

JBLE-Langley



Environmental Special Conditions

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Foreword

Contractors shall comply with the most current version of this Environmental Special Conditions Package in the bidding and performance of contracts for all work performed at Joint Base Langley Eustis – Langley (herein referred to as JBLE-Langley).

This document was created by JBLE-Langley's 633 CES Environmental Element (herein referred to as the 633 CES/CEIE) to guide those engaging in construction projects and maintenance work within the boundaries of the installation. There are many statutes pertaining to Federal lands, some of which are more restrictive and have more requirements than those of the Commonwealth of Virginia or the City of Hampton. The Environmental Special Conditions are meant to identify those requirements, some which are unique to JBLE-Langley, to be met in the performance of work and ensure full compliance with pertinent provisions of Federal (Environmental Protection Agency, EPA), State (Virginia Department of Environmental Quality, VDEQ), and local regulations and procedures. These conditions are 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(s). The Contractor shall also execute Best Management Practices (BMPs) throughout each project or performance of work.

Anyone performing work at JBLE-Langley is required to coordinate with the Government Point of Contact (POC) for a given project, usually the Contracting Officer's Representative or Project Manager, to ensure the complete, accurate and timely submittals of all environmental related documents. Refer to Section 4 for more information on document submittals.

1.0 Objective

It is the duty of JBLE-Langley's environmental specialists (Program Managers) to ensure that all projects that occur on JBLE-Langley meet Federal, State, local and Air Force requirements. This document contains fundamental provisions that pertain to common construction, renovation, repair and demolition activity which regularly occurs at JBLE-Langley. Special projects may have additional requirements not mentioned within, and as such, will require a more detailed review by the 633 CES/CEIE environmental staff in order to ensure that all aspects of JBLE-Langley's environment is protected.

JBLE-Langley is committed to sustaining the environment through a C.L.E.A.N. approach:

Comply – We will comply with all environmental regulations and all other requirements while reducing compliance costs and liabilities.

Limit impact – We will prevent pollution and minimize waste while cleaning up past sites of environmental concern and making efforts to achieve Chesapeake Bay conservation.

Execute plans – We will identify and attain energy, environment, safety and occupational health objectives and targets through planning that is Specific, Measurable, Achievable, realistic, and Timely (SMART).

Achieve improvements – We will continuously improve our programs and processes through the use of effective management and planning.

Notify – We will communicate our environmental commitments and performance to all levels of our organization and local community.



Figure 1: Current JBLE-Langley Wetland Boundary Map

It is the Contractor's responsibility to ensure that all of the requirements of the Environmental Special Conditions are adequately addressed and that all requested submittals are received and approved by the 633 CES/CEIE. There are a number of submittals noted within this document that are required to be delivered; failure to adhere to these requirements can cause delays in construction, renovation, repair, maintenance, etc. of projects.

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 JBLE-Langley and close integrated collaboration between Contractors and environmental staff is key to protecting the environment in which our families work, live and play.

2.0 Implementation

All work is to be performed in a manner that prevents pollution, protects the environment and conserves natural resources. All work performed within JBLE-Langley boundaries shall be carried out in accordance with all applicable Federal, State and local laws, regulations, ordinances, Executive Orders and any other rules or rulings including JBLE-Langley specific policies. Personnel shall have all necessary required trainings and certifications for the work that is being accomplished.

All parts of this document that pertain to the project work/scope should be included in the contract. Failure to do so could result in noncompliance issues.

3.0 Training

JBLE-Langley requires Environmental Management System (EMS) and Environmental Compliance Training for all Contractor personnel (to include subcontractors, etc.) performing work within the boundaries of the installation. This training is a requirement of International Organization for Standardization (ISO) 14001 and Air Force Instruction (AFI) 32-7001, *Environmental Management*. Details on accessing and obtaining the required training certification can be found in Section 11. Upon inclusion in the contract Statement of Work, the Contracting Officer's Representative will verify that all Contractor personnel have acquired the training at their appropriate site or location and that copies have been submitted to the 633 CES/CEIE EMS Coordinator via email at 633CES.EMS.TRAINING@us.af.mil.

Additionally, all on-site Contractor personnel shall complete yearly EPA sponsored environmental training specified for the type of work conducted on-site.

4.0 Environmental Document Submittal Procedures

For environmental issues, the 633 CES/CEIE serves as JBLE-Langley's repository for copies of permits obtained by contractors as required by environmental regulatory agencies such as the EPA and the 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.

The following contract deliverables are due to the JBLE-Langley Project Manager and Contracting Officer's Representative who will in turn provide them to the appropriate 633 CES/CEIE POC.



The documents listed shall only be submitted if they are applicable to the project and work being performed.

4.1 Before Construction Starts (60 – 90 days)

- Wetland Permits (Joint Permit Application (JPA) submitted to and approved by the Virginia Marine Resources Commission (VMRC), the Virginia Department of Environmental Quality (VDEQ), the City of Hampton Wetland Board and the U.S. Army Corps of Engineers (USACE), as applicable. One JPA is sent to all agencies for review following submittal).
- Nationwide Permit (USACE) (Note: allow 45 days)
- Technical and Manufacturer data for Air Polluting Stationary Sources, see section 7.1.2 for specific information necessary for submittal
- VDEQ Construction Generator Permit Registration Statement
- Stormwater Pollution Prevention Plan (SWPPP)
 - Please note that the SWPPP include the following plans:
 - Erosion and Sediment Control Plan (ESC Plan)
 - Pollution Prevention Plan (P2 Plan)
 - Stormwater Management Plan (SWM Plan) to include Runoff Reduction Calculation(s)
- For construction projects involving historic buildings: Building elevations showing proposed building modifications as well as photographs of the existing condition to support base consultation with the State Historic Preservation Office (SHPO).

4.2 Before Construction Start (30 days)

- Asbestos Abatement Plan
- Lead-Based Paint (LBP) Abatement Plan
- Contractor Hazardous Material (HAZMAT) Worksheet
- Copy of all SDSs attached to Contractor Hazardous Material Worksheet
- Green Procurement Planning Use Forms
- EMS and Environmental Compliance Training Certification(s)
- VDEQ Construction General Permit Coverage Letter
- VDEQ SWM/ESC Plan Approval Letter
- Virginia Clean Soil Certifications
- Proposed Borrow Soil Sampling Laboratory Results
- Petroleum, Oils and Lubricants (POL) Storage Tank Registration Notification (Inspection Logs should be maintained on site)
- EPA Certificate(s) of Conformity for each portable/temporary generator

4.3 During Contract

- Monthly HAZMAT Usage Report
- Monthly wetland impact reports (required only for individual wetland permits issued by VDEQ)
- Quarterly Refuse/Recycling Reports and Weight Tickets
- Hazardous Waste/Asbestos/LBP Manifests (***Must*** be signed by appropriate JBLE-Langley Environmental Representative(s))
- Weekly/Monthly Storage Tank Inspections (Inspection Reports should be maintained on site)

4.4 End of Contract/Before Contract Closes

- VDEQ Construction General Permit Notice of Termination Letter
- Green Procurement Exemption Form (if applicable)
- Green Procurement Final Usage Report
- All returned Asbestos, LBP and Hazardous Waste Manifest (signed by receiving landfill or treatment facility)
- VDEQ Stormwater Management As-Builts

5.0 Non-Compliance, Fines and Inspections

Any fines and penalties that are the result of 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 JBLE-Langley.

Federal, State and local inspections may occur at any time during the contract period. The 633 CES/CEIE will coordinate with the Contracting Officer's Representative, Project Manager, the Contractors and any other applicable parties as necessary in the event the contract work site/equipment will be involved in any inspection.

6.0 Discrepancies

In case of a conflict or discrepancy between environmental laws and regulations, as well as these special conditions, and the contract specifications, the Contractor shall immediately submit the matter in writing to the Contracting Officer's Representative for a determination. Without such determination, any actions taken shall be at the Contractor's own risk and expense.

7.0 Environmental Compliance Program Areas

7.1. Air Quality

Any fixed or stationary unit/source that produces or has the potential to produce any of the six Criteria Pollutants (CP), Hazardous Air Pollutants (HAPs), Greenhouse Gases (GHG) or fugitive Ozone Depleting Chemical (ODC) emissions into the atmosphere constitutes an emissions unit/source at JBLE-Langley, and is subject to regulations set forth under the Clean Air Act.

Only projects found by the 633 CES/CEIE Air Quality Program Manager to demonstrate compatibility with regulations and permits may have approval and be allowed to proceed through procurement and construction.

7.1.1 Air Emission Producing Units

Stationary sources of air pollutants are required to be permitted based on the process category (operation category) and overall expected emission rate (referred to as the Potential to Emit emissions, PTE). JBLE-Langley must track various usage and operating throughputs (i.e., hours of operations, fuel consumption and paint usage) to ensure compliance with all Federal, State, local and Air Force regulations. Because JBLE-Langley is quantitatively

limited by the amount of pollutants emitted from its sources per the VDEQ issued State Operating Permit, all stationary sources must be evaluated.

The following equipment list contains examples of common stationary sources which emit regulated emissions, and as such, require written approval from the 633 CES/CEIE Air Program Manager *prior* to procurement:

- External Combustion Units (including but not limited to: boilers, water heaters, furnaces, unit heaters, space heaters, etc.)
- Internal Combustion Engines (including but not limited to: non-emergency, emergency, fire pumps, barrier engines, etc.)
- Paint Booths/Painting Areas
- Solvent-Based Parts Washers/Cold Cleaners
- Aboveground Storage Tanks (including but not limited to those storing gasoline, MOGAS, E-85, jet fuel, No. 2 distillate oil, diesel fuel or biodiesel) [Note Air Quality approval is different than approval from the Tank Program]
- Any other equipment that emits pollutants regulated under the Clean Air Act

If equipment, such as portable rock crushers, have their own permit already assigned, please provide the 633 CES/CEIE Air Program Manager a copy of the permit.

7.1.2 Permitting Process

To meet permit requirements, the Contractor shall submit necessary information for each stationary source to the 633 CES/CEIE Air Program Manager for evaluation on permitting. The sooner the information is provided, the sooner the 633 CES/CEIE Air Program Manager can complete the evaluation and determine if a New Source Review (NSR) Construction Permit will be required *before* construction of the stationary source can begin. An evaluation must be completed for the entirety of a project (i.e., multiple sources per facility, multiple facilities per project, etc.).



Depending on the project, the definition of before construction may refer to the construction of the entire project or facility rather than an individual unit. If VDEQ has determined that the definition applies to the project/facility, no work (i.e., even digging a hole) can start until a permit has been issued. The 633 CES/CEIE Air Program Manager will provide appropriate guidance.

If during the evaluation, it is determined that a NSR application *is* required to be submitted, the 633 CES/CEIE Air Program Manager will coordinate with the Contracting Officer's Representative and the Contractor to determine who will be responsible for the submission of the NSR application to the VDEQ. If it is determined that the Contractor will be responsible for the NSR application, the 633 CES/CEIE Air Program Manager will need to review the application before submission. If the 633 CES/CEIE Air Program Manager will be responsible, the 633 CES/CEIE Air Program Manager will provide updated to the Contracting Officer's Representative and the Contractor as necessary.

If during the evaluation, it is determined that a NSR application *is not* required to be submitted, the 633 CES/CEIE Air Program Manager will provide written notification to the Contracting Officer's Representative and the Contractor.

The following sections provide a list of the necessary information that must be submitted to the 633 Air Program Manager for evaluation. Please note that the complexity of the project/work may require more information to be submitted.

7.1.2.1 External Combustion Units

- Type of unit (i.e., boiler, water heater, unit heater, furnace, HVAC)
- Total number of units, if the same manufacture and size
- Technical specification sheets (i.e., unit manufacturer, model number, maximum heat input, burner data, etc.)
- Fuel type(s) (please identify upfront if the source will be dual or multi-fueled)

7.1.2.2 Emergency/Non-Emergency Generators

- Technical specification sheets (i.e., manufacture make, model number, maximum engine power rating, fuel consumption rating, family name, etc.)
- Fuel type
- Emission Standards (per manufacturer)
- EPA Certificate of Conformity

Regardless of the engine's power or date of manufacturer, all generators shall be in compliance with Federal, State and Air Force regulations and standards. This includes meeting fuel requirements (if diesel combusted engine, the diesel fuel must have a maximum sulfur content of 15 parts per million), operating agendas, emission standards (Tier Standards) and emission controls.

7.1.2.3 Paint Booth/Paint Area

Painting sources often require a NSR application to be submitted based on guidance provided by the VDEQ, and therefore are more complex projects and the permitting process may include more specific detailed information.

- Design schematic/drawing(s) (i.e., manufacture design sheets or if a paint area, the design drawing(s))
- Filtration design and specification
- Differential Pressure Gauge specifications

7.1.2.4 Solvent-Based Parts Washers/Cold Cleaners

- Technical specification sheets (i.e., manufacture make, model number, size, etc.)
- Solvent SDS

7.1.2.5 Aboveground Storage Tank

- Technical specification sheets (i.e., manufacture make, model number, holding capacity, etc.)
- Material to be stored (i.e., gasoline, diesel, jet fuel, etc.)

7.1.3 Replacement Sources

Replacement sources are defined as the substitution of an emissions unit for an emissions unit located at a stationary source, which will thereafter perform the *same function* as the replaced emissions unit. This includes sources where:

- The replacement emission source is of an equal or lesser size and of an equal or lesser rated capacity as compared to the replaced emissions unit.
- The replacement emissions unit is functionally equivalent to the replaced emissions unit.
- The replacement emissions unit does not change the basic design parameters of the process operation.
- The PTE of the replacement emissions unit does not exceed the PTE of the replaced emissions unit. (The 633 CES/CEIE Air Program Manager will determine this during the evaluation).

The 633 CES/CEIE Air Program Manager will evaluate all replacement sources as a new stationary source. If it is determined that the replacement source *does* need to be permitted, an expected removal date for the old source must be provided in order to complete the NSR application.

If it is determined that the replacement source *does not* need to be permitted, the Contractor/Contracting Officer's Representative needs to provide the date in which the old source was removed for future updates to the air permit.

7.1.4 Volatile Organic Compounds (VOCs)

All coatings and solvents used in the performance of this contract shall meet the required performance specifications and shall not exceed the Volatile Organic Compound (VOCs) limits of the Air Pollution Control District(s) where they are used. Coatings and solvents shall be registered with the base HAZMART, as described in Section 7.4.

7.1.4.1 VOC Work Practice Standards

At all times the disposal of VOCs shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. 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.

7.1.5 Fugitive Dust Emissions

If the project is likely to create dust emissions, the following requirement applies.

Mitigation of fugitive dust emissions shall be accomplished in accordance with 9VAC5-40-90, Standard for Fugitive Dust/Emissions, as described below:

This document is subject to change at any time.

- Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles and other surfaces which may create airborne dust; the paving of roadways and maintaining them in a clean condition.
- Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.
- Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion.
- The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

7.1.6 Ozone Depleting Substances and Chemicals (ODS and ODCs)

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. Contracts may not require the delivery of any items of supply that contains a Class I ODS or any service that includes the use of a Class I ODS.

7.2 Asbestos

Contact the 633 CES/CEIE Asbestos Specialist to determine any known presence of asbestos before starting any work.

7.2.1 Asbestos Presence

It is important to note the results of any asbestos through proper testing. If asbestos is present, the Contractor must abide to the sections below pertaining to plans, notifications and manifests.



For questions about Asbestos or Lead Based Paint, please contact the JBLE-Langley Specialist(s) at:

757-764-1046

- ☐ Tests have indicated that asbestos is ***not present*** in the areas affected by this work
- ☐ Tests have indicated the ***presence*** of asbestos in the areas affected by this work

Based on the checklist above, please include a statement if a recent survey was completed.

If asbestos not previously known to exist is exposed, the Contractor shall cease work in the affected area and notify the Contracting Officer's Representative.

7.2.2 Abatement Plan

An abatement plan is only required when a project will have asbestos removal. Abatement plans are to include but not limited to:

- The description of how abatement is to be accomplished

This document is subject to change at any time.

- Required notifications
- Required licensing
- Employee Safety Requirements and
- Air Sampling

The Abatement Plan shall be submitted to the 633 CES/CEIE Asbestos Specialist for review.

7.2.3 Asbestos, Abatement or Removal Notification

Asbestos Abatement or Removal Notifications are only required when a project will have asbestos removal.

The Contractor is responsible for disposal of asbestos debris. The Contractor is subject to Occupational Safety and Health Administration (OSHA), Federal and State compliance and inspection regulations for asbestos removal. The Contractor must perform asbestos abatement in accordance with these specifications and EPA National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for asbestos and any subsequent updates thereto. This includes EPA Region 3 and State notifications that shall be accomplished at least **20 days** prior to starting any asbestos abatement or removal. A copy of the notification shall be submitted to the Contracting Officer's Representative and to the 633 CES/CEIE Asbestos Specialist.

7.2.4 Asbestos Manifests

Asbestos Manifests are only required when a project will have asbestos removal.

All asbestos waste manifests shall be signed by the 633 CES/CEIE (can be either the Asbestos Specialist or Hazardous Waste Program Manager) prior to removal of asbestos waste from the base. A copy of the completed manifest (signed by the receiving landfill) shall be submitted to the 633 CES/CEIE Asbestos Specialist.

7.3 Lead-Based Paint (LBP)

Contact the 633 CES/CEIE LBP Specialist to determine any known presence of LBP before starting any work.

7.3.1 Lead Based Paint Presence

It is important to note the results of any lead based paint through proper testing. If lead-based paint is present, the Contractor must abide by the sections below pertaining to plans and disposal.

- ☐ Tests have indicated that lead-based paint is ***not present*** in the areas affected by this work
- ☐ Tests have indicated the ***presence*** of lead-based paint in the areas affected by this work

Based on the checklist above, please include a statement if a recent survey was completed.

If LBP not previously known to exist is exposed, the Contractor shall cease work in the affected area and notify the Contracting Officer's Representative.

7.3.2 Abatement Plan

An abatement plan is only required when a project will have LBP removal. Abatement plans are to include but not limited to:

- The description of how abatement is to be accomplished
- Required licensing
- Employee Safety Requirements and
- Air Sampling

The Abatement Plan shall be submitted to the Project Manager for review.

