR 52.223-3, each offeror (Contractor) must provide the KO with a list of proposed HAZMAT that it plans to use on the installation during the performance of the contract and must provide copies of all MSDS/SDSs to the HMCC, Building 6212. Spills and/or releases of hazardous materials must be reported immediately to the KO, USAG Fort Lee Fire and Emergency Services and the DPW-EMD.

Hazardous materials are any substance defined by OSHA as a hazardous substance requiring a MSDS. Hazardous materials that need to be reported include but are not limited to chemicals, paints, thinners, sealing compounds, strippers, glues, solvents, all petroleum products including oils, hydraulic fluids, and fuels stored on-site (fuels in vehicles are exempt), pesticides, adhesives, acids, flammables, corrosives, oxidizers, compressed gases (such as but not limited to oxygen, acetylene, propane, flammable and non-flammable gases, all aerosols and all materials containing hazardous substances.

No contractor (including sub-contractors) shall bring hazardous materials onto Fort Lee without coordination with the HMCC and presentation of SDS for all chemicals.

SDS / MSDS must be submitted to both DPW-EMD and HMCC by project managers for ALL chemicals to be used on a project at Fort Lee.

Hazardous Materials Management Program

The USAG Fort Lee HMCC will notify the PM and KO if extremely hazardous materials are being used by the Contractor. The Contractor shall not bring any extremely hazardous chemicals on USAG Fort Lee without prior approval from the HMCC. Contractors are not allowed to have more than a 14-day supply of HAZMAT on the installation at any time. A monthly account of hazardous materials used must be provided to the KO and the HMCC for tracking purposes. A final report must be submitted to the KO and HMCC upon project completion. Contractors must ensure that any unused HAZMAT is removed from the installation prior to final inspection and project completion.

If it is determined at any time that HAZMAT is on site that were not reported in advance, the KO (or designated Government representative) will be notified and the project may

be delayed until the materials are properly documented and submitted as stated above or removed from USAG Fort Lee property.

Hazardous Material Storage

The Contractor will manage HAZMAT properly at all times during performance of this contract; including, but not limited to, all requirements set forth within this paragraph. Containers must be in good condition and properly labeled with the contents and hazard class (flammability, toxicity, corrosivity, oxidizer, etc.) at all times. Containers will be closed at all times when not in use, HAZMAT will be kept under cover to protect it from the elements as well as to prevent stormwater runoff contamination. Tanks and 55-gallon liquid drums are required to be fitted with secondary containment.

USAG Fort Lee is subject to inspections at any time from outside agencies (EPA, VDEQ, and OSHA) and any violations acquired by the Contractor or its sub-contractors will be the responsibility of the Contractor and any fines associated with the violations will be resolved at the Contractor's expense.

Petroleum, Oil and Lubricants Storage

Containers of 55-gallon capacity or larger must be provided with secondary containment. Double-wall fuel tanks meet secondary containment requirements.

Inclusive in all HAZMAT storage areas

NO SMOKING signs will be posted in all HAZMAT storage areas. In addition, all HAZMAT will be segregated in storage according to compatibility (i.e. flammables will not be stored with corrosives, corrosives will not be stored with oxidizers, flammable gases will not be stored with flammable liquids, etc.)

Gas Cylinders

Gas cylinders shall be stored in the shade or under cover, be kept in the upright position with caps on properly and secured with chains and locks in order to prevent tampering or falling over. Gas storage areas will have signs indicating what type gases are present (i.e., flammable, oxidizer, non- flammable, etc.)

Hazardous Waste

USAG Fort Lee is regulated by the EPA as a large quantity generator to hazardous wastes and holds the appropriate EPA ID number.

All hazardous waste as defined in 40 CFR 260-265 is subject to Resource Conservation and Recovery Act (RCRA) provisions. All such waste generated by the Contractor during performance under this Contract shall be stored by the Contractor in containers approved by Department of Transportation Reg.49 CFR, part 172-173 and disposed of in accordance with the Installation Hazardous Waste Management Plan available for review in the DPW-EMD. All other wastes generated by the Contractor shall be disposed of by the Contractor in coordination with the KO (or designated Government representative) and DPW-EMD.

For questions about disposal or manifests of contaminated wastes, please contact the DPW-EMD Hazardous Waste Program staff:

804-734-3811
804-734-3772

Hazardous Waste Regulations

The Contractor will collect and segregate all solid and/or hazardous wastes generated during the performance of the contract in containers located in an area designated by the KO (or designated Government representative) or DPW-EMD. All wastes shall be re-used, recycled, or disposed of prior to completion of work. The Contractor must, prior to removing any waste from USAG Fort Lee, properly classify each waste stream. Classification can be made based on generator knowledge or through laboratory analysis. The identification and classification of each waste stream shall be shown in the waste management plan, if applicable. The Contractor will coordinate with the KO (or designated Government representative) and DPW-EMD Hazardous Waste or Compliance Program Manager to ensure hazardous waste removed from USAG Fort Lee is accompanied by a Uniform

Using a CAC, Fort Lee regulations and guidance can be found on the Intranet on the EMD website or by contacting the appropriate EMD Program Manager. ARMY wide regulations can be found on the Internet as well.

Use your email certificate for authorization

Hazardous Waste Manifest, including USAG Fort Lee's EPA ID number, to be signed by the DPW-EMD Hazardous Waste Manager.

Prior to beginning any demolition:

- The contractor shall confirm the existence or lack of existence of hazardous substances including, but not limited to, asbestos, PCBs, and lead. If hazardous substances exist, the contractor shall properly remove and dispose of these materials prior to beginning any other demolition.

- Lead may be present in windows/frames. If any framing or window replacement is proposed then testing may be needed. PCB and non-PCB ballasts may also be present at this site; if found and replaced the ballasts and bulbs will be turned in to USAG Fort Lee's HazWaste Facility (Building 7123 for recycling or disposal).
- USAG Fort Lee assumes that anything built before 1978 contains lead and that anyone doing any work in a building should be made aware of that so that they can comply with the OSHA worker-protection requirements in 29 CFR. Refer to Hazardous Waste Testing section. Under no circumstances will the Contractor leave any solid wastes, HAZMAT, or hazardous wastes at USAG Fort Lee at the end of a project.
- Before the project is turned over to the Government, the Contractor will remove all solid wastes, hazardous materials, and hazardous wastes from the installation. Those items include, but are not limited to, dirt piles, concrete piles, asphalt piles, and rubbish piles. No materials will be left for the future use of the Government, unless Contractor receives direction to do so from the KO (or designated Government representative); this is to include the aforementioned items and also regular or touch-up paint, plaster, solvents, etc.

All material and waste containers must be closed when not in use. Materials/wastes are to be covered for protection from the weather. Each container is to be properly labeled. Do not store hazardous materials/wastes or portable toilets near storm drains. Upon completion of the project the Contractor shall remove all hazardous materials and hazardous waste.

The Contractor shall submit all trip tickets from the landfill facility, incinerators and recycling companies to show that all debris is being land-filled, incinerated, re-used or recycled in an approved location and in accordance with all federal requirements. Each trip ticket must be submitted to the KO.

Hazardous Waste Manifests

DPW-EMD staff will review all lab analyses or MSDS of wastes prior to signing manifests. All hazardous waste manifests must be signed by the DPW-EMD prior to removal of such waste from the Installation. Only the DPW-EMD Hazardous Waste Manager and Compliance Manager are authorized to sign Universal Hazardous Waste Manifests. The generator copy of the manifest must be returned to the DPW-EMD within 35 days of removal of waste from the installation.

Hazardous Waste Site Management

The Contractor will ensure all material/waste containers are closed when not in use. The Contractor will properly label each container and will not store hazardous materials near storm drains. Upon completion of projects, the Contractor will remove all hazardous materials and hazardous waste from USAG Fort Lee through coordination with the KO (or designated Government representative) and DPW-EMD Hazardous Waste Manager.

Waste Accumulation Areas

Contractor activities generating hazardous wastes as defined in 40 CFR Part 261.3 must contact the DPW-EMD for assistance in setting up a designated Satellite Area Site (SAS). The Contractor will designate a single and back-up point of contact to manage the SAS at all times in accordance with Federal, state, Army, and USAG Fort Lee Policies. The point of contact, and their back-up, shall have training as prescribed in 29 CFR 1910.1200 and as set forth in the USAG Fort Lee Hazardous Waste SOP. This includes citing a roll-off for disposal of a hazardous waste i.e. demolition wastes. However, roll-offs are greater than 55 gallons and fall outside the SAS rule.

Hazardous materials are different from hazardous wastes. The Contractor will not remove hazardous wastes from Fort Lee premises without the DPW-EMD Hazardous Waste Manager's signature on the manifest.

Contaminated Absorbents

The Contractor will clean up all hazardous materials/wastes using the proper absorbent materials. Spills caused by the Contractor will be the Contractor's responsibility to containerize and dispose of the contaminated absorbent material.