7.3.3 Lead-Based Paint Disposal

Disposal of lead debris containers is the responsibility of the Contractor. Lead contaminated debris must be sampled and tested to determine the concentration level of lead. The analysis will determine the proper waste management procedures. The 633 CES/CEIE LBP Specialist will inform the Contractor on these management procedures. If wastes are determined to be hazardous by regulatory criteria, the containers cannot leave the installation until a completed manifest is reviewed and signed by the 633 CES/CEIE Hazardous Waste Program Manager. The Contractor must contact the JBLE-Langley Hazardous Waste Contractor(s) at 633CES.CEIE.HAZWASTE@us.af.mil or 757-225-5808 to store full drums of lead contaminated waste at the <90 day site (located on base at 510 Poplar Road). The drums must be in good condition, labeled properly and closed. The Contractor has ***less than 90 days*** of storage on base before the containers must leave the installation.

7.4 Hazardous Materials (HAZMAT) Management

7.4.1 Hazardous Materials Usage and Reporting

In compliance with AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*, all Contractors are required to report the usage of all hazardous materials to the Federal Government for all projects and contracts including service contracts executed on JBLE-Langley. In accordance with Federal Acquisition Regulation (FAR) Clause 52.223-3, each offeror (the Contractor) must provide the Contracting Officer's Representative with a list of proposed HAZMAT that it plans to use on the installation during the performance of the contract. In accordance with FAR Clause 5352.223, the Contractors must obtain installation authorization prior to bringing the HAZMAT on an AF installation, and must report usage data to the HAZMART.



No contractor (including sub-contractors) shall bring hazardous materials onto JBLE-Langley without proper coordination and approval!

Hazardous materials are any substance defined by OSHA as a hazardous substance requiring a Safety Data Sheet (SDS). Hazardous materials that need to be reported include but are not limited to:

- Chemicals
- Paints
- Thinners and solvents
- Sealing compounds
- Strippers
- Glues and adhesives
- All petroleum productions including oils, hydraulic fluids and fuels stored on-site (POLs in vehicles and equipment used are exempt)
- Pesticides
- Acids
- Flammables
- Corrosives
- Oxidizers
- Compressed gases (i.e., oxygen, acetylene, propane, flammable and non-flammable gases)
- All aerosols
- All materials containing hazardous substances

The Contractor shall request the proposed usage of all Hazardous Materials by completing and submitting the following for each project:

- The Contractor Hazardous Material Worksheet at Attachment 3A
- The Contractor HAZMAT SDS Submittal at Attachment 3B (be sure to list all information for each hazardous material) [Please note that an Excel spreadsheet can be provided upon request] and
- Submit a copy of the SDS for each item to the Contracting Officer's Representative prior to bringing the items on the installation

The Contractor shall submit to the Contracting Officer's Representative the information for each item not less than ***thirty (30) calendar days*** prior to bringing the items on the installation in order to give the Government sufficient time to review and approve the hazardous materials. The Contractor shall submit this information to the Contracting Officer's Representative as soon as possible for short notice contracts or projects. An electronic version of the Contractor Hazardous Material Worksheet and Contractor HAZMAT SDS Submittal can be obtained through the Contracting Officer's Representative, Project Manager or the 633 CES/CEIE Hazardous Materials Management Program Manager.

The Contracting Officer's Representative will immediately provide this information to the Project Manager who will in turn immediately provide it to the 633 CES/CEIE Hazardous Materials Management Program Manager. If possible, it is best for the Contractor to submit this information electronically so it can be distributed to all reviewing parties electronically for a faster review.

After the project starts, monthly usage information will be provided to the Contracting Officer's Representative who will in turn provide this information to the Project Manager who will in turn provide it to the 633 CES/CEIE Hazardous Materials Management Program Manager. Attachment 5, Monthly Report for HAZMAT, will be used to report monthly usage. For contracts/projects ***exceeding six months***, this form is required to be filled out on a ***monthly*** basis. For contracts ***less than six months***, this form is required at the ***beginning and upon completion*** of work.



If there are any questions on how to fill out the Contractor Hazardous Material Worksheet or the monthly report, see the Contracting Officer's Representative, Project Manager or the 633 CES/CEIE Hazardous Materials Management Program Manager.

7.4.2 Hazardous Materials Management Program (HMMP)

The JBLE-Langley HMMP team will meet on an as-needed basis to review the Contractor Hazardous Material Worksheets and SDSs to ensure there are no concerns with the chemicals being used and/or stored on the installation. If there are concerns about any chemicals, and if it is determined that the Contractor plans to use an extremely hazardous chemical on JBLE-Langley, the HMMP team will notify the Contracting Officer's Representative and the Project Manager who will in-turn notify the Contractor of JBLE-Langley's concern. The Contractor will not bring any extremely hazardous chemicals on JBLE-Langley or any other chemicals that the HMMP team determines cannot be used on JBLE-Langley. The HMMP team will also notify the Project Manager if all hazardous materials are authorized for use.

If the Contractor requires additional hazardous materials not previously submitted for approval, they shall submit the request as stated above ***seven days*** prior to bringing the item on the base.

NOTE: If it is determined at any time that hazardous materials are on site that were not reported in advance, the Contracting Officer's Representative will be notified and the project can be stopped until the materials are submitted as stated above.

7.4.3. Hazardous Material Storage

Hazardous materials will be managed properly at all times while on JBLE-Langley. This means containers will be in good condition and will be properly labeled with the contents and hazard class (flammable, toxic, corrosive, oxidizer, etc.) at all times. Containers will be closed at all times when not in use. Hazardous materials shall be kept under cover to protect them from the elements and to prevent stormwater runoff contamination.

7.4.3.1 Tanks and 55-Gallon Liquid Drums

Tanks and 55-gallon liquid drums shall have secondary containment.



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.).

7.4.3.2 Gas Cylinders

Gas cylinders shall be maintained in the upright position with caps on and secured with chains and locks to prevent tampering and from falling over. Gas storage areas will have signs indicating what type gases are stored in the area (i.e. flammable, oxidizer, non-flammable, etc.).

JBLE-Langley is subject to inspections at any time from outside agencies (EPA, VDEQ and OSHA). Any violations by the Contractor will be the responsibility of the Contractor and any fines associated with the violations will be resolved at the Contractor's expense.

7.5 Fuel, Sewage and Other Spills

Call 911 – Fire and Emergency

Services **immediately** in the event of a spill where assistance is needed to stop or contain the spill. In the event of a fuel, sewage, and/or other toxic spillage during the performance of this contract, the Contractor shall be responsible for its containment, cleanup,

and related disposal costs. The Contractor shall have sufficient spill response supplies readily available on site to contain any spillage. In the event of any Contractor-related release, even if Fire and Emergency Services are not needed, the Contractor shall **immediately** notify the Contracting Officer and the 633 CES/CEIE at 757-764-3906 and take appropriate actions to correct its cause to prevent future occurrences.



CALL 911 – FIRE AND EMERGENCY SERVICES IMMEDIATELY in the event of a spill where assistance is needed to stop or contain the spill.

If the Federal, State or local authorities assess any monetary fine, penalty or assessment related to the release of any substance by the Contractor, his/her employees or agents during the performance of this contract, the Contractor shall be solely liable for its payment, authorizes the United States Air Force (USAF) to withhold such from payment and otherwise indemnify and hold the USAF harmless.

7.6 Storage Tanks

This section must be included if work includes or is in an area of storage tanks, either Aboveground Storage Tanks (ASTs) or Underground Storage Tanks (USTs). Contact the 633 CES/CEIE Tank Program Manager to determine any known history or presence of storage tanks.

Note: Storage Tank determination will be made during the design review stage.

7.6.1 Storage Tank Registration Notification

Notify the 633 CES/CEIE Tank Program Manager **30 days** prior to a tank being put into service to meet regulatory documentation requirements. Include the following documents in the submittal:

- Tank contents
- Tank size
- Tank Schematics
- Tank and Pipe Testing Documentation

7.6.2 Disposal of Petroleum Contaminated Soil

If excavating around any removed, abandoned or in-service AST or UST, please note the following:

Contaminated soil may be encountered in proximity to previous and current tank sites. Disposal of such soil must be funded as part of this project. Soil must be disposed of IAW Section 7.8.2, along with applicable Federal and State regulations. If contaminated soil is discovered, notify the 633 CES/CEIE Hazardous Waste Program Manager prior to disposal.

7.6.3 Aboveground Storage Tanks (ASTs)

Any temporary or permanent AST(s) allowed on site shall have secondary containment, venting and spill/overflow protection. Anti-siphon valves are also required. The Contractor shall visually inspect such tanks daily for leaks. All ASTs shall be installed or erected in accordance with 9VAC25-91, National Fire Protection Association (NFPA) 30 and 40 CFR 112.7.

7.6.3.1 Notification

If an AST is removed or re-located, the Project Manager is required to notify the 633 CES/CEIE Tank Program Manager and the 633 CES/CEIE Air Program Manager prior to the action so regulatory documentation can be initiated and submitted.

7.6.4 Underground Storage Tanks (USTs)

If there is going to be construction or excavation where there is an abandoned UST, note that any UST located within a project area presents an underground hazard and the work should be routed around the site or other provisions made. Contact the 633 CES/CEIE Tank Program Manager for additional information.

Note: The 633 CES/CEIE Tank Program Manager will review proposed project site plans/maps and layouts prior to start of work to determine if there are any existing USTs.

7.7 Waste Disposal

7.7.1 Solid Waste Disposal

All waste materials generated by any work under this contract performed on JBLE-Langley shall be handled, transported, stored, recycled and disposed of by the Contractor and by his/her subcontractors at any time in accordance with these specifications, all applicable Federal, State, or local laws, ordinances, regulations, court orders, or other types of rules or rulings having the same effect of law. These include but are not limited to:

- The Resource Conservation and Recovery Act (RCRA) (40 CFR 260-270)
- The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC Sec 9621)
- The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300)
- The Federal Water Pollution Control Act, as amended (33 USC Sec 1251 ET SEQ)
- The Clean Air Act, as amended (42 USC Sec 1857 ET SEQ)
- The Endangered Species Act, as amended (16 USC Sec 1531, ET SEQ)
- The Toxic Substances Control Act, as amended (15 USC Sec 2601, ET SEQ)
- The Solid Waste Disposal Act, as amended (42 USC 6901 ET SEQ)
- The Archaeological and Historic Preservation Act, as amended (16 USC Sec 469, ET SEQ)

- The Virginia Solid Waste Management Regulations (9VAC20-81)

The Contractor shall collect all solid wastes generated during the performance of the contract in a container/area provided by the Contractor and approved by the Contracting Officer's Representative. The Contractor shall provide appropriate containers for the collection and segregation of solid wastes, recyclables and construction and demolition (C&D) debris generated directly and indirectly by work under this Contract. The Contractor is ***prohibited*** from using base dumpsters or other Federal Government owned/leased waste receptacles for the disposal of any solid wastes. All solid wastes shall be reclaimed, recycled or disposed of prior to completion of work on JBLE-Langley.

As proof of proper disposition of solid wastes, the Contractor shall provide legible weight receipts for solid waste disposed and materials recycled bearing the name, address and phone number of the receiving facilities for every load of materials delivered. The weight ticket shall detail:

- The type of material
- Weight of the material (in pounds or tons)
- The date of the transaction and
- A signature from a representative of the receiving facility



The Contractor must submit Attachment 3, Construction/Demolition Debris Recycling and Reporting along with the weight tickets to the Project Manager, who will provide it to the 633 CES/CEIE Qualified Recycling Program/Integrated Solid Waste Program Manager after every load is removed from JBLE-Langley for recycling.

Receipts shall be submitted to the Contracting Officer's Representative and Project Manager within ***ten calendar days*** after the transaction.

Under no circumstances will any solid waste or hazardous materials be left at JBLE-Langley at the end of the project. Before the project is turned over to the Federal Government, the Contractor will remove all solid wastes and hazardous materials 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 Federal Government ***UNLESS*** instructed to do so in writing by the Federal Government. This is to include the before mentioned items and also regular or touch-up paint, plaster, solvents, etc. If it is determined that the Contractor left materials behind, services may be terminated and/or a penalty payment to include the cost of disposal of the material by the Federal Government may be withheld from the project payment.



Hazardous materials are different from hazardous wastes so be careful not to confuse the two. Hazardous Wastes will *not* be removed from the installation without the 633 CES/CEIE Hazardous Waste Program Manager signing the Hazardous Waste Manifest. The JBLE-Langley Hazardous Waste Program Manager can be contacted at 757-764-1133/1132 if needed.

7.7.1.2 Refuse Containers

All refuse containers shall be free from graffiti and ***must*** be equipped with a securable water proof tarpaulin or cover. Location of all refuse containers shall be annotated on the Worksite Layout Plan.

NOTE: The water proof cover shall be in place at ***all times***, except when waste is being deposited or removed.

7.7.1.2.1 Construction and Demolition (C&D) Debris Diversion

As good stewards of the environment, the Federal Government is committed to diverting its waste away from landfills to the greatest extent possible. This can be done through recycling, reusing (when directed by the Federal Government) and donating construction and demolition debris materials. The Contractor shall 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, wood, roofing materials, wallboard, ceiling tiles, etc. With prior coordination through the Contracting Officer's Representative and the 633 CES/CEIE Qualified Recycling Program/Integrated Solid Waste Program Manager, the Contractor may take scrap metals to the JBLE-Langley scrap metal yard for recycling.



The Contractor must submit Attachment 3, Construction/Demolition Debris Recycling and Reporting along with the weight tickets to the Project Manager, who will provide it to the 633 CES/CEIE Qualified Recycling Program/Integrated Solid Waste Program Manager after every load is removed from JBLE-Langley for recycling.

The following are some suggested local sites for recycling construction and demolition debris:

Table 1: Local Sources of Recycling

| Company | Address | City | Phone | Acceptable Items |
|-------------------------|-------------------------------------|--------------|--------------|---|
| Tidewater Fibre | 5602 Chestnut Ave | Newport News | 247-5766 | Paper, cardboard, plastics, aluminum, glass, tin cans |
| Old Dominion Recycling | 1618 W. Pembroke Ave. | Hampton | 723-2942 | Aluminum, copper, steel, iron, metals, paper, tires |
| S.B. Cox, Inc. | 217 Cox Drive | Yorktown | 969-1409 | All C & D, i.e. concrete, concrete w/rebar, wood, brick, block, steel, all metals, sheetrock, asphalt, cardboard, paper, plastics |
| Butler Paper | 324 Newport St | Suffolk | 539-2351 | Industrial & Commercial Paper Recycling |
| Gutterman Iron & Metal | 706 May Ave. | Norfolk | 627-1095 | Scrap Brass, Copper & Aluminum |
| Sims Metal | 2116 George Washington Memorial Hwy | Tabb | 599-4940 | Steel, aluminum, brass, copper, stainless steel, radiators |
| Waterway Materials Corp | 1401 Precon Drive | Chesapeake | 545-0004 | Concrete, concrete w/rebar, brick, block, asphalt |
| CrushCon Aggregates | 100 North Park Lane | Hampton | 723-1131 | Concrete, concrete w/rebar |

7.7.1.3 Recycling and Disposal Reporting

The Contractor shall report on a **quarterly** basis the tonnage of the items recycled and the amounts disposed of by landfill and amounts disposed of by regular or waste-to-energy incineration to the Project Manager, the Contracting Officer's Representative and the 633 CES/CEIE Qualified Recycling Program/Integrated Solid Waste Program Manager by the **5th day of each quarter (Jan, Apr, Jul and Oct)** during the period of performance. This report will be for the previous quarter.

The report shall include:

- The title of the project
- The project number
- The Contractor's company name
- Point-of-contact with 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 recycled. For all items that could not be recycled, the Contractor will provide a brief reason as to why the items could not be recycled.

For items disposed of, one total tonnage can be given for items landfilled and one total tonnage for items incinerated (specify waste incinerator or waste-to-energy incinerator) instead of reporting disposal figures for the various items. For items that cannot be accurately measured, estimates will be sufficient. Use the form at Attachment 3, Construction/Demolition Debris Recycling and Reporting, to report this information to the Contracting Officer's Representative, Project Manager and to the 633 CES/CEIE Qualified Recycling Program/Integrated Solid Waste Program Manager.

To send it to the 633 CES/CEIE Qualified Recycling Program/Integrated Solid Waste Program Manager, email it to 633CES.CEI.Flight@us.af.mil.

7.7.1.4 Contain Loose Debris

Loose debris on trucks leaving the site shall be loaded in a manner that shall prevent dropping/releasing of materials on streets and conform to local ordinances/laws. Fasten a suitable water proof cover, such as a tarpaulin, over the load before entering surrounding streets.

7.7.1.5 Trip Tickets

Contractor shall submit all trip tickets from the landfill facility, incinerators and recycling companies to show all debris is being landfilled, incinerated or recycled in accordance with all Federal requirements and in an approved location. These trip tickets will be submitted to the Contracting Officer's Representative who will in turn give them to the Project Manager.

7.7.2 Hazardous Waste (HW)

7.7.2.1 Site Management

All waste containers (i.e., HW, non-regulated, used oil, etc.) must be closed when not in use. Waste containers shall be stored undercover as to protect from the elements. All liquid waste shall have secondary containers. Each waste container is to be properly labeled. Do not store waste containers near storm drains. Upon completion of this project, the Contractor shall remove all waste containers from the installation (for associated manifest requirements see paragraph 7.7.2.3).

7.7.2.2 Waste Characterization Samples For Floor Renovation

Waste characterization samples must be collected to determine if it meets the RCRA definition of a hazardous waste. It is the responsibility of the Contractor to collect the sample and provide analysis to the 633 CES/CEIE Hazardous Waste Program Manager. Waste debris from floor stripping or floor blasting performed on JBLE-Langley must be sampled for TCLP Metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) for solid debris and must add corrosivity test for liquid stripping. Additionally, it is the Contractor's responsibility to dispose of the waste generated on this project. (For associated manifest requirements see paragraph 7.7.2.3).

7.7.2.3 Manifests

The 633 CES/CEIE Hazardous Waste Program Manager shall review all lab analyses and/or Safety Data Sheets (SDSs) of wastes prior to signing manifests. *All* hazardous

waste manifests and land disposal restriction documents (LDR) must be signed by the 633 CES/CEIE Hazardous Waste Program Manager prior to removal of such waste from the base. The generators initial copy of the HW manifest and the LDR form must be provided after the approved person signs the manifest. The destination to generator copy of the manifest must be returned to:

633 CES/CEIE
Attn: Hazardous Waste Program Manager
37 Sweeney Boulevard
JBLE-Langley VA 23665

7.7.3 Universal Waste

7.7.3.1 Florescent Lamps

The Contractor shall use environmentally-friendly green tip (i.e., low mercury) fluorescent lamps during lamp replacement. All fluorescent lamps shall be managed as Universal Waste.



**Under no circumstances
shall lamps be crushed
on JBLE-Langley.**

The Contractor shall manage all Universal Waste Lamps in accordance with Federal, State and Air Force laws, regulations, directives, and plans. The Contractor can contact the JBLE-Langley Hazardous Waste Contractor(s) at 633CES.CEIE.HAZWASTE@us.af.mil or 757-225-5808 to arrange for pick-up, except in cases where lamp replacement is part of the contract. If disposal is part of the contract, lamps will be properly disposed of by the Contractor and any waste manifests will be signed by the 633 CES/CEIE Hazardous Waste Program Manager.

For more guidance on Universal Waste, please reference the JBLE-Langley Universal Waste Guidance Memorandum. Contact the Contracting Officer's Representative or the the 633 CES/CEIE Hazardous Waste Program Manager for access to this document.

7.7.4 Soil and Petroleum Contaminated Wastes

7.7.4.1 Contaminated Absorbents

All petroleum spills/releases must be cleaned up using absorbent materials. Spills caused by the Contractor will be the Contractor's responsibility to containerize and dispose of the contaminated absorbent material. Spills caused by the Federal Government will be the responsibility of the Federal Government who shall contact the JBLE-Langley Hazardous Waste Contractors at 633CES.CEIE.HAZWASTE@us.af.mil or 757-225-5808 to arrange for pick-up.

7.7.4.2 Soil

All soils must be tested to determine if it contains any contaminants prior to relocating it on base or disposing of it off-base. Soils that are to be reused in the same hole from which they are dug up may be replaced without testing (reference 9VAC20-81-95.C.7.d) unless there is knowledge of possible contamination. The Hazardous Waste Program Manager will make the determination for soil testing in these instances. Testing and

disposal of soil shall follow the Virginia Solid Waste Management Regulations (9VAC20-81-660, Soil contaminated with petroleum products).

Testing shall include items specified in the solid waste regulations to include but not limited to:

- RCRA hazardous waste characteristics (i.e., corrosivity, ignitability, reactivity, and toxicity)
- Total metals
- Volatile Organic Compounds (VOCs)
- Semi-Volatile Compounds (SVOCs)
- Total Petroleum Hydrocarbons (TPH)
- Pesticides/herbicides
- Polychlorinated Bi-phenyls (PCBs)
- Presence of liquids (paint filters)
- Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX)
- Toxicity Characteristic Leaching Procedure (TCLP)
- Total Organic Halides (TOX)
- Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA)

Important

It is the Contractor's responsibility to coordinate with their selected lab to ensure the testing methods used are the approved testing methods. The 633 CES/CEIE will not be responsible for providing the approved testing method.

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, in sludge or slurry form, to include soils from directional drilling shall be containerized and managed as either hazardous waste or non-regulated waste, depending on what contaminate was spilled.

Under no circumstances may soil be stock piled for dewatering, as this could be considered landfilling and would require a permit from the VDEQ. It shall be the responsibility of the Contractor to dispose of such containerized contaminated soil. The 633 CES/CEIE Hazardous Waste Program Manager must review the sample results and must sign all hazardous/nonhazardous waste manifests prior to disposal. Contact the 633 CES/CEIE Hazardous Waste Program Manager at 757-764-1133/1132 for additional information.

Composite Sample

One composite sample (combined number of samples collected into a single sample) is required for every 250 cubic yards of soil to be disposed.

NOTE: *Under no circumstances* shall soil, clean or contaminated, from JBLE-Langley be delivered to or donated to off-base sources for use. Clean or contaminated soil shall

be taken to an appropriate landfill or processing center based on the contaminants identified by analysis.

7.8 Water Quality

This section applies when projects will require **any** exterior material laydown, construction or excavation. Section 7.8 is to be referenced alongside the JBLE-Langley Construction Inspection and Compliance Procedures document on the JBLE-Langley Environmental Website.



Stormwater management and hydrology planning should be considered during initial phases of site planning. Buried utility lines, high groundwater, prohibition of pervious pavement, and flightline restrictions often lead to construction delays.

The Contractor shall submit their Site Specific Erosion and Sediment Control Plan and Stormwater Pollution Prevention Plan to the 633 CES/CEIE Water Program Manager for an initial review **before submission** to the VDEQ for final approval. The VDEQ serves as the Virginia Stormwater Management Plan (VSMP) and Virginia Erosion and Sediment Control Plan (VESCP) Authority.

Table 2: Land Disturbance Requirements Quick Reference

| Size of Land Disturbance | Requirement | Additional Info | Code | Link |
|--------------------------|---|--|----------------------------|---|
| All Disturbance | Erosion and Sediment Control (ESC) | Virginia Erosion and Sediment Control Handbook | 9VAC25-840 | https://www.deq.virginia.gov/water/stormwater/erosion-and-sediment-control |
| > 5,000 sq ft | Energy Independence and Security Act: Section 438 | Maintaining pre-development hydrology | Title 42 USC Section 17094 | https://www.epa.gov/nps/stormwater-management-federal-facilities-under-section-438-energy-independence-and-security-act |
| >10,000 sq ft | Site Specific ESC Plan | | 9VAC25-840 | https://www.deq.virginia.gov/water/stormwater/esc-handbook |
| >= 1 acre | Construction General Permit (CGP) | | 9VAC25-880 | https://www.deq.virginia.gov/permits-regulations/permits/water/stormwater-construction |
| >= 1 acre | Stormwater Pollution Prevention Plan (SWPPP) | Impaired water requirements: Back River and Chesapeake Bay | 9VAC25-870-54 | |
| >= 1 acre | Stormwater Management Plan (SMP) | | 9VAC25-870-55 | |
| >= 1 acre | Pollution Prevention (P2) Plan | | 9VAC25-870-56 | |

7.8.1 Energy Independence and Security Act (EISA) Section 438

Federal facility projects **over 5,000 square feet** are required to reduce stormwater runoff from development and redevelopment projects to reflect pre-development (natural state) hydrology. A full description of requirements can be found in “Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act” on the EPA site linked above.

Runoff reductions may be achieved using one of two options:

- 1) Complete retention of 95th percentile rainfall events on site
- 2) Construction of a site-specific hydrologic analysis to determine pre-development runoff conditions to quantify allowable post-construction runoff

It is recommended that Option 1 is calculated and addressed during the conceptual design phase. Design drafts should include the following and will be evaluated by the 633 CES/CEIE Water Program Manager:

This document is subject to change at any time.

- Runoff requirements calculations for EISA Section 438
- Design of control measures to meet runoff requirements at the maximum extent technically feasible

Although this requirement is separate from VDEQ construction laws, stormwater control measures required at the state level may suffice for EISA Section 438. If state stormwater control measures are used to achieve EISA reductions, runoff calculations should be provided to show compliance.

7.8.2 Erosion and Sediment Control (ESC)

The Contractor is responsible for using erosion and sediment controls (ESC) for ***any amount of land disturbance***. ESC practices shall be designed, installed and maintained in accordance with the Virginia Erosion and Sediment Control Handbook. Any alternate methods of protection will be reviewed at each design phase by the Contracting Officer's Representative and 633 CES/CEIE Water Program Manager for approval.

- The Contractor shall provide erosion control fencing (silt) to prevent site runoff.
- Baled vegetation such as hay or straw may not be used for erosion control and inlet protection from stormwater run-off.
- The Virginia ESC Handbook uses outdated Intensity Duration Frequency (IDF) values. The National Oceanic and Atmospheric Administration (NOAA) Atlas 14 values for IDF curves shall be used instead.
- Temporary and permanent seeding and planting must be done in accordance with the Natural Resources restrictions and the JBLE-Langley Plant List, which can be found in Section 8.2. **NOTE:** Ensure seed mixes do not contain millet or other prohibited plants.

7.8.2.1 Site Specific ESC Plan

Land Disturbing Activities (LDAs) that are ***over 10,000 square feet*** require the Contractor to develop a site specific Erosion and Sediment Control Plan in accordance with Virginia Erosion and Sediment Control Law and Regulations (9VAC25-840) and meet the 19 minimum standards described in 9VAC25-840-40, as applicable.

The ESC Plan shall include:

- Analyses and results used for Minimum Standard 19
- Site plan(s)/detailed maps for the work site that clearly show the siting of the ESC practices and best management practices
 - The Virginia Uniform Coding System for ESC Practices shall be used on all site plan submittals
- Contractor's maintenance responsibilities required for the ESC controls

7.8.3 Virginia Stormwater Management Plan (SWM Plan)

For LDAs of **1 acre or more**, projects shall comply with Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870) and General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880).

7.8.4 Stormwater Pollution Prevention Plan (SWPPP)

For LDAs of **1 acre or more**:

A Stormwater Pollution Prevention Plan (SWPPP) submittal shall be developed in accordance with 9VAC25-870-54, VDEQ Construction General Permit Part II and submitted to the 633 CES/CEIE Water Program Manager for initial review. Once reviewed and approved, the Contractor will submit to VDEQ for final approval.



All SWPPPs must contain the following:

- Erosion and Sediment Control Plan (Section 7.8.2)
- Stormwater Management Plan (Section 7.8.4.1)
- Pollution Prevention (P2) Plan (Section 7.8.4.3)
- Additional control measures to meet the requirements of existing impaired waters and Total Maximum Daily Loads (TMDLs)

7.8.4.1 Stormwater Management Plan (SWM)

A complete SWM Plan must meet the requirements of 9VAC25-870-55. Plan submittals must have the Virginia Runoff Reduction Method (VRRM) compliance sheets, documentation and calculations verifying compliance with the water quality and quantity requirements (Part II B of the regulations) of these regulations and a map(s) of the site that depict the topography of the site.

The Contractor shall implement the approved SWM Plan and all design features for projects approved by the VDEQ.

At the completion of the project, certified construction record drawing(s) ("as-built") for permanent stormwater management facilities shall be provided to the 633 CES/CEIE Water Program Manager in accordance with the VDEQ approved SWM plan. Drawings must include tie-ins with existing Stormwater utilities if applicable.

7.8.4.2 Stormwater Management Facilities

Permanent stormwater management facilities must be compatible with the base's high groundwater table. Seasonally high groundwater levels at the project site may need to be recorded by the Contractor before installation of stormwater management facilities.

Natural stormwater management facilities are encouraged and should be preferentially chosen over manufactured facilities when feasible. Areas of trees and vegetation should be considered for stormwater control before manufactured facilities.

Stormwater management facilities that encourage standing water or high vegetation may **not** be compatible near the flight line at the discretion of the 633 CES/CEIE Natural Resources Program Manager.

Under no circumstances shall porous, pervious or permeable asphalt/concrete be placed on JBLE-Langley.



Stormwater nutrient credit purchasing is prohibited by the DoD.

7.8.4.3 Pollution Prevention Plan (P2 Plan)

A site specific Pollution Prevention (P2) Plan will be developed in accordance with 9VAC25-870-56 and VDEQ Construction General Permit Part II B 4.

7.8.5 Construction General Permit (CGP) Coverage)

For LDAs of **1 acre or more**:

Construction General Permit coverage is required under the Virginia Stormwater Management Program (VSMP) General Permit for Discharges of Stormwater from Construction Activities from VDEQ.



No LDAs shall commence without an approved SWPPP and VDEQ-issued CGP coverage.

The Contractor shall submit a copy of the VDEQ Construction General Permit Registration Statement to the 633 CES/CEIE Water Program Manager for review and approval prior to submittal to VDEQ. Upon approval, the Contractor shall submit the VDEQ Construction General Permit Registration Statement and applicable fee to VDEQ.

After SWPPP approval (see Section 7.8.3), the Contractor shall register for CGP coverage from VDEQ in accordance with 9VAC25-880-50. The Contractor is considered the Permit Operator and is responsible for all CGP registration fees (9VAC25-870-820).

The Contractor may begin LDAs once a VDEQ Construction General Permit coverage letter has been received. The Contractor shall be responsible for terminating permit coverage once the project site has reached final stabilization and verified by the VDEQ Inspector and Contracting Officer's Representative. Final Stabilization is defined in 9VAC25-880-1 as soil disturbing activities have been completed and a permanent vegetative cover has been established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform, mature enough to survive and will inhibit erosion.

7.8.6 Illicit (Prohibited) Discharges

The Contractor shall ensure no illicit discharges occur at the project site. An "illicit discharge" is any non-stormwater discharge to the storm drain system except as expressly allowed by JBLE-Langley's Virginia Pollutant Discharge Elimination System (VPDES) permits, the project-specific VSMP General Permit for Discharges of Stormwater from Construction Activities and/or a discharge approved in writing by JBLE-Langley.

Examples of illicit discharges include the following:

- Dumping trash or debris
- Disposing of vehicle/equipment maintenance fluids into a storm drain
- Leaking dumpsters flowing into a storm drain inlet
- Pouring paints, stains or any hazardous material into a storm drain
- Cleaning paint brushes or applicators in or near a storm drain
- Allowing wash water with soaps, detergents or paint debris into a storm drain inlet
- Washing silt, sediment, concrete or gravel into a storm drain
- Allowing uncontrolled release of sediment into a storm drain
- Pumping groundwater from site dewatering into the grass or storm drain before approval and testing for contaminants
- Any measureable flow during dry weather containing pollutants



Figure 2: Example of illegal dumping into a stormwater drain. Note: photograph is not taken at JBLE-Langley and is only used for educational purposes.

Water from firefighting, hydrant flushing and A/C condensate are not considered illicit discharges.

7.8.7 Wastewater

Discharges to the sanitary system are ***prohibited*** and may only be authorized through the 633 CES/CEIE Water Program Manager.

If it is determined that frac tanks are needed after construction has commenced in order to store liquids that cannot be discharged, they must be approved through the 633 CES/CEIE Water Program Manager.

High expansion foam, aqueous film forming foam (AFFF) and any other firefighting foam is strictly ***prohibited*** in the sanitary or storm system. New facilities must have foam recovery tanks or tie into existing recovery tanks at other facilities.

8.0 Environmental Conservation Program Areas

Environmental personnel oversee the preservation and management of cultural and natural resources surrounding JBLE-Langley. These two programs work to retain the installation's cultural and natural heritage together with supporting the military mission. Currently, there are 31 Archeological sites, 250 Historical Buildings, 695 acres (approximately 20%) of wetland area on JBLE-Langley. The requirements for the cultural and natural resources program are discussed below.

8.1 Cultural Resources

Prior to any excavation on JBLE-Langley's property, the Contractor shall complete AF Form 103, Base Civil Engineering Work Clearance Request (Dig Permit) to include coordination with the 633 CES/CEIE Cultural Resources Program Manager to ensure that excavation is not occurring in known archaeological sites. In the event of the inadvertent discovery of a potential archaeological site, the Contractor shall immediately cease work, contact the 633 CES/CEIE Cultural Resources Program Manager, and take steps to secure the site. In the event of the discovery of possible human remains, the Contractor shall cease work and contact the 633 Security Forces Squadron to investigate the site.

Prior to rehabilitation, repair, maintenance or new construction on historic facilities, it is imperative that the Contractor contact the 633 CES/CEIE Cultural Resources Program Manager to assure Section 106 compliance. All work on historic facilities shall be accomplished in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. These Standards may be found at the National Park Service website <https://www.nps.gov/tps/standards.htm>. For brick repointing work, the Contractor shall also comply with the Program Comment for Department of Defense Rehabilitation Treatment Measures Removal of Mortar Joints and Repointing.



The Contractor is expected to have at least five (5) years of experience working with historic structures.

Prior to commencing demolition projects, the Contractor shall coordinate with the 633 CES/CEIE Cultural Resources Program Manager to ensure Section 106 compliance has been completed. If, during the demolition process, unknown features of potential historic interest are uncovered, the Contractor shall immediately cease work and contact the 633 CES/CEIE Cultural Resources Program Manager.

8.2 Natural Resources

8.2.1 Tree Protection, Preservation and Planting

Trees take generations to mature, yet they can be irreparably damaged or killed within seconds, or subjected to conditions which may take five to ten years to kill them. Improper planting may result in short-term death, structural failure or a long-term deterioration. Most situations can be prevented. The Contractors are responsible for removing or replacing (at the 633 CES discretion) trees which are critically injured or killed due to a failure to adhere to the following requirements.

8.2.1.1 Protect Mature Existing Trees

For mature (15+ feet in height) existing trees within a job site, the Contractors must protect a minimum amount of area in order to prevent killing existing trees through the placement of barrier structures. This minimum amount of area is called the Critical Root Zone (CRZ) or Tree Protection Zone (TPZ) and is equivalent to the soil area below ground and the space above ground defined by the tree's drip line, or the greatest extent of the branches. There is a minimum amount of area, above (for the trunk and crown) and

below ground (for soil health and the root system) that is required to protect trees and preserve tree health. See Figure 3 for a diagram of the TPZ. The Contractors are responsible for replacing trees killed or critically injured as a result of failing to erect barriers or otherwise protect the TPZ. Examples of damage to trees from failure to protect the TPZ include breaking branches, tearing the bark, wounding the trunk or cutting roots within the critical root zone as shown below.