Hazardous Waste in Excess of 55 Gallons

Hazardous waste in excess of 55 gallons must be manifested off USAG Fort Lee within 72 hours of generation in order to comply with the requirements of the satellite accumulation rule. If, in an emergency, waste in excess of 55 gallons must be stored on site for more than 72 hours, arrangements must be made to use Fort Lee's 90-day storage site. Roll-offs, due to their size, may remain onsite until removed. Roll-offs containing hazardous wastes are required to be in good condition, covered with poly sheeting or equivalent material to prevent rainwater infiltration, and are subject to weekly inspections by the DPW-EMD Hazardous Waste Manager.

Hazardous Waste Soil

Soil must be tested for contaminants Soil must be tested for contaminants prior to removal from USAG Fort Lee. Testing and disposal of soil shall follow Virginia Solid Waste Management Regulations 9 VAC 20-81-660. A minimum of one composite sample shall be analyzed for each required test for every 250 cubic yards of soil to be disposed. Testing shall include at minimum: Total Petroleum Hydrocarbon (TPH) Gasoline Range Organics, and Diesel Range Organics, Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX), Total Organic Halides, a

Paint Filter Test, and total metals. Contractors will contact the DPW-EMD Hazardous Waste Manager to determine if further tests are required. If test results determine "other than clean", the material must be transported to an appropriate landfill or processing center based on the contaminants identified. Contaminated soils shall be containerized and managed as either hazardous waste or non-regulated waste, depending on the contaminant. The disposal of

The DPW-EMD must review the sample results and sign all hazardous/non-hazardous waste manifests prior to disposal.

Under no circumstances will soil, clean or contaminated, from Fort Lee be delivered to or donated to outside sources (other than an appropriate landfill or processing center based on the contaminants identified) for use.

the containerized contaminated soil shall be the responsibility of the Contractor. DPW-EMD must review the sample results and sign all hazardous/non-hazardous waste manifests prior to disposal.

Subsequent to coordination with the KO (or designated Government representative), the Contractor shall contact the DPW- EMD Hazardous Waste Program Manager to coordinate proper characterization, disposition, and disposal of any contaminated soils.

Hazardous Waste Testing

All hazardous wastes that cannot be characterized through generator knowledge shall be tested for hazardous wastes constituents according to EPA testing methods in SW-846. Wastes may be required to have the method 1311 TCLP performed to determine constituents. Contractors will coordinate with the DPW-EMD Hazardous Waste Manager to determine the appropriate tests. Testing shall adhere to the following procedures:

- The DPW-EMD shall be notified in advance to have the option of witnessing the testing.
- All testing shall be performed by a Third-Party contractor.
- Containers shall be labeled with a unique identifier to distinguish them from other waste containers on the installation.
- Sampling shall be representative of the waste.
- All samples shall be accompanied by a Chain-of Custody (COC).
- .
- Sites with multiple containers may require a site diagram.
- The DPW-EMD shall receive a copy of the COC and lab results.

The DPW-EMD Hazardous Waste Manager and Compliance Manager have the final authority on waste determinations. Multiple sampling or re-sampling of containers is not permitted without permission from the DPW-EMD Hazardous Waste Manager. Failure to follow these procedures may result in the rejection of sample results.

Universal Waste

Universal waste is a subset of Hazardous Waste with reduced requirements. Provided the wastes are recycled, they may be kept for up to 365 days and not the 90 days for hazardous waste. Containers will be labeled "Universal Waste". The contents shall be clearly listed along with an accumulation start date.

Universal Waste Lamps

Upon removal of fluorescent lamps and high-intensity discharge bulbs, the Contractor will box the lamps and manage them as universal waste. USAG Fort Lee recycles bulbs including: Compact Fluorescent Lamps (CFLs), fluorescent straight tubes, u-tubes, mercury vapor lamps, sodium vapor lamps, and projector lamps. All lamps will be packaged and sealed with tape in a suitable container and labeled with an accumulation start date, the number of bulbs in the container and the phrase "UW lamps".

Ballasts

Upon removal of fluorescent light ballasts, the Contractor will separate PCB and non-PCB ballasts and place them in DOT-approved containers suitable for shipment.

Rechargeable Batteries

Recyclable batteries (NiCad, NiMH, Lithium, and Lead) may not be disposed of in the ordinary trash and are recycled by USAG Fort Lee. All rechargeable batteries will be counted, have their terminals taped and will brought to the Hazardous Waste Building, Building 7123 by appointment.

Waste Management, Clearing, Demolition & Disposal

A Waste Management Plan is required to be included in the submitted EPP. The Contractor shall collect all solid wastes generated during the performance of the contract in a container located in an area designated by the KO/PM. The Contractor shall provide appropriate containers for the collection and segregation of solid wastes, recyclables, and C&D debris generated directly and indirectly by work under this Contract. The Contractor is prohibited from using Installation dumpsters or other government owned/leased waste receptacles for the disposal of any solid wastes. During 2019, a minimum of sixty-eight (68) percent of all construction waste is required

to be diverted from landfills by reclaiming, recycling, or reusing. Prior to beginning any demolition:

- The contractor shall confirm the existence or lack of existence of hazardous materials including, but not limited to, asbestos, PCBs, and lead. If hazardous materials exist, the contractor shall properly remove and dispose of these materials prior to beginning any other demolition.
- Lead may be present in windows/frames. If any framing or window replacement is proposed then testing may be needed. PCB and non-PCB ballasts may also be present at this site.
- USAG Fort Lee assumes that any building built prior to 1978 contains lead and that anyone doing any works in a building should be made aware of that so that they can comply with the OSHA worker-protection requirements in 29 CFR.

Trip Tickets

The Contractor will submit all trip tickets from the landfill facility, incinerators, and recycling companies to validate that all debris is being land-filled, incinerated, re-used, or recycled in accordance with all federal requirements and in an approved location. These trip tickets will be submitted to the KO (or designated representative) and reports are to be provided to the DPW-EMD.

Project Managers and Primary Contractors shall track and list all of equipment that will be used and kept on site during the course of the project and place proper identification on the vehicles. This list must be updated daily if addition equipment is brought on site and completed once a week as a required task. Furthermore equipment found on post without the information below or not on the equipment list may be removed at the owner's expense. Construction vehicles, heavy equipment, lifts, trailers and other rolling pieces of equipment on USAG Fort Lee property without a Government license plate which left overnight or on their contracted sites must have the following information posted on the vehicle. Generally, the trip ticket is posted in the window if there is one, or on the door of the equipment or some other easily visible location. This information is necessary in case of spill(s), accident(s) or abandonment of equipment.

TRIP TICKET

Date	Construction Project	Company equipment belongs to	Emergency POC Phone No.
Equipment Ownership ID:			

Solid Waste Management

The Contractor shall collect all solid wastes generated during the performance of the contract in a container located in an area designated by the KO or COR and approved by DPW-EMD. The Contractor shall provide appropriate containers for the collection and segregation of solid wastes, recyclables, and construction/demolition debris generated directly and indirectly by work under this Contract. The Contractor is prohibited from using Installation dumpsters or other government owned/leased waste receptacles for the disposal of any solid wastes. All solid wastes shall be re-used, recycled, or disposed of prior to completion of work at USAG Fort Lee. Recycling to the maximum extent should be the objective. In an effort to reach IMCOM's goal of net zero solid waste by 2030, the required diversion rate increases 2% each year. **A minimum of sixty-eight (68) percent of all construction waste is required to be diverted from C&D landfills by reclaiming, recycling, or reusing.** Each Performance Work Statement (PWS) should contain source reduction requirements in order to reduce the initial input to the solid waste stream by specifying that the minimum packing and packaging materials be used for items shipped to the installation. If recycling is determined to be impractical a memorandum stating how the determination was made must be submitted to the DPW-EMD and approved before work begins.

Prior to removing any waste from USAG Fort Lee the Contractor shall properly classify each waste stream. Classification can be made based on generator knowledge or through laboratory analysis. The identification and classification of each waste stream shall be included in the waste management plan. If the government has previously identified and classified the waste stream, that fact should be noted in the Waste Management Plan. All hazardous waste removed from USAG Fort Lee must be accompanied by a Uniform Hazardous Waste Manifest, including USAG Fort Lee's EPA ID number and must be signed by the USAG Fort Lee Hazardous Waste Manager.

Under no circumstances will any solid wastes, hazardous materials, or hazardous wastes be left on USAG Fort Lee property at the end of the project. Before the project is turned over to the government, the Contractor will remove all solid wastes, hazardous materials, and hazardous wastes from the installation in accordance with applicable regulations. These items include, but are not limited to, piles of dirt, concrete, asphalt, and rubbish. No materials will be left for the future use of the government UNLESS instructed to do so in writing by the government. This includes the aforementioned items as well as regular or touch-up paint, plaster, solvents, etc. If it is determined that the Contractor left materials/wastes behind, services may be terminated and/or a penalty payment to include the cost of disposal of the material by the government may be withheld from the project payment.