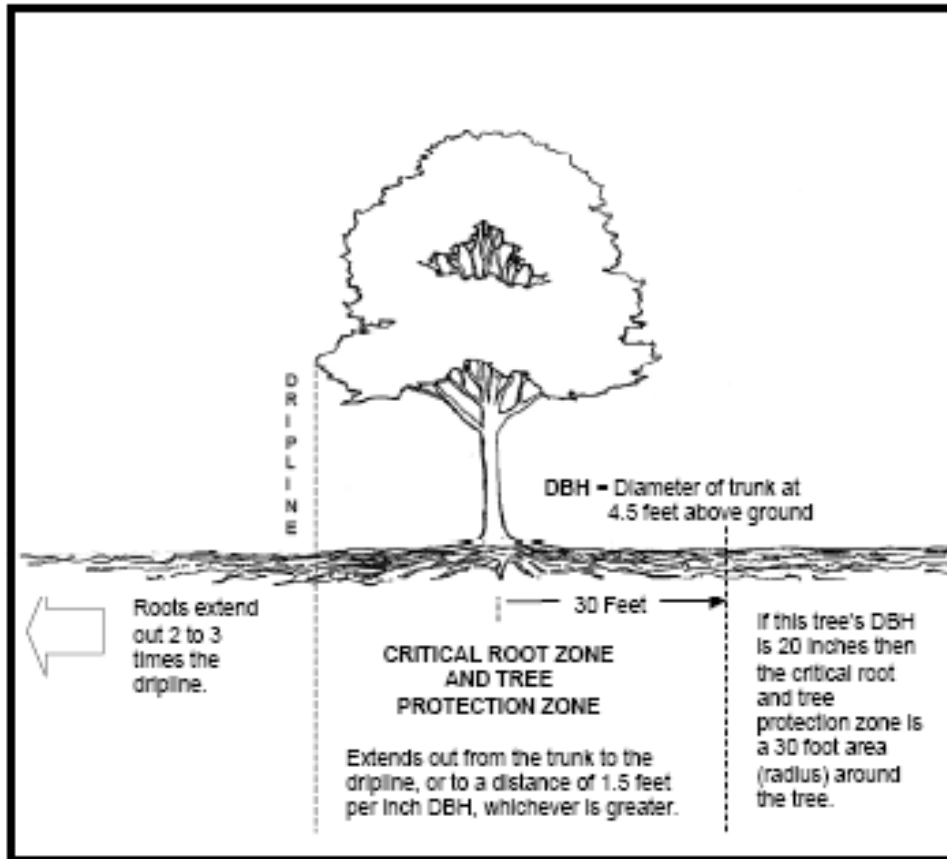


Figure 3: Location of the Critical Root Zone and Tree Protection Zone

8.2.1.2 Erect Tree Protection Zone Structures

When a job site will occur in an area with established trees, structures must be erected to protect the TPZ. Structures erected to preserve TPZ shall meet the minimum requirements below:

- Chain link fence – 48-inch minimum height
- Snow/Sand fence – 48-inch minimum height
- Safety fence – 48-inch minimum height

8.2.1.3 Protect Young Trees

For small trees, newly planted trees and trees with narrow crowns, the drip line defined area is too small for proper protection. Therefore, it is best to define both the Critical Root and Tree Protection Zones as the circular area above and below ground with a radius equivalent to or greater than 6 feet *or* 1.5 feet for every inch in trunk diameter at 4.5 feet above the ground. For example, a tree with a trunk diameter of 6 inches has a TPZ of 9 feet (6 inches x 1.5) around the tree. Tree trunks and crowns must also be protected to prevent damage. Tree crowns may be trimmed to prevent damage and facilitate appropriate staging. When such trimming is required, a professional who is licensed to conduct tree work must be used to complete the required task.

Example

A tree with a trunk diameter of 6 inches has a TPZ of 9 feet (6 inches x 1.5) around the tree.

8.2.1.4 Damage to Trees from Digging or Trenching

Tree roots can extend far from the trunk of a tree and are mostly located within the top 18 inches of soil. As shown in Figure 4, digging holes or trenching through roots may disconnect a tree from a large portion of its roots making the tree likely to die and become a hazard. Severing one major root can cause the loss of 5 – 20% of the root system and may cause the death of the tree. Often, this damage is not apparent for many years but can result in costly maintenance or removal requirements for the base in the future. For projects that require digging or trenching, evaluate where the trench must go. If the digging and trenching that are necessary will likely sever a portion of the tree roots, then the 633 CES/CEIE Natural Resources Program Manager shall be consulted to determine if the tree must be removed.

If trenching or hole digging which will result in the death of an established tree is required in order to complete a project, the Contractor will be responsible for removing the tree and grinding the stump down to ground level.

If a tree must be removed, replacement with a tree of the same species may be required at the Contractor's expense. The 633 CES/CEIE Natural Resources Program Manager will work with the Contracting Officer's Representative to determine the best course of action for tree replacement.

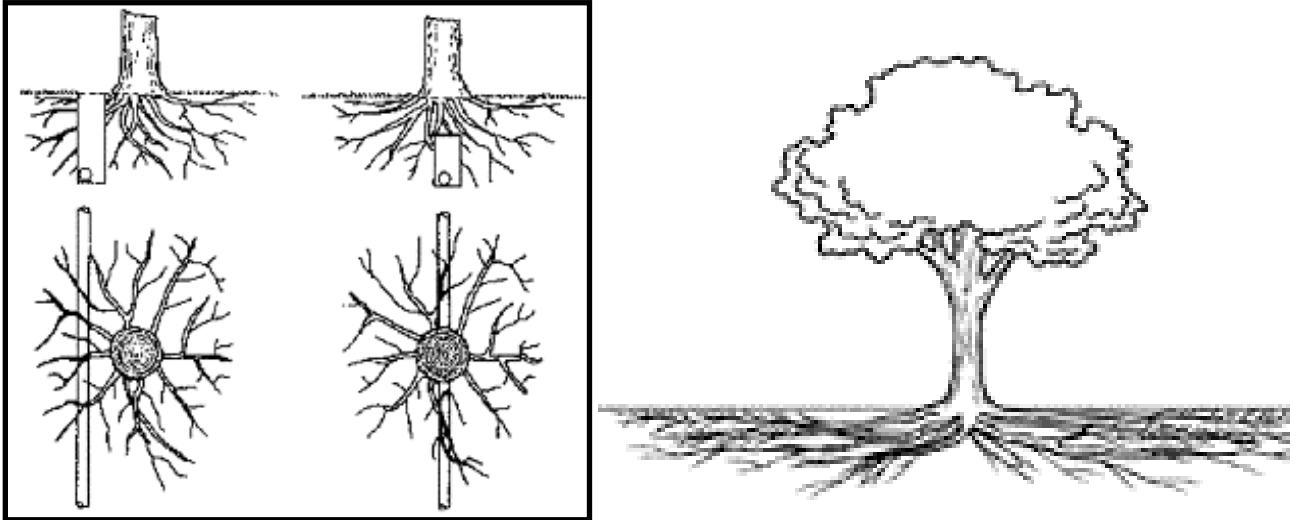


Figure 4: Trench and hole cuts likely to result in serious damage or death to a tree. If a trench or hole will result in serious root damage, the tree may have to be removed at the contractor's expense.

8.2.1.5 Planting New Trees

Many construction projects include tree planting during the final stages. Trees shall be planted and staked (if required) in accordance with industry standards and as shown in the following two figures (Figures 5 and 6). Trees which die within one year of planting as a result of improper planting will be replaced at the Contractor's expense.

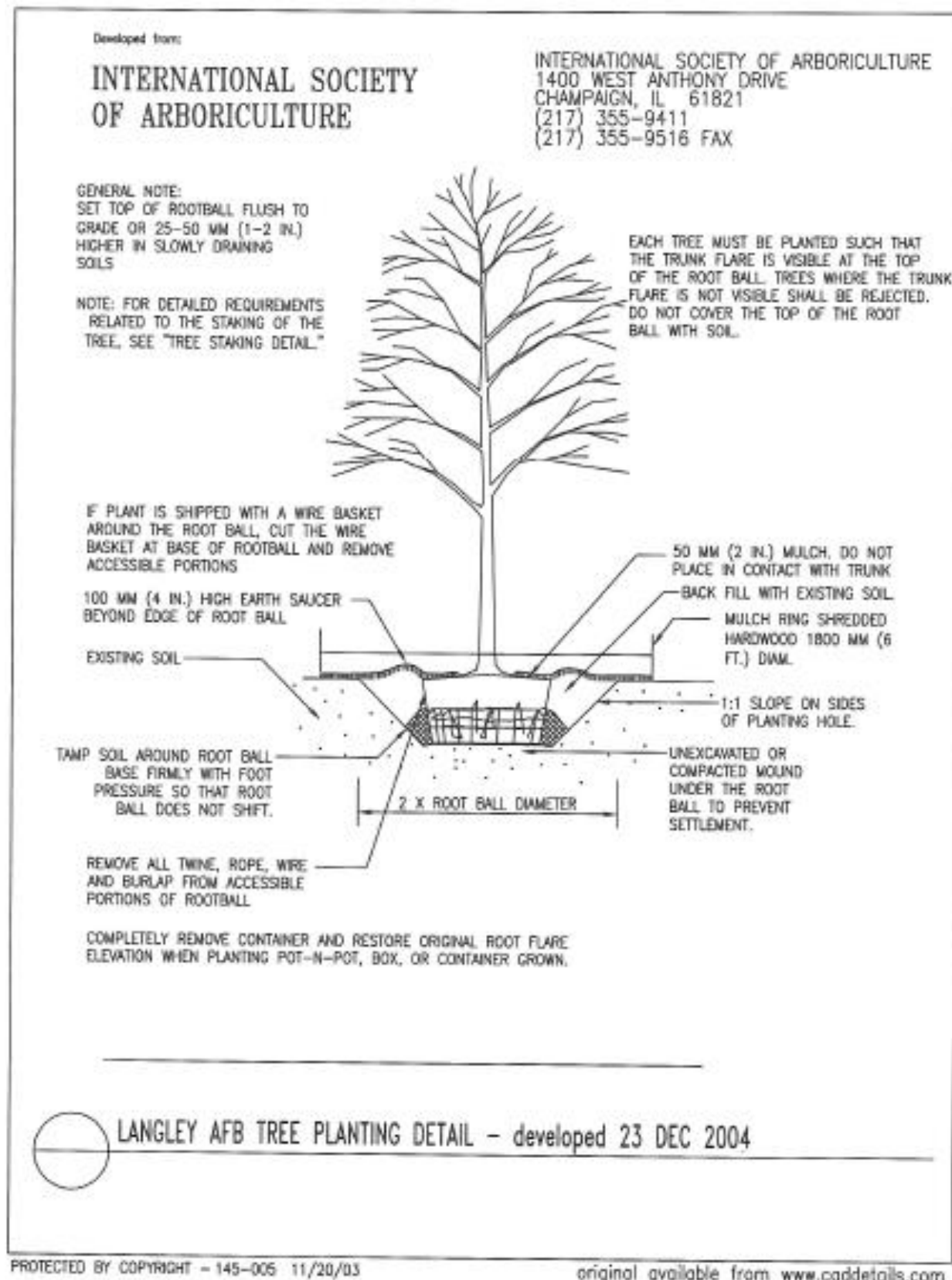
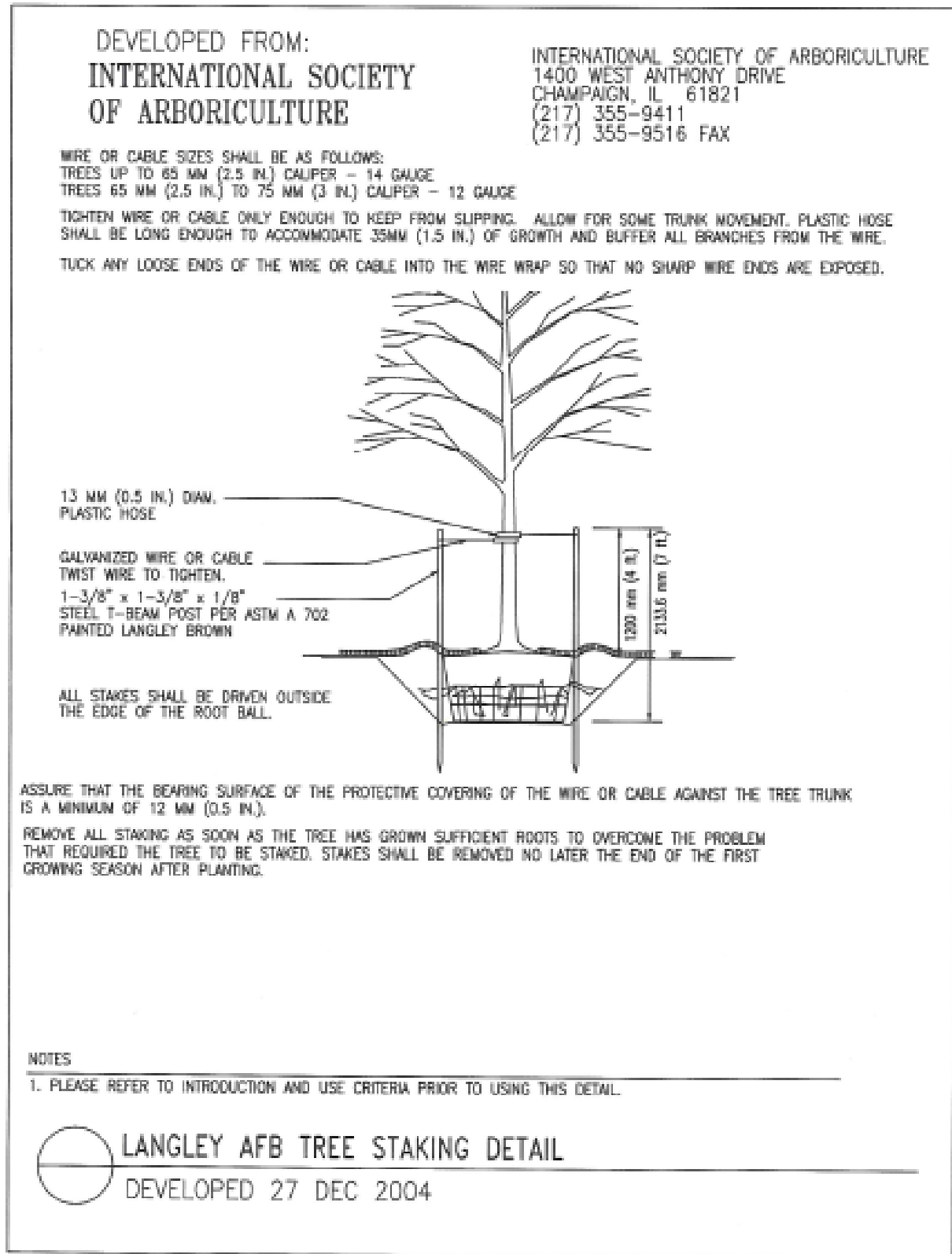


Figure 5: Tree Planting Detail



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original available from www.caddetails.com

Figure 6: Tree Staking Detail

8.2.2 Plant Listings

The JBLE-Langley approved planting list is **not** intended to be a comprehensive list of all plants approved for planting on JBLE-Langley. It is intended to serve as a starting point to inform landscaping on the installation.

When selecting material for landscape installation, select native, drought (or flood) tolerant plant species (including grasses) where appropriate for the locale to promote energy efficiency and water conservation, preserve drainage patterns, inhibit erosion, improve air quality, lower maintenance, and add beauty. Drought or flood tolerant horticultural species not listed by the USDA as invasive within the continental U.S., may also be selected to accomplish these goals. Exceptions for locally native species such as *Spartina alterniflora*, should be made to this policy.

Careful consideration of the installation BASH plan should be made when selecting plants for landscaping anywhere near the airfield. Generally speaking, plants which produce berries or an abundance of seeds which are attractive to birds, should not be planted within **1/4 mile** from the airfield.

More native, locally adapted species, can be found in the Virginia Department of Conservation and Recreation's Natural Heritage Program brochure available online at: <https://www.dcr.virginia.gov/natural-heritage/document/cp-nat-plants.pdf>

It is a direct violation of DoD and Air Force policy, as well as Executive Order (EO) 13112 (Invasive Species, 3 Feb 99), to "authorize, fund, or carry out actions likely to cause or promote the introduction or spread of invasive species".

Plants listed on the prohibited list shall not be planted on the installation as this would be a direct violation of EO 13112 (Invasive Species, 3 Feb 99), AF Ecosystem Management Principals, Air Force Instruction 32-7064 Integrated Natural Resources Management and JBLE-Langley Installation Natural Resources Management Plan.

If you have questions related to plant selection for landscaping, please contact the 633 CES/CEIE Natural Resources Program Manager at 757-764-1090.



The JBLE-Langley approved planting list is *not* intended to be a comprehensive list of all plants approved for planting on JBLE-Langley. It is intended to serve as a starting point to inform landscaping on the installation.