Construction and Demolition Waste Management

For questions about C&D wastes, please contact DPW-EMD Pollution Prevention Program staff:

804-765-7549

The Contractor will recycle all C&D debris to the maximum extent possible. The Contractor shall make every effort to recycle materials such as, but not limited to, concrete (including concrete with rebar), brick, asphalt, all metals including piping, building insulation, wood, wood paneling and wainscoting, roofing materials, wallboard, carpet, ceiling tiles, floor tiles, cardboard, and similar materials that do not constitute, in and of themselves or in combination with other materials, hazardous materials. With prior coordination through the KO (or designated Government representative), USAG Fort Lee Recycling Center and DPW-EMD, the Contractor may take scrap metals to the USAG Fort Lee Recycling Center unless otherwise specified in the contract. See Appendix B for a list of off-site recycling locations.

It is within the Army's Sustainable Design and Development Policy to apply sound environmental principles in the design, construction and use of facilities. As part of the implementation of that policy the Contractor shall:

- Practice efficient waste management when sizing, cutting and installing products and materials.
- Use all reasonable means to divert C&D waste from landfills or incinerators and to facilitate their recycling or reuse.
- The Government is committed to diverting its waste away from landfills to the greatest extent possible.

The Contractor will support this objective by adhering to the following requirements:

- Reusing (when authorized and directed by the Government)
- Recycling
- Donating construction/demolition debris material.

Construction and Demolition Waste Management Plan

A waste management plan (to include solid non-hazardous waste and solid hazardous waste) shall be submitted within 15 days after notice to proceed and prior to initiating any site preparation work. At a minimum, for FY19 this shall include the contractor's plan(s) for a minimum **68% diversion rate** with a 2% increase in the diversion rate each year until 2030. The plan should include detailed information regarding the techniques used to meet the diversion rate. Should the Contractor deem that the 68% diversion rate cannot be met,

justification for not meeting the goal are required to be included in the plan. The plan shall include the following:

- Name of individuals on the Contractor's staff responsible for waste prevention and management.
- Actions that will be taken to reduce solid waste generation.
- Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas and equipment to be used for processing, sorting, and temporary storage of wastes.
- Characterization, including estimated types and quantities, of the waste to be generated.
- Name of landfill and/or incinerator to be used and the estimated costs for use, assuming that there would be no salvage or recycling on the project.
- Identification of local and regional reuse programs, including non-profit organizations such as schools, local housing agencies, and organizations that accept used materials such as materials exchange networks and Habitat for Humanity.
- List of specific waste materials that will be salvaged for resale, salvaged and reused, or recycled. Recycling facilities that will be used shall be identified and approved by DPW-EMD.
- Identification of materials that cannot be recycled or reused with an explanation or justification.
- Anticipated net cost savings determined by subtracting Contractor program management costs and the cost of disposal from the revenue generated by sale of the materials and the incineration and/or landfill cost avoidance.

Records

Records shall be maintained to document the quantity of waste generated; the quantity of waste diverted through sale, reuse, or recycling; and the quantity of waste disposed by landfill or incineration. The records shall be made available to the KO/PM during construction, and a copy of the records shall be delivered to the KO/PM upon completion of the construction. Throughout the duration of the contract, contractor shall maintain and make available to the KO/PM, records, to include all weight tickets, documenting the quantity of waste generated, the quantity of waste diverted from a landfill or incineration and the quantity of waste disposed by landfill or incineration. Upon contract completion, the contractor shall submit a copy to the DPW-EMD of all records including a statement certifying that at least 68% of C&D waste has been diverted from landfill disposal.

The contractor shall notify the KO (or designated Government representative) if diversion activities will cause the project duration time to be exceeded. Along with the notification, the contractor shall provide the highest diversion rate that

can be obtained based on the project schedule. If it is determined by the Government that the project is mission-critical, the diversion rate may be amended. If the cost of achieving the minimum diversion rate of 68% is significantly greater than the cost of conventional demolition methods and the risk can be attributed directly to meeting the minimum diversion rate, the contractor shall immediately notify the KO for a determination on whether a lower diversion rate is acceptable. If the KO determines that a lower diversion rate is acceptable, the rate may be amended to the highest obtainable rate that can be met, as agreed upon by all parties.

Stormwater

The Contractor shall prepare a Stormwater Management Plan (SMP) and a Stormwater Pollution Prevention Plan (SWPPP) in accordance with current Virginia Stormwater Management requirements.

For land-disturbing activities affecting one or more acres of land, the Contractor shall apply for coverage under the Construction General Permit to the VDEQ. The Contractor shall be responsible for all fees associated with obtaining General Permit coverage. The Contractor shall provide a postmarked copy of the submitted VDEQ stormwater permit application, to include the SMP and SWPPP, to the KO and DPW-EMD within 5 days of submission to VDEQ. The Contractor shall submit this registration and any required plans and specifications to VDEQ at least 60 days prior to commencement of ground disturbing activities. Prior to commencement of land-disturbing activities, the Contractor shall provide evidence of coverage by submitting a copy of the VDEQ coverage letter under the Construction General Permit to the KO and DPW-EMD. The following is a list of items required for inclusion in the plans:

For questions about Stormwater, please contact DPW-EMD Compliance Program Staff:

804-734-3772
804-734-3760

- Copies & signatures of all licenses and permits (i.e. signed VDEQ permit authorization)
- Permit fees; copy of checks
- Calculations and methods identified
- Certified reviewed plans and P.E. stamp
- Responsible Land Disturber Certification from VDEQ
- The Plan Reviewer's Certification
- Map with verified constraint boundaries adjacent to or within the project limits
- Map with verified wetlands and the 100' RPA Buffer that exists adjacent to or within the project limits

- Miss Utility verified ticket number informing the DPW-EMD of the presence of any existing utilities to be demolished or relocated as part of the project. USAG Fort Lee utilities are privatized. USAG Fort Lee owns the gas distribution infrastructure. Some of the utility infrastructure on USAG Fort Lee has been found to contain asbestos. See DPW-EMD Asbestos Specialist for additional information.

At the conclusion of work, the Contractor shall provide a copy of the general Permit Notice of Termination to DPW-EMD concurrently with submission to VDEQ as outlined in the Environmental Checklist, Appendix B.

Stormwater site design must incorporate strategies which include a combination of structural and/or nonstructural BMPs which are appropriate for the site. The design is to include adequate long-term operation and maintenance of BMPs. Water quality protection will be considered in accordance with the Federal Water Pollution Control (Clean Water) Act and current Commonwealth of Virginia regulations.

State and federal manuals which address proper Stormwater management design techniques include:

- **Virginia Stormwater Management Handbook, Volume I**
- **Virginia Stormwater Management Handbook, Volume II**
- **Virginia Department of Transportation Drainage Manual**
- **Virginia Erosion and Sediment Control Handbook**
- **Low Impact Development Design Strategies: An Integrated Design Approach**
- **Unified Facilities Criteria: Low Impact Development**
- **Low Impact Development Hydrologic Analysis**

USAG Fort Lee Stormwater Requirements Quick Reference:	
Disturbed Ground (square feet)	**Requirement**
< 2,500	Install appropriate E&SCs to prevent sediment from being washed into storm sewer.
> 2,500	Submit E&SC Plan in accordance with the requirements of the Virginia E&SC regulation to the DPW-EMD for review and approval.
> 5,000	Project must demonstrate conformance with the requirements of **Section 438 of the Energy Independence and Security Act** and **Army Low Impact Development Technical User Guide**. In general, development of more than 5,000 square feet of land must either retain the 95th percentile rainfall event on site, or use site-specific hydrological analysis to determine the pre-development hydrology. A justification must be provided if this requirement cannot be met. A Stormwater Management Plan must be submitted to the DPW-EMD for review.
> 1 Acre	Prepare and submit application for coverage in accordance with the **Virginia Stormwater Management Permit** program. Application must be approved by VDEQ and a coverage letter received by the DPW-EMD prior to beginning ground altering disturbance. Submit E&SC Control Plan in accordance with the requirements of the Virginia E&SC regulation to the DPW-EMD for review and approval.
Privatized Utilities	For privatized utility installation, upgrade, repair, etc. as a stand-alone project or part of a large project, utilities with an approved statewide E&SC Plan shall abide by that plan in lieu of the following requirements, but must provide a copy of the plan to the DPW-EMD for its records. Utility work on hard surfaced roads, drives, sidewalks and individual utility connects are exempt.
> 10,000	Submit E&SC Plan in accordance with the requirements of the Virginia E&SC regulation to the DPW-EMD for review and approval.
> 1 Acre	Follow procedure above for projects > than 1 acre.

Erosion and Sediment Control

All land-disturbing activities must comply with the Virginia Erosion and Sediment Control Laws and Regulations, Virginia Stormwater Management Act and Regulations, Virginia Stormwater Management Program General Permit, and the Chesapeake Bay Preservation Act.

For land disturbing activities 2,500 square feet or greater (10,000 square feet or greater for utility work), the Contractor shall prepare an E&SC Plan. Plans must be prepared in accordance with the Virginia Erosion and Sediment Control Handbook and the Virginia Stormwater Management Handbook, Volumes I and II.