8.2.2.1 Approved Plant List – Trees

Table 3: Approved Tree List

| Scientific Name | Common Name | Notes |
|-----------------------------|----------------------------------|---|
| Acer rubrum | Red Maple | |
| Acer palmatum | Japanese Maple | |
| Betula nigra | River Birch | |
| Betula papyrifera | Paper Birch | |
| Betula populifolia | Gray Birch | |
| Carpinus caroliniana | Ironwood | |
| Carya tomentosa | Mockernut Hickory | |
| Celtis laevigata | Hackberry | |
| Celtis occidentalis | Common Hackberry Δ | <i>Do not plant near airfield</i> |
| Cercis canadensis | Eastern Redbud | |
| Chamaecyparis pisifera | False Cypress | |
| Chinese juniper | Juniperus chinensis | <i>Good for windy exposed areas</i> |
| Chionanthus spp | Fringe Tree | <i>No longer acceptable due to recent invasion of Emerald Ash Borer</i> |
| Cornus species | Dogwood species | <i>Do not plant near airfield</i> |
| Cryptomeria japonica | Cryptomeria | |
| Cupressus sempervirens | Italian Blue Cypress | |
| Fagus grandifolia | American Beech | |
| Ginkgo biloba | Ginkgo or Maidenhair Tree | |
| Gleditsia triacanthos | Thornless Honeylocust □ | |
| Juniperus virginiana | Eastern Redcedar □Δ | <i>Do not plant near airfield</i> |
| Liriodendron tulipifera | Tulip Poplar | |
| Magnolia grandiflora | Southern Magnolia | <i>Do not plant near airfield</i> |
| Magnolia virginiana | Sweetbay Magnolia ◇ | |
| Nyssa sylvatica | Black Tupelo | <i>Do not plant near airfield</i> |
| Pinus taeda | Loblolly Pine | |
| Pinus thunbergii | Japanese Black Pine □ | <i>Use with caution. Reported as invasive within Colonial National Historic Park.</i> |
| Pinus virginiana | Virginia Pine | |
| Platanus × acerifolia | London Plane Tree | |
| Platanus occidentalis | American Sycamore | |
| Quercus alba | White Oak | |
| Quercus coccinea | Scarlet Oak | |
| Quercus falcata | Southern Red Oak | |
| Quercus marlandica | Blackjack Oak | |

| Scientific Name | Common Name | Notes |
|-------------------------------|----------------------|--|
| Quercus phellos | Willow Oak □ | <i>Use with caution – overabundant on JBLE-Langley</i> |
| Quercus shumardii | Shumard Oak | |
| Quercus virginiana | Live Oak □Δ | <i>Use with caution – overabundant on JBLE-Langley</i> |
| Rhapidophyllum hystrix | Needle Palm | <i>Do not plant near airfield</i> |
| Robinia pseudoacacia | Black Locust | |
| Taxodium distichum | Bald Cypress ◇ | |
| Tilia cordata | Littleleaf Linden | |
| Trachycarpus fortunei | Windmill Palm | <i>Do not plant near airfield</i> |
| Ulmus parvifolia | Lacebark Elm | |

Bold text indicates some salt tolerance

□ denotes plants that are especially salt tolerant

Δ denotes plants that are especially tolerant of occasional salt flooding

◇ denotes plants that tolerate wet conditions and/or occasional brackish flooding

Plants listed as not for use near airfield should be located 1/4 mile or more from airfield surface due to potential wildlife attracting fruit

8.2.2.2 Approved Plant List – Shrubs

Table 4: Approved Shrubs List

| Scientific Name | Common Name | Notes |
|-------------------------------|-----------------------------|--|
| Alnus serrulata | Hazel alder | <i>Do not plant near airfield</i> |
| Baccharis halimifolia | Saltbush □Δ◇ | |
| Clethra alnifolia | Sweet Pepperbush ◇ | <i>Do not plant near airfield</i> |
| Cotoneaster divaricatus | Spreading Cotoneaster | |
| Cotoneaster horizontalis | Rockspray Cotoneaster | |
| Cupressus sempervirens | Italian Blue Cypress | |
| Hydrangea arborescens | Wild Hydrangea | <i>Do not plant near airfield</i> |
| Hydrangea macrophylla | Big leaf hydrangea | <i>Only disease resistant varieties - cercospora can be a problem here</i> |
| Hydrangea macrophylla | Bigleaf Hydrangea | |
| Juniperus species | Horticultural juniper | <i>Do not plant near airfield</i> |
| Morella cerifera | Wax Myrtle □Δ◇ | <i>Do not plant near airfield</i> |
| Nerium oleander | Oleander □ | <i>Highly poisonous if ingested or during contact for pruning by sensitive individuals – do not plant in housing areas, near child development facilities or veterinary clinic</i> |
| Pittosporum tobira | Mockorange □ | |
| Sabal minor | Dwarf Palmetto Δ | <i>Do not plant near airfield</i> |

| Scientific Name | Common Name | Notes |
|---------------------------|---------------------------|-------|
| Vitex agnus-castus | Vitex, Chaste Tree | |
| Yucca species | Yucca □ | |

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8.2.2.3 Approved Plant List – Perennials & Vines

Table 5: Approved Vine List

| Scientific Name | Common Name | Notes |
|------------------------------------|-------------------------------------|-----------------------------------|
| Bignonia capreolata | Cross Vine | |
| Campsis radicans | Trumpet Vine Δ ◇ | |
| Decumaria barbara | Climbing Hydrangea | |
| Gelsemium sempervirens | Carolina Jessamine ◇ | |
| Lonicera sempervirens | Coral or Trumpet Honeysuckle | <i>Do not plant near airfield</i> |
| Parthenocissus quinquefolia | Virginia Creeper | <i>Do not plant near airfield</i> |
| Passiflora incarnata | Purple Passion Vine | |

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Plants listed as not for use near airfield should be located 1/4 mile or more from airfield surface due to potential wildlife attracting fruit

Table 6: Approved Perennials

| Scientific Name | Common Name | Notes |
|-----------------------------------|----------------------------|-------|
| Achillea millefolium | Common Yarrow | |
| Aquilegia canadensis | Eastern Columbine | |
| Asclepias incarnata | Swamp Milkweed | |
| Asclepias syriaca | Common Milkweed | |
| Asclepias tuberosa | Butterfly Weed | |
| Canna species | Canna ◇ | |
| Conoclinium coelestinum | Mistflower | |
| Coreopsis verticillata | Threadleaf Coreopsis | |
| Delosperma cooperii | Ice Plant | |
| Dianthus gratianopolitanus | Cheddar Pink | |
| Echinacea purpurea | Purple Coneflowers | |
| Eryngium aquaticum | Marsh Rattlesnake Master ◇ | |
| Eupatorium perfoliatum | Common Boneset | |
| Eutrochium species | Joe-Pye Weed | |

| Scientific Name | Common Name | Notes |
|-------------------------------|------------------------|--|
| Gaillardia species | Blanketflower ◇ | |
| Gazania rigens | South African Daisy | |
| Hemerocallis species | Daylily ◇ | |
| Hibiscus moscheutos | Common Rose Mallow ◇ | |
| Kosteletzkya virginica | Seashore Mallow □△◇ | |
| Liatris species | Gayfeather | |
| Limonium carolinianum | Carolina Sea Lavender | |
| Oenothera species | Sundrops | <i>Do not plant near airfield</i> |
| Perovskia atriplicifolia | Russian Sage | |
| Phlox species | Phlox | |
| Rhexia species | Meadowbeauty | |
| Rhododendron species | Asian or native azalea | |
| Rhus copallinum | Winged sumac | <i>Do not plant near airfield</i> |
| Rosmarinus officinalis | Rosemary ◇ | |
| Rubus sp. | Blackberry | <i>Do not plant near airfield. Can be used to create a "security border"</i> |
| Rudbeckia fulgida | Blackeyed Susan | |
| Sedum x Autumn Joy | Autumn Joy Sedum | |
| Sempervivum | Hens and Chicks | |
| Solidago sempervirens | Seaside Goldenrod ◇△ | |
| Solidago species | Goldenrod | |
| Symphyotrichum species | Aster | |
| Tradescantia species | Spiderwort | |
| Tulbaghia violacea | Society Garlic | |
| Viola sororia | Common blue violet | |
| Yucca species □ | Yucca | |

Bold text indicates some salt tolerance

□ denotes plants that are especially salt tolerant

△ denotes plants that are especially tolerant of occasional salt flooding

◇ denotes plants that tolerate wet conditions and/or occasional brackish flooding

Plants listed as not for use near airfield should be located 1/4 mile or more from airfield surface due to potential wildlife attracting fruit

8.2.2.4 Approved Plant List – Grasses, Sedges & Rushes

NOTE: Care should be used when planting most species of grass to avoid dense stands of brush that can provide habitat for wildlife near the airfield.

Table 7: Approved Grasses, Sedges & Rushes List

| Scientific Name | Common Name | Notes |
|------------------------|-------------------|-----------------------------------|
| Distichlis spicata | Salt Grass □ | |
| Eragrostis spectabilis | Purple Love Grass | <i>Do not plant near airfield</i> |
| Juncus effusus | Common Rush | |
| Muhlenbergia species | Muhly grass | |

| Scientific Name | Common Name | Notes |
|-------------------------|-------------------------|-----------------------------------|
| Panicum virgatum | Switch Grass | <i>Do not plant near airfield</i> |
| Schizachyrium scoparium | Little Bluestem | |
| Spartina patens | Saltmeadow Cordgrass □Δ | |
| Spartina alterniflora | Saltmarsh Cordgrass □ | |

Bold text indicates some salt tolerance

□ denotes plants that are especially salt tolerant

Δ denotes plants that are especially tolerant of occasional salt flooding

◇ denotes plants that tolerate wet conditions and/or occasional brackish flooding

Plants listed as not for use near airfield should be located 1/4 mile or more from airfield surface due to potential wildlife attracting fruit

8.2.2.5 Approved Plant List – Annuals & Shortlived Perennials

Table 8: Approved Annuals & Shortlived List

| Scientific Name | Common Name | Notes |
|---|----------------------------|-------|
| Aquilegia canadensis | Eastern Columbine | |
| Begonia x semperflorens-cultorum | Wax Begonias | |
| Coreopsis species | Coreopsis, Tickseed | |
| Cosmos bipinnatus | Cosmos | |
| Gazania rigens | South African Daisy | |
| Portulaca | Purslane, Moss Rose | |

Bold text indicates some salt tolerance

□ denotes plants that are especially salt tolerant

Δ denotes plants that are especially tolerant of occasional salt flooding

◇ denotes plants that tolerate wet conditions and/or occasional brackish flooding

Plants listed as not for use near airfield should be located 1/4 mile or more from airfield surface due to potential wildlife attracting fruit

8.2.2.6 Prohibited Plant List

This list is not intended to be all-inclusive. Careful consideration of the installation BASH plan should be made when selecting plants for landscaping anywhere near the airfield. Generally speaking, plants which produce berries or an abundance of seeds which are attractive to birds, should not be planted within 1/4 mile from the airfield.

Millet, partridge pea and lespedeza species shall not be used for erosion control as they have been observed to attract large flocks of mixed blackbirds.

Table 9: Prohibited Plant List

| Scientific Name | Common Name | Notes |
|-----------------------|---------------------|-----------------|
| Acer platanoides | Norway Maple | |
| Agrostis capillaris | Colonial bent-grass | |
| Ailanthus altissima | Tree-of-heaven | |
| Akebia quinata | Five-leaf Akebia | |
| Albizia julibrissin | Mimosa | Already Present |
| Aldrovanda vesiculosa | Waterwheel | |

| Scientific Name | Common Name | Notes |
|----------------------------------|---------------------------------|--|
| Alliaria petiolata | Garlic Mustard | |
| Alternanthera philoxeroides | Alligator-weed | Already Present |
| Ampelopsis brevipedunculata | Porcelain-berry | |
| Arthraxon hispidus var. hispidus | Joint Head Grass | |
| Asclepias curassavica | Mexican Milkweed | |
| Berberis thunbergii | Japanese Barberry | |
| Carex kobomugi | Japanese Sand Sedge | |
| Celastrus orbiculatus | Oriental Bittersweet | |
| Centaurea stoebe ssp. micranthos | Spotted Knapweed | |
| Cirsium arvense | Canada Thistle | |
| Cirsium vulgare | Bull Thistle | |
| Commelina communis | Asiatic Dayflower | Already Present |
| Dioscorea polystachya | Cinnamon Vine | |
| Dipsacus fullonum | Wild Teasel | |
| Echinochloa frumentaceae | Japanese millet | BASH |
| Egeria densa | Brazilian Waterweed | |
| Eichhornia crassipes | Water Hyacinth | |
| Elaeagnus species | Russian Olive Species | Already Present |
| Euonymus alatus | Winged Euonymus | Already Present |
| Euonymus fortunei | Winter Creeper | |
| Ficaria verna | Lesser Celandine | |
| Glechoma hederacea | Gill-over-the-ground | |
| Hedera helix | English ivy | Already Present |
| Heracleum mantegazzianum | Giant Hogweed | |
| Holcus lanatus | Common Velvet Grass | |
| Humulus japonicus | Japanese Hops | |
| Hydrilla verticillata | Hydrilla | |
| Imperata cylindrica | Japanese Blood Grass/Cogongrass | |
| Imperata cylindrica | Cogon Grass | |
| Ipomoea aquatica | Water spinach | |
| Iris pseudacorus | Yellow Flag | Already Present |
| Lespedeza bicolor | Shrubby Bushclover | Already Present |
| Lespedeza cuneata | Sericea Lespedeza | BASH concern - already present in some areas |
| Ligustrum species | Privet | Already Present |

| Scientific Name | Common Name | Notes |
|--|------------------------------|---|
| <i>Lolium perenne</i> | Perennial ryegrass | BASH concern - may be evaluated for use on a case by case basis |
| <i>Lonicera fragrantissima</i> | Winter Honeysuckle | |
| <i>Lonicera japonica</i> | Japanese Honeysuckle | Already Present |
| <i>Lonicera maackii</i> | Amur Honeysuckle | |
| <i>Lonicera morrowii</i> | Morrow's Honeysuckle | |
| <i>Lonicera tatarica</i> | Tartarian Honeysuckle | |
| <i>Ludwigia grandiflora</i> ssp. <i>Hexapetala</i> | Large flower primrose willow | |
| <i>Lysimachia nummularia</i> | Moneywort | |
| <i>Lythrum salicaria</i> | Purple Loosestrife | |
| <i>Melia azedarach</i> | Chinaberry | Already Present |
| <i>Microstegium vimineum</i> | Japanese Stiltgrass | Already Present |
| <i>Miscanthus sinensis</i> | Chinese Silvergrass | Present at visitor's center. Removal being attempted |
| <i>Miscanthus</i> spp. | Silvergrass, Fountaingrass | |
| <i>Morus alba</i> | White Mulberry | Already Present |
| <i>Murdannia keisak</i> | Marsh dewflower | |
| <i>Myriophyllum aquaticum</i> | Parrot Feather | |
| <i>Myriophyllum spicatum</i> | Eurasian Water-milfoil | |
| <i>Najas minor</i> | Brittle Naiad | |
| <i>Nandina domestica</i> | Heavenly bamboo | Already Present |
| <i>Oplismenus hirtellus</i> ssp. <i>Undulatifolius</i> | Wavyleaf Grass | |
| <i>Panicum miliaceum</i> | Proso millet | BASH |
| <i>Panicum ramosum</i> | Browntop millet | BASH |
| <i>Paulownia tomentosa</i> | Royal Paulowina | |
| <i>Pennisetum alopecuroides</i> | Chinese Fountain Grass | |
| <i>Pennisetum glaucum</i> | Cattail millet | BASH |
| <i>Perilla frutescens</i> | Beefsteak Plant | |
| <i>Persicaria longiseta</i> | Long-bristled Smartweed | |
| <i>Persicaria perfoliata</i> | Mile-a-minute | |
| <i>Phleum pratense</i> | Timothy | |
| <i>Phragmites australis</i> ssp. <i>australis</i> | Common Reed | Already Present |
| <i>Phyllostachys aurea</i> | Golden Bamboo | Already Present |

| Scientific Name | Common Name | Notes |
|------------------------------|--------------------------|---------------------------------------|
| Poa compressa | Flat-stemmed Bluegrass | |
| Poa trivialis | Rough Bluegrass | |
| Populus alba | Silver Poplar | Present around Munitions Storage Area |
| Pueraria montana var. lobata | Kudzu | |
| Pyrus calleryana | Callery Pear | |
| Reynoutria japonica | Japanese knotweed | |
| Rhodotypos scandens | Jetbead | |
| Rosa multiflora | Multiflora Rose | Already Present |
| Rubus phoenicolasius | Wineberry | |
| Rumex acetosella | Sheep sorrel | Already Present |
| Rumex crispus ssp. crispus | Curly dock | |
| Salvinia molesta | Giant Salvinia | |
| Securigera varia | Crown-vetch | |
| Serecea spp. | Korean/Chinese Lespedeza | |
| Setaria italica | Foxtail millet | BASH |
| Solanum viarum | Tropical Soda Apple | |
| Sorghum halepense | Johnson Grass | Already Present |
| Spiraea japonica | Japanese Spiraea | |
| Stellaria media | Common Chickweed | Already Present |
| Trapa natans | European Water Chestnut | |
| Ulmus pumila | Siberian Elm | |
| Urtica dioica | European Stinging Nettle | |
| Veronica hederifolia | Ivy-leaved Speedwell | |
| Viburnum dilatatum | Linden arrow-wood | |
| Vinca major | Greater Periwinkle | |
| Vinca minor | Periwinkle | Already Present |
| Vitex rotundifolia | Beach Vitex | |
| Wisteria floribunda | Japanese Wisteria | |
| Wisteria sinensis | Chinese Wisteria | |

Use of plants listed by the USDA (<https://plants.usda.gov>) as invasive in North Carolina, Virginia, Tennessee, Maryland, West Virginia or Kentucky is prohibited. Use of plants listed as invasive anywhere in the U.S.A is strongly discouraged.

8.2.3 Wetlands

The 633 CES/CEIE is not responsible for project compliance with Federal, State and local wetland regulations. It is incumbent upon Design/Contracting personnel and the Contractors to determine wetland permitting and mitigation requirements. Please note that the proposed activity may be covered by a Nationwide Permit (NWP) or a State Program General Permit (SPGP). A Joint Permit Application (JPA) will be required to determine if either a NWP or a

SPGP is appropriate for the proposed activity. Allow at least 60 – 90 days after application submission for the acquisition of a wetlands permit if one is required. For additional information on the application process please refer to this link:

<http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/PermitsFeesRegulations>

All wetlands permitting shall be completed prior to the start of construction activities which will affect the waters of the United States. Contractors selected to perform work in wetlands will be responsible for all fees associated with issuance of wetland permits to include fees for required public notification. The 633 Air Base Wing Commander shall be listed as the permit holder of record on all JPAs. The 633 Civil Engineer Squadron Deputy Base Civil Engineer shall be listed as an agent to facilitate closure of permits upon project completion.

If the installations base wide wetland delineation is no longer legally valid and it is determined wetlands may be present on a project site, a wetland delineation must be completed to facilitate permitting. To delineate wetlands and other waters of the United States, the Consultant selected should be trained in delineation standards set forth within the United States Army Corps of Engineers (USACE) 1987 Corps Wetlands Delineation Manual, and subsequent guidance, to perform a wetland(s) delineation. The Consultant's findings should then be provided to the Corps in the form of a report. Corps staff will review the validity of the report and make a written and appealable agency determination on the presence and extent of wetlands and other waters of the United States on the property. Confirmation of a delineation by the USACE generally takes 30 days after submission.



Figure 7: Example of a wetland.

A Joint Permit Application (JPA) is used to apply for standard permits, also known as individual permits, for work in the waters of the United States (including wetlands) within Virginia. Such work may include construction, dredging, filling or excavation in the waters or in wetlands. The JPA is also used for a Nationwide Permit (NWP) Preconstruction Notification (PCN) when required. If a JPA is submitted as a PCN, then this must be boldly marked as a PCN application. There is a box that should also be check marked to indicate the JPA is for PCN on page 7 of the July 2008 JPA form.

These applications are used to apply for permits from the Norfolk District Army Corps of Engineers, the Virginia Marine Resources Commission (VMRC), the VDEQ and the Local Wetlands Boards (LWB). The JPA process and JPA forms are used by the USACE, the VMRC, the VDEQ and the LWB for permitting purposes involving water, wetlands and/or dune/beach resources, including, but not limited to, construction, dredging, filling or excavation. Read the directions on the application carefully to determine how many copies must be submitted to the VMRC, who acts as the clearinghouse for permit applications.