All E&SC and SWM Plans must be reviewed by the DPW-EMD to ensure compliance with the State Laws and Regulations and the USAG Fort Lee Municipal Separate Storm Sewer System (MS4) Permit. The Contractor shall provide a copy of any required plans and specifications to the DPW-EMD for review at least 60 days prior to commencement ground disturbing activities. The Contractor must receive approval of its E&SC Plan from the DPW-EMD prior to commencement of land-disturbing activities.

Requirements for Offsite Soils

Check with regional and local authorities as well as the activity to determine actual requirements of bracketed items; values shown come from the Commonwealth of Virginia. Remove this paragraph if not required by the project.

Test offsite soils brought in for use as backfill for Total Petroleum Hydrocarbons (TPH), Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) and full Toxicity Characteristic Leaching Procedure (TCLP) including ignitability, corrosivity and reactivity. Backfill shall contain a maximum of 100 parts per million (ppm) of total petroleum hydrocarbons (TPH) and a maximum of 10 ppm of the sum of Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) and shall pass the TCLP test. Determine TPH concentrations by using EPA 600/4-79/020 Method 418.1. Determine BTEX concentrations by using EPA SW-846.3-3 Method 5030/8020. Perform TCLP in accordance with EPA SW-846.3-3 Method 1311. Provide Borrow Site Testing for TPH, BTEX and TCLP from a composite sample of material from the borrow site, with at least one test from each borrow site. Do not bring material onsite until tests have been approved by the Contracting Officer.

- **NO excess soil may be disposed of on Fort Lee property without written authorization from the DPW-EMD and DPW Master Planning Division**
- **Hay bales SHALL NOT BE USED for erosion control and inlet protection from storm water run-off on the Ordnance Campus or Cantonment Area. The only allowed areas are the Ranges as long as it meets the needs of the project and does not interfere with operations.**

Oil-Water Separators

For maintenance and service areas where a floor drain is required, all such drains shall discharge to an appropriately-sized and designed gravity oil-water separator. No coalescing media will be allowed. The separator shall discharge treated effluent to the sanitary sewer system, unless no sewer service is proved to the facility. The oil-water separator shall be located such that it provides convenient access to a waste oil recycler truck. Drains, such as those at wash racks, which are exposed to rainwater, shall be bermed to prevent the entrance of stormwater.

Low Impact Development (LID)

The DoD requires the use of LID methodologies to manage stormwater runoff from development or redevelopment projects on a Federal Facility or utilizing Federal funds with a footprint that exceeds 5,000 square feet in accordance with Unified Facilities Criteria (UFC) 3-210-10 and the Energy Independence and Security Act of 2007 (EISA). This requirement is applicable to new construction, additions, new pavement and sidewalks (horizontal construction), and site redevelopment.

The design objective of LID is to maintain the pre-development hydrologic conditions. Potential opportunities for improving water quality when developing the appropriate sites include providing runoff diversion; recycling gray water; harvesting rainwater; disconnecting downspouts or discharging them to pervious surfaces; using pervious surface parking instead of asphalt parking; minimizing tree clearing and grubbing; and installing bio-retention, soil amendments, filter strips, vegetated buffers, grassed swales, dry wells, infiltration basins/trenches, inlet pollution removal devices and tree box filters LID with respect to paving can result in lower maintenance costs and overall life-cycle costs when the savings from the reduced conventional stormwater management infrastructure (e.g., curbs, gutters, piping, detention basins, etc.) is taken into account, as well as the need for fewer operation and maintenance requirements. With respect to porous pavements, the LID approach has the following additional benefits: pollutant removal, control of heat island effects, and cooler surface waters that receive stormwater runoff. BMPs shall be installed to meet LID requirements. Preferred methods may include stormceptors, infiltration pits, plastic chamber systems and vegetated swales. Retention and/or detention ponds may be used only with prior approval from the DPW-EMD.

Prior to finalizing the design for a redevelopment project, the designer shall also consider whether natural hydrological conditions of the property can be restored, to the extent practical. Estimated design and construction costs for implementing EISA

Once final design is complete, contractor must submit a completed EISA LID design certification to the DPW-EMD.

Section 438, Stormwater Runoff Requirements for Federal Development Projects, shall be documented in the project cost estimate as a separate line item.

For Military Construction projects developed in FY 13 and beyond, an additional 2% should be added as a supporting facility cost. LID Standards include American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Standard 189.1, Unified Facilities Criteria 3-210-10, 4-030-01 (Sustainable Development), 1-200-01 (DoD Building Code), 4-010-01 (DoD Minimum Antiterrorism Standards for Buildings), and Chapter 10 of Army Regulation (AR) 420, Army Facilities Management.

Storage Tanks
Installation of permanent underground or above ground storage tanks must be approved by the DPW-EMD. Temporary storage tanks used to serve equipment during construction do not require prior approval, but must have secondary containment or be double walled (if 55- gallons or larger), and their location must be shown on an approved E&SC Plan or Environmental Protection Plan (EPP).

CONSERVATION

As one of the four pillars of the Environmental Management Division, the Conservation Branch oversees the preservation and management of USAG Fort Lee's natural and cultural resources. Elements from these resources are the most visible aspects of USAG Fort Lee's surroundings and make up the majority of the installation's environmental constraints. This ties the conservation team to every aspect of USAG Fort Lee's planning and mission objectives. These two programs work in concert to retain the installation's natural and cultural heritage together with supporting the military mission. The requirements for each are discussed below.

Cultural Resources

The term "cultural resource" is not defined by NEPA or any other Federal law. However, there are several laws and executive orders that deal with particular kinds of "resources" that are "cultural" in character. With respect to cultural resources, the federal law that figures prominently in every project review is the National Historic Preservation Act (NHPA), which sets forth government policy and procedures regarding "historic properties" — that is, districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places (NRHP).

More specifically, Section 106 of NHPA (36 CFR 800) requires that Federal agencies consider the effects of their actions on such properties, following regulations issued by the Advisory Council on Historic Preservation.

Another federal law, the Archaeological Resources Protection Act of 1979 (ARPA), makes it a federal crime for persons to excavate, remove, damage, or otherwise deface any archaeological resource or even *attempt* to excavate, remove, damage, or otherwise deface any archaeological resource on federal lands. **USAG Fort Lee proactively monitors the installation for violations of this provision and to enforce the laws prohibiting such activity**.

An archaeological resource is "any material remains of past human life or activities which are of archaeological interest…"

To date, USAG Fort Lee has identified more than 100 different locations or sites on the installation that are of archaeological interest, 48 of which have been determined eligible or potentially eligible for listing in the NRHP and as such, must be protected. There is also

one building, 4300 (Fort Lee Theatre) and one object (Anzio Annie Railgun) in this category.

Examples of archaeological resources include, but are not limited to: stone tools such as flakes and projectile points, pottery, bottles, buttons, bullets, building material (such as brick), and especially bones and obvious human burials which are at least 50 years old. However, the determination of age and significance will be made by the USAG Fort Lee Cultural Resource Manager (CRM) or staff archaeologist.

Compliance with Section 106 of the National Historic Preservation Act
While USAG Fort Lee is responsible for ensuring compliance with this law, every project proponent must do his or her part by providing complete, accurate and timely information to the DPW in order for the requirement to be met without causing delay to a project.

In order to facilitate effective and timely environmental review of a proposed project, the DA Form 4283 or other project documentation requires:

- A clear and complete description of the project and project requirements. **If the requirement details are not known, the request should ask for design or engineering services**.
- Scaled plan view map or drawing showing specific location and limits of project.
- Understanding that any project which changes in size, scope of work or location or has a REC older than ONE YEAR must be resubmitted for review.

Upon completion of environmental review, the project proponent will receive documentation, usually in the form of a REC, which in part will state either that Section 106 consultation was not required or that Section 106 consultation has been completed.

If your project requires ground altering disturbance of any depth or alteration to a building which is 50 years in age or older and you do not have evidence of Section 106 compliance **DO NOT PROCEED** and contact the DPW-EMD immediately. Courses of action necessary to continue the project will be presented as soon as possible.

Inadvertent or Emergency Discovery of Archaeological Deposits
All ground disturbing activity, regardless of whether the area has been previously disturbed or subject to a cultural resource survey, has the potential to cause effects on historic properties. This section covers all situations when inadvertently discovered cultural resources are found.

Upon discovery of any artifact visible on the ground surface or buried archaeological deposits (archaeological resource),

Any questions about Cultural Resources, please contact DPW- EMD Cultural Resource staff:

Cultural Resource Manager:	**804-734-4434**
Staff Archaeologist:	**804-765-7026**

the activity in the vicinity of the find must be immediately halted, and the CRM or Staff Archaeologist contacted.

Inadvertent Discovery Procedures

- Immediately halt work in the area of any discovery and notify the CRM or Staff Archaeologist within 24 hours. **Failure to stop work and notify authorities subjects the contractor and Fort Lee's Garrison Commander to liability under federal cultural resource protection laws**.
- The CRM and/or staff archaeologist will visit the site within 24 hours after notification and examine the area of discovery, **which may require additional controlled excavation by cultural resource staff**.
- The CRM or staff archaeologist will determine whether the artifacts represent a significant site (historic property); if a positive determination is made, the CRM will begin consultation with the Virginia State Historic Preservation Officer (SHPO) and other consulting parties to determine the appropriate course of action. **During this time, the location of the discovery must be secured and remains a "no go" zone**.
- If the determination by the CRM is that the inadvertent discovery is not significant, work may resume **upon notification by the KO**.

Metal Detecting

Per USAG Fort Lee Policy #03-12, updated April 28, 2017; metal detecting ANYWHERE on Fort Lee is prohibited. Any individual who is metal detecting on USAG Fort Lee will be subject to criminal prosecution. Only persons conducting metal detecting pursuant to scientific data collection of archaeological remains as described in NHPA Section 106 or Section 110 activities and holding the appropriate permit are exempt from this policy.

Natural Resources

In general, natural resource management at USAG Fort Lee includes monitoring tree and forest (timber) health, protection of wetlands, ensuring the use of appropriate landscape and vegetation, and conservation and inventory of wildlife and wildlife habitat. Three federal laws which influence natural resources management on USAG Fort Lee are the Federal Water Pollution Control (Clean Water) Act, Endangered Species Act of 1973, and Migratory Bird Treaty Act of 1918.

Wetland Protection

The Contractor shall not enter, disturb, destroy, or allow discharge of contaminants into any wetlands or RPA as defined by the Chesapeake Bay Preservation Act. No land disturbance shall occur within 100 feet of existing wetlands or protected stream

channels without Environmental approval. This 100 foot buffer is shown on all environmental constraints maps provided by the DPW-EMD.
All BMPs must be shown on the E&SC drawings or other detail drawings. A certified Responsible Land Disturber shall be on site for all ground disturbing activity in excess of 10,000 sq. ft. and must have an original, current, validated certificate on site and received by the DPW-EMD.

Forestry

For questions about Natural Resources, please contact the DPW-EMD Conservation Program Manager:

804-734-5080

All projects that involve the cutting or clearing of timber must coordinate with the DPW-EMD Natural Resource Manager. Timber stands that exceed a quarter of an acre in size require an official Government estimate of the value, which must be paid to the Government upon harvest. This is a requirement of the Army's Reimbursable Forestry program which collects these fees, making them available to the Installation to supplement other Army natural resource management funding to implement conservation-based natural resource projects. Harvesting of timber is not allowed to occur between 1 April and 1 November per the Migratory Bird Treaty Act and the Endangered Species Act as pertains to protected birds and bats. Exceptions to this policy must be approved by the DPW-EMD Conservation Program Manager.

The Contractor shall provide fencing, supervised trimming, and general protection of existing trees and root systems for those trees which will remain or that are subject to the effects of project execution, whether the construction is temporary or permanent.

The Contractor shall ensure that the tree protection and trimming areas are coordinated and approved by the DPW-EMD and depicted on the site drawings upon completion of the design's final topographic survey. Existing utilities within or adjacent to the sites must be protected by the Contractor and remain active during all phases of construction activity. If work requires an interruption to utility service, the outage must be scheduled and reported through the proper channels in accordance with USAG Fort Lee Policy.

Wildlife

USAG Fort Lee is home to a variety of wildlife and has an established deer, turkey, and waterfowl hunting program.

USAG Fort Lee's Wildlife Biologist manages and monitors wildlife on Fort Lee. The goal is to maintain biodiversity of healthy wildlife populations while supporting Fort Lee's mission. With regard to bats, USAG Fort Lee monitors for evidence of both federal and state listed, threatened and endangered species, as well as any evidence of disease or injury. Most importantly:

- Any bats found in buildings or on the grounds must be reported to the EMD by calling 734-5080 or 734-5014 and photos taken if possible.
- Bird nests discovered in areas conflicting with mission or Garrison activities must be reported to the EMD prior to taking action. Nests containing eggs or young may have to be protected until fledging of young has occurred, per the Migratory Bird Treaty Act.
- All baby wildlife encountered must be left alone, and NEVER captured or collected.
- All snakes should be reported to 734-5080 or 734-5014 and should never be harmed. If they are creating a problem, they should be photographed and observed until assistance arrives. If it can be done safely they should be contained to avoid escape, so that they can be safely moved to another area.

Landscape and Vegetation

The Contractor shall provide a Landscape Plan prepared by a Registered Landscape Architect or Landscape Designer and all landscape improvements must comply with UFC 4-010-01, UFC 3-210-02 (POV Site Circulation and Parking) and US Army Corps of Engineers Technical Instruction 804-11. Acceptable plants are those which are native to the area, low maintenance, low water and drought resistant species which can be installed in plant beds or areas. See *Native Plants for Wildlife Habitat and Conservation Landscaping* for more information. The use of berms to accent the building and plant beds is encouraged. When practical, existing trees will be protected and saved.

The Contractor is required to collect soil samples and submit them to an accredited testing laboratory and submit the results to the KO (or designated Government representative) and DPW-EMD. The Contractor will apply all soil amendments identified in the soil sample report at the identified rates.

The seed blend recommendations must be approved by the KO (or designated Government representative) and the DPW-EMD. In the event that the Contractor installs sod, it will be Tifway 419 Bermuda grass or another sod type approved by the KO (or designated Government representative) and DPW-EMD.

Additional Landscape Requirements:

- Furnished plant material will be guaranteed to be in a vigorous growing condition for a minimum period of 12 months regardless of contract time period. Plant establishment period will continue until 12 months from the Building Occupancy Date after project completion.
- Planting soil consisting of 4 inch depth of amended existing surface soil, supplemented with imported or manufactured topsoil will be used for all seeded or sodded lawn areas. Topsoil analysis testing may be required in order to verify the suitability of the produce based on its intended use, and at the discretion of the DPW-EMD. Soil stabilization such as netting, blankets, and stabilizer mats will be included as needed and must be properly maintained. Turf areas shall be provided with a minimum slope of 1 percent to provide

positive drainage and a maximum slope of thirty percent to prevent erosion and allow for maintenance.

- All new landscape materials and soil brought onto the site must be accompanied with a certification that the materials and soils are free of red fire ants and invasive species for Virginia. No material will be accepted without this certification. Clean soil certification and testing requirements are outlined in the "Clean Soil" section of the Installation Restoration Program.
- New building construction and additions with lawn areas less than one acre will be sodded with a hybrid Tifway 419 Bermuda grass, and should be over seeded with perennial ryegrass if installed September through April. Additionally, any sodding or seeding will require watering for the first thirty days as needed. Contractor may ask for an exemption for specified lawn areas where sodding is cost prohibitive and get a written wavier for establishment from grass seed. If a waiver is granted, the seeding blend shall be 80% Tall Fescue, 15% Perennial Ryegrass, and 5% Bermuda grass. Seed blend must be "Blue Tag" certified for use in Virginia. Any other seed blend must be coordinated with and approved by the DPW-EMD.

Any questions about C&D wastes, please contact DPW- EMD Pollution Prevention Program staff:

804-765-7549

- Areas used by the Contractor for the storage or staging of equipment and materials or for any other reason, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including the application of top soil and seeding if necessary.
- Mulch placed around new plants and trees should not exceed 3 inches in depth and should be evenly distributed around the stem. Piling mulch against a tree in a dome around the base is not acceptable.
- Virginia's Regulations for the Application of Fertilizer to Nonagricultural Lands, 2VAC5-405-20, require certification for all licensees and contractor-applicators, state agencies, localities or other governmental entities engaged in the commercial application of fertilizers to non-agricultural lands. Anyone desiring certification as a Certified Fertilizer Applicator (CFA) must successfully complete approved training and submit an online application to the Virginia Department of Agriculture and Consumer Services. CFA certification is valid for four years from the date of issuance. Certified fertilizer applicators shall complete a minimum of two hours of coursework every two years for recertification.

POLLUTION PREVENTION

Pollution Prevention (P^2) is a comprehensive initiative focused on recycling, sustainability, energy conservation and backflow prevention to reduce and prevent pollution at the source. It focuses on conservation of resources, replacement of hazardous materials with less hazardous materials, waste reduction, recycling, and other preventive means to successfully and cost effectively avoid, prevent, or reduce the generation of pollutants. The P^2 program has three significant impacts on USAG Fort Lee. First, it helps reduce our environmental compliance burden by minimizing the applicability of requirements imposed by environmental laws and regulations. Second, successful P^2 projects help reduce operational costs. Third, the

P^2 program is fundamental in reducing waste and pollution. The approach in which we integrate P^2 is through the USAG Fort Lee Mission Integration Environmental Management System.