Permit applicants may obtain paper copies of the Joint Permit Applications by calling the Corps at 757-201-7652, or by download at:

<http://www.nao.usace.army.mil/Missions/Regulatory/JPA.aspx>

There are two different Joint Permit Applications available for use depending on the type of activity that you are proposing. If you propose to impact tidal waters, wetlands, or dunes/beaches in the Tidewater area of Virginia, you may be eligible to use the TIDEWATER JPA, an abbreviated version of the Joint Permit Application. Activities eligible to use the Tidewater JPA include piers, boathouses, boat ramps, moorings, marinas, aquaculture facilities, riprap revetments, bulkheads, marsh toe stabilizations, breakwaters, beach nourishment, groins, jetties, road crossings over tidal waterways and utility lines over or under tidal waterways. Dredging and excavation projects in tidal waterways/wetlands **must** use the Standard JPA.

Your complete JPA shall be submitted to 633 CES/CEIE Natural Resources Program Manager for review and routing to the 633 Air Base Wing (633 ABW) for the signature of the 633 ABW Commander (633 ABW/CC). The 633 Civil Engineer Squadron Deputy Commander (633 CES/CD) shall be designated as the agent.

Contracts, specifications and bid documents/advertisements should clearly indicate that it is the General Contractor's responsibility to determine and verify the presence and location of jurisdictional wetlands, prepare permit applications and other documents for the 633 ABW, submit permit fees and make any required payments in lieu of mitigation to the Virginia Aquatic Resources Trust Fund or its legal designee.

Contractors and Federal Government representatives must make themselves aware of all specific conditions associated with the approved permit. Therefore, the approved permit must be read by both the Contractor and Federal Government representatives. Please note the majority of permits approved will have conditions specific to the permitted project which must be followed. For example, some individual permits will require monthly inspection reports and photos of site conditions to be maintained.

8.2.4 Roof Design to Minimize Bird Colonization

As an Air Force Installation, the presence of large colonies of birds poses a hazard to the JBLE-Langley mission. Roof design that minimizes bird colonization will reduce the frequency of aircraft impacts with wildlife and protect the life of military personnel in and around the airfield. Colonial shorebirds such as Least Tern, Killdeer and American Oystercatcher have demonstrated an affinity for rooftop nesting on flat gravel rooftops. In order to prevent Bird Aircraft Strike Hazards (BASH), the installation of flat gravel rooftops on new buildings **must** be avoided. Major roof repair to existing gravel rooftops should include the removal of gravel substrate and replacement with energy efficient materials such as tar shingles, rubber, vinyl or polyurethane materials.

If a shorebird colony is found to be actively nesting on a building during repair or replacement of an existing roof, harassment or take of shorebirds is **prohibited** by the Federal Migratory Bird Act. If shorebirds are present, the 633 CES/CEIE Natural Resources

Program Manager should be contacted so that the best course of action in compliance with all Federal and State regulations can be identified.

9.0 Pollution Prevention

9.1 Green Procurement (Use of Recycled-Content Products)



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 Guideline (CPG) Program for recycled-content products. The Contractor shall use recycled-content products as required by the EPA, other governmental agencies and Federal Acquisition Regulation (FAR) clauses.

It is mandated by Executive Order 13834, (Efficient Federal Operations), and Section 6002 of the Resource Conservation and Recovery Act (RCRA) that the Federal Government use recycled-content products in the construction and/or renovation of facilities. It is the intent of the Federal Government to comply with the EPA requirement 100% of the time and use as many of the applicable listed recycled-content products as feasible and economically practical. The Contractor shall consider this a standard requirement for all aspects of the project construction.

The recycled-content products listed in the CPG can be found on EPA's website www.epa.gov/cpg/products.htm. These products are also listed in Attachment 6, Contract Submittal and Contractor Reporting Form.



This list is subject to change at any time so it is the Contractor's responsibility to be aware of any updates or additions.

Such products shall also comply with the requirements of the EPA's Consolidated Recovered Materials Advisory Notice (RMAN). The RMANs recommend recycled-content ranges for CPG products based on current information on commercially available recycled-content products. The recommended recovered materials content percentage can be obtained by clicking on the product on the website.

9.1.1 Green Procurement Forms

Before starting the project, the Contractor shall complete Attachment 6 indicating the items planned for use. The Contractor will provide this to the Contracting Officer's Representative and the Project Manager. Upon completion of project construction, the Contractor shall complete the form again. At this time, the Contractor shall indicate the use and non-use of products that are contained in the CPG, and shall list the recycled-content percentage for the applicable item. In each instance where a recycled-content construction product is not used, the Contractor shall provide to the Contracting Officer's Representative (or the designated representative) and the Project Manager a completed Exemption Form, Attachment 7, Recovered Materials Determination Form.

The Contractor shall complete this form for all items for which he or she desires an exemption from the Green Procurement Program for Recovered Materials that are being procured. Exemptions can only be taken if ***all*** of the following conditions are met:

- 1) The item is not available within a reasonable period of time
- 2) The item fails to meet a performance standard in the specifications, and
- 3) The item was only available at an unreasonable price (i.e., the recycled-content product costs more than the non-recycled content product)

NOTE: The fourth reason on the Recovered Materials Determination Form (i.e., the item is not available from two or more sources), does not apply to construction/renovation Contractors as the Federal Government will not prescribe where you can get your materials from. The Contractor shall provide specific reasons why an item is exempt, and shall furnish supporting documentation.

The Contractor will sign the completed Attachment 6 form as the “Procurement Originator,” which will also be signed by the 633 CES Engineering (633 CES/CEN) Flight Chief or Deputy Flight Chief. The form(s) will be kept in the project folder indefinitely.

10.0 Installation Restoration Program

This section is only required if the project work is being conducted in an Installation Restoration Program (IRP) area. If applicable, ensure drawings define the IRP boundaries and well locations. Appropriate and additional guidance will be provided if the project does impact an IRP site.

10.1 Soil Support Program (SSP) Accountability

The soils obtained from off-base sources shall meet the criteria outlined below. The soils generated during construction project excavation will be collectively referred to as “soil media.” Soil media is not inherently waste-like, but it may contain waste-like materials, including contaminants associated with historical operations at the site. Given the base history of operations, the Contractor must make a determination as to whether the soil media is contaminated. The exception is if the soil media is to be placed back into the same hole it was removed from, then testing is not required. If soil media is determined to be contaminated, then a hazardous waste determination must be made. Standard test methods are described below. Contaminated soil media shall be managed as a solid waste and removed from base in accordance with applicable requirements for disposal of solid waste. If the soil media is determined to be uncontaminated and not waste-like, then it may be reused on JBLE-Langley as clean fill, upon request with the approval of the 633 CES/CEIE Hazardous Waste Program Manager, only if there is an identified need for it or it must be disposed of at an approved landfill.

10.1.1 Clean Soil

Projects requiring clean soil, including but not limited to topsoil and backfill materials, to be brought onto JBLE-Langley or relocated within the boundaries of the base must meet minimum standards based on results of physical (geotechnical) and chemical testing. All materials will meet geotechnical specifications appropriate for the type of project being

accomplished and are typically identified elsewhere in the project specifications. The intent of this section is to prevent cross contamination (i.e. planned excavation) and define clean soil based on chemical and/or project specifications. Soil contaminant levels shall be tested, with test procedures and results documented to ensure that only the source(s) of topsoil and/or backfill deemed to have acceptable soil contaminant levels be utilized for current and future use. The Contractor shall implement a plan and confirm the proposed source(s) of clean topsoil and/or backfill (borrow source) meet the clean soil specifications for the project. The plan should incorporate borrow source information, sampling data and testing results. The Contractor will submit the sampling plan and results within **30 days** of the start of the project to allow for the review and acceptance/rejection of soil. As a minimum, the Contractor shall meet the following standards:

10.1.2 Borrow Soil

The Contractor shall provide detailed borrow source information (i.e., location, owner, operator, past and current land use, previous chemical testing results, etc.) at the point of planned excavation to the 633 CES/CEIE Hazardous Waste Program Manager to determine chemical testing requirements. The Contractor shall also submit a certification stating:

- The materials contain no asbestos
- No gross contamination have been discerned by visual or olfactory observations and
- No spills of a hazardous waste (40 CFR 261) have occurred at the borrow site

If previous chemical testing results exist and are provided, the 633 CES/CEIE Hazardous Waste Program Manager will evaluate those results to determine if they are sufficient and that the proposed borrow soils meet clean soil requirements. If testing is incomplete, the 633 CES/CEIE Hazardous Waste Program Manager will review borrow source information to determine chemical sample requirements.

10.1.2.1 On-Base Soil Sources

Unless otherwise provided in the contract, the Contractor shall bear all expenses of developing the source. For the site where soil is reclaimed from Federal Government land, the Contractor may be required to perform final grade and seeding according to project requirements.

10.1.2.2 Excess Soil Work

Acceptable excess soil shall be delivered to the designated location(s) following approved haul routes. For the site where excess soil is deposited on Federal Government land, the Contractor may be required to perform final grade and seeding according to project requirements.

10.1.3 Sample Plan

At least one composite sample (6 – 8 grabs) for each *undisturbed* borrow source would be taken from the original point of excavation and required for each 5,000 cubic yards of soil. For soil taken from *disturbed* borrow sources, samples are required for each 1,000 cubic yards of soil. The nature of the borrow source is to be considered when determining the quantity and depth of the samples. Additional samples may be required to adequately characterize the proposed borrow source (i.e. laterally and vertically). The Contractor shall submit a Sample Plan (to include site map, excavation area, location and depth of samples) for the 633 CES/CEIE Hazardous Waste Program Manager's review and approval.

Composite Sample Plan

Undisturbed borrow source:
1 sample per each 5,000 cubic yards

Disturbed borrow source:
1 sample per each 1,000 cubic yards

10.1.4 Chemical Testing Standards

The analysis must be performed by an accredited or certified laboratory approved by the EPA and the State of Virginia (i.e., Environmental Laboratory Accreditation Program (ELAP) or the Virginia Environmental Laboratory Accreditation Program (VELAP)). Submit a copy of the chain of custody and complete validated report of analysis to the 633 CES/CEIE Hazardous Waste Program Manager for review and approval **30 days** prior to use of any borrow soils. Chemical testing of any borrow source will include sampling for the following suite of contaminants (test requirements may be reduced based on borrow source information):

- Total Petroleum Hydrocarbons (TPH) to include Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) [EPA Method SW846; EPA Method 8015C]
- Volatile Organic Compounds (VOCs) [EPA Method 8260B] to include Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)

The soil support test suite shall also include unless generator knowledge suggests otherwise:

- Semi-Volatile Organic Compounds (SVOCs) [EPA Method SW846 8270D]
- Pesticides [EPA Method SW846 8081B]
- Herbicides [EPA Method SW846 8151A]
- Polychlorinated Bi-phenyls (PCBs) [EPA Method SW846 8082A]
- Cyanide [EPA Method SW846 9210]
- Target Analyte List (TAL) Metals (including Mercury) [EPA Method SW846 6020A/7471B]
- Volatile Organic Compounds (VOCs) [EPA Method SW846 8260B] (other than BTEX compound reference in the preceding paragraph)
- Perfluorooctane Sulfonate (PFOS)/Perfluorooctanoic Acid (PFOA) [EPA Method SW846 537]

The above analysis suites will be analyzed on a ***total constituent basis***.



It is the Contractor's responsibility to coordinate with their selected lab to ensure the testing methods used are the approved testing methods.

10.1.5 Clean Soil Determination

Soils tested under the EPA screening levels and/or base "background" levels will be considered acceptable "clean" soil. Results from the total constituent analysis must not exceed EPA Region III "Residential" Risk Based Concentrations (RBC) and the JBLE-Langley Upper Tolerance Limit (UTL) background soil concentrations. For use in current and future industrial areas, EPA Region III "Industrial" RBCs may be considered but shall not exceed UTL background levels.

10.1.6 Excavation and Delivery Screening

Common to any multiple point sampling, composite testing may not accurately characterize the entire site. Should contamination be detected (i.e., free product, stained soils, chemical odors, etc.) during excavation or delivery, soil operations shall be ***immediately*** discontinued pending the 633 CES/CEIE Hazardous Waste Program Manager's notification and resolution. Additional soil testing and screening may be required to determine if continued use of the borrow site is acceptable.

10.1.7 Material Physical Characteristics

All soil obtained from sources within or outside the limits of Federal Government-controlled land shall meet the physical characteristics as defined in project specifications.

10.2 Contaminated Soil and Free Product

Any material (soil) that is suspected of containing petroleum products shall be reported to the Contracting Officer's Representative or the designated representative. If discovered, the Contractor shall mitigate any potential threat to the workers, public and the environment. The area that will be disturbed under this contract has the potential to have free product migrate into and under the construction site.

10.3 Site Safety

Site summaries from our Management Action Plan are furnished with this contract to familiarize personnel with the potential hazards associated with construction and demolition work at these sites. Ensure workers are informed of potential hazardous exposures from working at these sites, and that the appropriate precautions are followed to minimize hazards to human health and the environment. Personnel working at these sites shall have ***current*** 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) Training. At least one individual on site should have completed the OSHA 8-hour supervisor training course. The plans identify the boundary of these IRP sites. To perform work at these sites, the Contractor must have a Health and Safety Plan and Hazardous Waste Disposal Plan for proper disposal of all regulated materials generated during execution of this project.

10.4 Monitoring Wells

There may be several monitoring wells installed in and around the proposed construction area. Site maps and construction drawings provide the location of these wells. The Contractor shall take all precautions to prevent any damage to wells. If the wells and associated structures are damaged during the project, the Contractor shall repair/replace all damages at no additional expense to the Federal Government. The Contractor shall dispose of all regulated materials during repair of the damaged structures and remove any free product as required by the VDEQ regulations.

10.5 Additional Excavation

Prior to any excavation beyond the immediate area or boundary of the construction site, the Contractor shall coordinate with the Contracting Officer's Representative, the 633 CES/CEI, and the Air Force Civil Engineer Center/Environmental Management Operations (AFCEC/CZO) to obtain proper approval. Please note that this is accomplished through the Air Force 103 form.

Additional work in an IRP area will likely require additional notification to the EPA and the VDEQ by AFCEC/CZO.

11.0 Environmental Management Systems (EMS) Conformance

The Contractor shall perform work under this contract consistent with the relevant policy and objectives identified in JBLE-Langley's Environmental Management System (EMS). The Contractor shall perform work in a manner that conforms to all appropriate Environmental Management Programs and Operational Controls identified by the JBLE-Langley EMS. In the case of a noncompliance, the Contractor shall respond and take corrective action immediately. In the case of a nonconformance, the Contractor shall respond and take corrective action based on the time schedule established by the 633 CES/CEIE EMS Coordinator. In addition, the Contractor shall ensure that all personnel associated with the work of this contract (i.e., employees, subcontractors, etc.) are aware of the roles and responsibilities identified by the EMS and how these requirements affect their work performed under this contract.



Figure 8: Common EMS Components

Upon inclusion in the contract Statement of Work, the Contracting Officer's Representative will verify that all Contractor personnel have acquired EMS Awareness Training IAW AFI 32-7001, at their appropriate site or location. JBLE-Langley has created a base-specific EMS Awareness and Environmental Compliance Training to meet the requirements of the referenced AFI. The training can be accessed through The Environmental Awareness Course Hub (TEACH) website at <https://usaf.learningbuilder.com>.

Certifications showing completion of the above mentioned training should be submitted to the 633 CES/CEIE EMS Coordinator at 633CES.EMS.TRAINING@us.af.mil. If the training is completed as a group, one certificate and a roster of all those in attendance can be submitted.

NOTE: Please open the training link in either Chrome or Edge, as Internet Explorer is not supported.

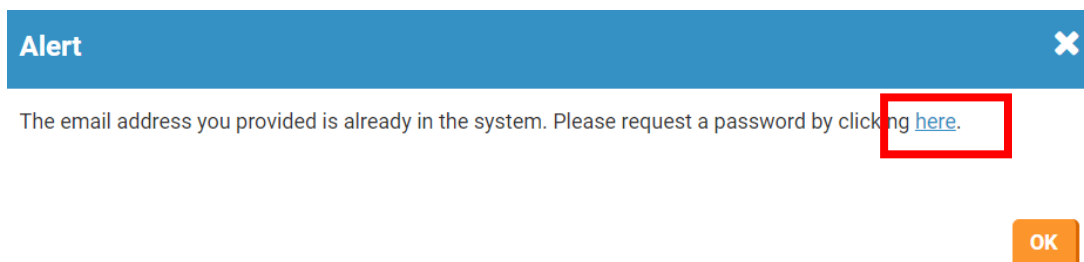
11.1 Accessing and Completing the Training

11.1.1 Logging In

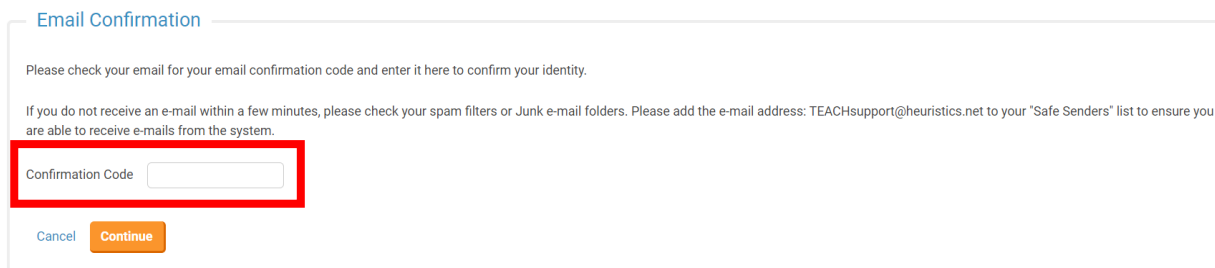
If you already have an account, simply enter your username and password. If you are new to TEACH, select the *Register for an Account* button.

Enter the email address you want associated with the TEACH account. If no alert message appears after typing the email address, proceed by entering Password, and First and Last Name. Note, not all form fields are required to be filled out.

If you receive an alert message, as shown below, the email is already registered in the system. Select the *here* button to request a password. Instructions will then be sent to the email entered.

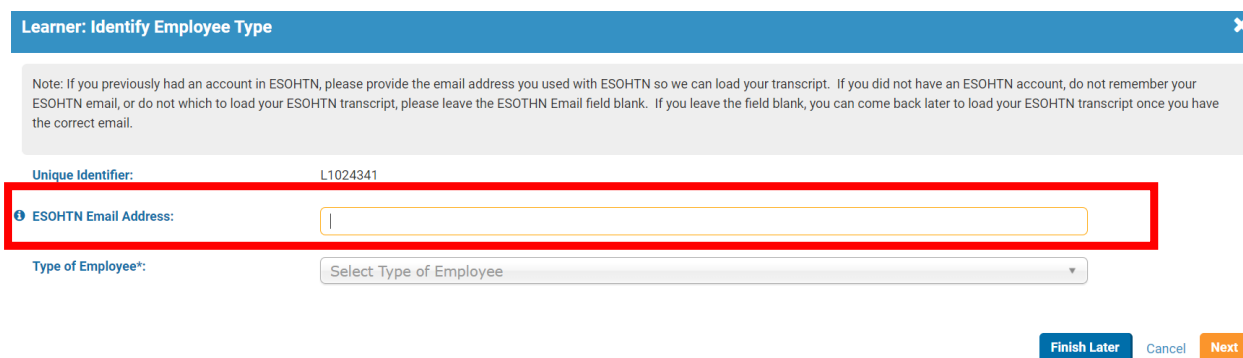


After submitting the new account information, a Confirmation Code will be sent to the email used to establish the account. Enter the Confirmation Code as indicated and select *Continue*.

A screenshot of a web form titled "Email Confirmation". The form has a light blue header bar with the title. Below the header, there is a paragraph of text: "Please check your email for your email confirmation code and enter it here to confirm your identity." followed by another paragraph: "If you do not receive an e-mail within a few minutes, please check your spam filters or Junk e-mail folders. Please add the e-mail address: TEACHsupport@heuristics.net to your 'Safe Senders' list to ensure you are able to receive e-mails from the system." Below this text is a label "Confirmation Code" followed by a text input field. A red rectangular box highlights the input field. At the bottom of the form, there are two buttons: a blue "Cancel" button and an orange "Continue" button.

11.1.2 Enter Account Details

For users that had access to the previous training database, Environmental, Safety, and Occupational Health Training Network (ESOHTN), accounts can be linked to TEACH by providing the email address assigned to the ESOHTN account, as shown below.



Learner: Identify Employee Type

Note: If you previously had an account in ESOHTN, please provide the email address you used with ESOHTN so we can load your transcript. If you did not have an ESOHTN account, do not remember your ESOHTN email, or do not wish to load your ESOHTN transcript, please leave the ESOHTN Email field blank. If you leave the field blank, you can come back later to load your ESOHTN transcript once you have the correct email.

Unique Identifier: L1024341

ESOHTN Email Address:

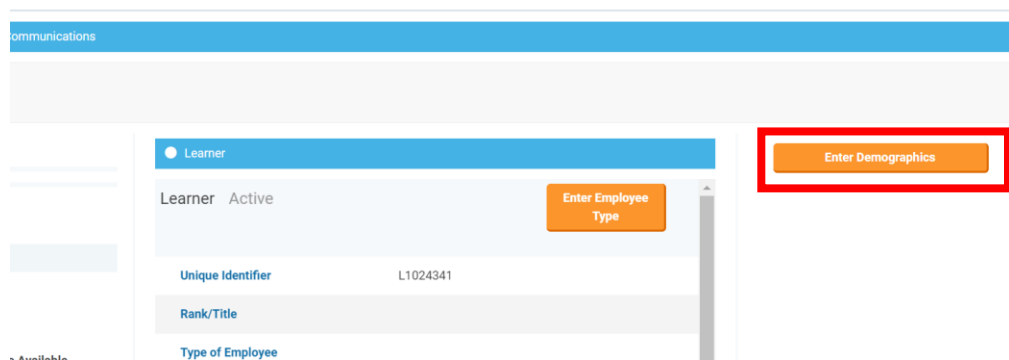
Type of Employee*: Select Type of Employee

[Finish Later](#) [Cancel](#) [Next](#)

Begin to enter the account details by either selecting the appropriate *Type of Employee* or selecting *Finish Later* which will lead to the account details screen.

If the email address was already in the system, then Select *My Account* on the top right hand side of the website. On the new screen, select *Enter Demographics*.

Account Details



communications

Learner

Learner Active [Enter Employee Type](#)

Unique Identifier L1024341

Rank/Title

Type of Employee

[Enter Demographics](#)

Use the guidance below when completing the demographics.

Employee Type: Civilian, Air National Guard, Reserves, Contractor, etc.

Rank/Title: Select the appropriate position; if the title is not listed select NA

Job Type: Select the job type closest to what describes duty title/additional duties

Installation: Select the base and unit that closest matches; Primary Subordinate Units (PSUs) shall select the nearby installation. An example is below for Contractors.

Other: Enter Wing/Group/Squadron; if Contractor state “Contractor”

Branch of Service/Company Name/Unit: Complete accordingly; if a contract or tenant, please provide full name of company

| | |
|--|--|
| Unique Identifier: | L1024341 |
| Type of Employee: | Contractor (Construction) |
| Rank/Title*: | NA |
| Job Type*: | Construction Occupations |
| Job Focus Tasks / Major Responsibilities / Additional Duties*: | Construction Contractor ✕ |
| Installation*: | United States Air Force (USAF) > ACC > JB Langley-Eustis > JBLE-Langley > Other (change) |
| "Other" Details: | |
| Branch of Service/Company Name/Unit Designation*: | NAME |

11.1.3 Take the Course & Print Certificate

Once account details have been completed, on the Home screen, select the *Begin* button to begin.

Transcripts

| [L1024341 / Active] | |
|-----------------------------|-----------|
| Transcript | Status |
| TEACH Course Completion Log | Available |
| Begin | |

Then select the *Search for a Course* button.

Courses and Transcripts

TEACH Course Completion Log [Show Details](#)

[Return to: Transcripts](#)

[Create/Update ITP](#)

Courses

[Show More Instructions](#)
To view available courses, click the "Search for Course" button. Expand "Show More Instructions" for additional details.

[Search for Course](#)

[Create/Update ITP](#)

Search for the appropriate course using the information below.

Course Number: UEC311JBLEL00331

Course Title: JBLE-Langley Environmental Management System (EMS) and Environmental Compliance Training

This document is subject to change at any time.

Keyword:

Course Number:

Search Results

| Title | Provider | Date Published | Duration | |
|--|--------------|----------------|----------|---|
| JBLE-Langley Environmental Management System (EMS) and Environmental Compliance Training UEC311JBLEL00331 | JBLE-Langley | 1/22/2021 | 60 | <input type="button" value="+ Select"/> |

Select + *Select* to the right of the course descriptions. A new screen should pop-up providing course details.

If the screen does not pop-up, the course should be listed in the *Courses* section on the home screen. From there, select the *Take Course* button.

On the course detail screen, select the link provided under *Course Materials*. Review the course material provided (***download the PDF document***).

JBLE-Langley Environmental Management System (EMS) and Environmental Compliance Training: Take Course

Instructions: In order to receive credit for this course, please return here after reviewing the course materials. There is an assessment for this course. Please click on the **orange continue button** to complete the process.

Course Title: JBLE-Langley Environmental Management System (EMS) and Environmental Compliance Training



Course Description: The purpose of this course is to provide students with general awareness of Environmental Management System (EMS) and an overview of the environmental programs at JBLE-Langley.

Duration: 60

Frequency: Annual

Date Published: 1/22/2021

Contact Info: SHERRY JOHNSON
SHERRY.JOHNSON.4@US.AF.MIL

Course Materials: [JBLE-Langley Environmental Management System \(EMS\) and Environmental Compliance Training.pdf](#)  

Once finished reviewing the course material, go back to the course description screen (if closed, go to the home screen). From the course description screen, select the *Continue* button.

A new screen will appear notifying you that there is an assessment for this course. Select the *Continue Assessment* button.

JBLE-Langley Environmental Management System (EMS) and Environmental Compliance Training: Course Assessment ✕

You have two attempts to pass this assessment. To review the course materials again, please click on the blue Back button.

Course Assessment*:

Incomplete (0 of 20 questions answered)

Continue Assessment

Back

Finish Later

Cancel

Upon completing the course, there will be a course evaluation. Once the course evaluation is finished, select the *Submit* button. The course evaluation **must** be completed before the training certificate will be provided.

For a Certificate of Completion, go back to the home screen. Under *Transcripts*, find the course name completed, and select either the yellow certificate in the middle of the course listing or the “gear icon” on the right.

Yellow certificate

Gear icon



Completed



- When selecting the yellow certificate, please note that the certificate will open in a new tab in the internet browser.
- When selecting the “gear icon”, an option list will appear. From that list, select *View Certificate*. The certificate will then open in the same window requiring the use of the back button to access the TEACH system.

Additional Notes:

- If the yellow certificate or the gear icon is not available – the course evaluation was not completed.
- ESOHTN *attendance records from 2013* were imported into TEACH. ESOHTN courses cannot be selected, viewed, re-taken or have certificates of completion. ESOHTN records will be shown on your transcripts only.

Once you have received the certificate, please send it to the 633 CES/CEIE EMS Coordinator via email at 633CES.EMS.TRAINING@us.af.mil.

After submission of the training certification, close out of the site by logging off. When using the site in the future, use the same Username and Password.

Attachment 1

Glossary of References and Supporting Information

References

9VAC5, *State Air Pollution Control Board (VDEQ)*
9VAC20, *Virginia Waste Management Board (VDEQ)*
9VAC25, *State Water Control Board (VDEQ)*
29 CFR Part 1926.62, *Occupational Health and Environmental Controls: Lead*
29 CFR Part 1926.1101, *Toxic and Hazardous Substances: Asbestos*
40 CFR Parts 50-98, *Air Programs*
40 CFR Part 112, *Oil Pollution Prevention*
40 CFR Parts 239-282, *Resource Conservation and Recovery Act (RCRA)*
40 CFR Parts 260-273, *Hazardous Waste Program*
40 CFR Part 261, *Identification and Listing of Hazardous Waste*
40 CFR Part 273, *Standards for Universal Waste Management*
40 CFR Part 280, *Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks*
40 CFR Part 300, *National Oil and Hazardous Substances Pollution Contingency Plan*
40 CFR Parts 350-372, *Superfund, Emergency Planning, and Community Right-To-Know Programs*
40 CFR Parts 700-799, *Toxic Substances Control Act*
40 CFR Part 763, *Asbestos*
40 CFR Part 1068, *General Compliance Provisions for Highway, Stationary, and Non-road Engine Programs*
49 CFR Parts 171-180, *Hazardous Materials Regulations*
AFI 32-7001, *Environmental Management*, 23 August 2019
AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*
Executive Order (EO) 13834, *Efficient Federal Operations*
FAR Clause 5352.223, *Health and Safety on Government Installations*
FAR Clause 52.223-3, *Hazardous Material Identification and Material Safety Data*
ISO 14001:2015, *Environmental management systems—Requirements with guidance for use*
NFPA 30, *Flammable and Combustible Liquids Code*
Title 10 USC Section 2577, *Disposal of Recyclable Materials*
Title 10 USC Section 2701, *Environmental Restoration Program*
Title 15 USC Sections 2601-2692, *Toxic Substance Control Act*

Title 15 USC Sections 2641-2656, *The Asbestos Hazard Emergency Response Act*

Title 16 USC Section 469, *Archeological and Historical Preservation Act*

Title 16 USC Section 1531, *Endangered Species Act of 1973*

Title 33 USC Sections 1251-1386, *The Federal Water Pollution Control Act*

Title 33 USC Sections 1251-1387, *Clean Water Act*

Title 42 USC Sections 4851-4856, *Residential Lead-base Paint Hazard Reduction*

Title 42 USC Sections 6901–6992k, *Resource Conservation and Recovery Act*

Title 42 USC Section 7401-7671q, *Clean Air Act*

Title 42 USC Sections 9601-9675, *Comprehensive Environmental Response, Compensation and Liability Act*

Title 42 USC Sections 11001-11050, *Emergency Planning and Community Right-to-Know Act*

Title 42 USC Sections 13101-13109, *Pollution Prevention Act*

Document Reference

1. EPA Region III Risk Based Concentration (RBC) table. As this table is updated every 6 months, analysis is to be determined by the table current at the time of testing. This table can be found at <http://www.epa.gov/reg3hwmd/risk/human>.
2. Background Chemical Data Document for JBLE-Langley, 21 Oct 97, Table 7-1. The UTL (Upper Tolerance Limit) Summary Table outlines the JBLE-Langley's background data set. This table can be requested through 633 CES/CEI.

Abbreviations and Acronyms

| | |
|--------------|--|
| 633 ABW | 633d Air Base Wing |
| 633 ABW/CC | 633d Air Base Wing Commander |
| 633 CES | 633d Civil Engineer Squadron |
| 633 CES/CD | 633 Civil Engineer Squadron Deputy Commander |
| 633 CES/CEI | 633d Civil Engineer Squadron - Installation Management Flight |
| 633 CES/CEIE | 633d Civil Engineer Squadron - Installation Management Flight, Environmental Element |
| 633 CES/CEN | 633d Civil Engineer Squadron – Engineering Flight |
| AF | Air Force |
| AFCEC/CZO | Air Force Civil Engineer Center/Environmental Management Operations |
| AFFF | Aqueous Film Forming Foam |
| AFI | Air Force Instruction |
| AFMAN | Air Force Manual |

| | |
|----------|---|
| AST | Aboveground Storage Tank |
| BASH | Bird Aircraft Strike Hazards |
| BTEX | Benzene, Toluene, Ethylbenzene and Xylenes |
| C & D | Construction and Demolition |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regulations |
| CGP | Construction General Permit |
| CRZ | Critical Root Zone |
| DD | Defense Department |
| DoD | Department of Defense |
| DRO | Diesel Range Organics |
| EISA | Energy Independence and Security Act |
| ELAP | Environmental Laboratory Accreditation Program |
| EMS | Environmental Management System |
| EPA | Environmental Protection Agency |
| ESC | Erosion and Sediment Control |
| ESOHTN | Environmental, Safety, and Occupational Health Training Network |
| FAR | Federal Acquisition Regulation |
| GHG | Greenhouse Gases |
| GRO | Gasoline Range Organics |
| HAZMART | Hazardous Market |
| HAZMAT | Hazardous Materials |
| HAZWOPER | Hazardous Waste Operations and Emergency Response |
| HMMP | Hazardous Materials Management Process |
| HVAC | Heating Ventilation and Air Conditioning |
| HW | Hazardous Waste |
| IAW | In Accordance With |
| IDF | Intensity Duration Frequency |
| IRP | Installation Restoration Program |
| JBLE | Joint Base Langley Eustis |
| JPA | Joint Permit Application |
| LBP | Lead Based Paint |
| LDA | Land Disturbing Activities |

| | |
|---------|--|
| LDR | Land Disposal Restriction |
| LWB | Local Wetlands Board |
| NCP | National Oil and Hazardous Substances Pollution Contingency Plan |
| NESHAPs | National Emission Standards for Hazardous Air Pollutants |
| NFPA | National Fire Protection Association |
| NOAA | National Oceanic & Atmospheric Administration |
| NSR | New Source Review |
| NWP | Nationwide Permit |
| ODC | Ozone Depleting Chemical |
| ODS | Ozone Depleting Substance |
| OSHA | Occupational Safety and Health Administration |
| P2 | Pollution Prevention |
| PCB | Polychlorinated Bi-phenyl |
| PCN | Preconstruction Notification |
| PFOA | Perfluorooctanoic acid |
| PFOS | Perfluorooctane sulfonate |
| POC | Point of Contact |
| POL | Petroleum, Oils and Lubricants |
| PSU | Primary Subordinate Unit |
| RBC | Risk Based Concentrations |
| RCRA | Resource Conservation and Recovery Act |
| RMAN | Recovered Materials Advisory Notice |
| SDS | Safety Data Sheet |
| SPGP | State Program General Permit |
| SSP | Soil Support Program |
| SVOCs | Semi-Volatile Organic Compounds |
| SWM | Stormwater Management Plan |
| SWPPP | Stormwater Pollution Prevention Plan |
| TAL | Target Analyte List |
| TCLP | Toxic Characteristic Leaching Procedure |
| TEACH | The Environmental Awareness Course Hub |
| TMDL | Total Maximum Daily Loads |
| TOX | Total Organic Halides |
| TSCA | Toxic Substance Control Act |

| | |
|-------|---|
| TPH | Total Petroleum Hydrocarbons |
| TPZ | Tree Protection Zone |
| USACE | United States Army Corps of Engineers |
| USAF | United States Air Force |
| USC | United States Code |
| UST | Underground Storage Tank |
| UTL | Upper Tolerance Limit |
| VAC | Virginia Administrative Code |
| VDEQ | Virginia Department of Environmental Quality |
| VELAP | Virginia Environmental Laboratory Accreditation Program |
| VMRC | Virginia Marine Resources Commission |
| VOCs | Volatile Organic Compounds |
| VPDES | Virginia Pollutant Discharge Elimination System |
| VRRM | Virginia Runoff Reduction Method |
| VSMP | Virginia Stormwater Management Program |
| VSMW | Virginia Solid Waste Management |

Definitions

Air Quality – the specific measurement in the ambient air of a particular air pollutant at any given time. (VDEQ)

Compliance – The measure of how well an organization adheres to Federal, State, and Local Legal drivers.

Conformance – The measure of how well an organizational-level's EMS or the appropriate facility meets the requirements of its EMS and the International Organization for Standardization's 14001, standard identified in this Instruction and other policies, or other requirements established by DoD, AF, ANG, installations, and in accordance with the Air Force's EMS declaration of conformance protocol.

Construction Waste – Any solid waste that is produced or generated during construction, remodeling, or repair of pavements, houses, commercial buildings and other structures.

Criteria Pollutant (CP) – air pollutants for which National Ambient Air Quality Standards (NAAQS) have been established. Criterial pollutants include Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂), Carbon Monoxide (CO), Ozone (O₃), Particulate Matter (PM-10 and PM-2.5) and Lead (Pb).

Critical Root Zone (CRZ) – The minimum amount of area in order to prevent killing existing trees through the placement of barrier structures. This is generally agreed to be equivalent to the soil area below ground and the space above ground defined by the tree's drip line, or the greatest extent of the branches.

Cultural Resources – All structures, landscapes and objects of some importance to a community or culture for scientific, traditional, religious, or other reasons.

Demolition Waste – Any solid waste that is produced by the destruction of structures and their foundations and includes the same materials as construction wastes.