Recycling

As good stewards of the environment, the government is committed to diverting its waste from landfills to the greatest extent possible. This can be done through:

- Reducing
- Reusing (when authorized and directed by the Government)
- Recycling
- Donating construction/demolition debris (with prior approval)

It is also mandated by the Executive Order Regarding Efficient Federal Operations for Energy and Environment (issued May 17, 2018) that all federal agencies "implement waste prevention and recycling measures and comply with all Federal requirements with regard to solid, hazardous, and toxic waste management and disposal." Additionally, Section 6002 of the RCRA (Solid Waste Disposal Act), requires that the Federal Government use recycled-content products in the construction and/or renovations of facilities. It is the intent of the Government to comply with these requirements 100% of the time and use as many recycled-content products as feasible and economically practical. The Contractor shall consider this a standard requirement for all aspects of project construction.

Accordingly, the Contractor shall recycle all construction/demolition debris to the maximum extent possible. Diverting **68% from the solid waste stream** is mandated on USAG Fort Lee projects **in FY19**. The Contractor shall make every effort to recycle materials such as, but not limited to, concrete (including concrete with rebar), brick, asphalt, all metals including piping, building insulation, wood, wood paneling and wainscoting, roofing materials, wallboard, carpet, ceiling tiles, floor tiles, cardboard, and similar materials. If recycling is determined to be impractical, a memorandum stating how the determination was made must be submitted to the DPW-EMD. See Appendix B for a list of off-site recycling locations.

Whenever the potential for use of non-recycled content products exists during the construction stage of the project, the Contractor shall incorporate in this project, as a substitute, recycled content products that are listed and identified in the EPA's Comprehensive Procurement Guidelines for recycled-content products. The Contractor shall use recycled-content products as required by the EPA and other governmental agencies and FAR clauses.

Before starting the project, the Contractor shall create a Recycle Report checklist. The Contractor will provide this plan to the KO, the PM, and the DPW-EMD Recycling Manager. During project construction, the Contractor may have to adjust this plan indicating the use

and non-use of products and/or solid waste and will list all applicable items that have been recycled and not recycled.

The Contractor shall report on a monthly basis the tonnage of items reused, recycled, land-filled, and disposed by regular or waste-to-energy incineration to the KO, DPW-EMD Recycling Manager and USAG Fort Lee's Recycling Coordinator by the 10th day of each month during the period of performance. This report will be for the previous month. The report shall list the title of the project, the contract number, the Contractor's company name and point-of-contact, phone number, the type of items (i.e. concrete, concrete with rebar, asphalt, brick, scrap metals, wood, wallboard, etc.) and the tonnage of those items re-used and recycled. For items disposed of, a total tonnage shall be provided for items land-filled and a separate total tonnage provided for items incinerated, (specify waste incinerator or waste-to-energy incinerator), unless the Contractor prefers to report disposal figures for the various items. For items that cannot be accurately measured, estimates will be sufficient.

A FINAL recycling report must be signed by the Contractor as the "Procurement Originator" and then delivered to and signed by the DPW-EMD Recycling Manager. These forms shall be kept in the DPW-EMD record management system indefinitely.

Sustainability

Environmental sustainability promotes using resources in such a way that those resources are not depleted or permanently damaged. The goals of the Army's sustainability strategy are:

- Fostering an ethic within the Army that takes it beyond environmental compliance to sustainability.
- Strengthening Army operation capability by reducing its environmental footprint through more sustainable practices.
- Meeting current training, testing and other mission requirements by sustaining land, air and water resources.
- Minimizing impact and total ownership costs of Army systems, material, facilities and operations by integrating the principles and practices of sustainability.
- Enhancing the well-being of Soldiers, civilians, families, neighbors and communities through leadership in sustainability.
- Using innovative technology and the principles of sustainability to meet user needs and anticipate future Army challenges.

Sustaining the health and welfare of local communities is the starting place for sustaining the health and welfare of the world. We all depend upon a quality environment and availability of needed resources to preserve our quality of life for all Soldiers and civilians alike.

Sustainable design techniques will be implemented as they relate to site and building design, construction, operation, and deconstruction. Techniques that conserve energy, improve liability, and that can be justified by life cycle cost analysis as cost effective are required.

Leadership in Energy and Environmental Design (LEED)

LEED is required to the greatest extent possible for all projects. The contractor should incorporate LEED elements and principles to the maximum extent practicable for facility construction. The requirement goal of design and construction is to incorporate the necessary elements to meet LEED Silver rating points; however LEED certification is not required. Qualifying projects will be registered with the United States Green Building Council at the beginning of the design phase and the process followed up to the certification (if desired).

Written LEED updates shall be given to the DPW-A&ED (Architectural & Engineering Division) no less than quarterly to ensure that the project finishes at a minimum of LEED Silver per contract. The contractor shall conduct periodic update meetings as required by LEED. The final LEED Checklist must be provided to the PM and to the DPW-Engineering Division.

LEED Project Requirements

The Contractor will be required to take the following steps to achieve a LEED Silver Rating:

- Identify a LEED Accredited Professional on its team to champion sustainable design issues.
- Upon award, register with the United States Green Building Council (USGBC) to establish contact and gain essential information, software tools and communication procedures.
- Once the project is registered, the Offeror will prepare documentation and calculations to satisfy the prerequisite and credit submittal requirements.
- Communicate with the USGBC for guidance in meeting point criteria. The USGBC has established a review process for registered project inquiries called credit interpretation requests which ensure consistency across projects.
- At each design submittal phase, prepare an update on the status of the design in meeting the project requirements of LEED Silver. Provide documentation and calculations to verify goal attainment.
- During the construction phase, maintain required documentation and calculations to verify goal attainment.
- Upon project completion, compile a final documentation submittal to the United States Corps of Engineers (USACE) detailing how the goals (and points) were attained.
- Actual certification with the USGBC is not required unless stated to be within the

contracting and scoping documents.

Energy

Federal agencies are required by the Energy Policy Act of 2005, EISA, and FAR 23.203 to incorporate the performance criteria used for ENERGY STAR®-qualified and Federal Energy Management Program designated products into procurement contracts for energy consuming products and systems with emphasis on consideration of renewable energy technology to reduce purchased energy for conservation.

In accordance with The Energy Policy Act 2005, EISA, Executive Order 13693 Planning for Federal Sustainability in the Next Decade, and AR 420-1 (Army Facilities Management), the following requirements will be met:

- All Heating, Ventilation and Air Conditioning (HVAC) equipment (to include but not limited to Air Handling Units (AHU's), Roof Top Units (RTU's), Make up Air Unit's (MAU's) etc.), boilers, chillers, Variable Air Volume (VAV) boxes, fan coil units (FCU) etc. that are supplied with a micro-processor to control the equipment must also be provided with the interface (laptop, hand held device etc.), operating manuals, database and software, required to troubleshoot, diagnose, adjust or otherwise configure the equipment so that the equipment can be maintained without further reliance on the contractor.

- The installation of Dual Temperature piping systems is prohibited.

- The installation of Variable Refrigerant (VRF) systems is prohibited.

- Energy Management Control System (EMCS) graphics are to include but not limited to floorplans depicting location of space thermostats with the temperature reading, VAV box locations, a building summary screen, all major pieces of equipment (Boilers, Chillers, AHUs, RTU's, MAU's, VAV boxes, FCUs etc.). Roof plans shall depict the location of all roof mounted HVAC equipment. Each equipment graphic shall provide access to the sequence of operation describing in detail how the equipment is to be controlled. Heating system data points and alarms are to be integrated into the existing Post wide Heating System Summary Graphic. Cooling system data points and alarms are to be integrated into the existing Post wide Cooling System Summary Graphic.

- The Direct Digital Control (DDC) System shall utilize an Optimum start/stop program for each individual AHU, RTU, MAU, etc. utilizing the same logic as the existing Optimum start/stop program already implemented Post wide. A flowchart of this logic will be furnished upon request. This requires an individual occupancy schedule, capable of being adjusted through the EMCS, for each AHU, RTU, MAU, etc. A single occupancy schedule applicable to the entire building is not allowed unless there is only one AHU, RTU, MAU, etc. supplying the building.
- The DDC System shall utilize a Load Shed program utilizing the same logic as the existing Load Shed program already implemented Post wide. This program shall be based upon the electric demand and the electric demand limit. A Flow chart of this program will be provided upon request. The intent of this program is to control HVAC equipment in a manner that reduces electric demand and prevents exceeding the electric demand limit.

- All buildings are required to have Smart Meters to measure building electric, gas, and water consumption. Connection of the meters to the Meter Data Management System (MDMS) is also required.
- Variable Frequency Drives (VFDs) for all fan and pump motors are required when life cycle cost effective. If the contractor determines that the VFD's are not cost effective, the contractor shall provide the USAG Fort Lee Energy & Utilities Branch with the calculations and analysis. The contractor must obtain concurrence from the USAG Fort Lee Energy & Utilities Branch before removing VFD's from the scope of work.
- All exterior lighting to include but not be limited to parking lots, bollards, wallpacks, etc. are required to be Light Emitting Diode (LED) with a photo sensor to shut off the light during daylight hours when life cycle cost effective. Lights installed underneath overhangs, loading docks, door entryways, etc. must have a remote mounted photo sensor to prevent lights from being on during daylight due to the shadow effect of overhangs. If the contractor determines that the LED's are not cost effective, the contractor shall provide the USAG Fort Lee Energy & Utilities Branch with the calculations and analysis. The contractor must obtain concurrence from the USAG Fort Lee Energy & Utilities Branch before removing LED's from the scope of work.
- All interior lighting is required to be dimmable LED when available for the application and life cycle cost effective. If LED lighting is not available for the application, the contractor shall provide the USAG Fort Lee Energy & Utilities Branch with options available for the application. If the contractor determines that LED's are not cost effective, the contractor shall provide the USAG Fort Lee Energy & Utilities Branch with the calculations and analysis. The contractor must obtain concurrence from the USAG Fort Lee Energy & Utilities Branch before removing LED's from the scope of work.
- All emergency exit lighting is required to be LED.
- Occupancy sensors to turn off lights are required in all individual offices, conference rooms, copy rooms, break areas, auditoriums, hallways, restrooms, etc. wherever life cycle cost effective. If the contractor determines that the occupancy sensors are not cost effective, the contractor shall provide the USAG Fort Lee Energy & Utilities Branch with the calculations and analysis. The contractor must obtain concurrence from the USAG Fort Lee Energy & Utilities Branch before removing occupancy sensors from the scope of work.
- Emergency lights (with battery backup) used for egress shall be wired to dedicated power circuits. The wiring of Emergency lights (with battery backup) and area lights on the same power circuit is prohibited.
- The use of Day-Lighting controls to turn off or otherwise adjust lights near windows is required when natural light can provide sufficient light in areas adjacent to windows (including atriums and vestibules) and when life cycle cost effective. If the contractor determines that the day-lighting is not cost effective, the contractor shall provide the USAG Fort Lee Energy & Utilities Branch with the calculations and analysis. The contractor must obtain concurrence from the USAG Fort Lee Energy & Utilities Branch before removing day-lighting controls from the scope of work.
- The DDC System shall have the capability to control air handling equipment discharge air temperature set-point based upon return air temperature and according to a reset schedule (adjustable). If the air handling equipment does not utilize return air, the DDC system shall have the capability to control the discharge air temperature setpoint based upon the average space temperature and according to a reset schedule (adjustable).

- Chilled Water supply temperature set-point reset based upon AHU chilled water valve positions. Upon a call for cooling as indicated by any cooling valve being open more than 5% (adjustable), the DDC system will lower the Chilled Water supply temperature set-point according to a reset schedule (adjustable) so that no cooling valve position is more than 95% (adjustable) open.
- The DDC System shall control variable AHU down duct static pressure set-point reset based upon the VAV box damper positions. All VAV box damper positions shall be run through a maximum value function to determine the VAV box with the highest damper position. The down duct static set-point shall be adjusted so that the highest VAV box damper position does not exceed 95% (adjustable). Safeties shall be utilized to prevent the over pressurization of the ductwork. In the case where the same VAV box has been at the highest damper position for more than 24 hours (adjustable), of occupied time, the software will generate an alarm to identify the VAV box and that VAV box shall be automatically discarded from the control sequence for a period of time not to exceed seven days (adjustable). The next highest damper position will be used in the control sequence.
- The DDC System shall have the capability to control heating hot water supply temperature set-point reset based upon HVAC heating valve positions to include but not limited to AHU heating valves, VAV box reheat valves and FCU heating valve positions. Upon a call for heating as indicated by any heating valve being open more than 5% (adjustable), the DDC system shall raise the Heating Hot Water supply temperature set-point based upon a reset schedule (adjustable) so that no heating valve position is more than 95% (adjustable) open. Heating Hot water supply temperature set-point reset based upon outdoor air temperature is not allowed.
- All air handling equipment supplying air above 2000 CFM shall be capable of dehumidification. Relative humidity sensors in the return duct and occupied space shall control relative humidity in the occupied mode. During the unoccupied mode, should the space relative humidity raise above the unoccupied relative humidity set-point (adjustable), the DDC System shall turn the HVAC equipment serving the area on as necessary to lower the space relative humidity to an acceptable level (adjustable).
- All fixtures that use water to include but not be limited to faucets, toilets, urinals, shower heads, etc. are required to follow the WaterSense standards. The WaterSense standards are available at https://www.epa.gov/watersense.
- The DDC system shall utilize an Emergency HVAC shutdown program for each individual AHU, RTU, MAU etc. utilizing the same logic as the existing Emergency HVAC Shutdown program already implemented Post wide. A flowchart of this logic will be furnished upon request. The intent of this program is provide Force Protection during a Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) events by turning off all equipment that utilizes a fan to move air into, out of and throughout a building to include but not limited to AHU's, RTU's, MAU's, fan powered VAV boxes, exhaust fans, etc. The contractor shall obtain concurrence from the USAG Fort Lee Energy & Utilities Branch before removing Emergency HVAC shutdown from the scope of work.
- Local and Global Emergency HVAC Shutdown of any HVAC equipment supplied with a Hand-Off-Auto switch shall be accomplished through a separate shutdown relay wired in series to the safety circuit for the equipment. Utilizing the start-stop relay or occupied command to shut down the equipment when the Emergency HVAC Shutdown mode has been initiated is prohibited.
- If an emergency generator is provided, the generator shall have the run status, alarms, total

run time, run time for previous day, and current day run time mapped to the EMCS.

It is the contractor's responsibility to contact the USAG Fort Lee Energy & Utilities Branch Chief at (804-734-4523) if clarification of, or relief from, any of the requirements listed above is needed.

Cross Connection Control and Backflow Prevention

For Lee operates in accordance with the Safe Drinking Water Act, Cross Connection Control and Backflow Prevention in Waterworks of the Commonwealth of Virginia, State Board of Health, and Waterworks Regulations 1993, as amended and to include all site specific requirements.

Any questions about backflow, please contact DPW-EMD Pollution Prevention Program staff:

804-765-7994
804-734-3560

Domestic water mains entering a building shall be provided with a reduced-pressure backflow preventer. If the backflow is greater than 3 inches, the contractor will install a manifold system with the main line utilizing two smaller backflows that will provide the same amount of water with the ability to isolate each one independently for servicing. Additionally, domestic water systems shall be protected from contamination by hydronic water systems and other HVAC systems via a reduced-pressure backflow preventer and any mechanical equipment that may potentially contaminate the public water system. Backflow prevention/ test ports must be placed in locations that allow ease of access in mechanical rooms, not at ceiling height or blocked by other equipment.

Pest Management

The Contractor will submit a pest management plan to the KO (or designated Government representative) for DPW-EMD review and approval prior to the use of pesticides. The pest management plan must include all the information that is required in the IPMP, AR 200-1, USAG Fort Lee Policy 17-03, and any other applicable state or federal requirements. Only chemicals approved by the Army Environmental Command and on USAG Fort Lee's approved pesticide list can be used on the installation. The Contractor must be on the USAG Fort Lee Pest Contractor approved list, as provided by the DPW-EMD. After product is applied, submit amount of concentrated quantity applied on DA 1532 or another DPW-EMD approved format. In addition to these requirements, the Contractor must submit in the pesticide application the following information:

Any questions about pests or pesticides, please contact DPW- EMD Pest Management Program staff:

804-765-7994
804-734-3560

- Name of the Pest Company and applicator with Virginia approved license in the appropriate category.
- SDS and label of product being applied.
- Location of the area that product will be applied and square footage of application.
- Notification to the DPW-EMD at least 48 hours before application date.

Termite Treatment

The contractor shall provide soil treatment for termite control according to product label. All pesticides must be included in a Pesticide Management Plan developed by the

It is a requirement to apply termiticide for all new building construction and renovations when ground-level square footage is added

Contractor and submitted to and approved by the DPW-EMD Installation Pest Management Coordinator prior to application.

RESTORATION

The mission of USAG Fort Lee's Installation Restoration Program (IRP) is to identify and perform appropriate cost-effective contaminated site-cleanup, ultimately to protect human health and the environment and to return property to its pre-contaminated condition so that USAG Fort Lee property is suited for any installation use.

Restoration efforts at USAG Fort Lee are conducted under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) or RCRA. Some cleanup may also be regulated under state programs that do not follow the CERCLA or RCRA process.

Site Safety

Ensure that all workers are informed of any potential hazardous exposure from working at IRP sites, and that appropriate precautions are taken to minimize hazards to human health and the environment. Personnel working at these sites shall have, at a minimum, 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training certification and have a current 8 Hour HAZWOPER Refresher Certification. All operations at the site shall follow the regulations promulgated in 29 CFR 1910.120 for proper disposal of all regulated materials generated during project execution.

The potential to find unexploded ordnance (UXO) at a Restoration site, or anywhere on the installation, is real. UXO is dangerous. Do not enter areas with "Danger" signs. Learn

what to do: Recognize, Retreat, Report. Do not touch anything that could be UXO/MEC. The Directorate of Plans, Training, Mobilization and Security (DPTMS) policy is to stop work, call 911, and then the Provost Marshall Office (PMO)/DPTMS will contact the Explosive Ordnance Division (EOD) at Fort Belvoir to come identify the object and determine how to properly dispose.

Monitoring Wells

There are multiple ground water monitoring wells and other ancillary support structures installed at IRP sites around USAG Fort Lee, some of which may be present at or near a construction site. Site maps and construction drawings which show the location of monitoring wells and ancillary support structures should be reviewed prior to commencement of work on a site and are available through the DPW-EMD. The Contractor shall take precautions to prevent any damage to wells and other structures. If damage to a monitoring well(s) occurs during the project, the Contractor shall repair/replace the monitoring well(s) at no additional expense to the Government. The Contractor shall dispose of all state and federally regulated materials during repair of the damaged structures as instructed by the DPW-EMD.

Appendix A: Contract Language (page 1 of 2)

The Environmental Special Conditions (ESC) package was created by USAG Fort Lee's DPW-EMD to guide those engaging in construction projects and maintenance work within the boundaries of the installation. Federal lands are protected by many statutes, some of which are more restrictive and have requirements above and beyond those of the Commonwealth of Virginia or Prince George County.

The following language is to be **edited to meet the specific requirements** of all solicitations, performance work statements, scope of works and contracts executed by or on behalf of USAG Fort Lee.

SECTION X

Environmental X.1 General: The Contractor shall comply with the most current version of USAG Fort Lee's Environmental Special Conditions Package (ESC) when bidding and executing the performance of this contract.

X.1.1 Intent. The ESC identifies general and unique environmental requirements that are to be complied with on all construction projects at USAG Fort Lee. Adherence to these requirements ensures full compliance with pertinent provisions of Federal, Commonwealth of Virginia and local regulations and procedures which are or put in effect during the course of contract performance. The ESC is not intended to be fully inclusive of all regulations. It is the Contractor's responsibility to comply with all Federal, State and local laws, regulations or guidance.

X.1.2 Environmental Best Management Practices (BMPs). The Contractor shall execute Environmental Best Management Practices (BMPs).

X.1.3 Fines and Penalties. Failure to comply with environmental requirements may result in local, state or federal fines and penalties, including delay of final contract or task order payment. Below are references to potential fines and penalties that can be levied:

Amendments to the US Environmental Protection Agency's Civil Penalty Policies to Account for Inflation.

Commonwealth of Virginia Civil Fines and Civil Penalties

X.1.3.1 General. Any fines and penalties that are the result of actions by the Contractor, its subcontractors, employees, or other representatives/agents of the Contractor are the responsibility of the Contractor to pay. These fines/penalties are not to be passed on to USAG Fort Lee.

X.1.3.2 Delay of Payment. No final payment is to be made until all environmental due outs have been submitted and the conditions of the ESC have been met.

Appendix A: Contract Language (page 2 of 2)

X.2.1 Environmental Officer: The Contractor shall designate a representative to act as an Environmental Officer for all work performed under the contract. The Contracting Officer or Contracting Officer's Representative (COR) will notify the Contractor of any non-compliance with environmental requirements and action to be taken. Such notices, when delivered to the Contractor or its representative, shall be deemed to be sufficient for this purpose.

X.2.2 Compliance: IF THE CONTRACTOR FAILS OR REFUSES TO COMPLY PROMPTLY, THE CONTRACTING OFFICER MAY ISSUE AN ORDER STOPPING ALL OR PART OF THE WORK UNTIL SATISFACTORY CORRECTIVE ACTION HAS BEEN TAKEN, AND MAY TAKE OTHER ACTION AGAINST THE CONTRACTOR IN ACCORDANCE WITH THIS CONTRACT.

Environmental X.3.

This document is available online and must be read to ensure requirements for your action and reporting requirements for USAG Fort Lee.

Other applicable references include:

If you have environmental questions please contact the DPW-EMD at 804-734-5014

Appendix B: Off-Site Recycling Companies (page 1 of 2)

This list is provided for convenience, may not be exhaustive and does not constitute endorsement by the Federal Government.

Company Name	Material Accepted
ACE RECYCLING 13101 N Enon Church Road Chester, VA 23836-3120 804-318-3701	Nonhazardous Waste
AERC Recycling Solutions 3301 Rosedale Avenue Richmond, VA 23230 804-550-1762	Electronics
Atlantic Iron and Metal 30 Mill Street Petersburg, VA 23803 804-861-1900	Appliances, Batteries, Scrap Metal
Battery Barn 124 E Washington Street Petersburg, VA 23803 804-862-3425	Batteries
Caravati's Inc. 104 E 2nd Street Richmond, VA 23224 804-232-4175	Vintage Building Material
DAR PRO Solutions 16375 Doswell Park Drive Doswell, VA, 23047 804-876-3415 / 804-876-3005	Meat By-Products, Used Fryer and Cooking Oil
Dominion Salvage 607 Dinwiddie Avenue Richmond, VA 23224-5519 804-231-7964	Scrap Steel, Other Metals
Dwight Snead Construction Company 11255 Washington Highway Glen Allen, VA 23059-1910 804-798-1611	Demolition Waste

Appendix B: Off-Site Recycling Companies (page 2 of 2)

Company Name	Material Accepted
FCC Environmental 2353 Lanier Road Rockville, VA 23146 804-749-8344	Used Motor Oil and Antifreeze
Habitat for Humanity Restore 829 Commerce Street Petersburg, VA 23803 804-732-5793	Wide Variety of Reusable Material
HIMCO 213 S. 6th Ave Hopewell, VA 23860 804-458-8514	All forms of scrap metal
International Paper 1308 Jefferson Davis Highway Richmond, VA, 23224-7202 804-232-2386	Paper Products
River City Recycling 1709 Reymont Road North Chesterfield, VA 23237 804-525-7352	Cardboard, Metals, Plastic Bottles
S.B. Cox Inc. Richmond Recycling Center 5100 Williamsburg Ave. Richmond, VA 23231 804-222-3500	Asphalt, Metal & Salvaged Building Material
Smith Iron and Metal 3000 Bells Road Richmond, VA 23224 804-271-1239	Aluminum, Appliances, Brass, Copper, Electronics, Steel, Wiring
Sonoco Products Co. 1850 Commerce Road Richmond, VA 23224 804-233-5411	Cardboard, Paper
TFC Recycling 12206 Old Stage Road Chester, VA 23836 804-706-5877	Cardboard, Glass, Paper, Plastic, Metal

Appendix C: Utility Company Points of Contact (POC) (page 1 of 2)

- Prior to any excavation work, a Virginia Miss Utility ticket request to mark the locations of buried utilities must be made, either online or by phone at 811 or 1-800-552-7001.
- Miss Utility verified ticket number informing the DPW-EMD of the presence of any existing utilities to be demolished or relocated as part of the project. USAG Fort Lee utilities are privatized. USAG Fort Lee owns the gas distribution infrastructure. Some of the utility infrastructure on USAG Fort Lee has been found to contain asbestos. See DPW-EMD Asbestos Specialist for additional information.

USAG Fort Lee's Public Utility Specialist/Contract Officer's Representative for utility contracts is:

Leroy Good
Public Utilities Specialist/COR Utility Contracts
DPW-OPS—Office: 804-734-5092
825 19th Street Bldg. 6220
Fort Lee, Va. 23801

Individual Utility POCs for USAG Fort Lee are listed alphabetically by type below.

Communication – Comcast
POC: Justin Barden
Phone: 804-489-6667
E-Mail: justin_barden@comcast.com

Data/LAN – USAG Fort Lee Network Enterprise Center (NEC)
Arthie Mann
Telecommunication Specialist
Network Enterprise Center - Lee
2701 C Ave
Fort Lee, VA 23801
Office: 804-734-7526
Office: Fax: 804-734-7200
Arthie.m.mann.civ@mail.mil

Electric – Dominion Energy
POC: Richard Caldwell
Phone: 804-356-7812
E-Mail: Rick.M.Caldwell@dom.com
757-615-6348

Natural Gas -- Fort Lee DPW-OPS
POC: Kevin Nestor
Phone: 804-734-5086
E-Mail: kevin.w.nestor2.civ@mail.mil

Appendix C: Utility Company Points of Contact (POC) (page 2 of 2)

Wastewater – Old Dominion Utility Services
POC: Stephanie Hudik, PE
Phone: 757-888-0485
E-Mail: Stephanie.Hudik@odus.asusinc.com

Water – Virginia American Water
POC: Leslie M. B. Steves, PE
Phone: O: 804-446-9824
C: 856-305-1979
E-Mail: Leslie.Steves@amwater.com

Weld (Hot) Permits – USAG Fort Lee Fire and Emergency Management Service (EMS)
POC: Dean A. Flavell
Phone: 804-734-7973
E-Mail: dean.a.flavell.civ@mail.mil