Greenhouse Gases (GHGs) – are gases that trap heat in the atmosphere. Greenhouse gases include Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O) and Fluorinated gases.

Hazardous Air Pollutants (HAPs) – An air pollutant to which no ambient air quality standard is applicable and which in the judgment of the administrator causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness. (VDEQ)

Hazardous Material (HAZMAT) – any material or product that poses a threat to human health, the environment and property if released. HAZMAT is identified by being toxic, ignitable, explosive and/or chemically reactive.

Hazardous Waste (HW) – A waste with properties that make it dangerous or capable of having harmful effects on human health and the environment.

Non-regulated Waste – Solid wastes that have a specific disposal method, which cannot be discarded into normal waste streams (examples include asbestos and antifreeze).

Ozone Depleting Substance (ODS) – Refers to Class I and Class II ODS, as defined by the *Montreal Protocol on Substances that Deplete the Ozone Layer*. Also, as defined as manufactured chemicals, especially halocarbon refrigerants, solvents, propellants and foam blowing agents.

Pollution – Refers to the discharge of waste materials into the air, water or land.

Pollution Prevention – Refers to practice of reducing, eliminating or preventing pollution.

Refuse – All solid waste products having the character of solids rather than liquids and that are composed wholly or partially of materials such as garbage, trash, rubbish, litter, residues from clean up of spills or contamination, or other discarded materials. (VDEQ)

Spill – Any leakage, seepage, pumping, pouring, emitting, emptying, dumping or other release of material. Spills may be unintentional or intentional and be to air, land or water resources.

Solid Waste – Any material that is discarded or abandoned. This means that the material is being disposed of, burned or incinerated, accumulated, stored or treated or recycled, reused or reclaimed.

Stormwater – Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage. (VDEQ)

Tree Protection Zone (TPZ) – The minimum amount of area in order to prevent killing existing trees through the placement of barrier structures. This is generally agreed to be equivalent to the soil area below ground and the space above ground defined by the tree's drip line, or the greatest extent of the branches.

Universal Waste – Waste that contain common materials that are known to be hazardous, such as Lithium, Nickel-Cadmium and Mercury batteries, lamps and other Mercury containing equipment.

Volatile Organic Compounds (VOCs) – Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. (VDEQ)

Wastewater System – Refers to the sanitary sewer system that returns used non-environmentally sources water to the Hampton Roads Sanitary Sewer District treatment plants rather than the storm sewer system that discharges rainwater back into the environment.

Wetland – Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. (VDEQ)

Attachment 2

633 CES/CEIE Environmental Program Manager Contact List

| Program | Contact | Phone Number | EMAIL |
|--|-----------------|---------------------|------------------------------|
| Air Quality | Courtney Bevans | 757-225-7980 | courtney.bevans@us.af.mil |
| Asbestos/Lead-Based Paint | David Jennings | 757-764-1046 | david.jennings.4@us.af.mil |
| Cultural Resources | Sherry Johnson | 757-764-1130 | sherry.johnson.4@us.af.mil |
| Environmental Management Systems (EMS) | Courtney Bevans | 757-225-7980 | courtney.bevans@us.af.mil |
| Green Procurement | David Jennings | 757-764-1046 | david.jennings.4@us.af.mil |
| Hazardous Materials (HAZMAT) Management | David Jennings | 757-764-1046 | david.jennings.4@us.af.mil |
| Hazardous Waste/Universal Waste | Ron Holcomb | 757-764-1133 | ronald.holcomb.1@us.af.mil |
| Natural Resources | Alicia Garcia | 757-764-1090 | alicia.garcia.4@us.af.mil |
| Qualified Recycling Program/Integrated Solid Waste | David Jennings | 757-764-1046 | david.jennings.4@us.af.mil |
| Restoration | John Tice | 757-764-9394 | john.tice@us.af.mil |
| Soil Support Program (SSP) | David Jennings | 757-764-1046 | david.jennings.4@us.af.mil |
| Spills (Fuel, Sewage, Other, etc.) | Jeff Saunders | 757-764-1141 | jeffrey.saunders.9@us.af.mil |
| Storage Tanks | Ronald Best | 757-764-1132 | ronald.best.1@us.af.mil |
| Water Quality | Jeff Saunders | 757-764-1141 | jeffrey.saunders.9@us.af.mil |
| 633 CES/CEIE Environmental Flight Chief | David Jennings | 757-764-1046 | david.jennings.4@us.af.mil |

Attachment 3

Construction/Demolition Debris Recycling and Reporting

As stewards of the environment and because of the Air Force goals of diverting greater than 40% of its waste away from landfills, Contractors shall recycle C&D debris to the maximum extent possible. There are many sources in the local area that can recycle C&D. A list of sources can be found in the "Special Conditions" portion of JBLE-Langley construction contracts. If you need further assistance finding sources, contact the 633 CES/CEIE Pollution Prevention Manager at 757-764-3987. JBLE-Langley must report recycling metrics to higher Headquarters quarterly. Therefore, complete the form below for each project on JBLE-Langley and submit a copy to the 633 CONS Contracting officer, the 633 CES/CEN Project Manager, and the 633 CES/CEIE (Pollution Prevention Program Manager), by the 5th day of each quarter (05 Apr, 05 July, 05 Oct and 05 Jan) for the previous three month period for the duration of the project.

PROJECT NUMBER AND TITLE: _____

PROJECT LOCATION (BLDG # AND STREET ADDRESS): _____

CONTRACTOR NAME: _____

CONTRACTOR ADDRESS/PHONE NUMBER: _____

TYPE ITEMS RECYCLED:

_____ Concrete without rebar

_____ Concrete with rebar

_____ Scrap Metals

_____ Wood

_____ Roofing Materials

_____ Brick

_____ Asphalt

_____ Other: Specify _____

TONNAGE OF ITEMS RECYCLED: _____ TONS

TYPE ITEMS NOT RECYCLED:

_____ Concrete without rebar

_____ Concrete with rebar

_____ Scrap Metals

_____ Wood

_____ Roofing Materials

_____ Brick

_____ Asphalt

_____ Other: Specify _____

CONTINUED ON THE BACK

C&D Debris Recycling and Reporting Form (CONT'D)

REASONS ITEMS WERE NOT RECYCLED:

_____ No market for the items

_____ No local vendors to recycle the materials

_____ Not economically feasible: Specify: _____

_____ Other: Specify: _____

PROVIDE NAME OF COMPANY, POINT-OF-CONTACT AND PHONE NUMBER OF SOURCE BY WHICH RECYCLING AN ITEM(S) WERE ATTEMPTED:

Company Name: _____

Point of Contact: _____

Phone Number: _____

C&D ITEMS DISPOSED OF BY LANDFILL: _____ TONS

C&D ITEMS DISPOSED OF THROUGH REGULAR INCINERATION: _____ TONS

ITEMS DISPOSED OF BY WASTE-TO-ENERGY INCINERATION: _____ TONS

CONTRACTOR SIGNATURE

DATE

NOTE: ELECTRONIC SIGNATURE ACCEPTABLE

Attachment 4A

Contractor Hazardous Materials Worksheet

FOR ASSISTANCE, CONTACT YOUR CONTRACTING OFFICER, COR, OR PROJECT MANAGER

Project Number: _____
Project/Contract Title: _____
Project Location (Bldg #/Room #/Street Address): _____
Gov't Project Manager (Name, Org, Phone #): _____
Company Name: _____
Company POC (Name and Phone Number): _____
Detailed Project/Contract Description: _____

Will Hazardous Materials Be Stored On-Site (Y/N): _____
Where will it be stored? _____
Projected Number of Days on Site: _____
Estimated Start Date: _____ Estimated Completion Date: _____
Will facility/work area be occupied by government personnel during the project? (Y/N) _____

Complete attached spreadsheet, attach/include Safety Data Sheets (SDS) for all Hazardous Materials in the order as listed on the spreadsheet.

Submit all information to the Contracting Officer (CO), Contracting Officer Representative (COR) and Project Manager (PM) if the PM is not also the COR. An electronic submittal is preferred.

Contractors provide all data to CO or COR/PM a minimum of 30 calendar days before the project starts. In cases where 30 days is not feasible, provide the data as soon as possible. Allow a minimum of 14 calendar days for review/approval by the government.

CO or COR/PM submit all information to 633 CES Environmental electronically at 633 CES/CEI email address 633CES.CEI.Flight@us.af.mil

NOTE: Be sure to take all Hazardous Materials off the installation at completion of the project.

DO NOT leave any behind for the government to use/dispose of. Leaving chemicals behind may impact payment for your services.

Attachment 4B
Contractor HAZMAT SDS Submittal

NOTE: For ease, utilize the gov't developed excel spreadsheet to accomplish this.

Project Number:
Project Title:
Bldg #, Room #, Street Address:
Gov't Project Mgr (Name/Address):
Contractor Company Name:
Contractor Project Mgr (Name/Phone):

Chemical Name As Stated on Safety Data Sheet:

Max Qty Stored on Site (Gallons, Quarts, etc)

Total Qty to be Used (Gallons, Quarts, etc)

Application Process (Sprayed, Brushed, Poured, etc)

Will it be heated? (Y/N)

Will any type controls be used such as ventilation exhaust system, etc? If so, what type?

How will the item be stored? (Flammable cabinet, corrosive cabinet, 55-gal drum, tank, etc?)

Attachment 5

Contractor's Monthly Report for HAZMATs

Contractor:

Project Name:

Contract/Project #:

Location/Bldg #:

The following information is required for tracking of hazardous materials on JBLE-Langley. For contracts exceeding six months, this form is required to be filled out on a monthly basis and returned to the Federal Government project Contracting Officer Representative (COR). For contracts that are less than six months, this form is required at the beginning and at the completion of the work. The COR will provide a copy to the Project Mgr who will provide it to 633 CES/CEIE. This information is required to comply with State, federal, local, and Air Force laws and regulations.

[illegible]

Use additional sheets if required.

Contractor Name: _____ Date: _____

Signature: _____

Federal Government COR: _____ Date: _____

Signature: _____

Attachment 6
Contract Submittal and Contractor Reporting Form
Comprehensive Procurement Guidelines

(This chart is not intended to replace the EPA guidelines found at <http://www.epa.gov/cpg/products.htm>). It is the Contractor's responsibility to stay apprised of any new additions to these guidelines.)

| Categories and Designated Items (Note: This table includes proposed CPG items as well as items designated final.) | If marked w/ an "X", item is applicable | Purchased with no recycled content | Purchased with recycled content | Percent of recycled content |
|---|---|---|---------------------------------------|-----------------------------------|
| <u>VEHICULAR PRODUCTS</u> | | | | |
| Engine coolants - antifreeze | | | | |
| Rebuilt vehicular parts | | | | |
| Re-refined lubricating oils - including motor oil | | | | |
| Retread tires | | | | |
| <u>CONSTRUCTION PRODUCTS</u> | | | | |
| Building insulation products | | | | |
| Carpet (Polyester) | | | | |
| Carpet cushion | | | | |
| Cement and concrete containing coal fly ash, ground granulated blast furnace slag, cenospheres, or silica fume | | | | |
| Consolidated and reprocessed latex paint | | | | |
| Floor tiles | | | | |
| Flowable fill | | | | |

| Categories and Designated Items (Note: This table includes proposed CPG items as well as items designated final.) | If marked w/ an "X", item is applicable | Purchased with no recycled content | Purchased with recycled content | Percent of recycled content |
|---|---|---|---------------------------------------|-----------------------------------|
| Laminated paperboard | | | | |
| Modular threshold ramps | | | | |
| Non-pressure pipe | | | | |
| Patio blocks | | | | |
| Railroad grade crossing surfaces | | | | |
| Roofing materials | | | | |
| Shower and restroom dividers and partitions | | | | |
| Structural fiberboard | | | | |
| <u>LANDSCAPING PRODUCTS</u> | | | | |
| Compost made from yard trimmings or food waste | | | | |
| Garden and soaker hoses | | | | |
| Hydraulic mulch | | | | |
| Lawn and garden edging | | | | |
| Plastic lumber landscaping timbers and posts | | | | |
| <u>NON-PAPER OFFICE PRODUCTS</u> | | | | |
| Binders | | | | |

| Categories and Designated Items (Note: This table includes proposed CPG items as well as items designated final.) | If marked w/ an "X", item is applicable | Purchased with no recycled content | Purchased with recycled content | Percent of recycled content |
|---|---|---|---------------------------------------|-----------------------------------|
| <u>NON-PAPER-OFFICE PRODUCTS</u> (cont.) | | | | |
| Clipboards | | | | |
| Clip Portfolios | | | | |
| File folders | | | | |
| Presentation Folders | | | | |
| Office Furniture | | | | |
| Office recycling containers | | | | |
| Office waste receptacles | | | | |
| Plastic desktop accessories | | | | |
| Plastic envelopes | | | | |
| Plastic trash bags | | | | |
| Printer ribbons | | | | |
| Toner cartridges | | | | |
| <u>PAPER AND PAPER PRODUCTS</u> | | | | |
| Commercial/industrial sanitary tissue products | | | | |
| Miscellaneous papers | | | | |

| Categories and Designated Items (Note: This table includes proposed CPG items as well as items designated final.) | If marked w/ an "X", item is applicable | Purchased with no recycled content | Purchased with recycled content | Percent of recycled content |
|---|---|---|---------------------------------------|-----------------------------------|
| Newsprint | | | | |
| Paperboard and packaging products | | | | |
| Printing and writing papers | | | | |
| <u>PARK and RECREATION PRODUCTS</u> | | | | |
| Park benches and picnic tables | | | | |
| Plastic fencing | | | | |
| Playground equipment | | | | |
| Playground surfaces | | | | |
| Running tracks | | | | |
| <u>TRANSPORTATION PRODUCTS</u> | | | | |
| Channelizers | | | | |
| Delineators | | | | |
| Flexible delineators | | | | |
| Parking stops | | | | |
| Traffic barricades | | | | |
| Traffic cones | | | | |

| Categories and Designated Items (Note: This table includes proposed CPG items as well as items designated final.) | If marked w/ an "X", item is applicable | Purchased with no recycled content | Purchased with recycled content | Percent of recycled content |
|---|---|---|---------------------------------------|-----------------------------------|
| <u>MISCELLANEOUS PRODUCTS</u> | | | | |
| Awards and plaques | | | | |
| Bike Racks | | | | |
| Blasting grit | | | | |
| Industrial drums | | | | |
| Manual-grade strapping | | | | |
| Mats | | | | |
| Pallets | | | | |
| Signage | | | | |
| Sorbents | | | | |
| | | | | |

Attachment 7

Recovered Materials Determination Form

This form is to be completed by the procurement originator for all purchases requesting an exemption from the Affirmative Procurement Program for Recovered Materials being procured. For questions on whether the product is "EPA designated" or what the required recycled content is, refer to the product descriptions on EPA's website at <http://www.epa.gov/cpg/products.htm>. This form is not required for construction item purchases less than \$2,000, or for other purchases less than \$3,000.

Procurement Request/Project No. _____

EPA Designated Eight Product Category Items

Category 1 Paper and Paper Products

| | | |
|--|---|--|
| <input type="checkbox"/> Commercial/industrial sanitary tissue products | <input type="checkbox"/> Paperboard/packing products <input type="checkbox"/> Miscellaneous papers | <input type="checkbox"/> Printing and writing papers <input type="checkbox"/> Newsprint |
|--|---|--|

Category 2 Non-Paper Office Products

| | | |
|--|--|---|
| <input type="checkbox"/> Binders | <input type="checkbox"/> Plastic trash bags | <input type="checkbox"/> Presentation folders |
| <input type="checkbox"/> Plastic envelopes | <input type="checkbox"/> Office waste receptacles | <input type="checkbox"/> Clip portfolios |
| <input type="checkbox"/> Office recycling containers | <input type="checkbox"/> File folders | <input type="checkbox"/> Printer ribbons |
| <input type="checkbox"/> Office furniture | <input type="checkbox"/> Plastic desktop accessories | <input type="checkbox"/> Toner Cartridges |
| | <input type="checkbox"/> Clipboards | |

Category 3 Park and Recreation Products

| | | |
|---|--|---|
| <input type="checkbox"/> Park benches and picnic tables | <input type="checkbox"/> Running tracks | <input type="checkbox"/> Playground equipment |
| | <input type="checkbox"/> Playground surfaces | <input type="checkbox"/> Plastic fencing |

Category 4 Transportation Products

| | | |
|---|---|--|
| <input type="checkbox"/> Traffic barricades | <input type="checkbox"/> Delineators | <input type="checkbox"/> Traffic Cones |
| <input type="checkbox"/> Parking Stops | <input type="checkbox"/> Flexible delineators | <input type="checkbox"/> Channelizers |

Category 5 Vehicular Products

| | | | |
|--|--|--|--|
| <input type="checkbox"/> Engine Coolants | <input type="checkbox"/> Retread tires | <input type="checkbox"/> Re-refined lubricating oils | <input type="checkbox"/> Rebuilt vehicular parts |
|--|--|--|--|

Category 6 Landscaping Products

| | | |
|--|---|---|
| <input type="checkbox"/> Garden and soaker hoses | <input type="checkbox"/> Hydraulic mulch | <input type="checkbox"/> Plastic Lumber Landscaping timbers and posts |
| <input type="checkbox"/> Compost and fertilizer made from recovered organic materials | <input type="checkbox"/> Lawn and garden edging | <input type="checkbox"/> Food waste compost |

Category 7 Construction Products

| | | |
|--|---|--|
| <input type="checkbox"/> Consolidated and reprocessed latex paint | <input type="checkbox"/> Railroad grade crossing and surfaces | <input type="checkbox"/> Structural fiberboard |
| <input type="checkbox"/> Cement and concrete containing coal fly ash, ground granulated blast furnace slag, cenospheres, or silica fume | <input type="checkbox"/> Building insulation | <input type="checkbox"/> Carpet (polyester) |
| <input type="checkbox"/> Roofing materials | <input type="checkbox"/> Shower and restroom dividers | <input type="checkbox"/> Carpet cushion |
| | <input type="checkbox"/> Laminated paperboard | <input type="checkbox"/> Floor tiles |
| | <input type="checkbox"/> Modular threshold ramps | <input type="checkbox"/> Patio blocks |
| | <input type="checkbox"/> Non-pressure pipe | <input type="checkbox"/> Flowable fill |

Category 8 Miscellaneous Products

| | | | |
|---|-------------------------------|---|---|
| <input type="checkbox"/> Manual-grade strapping | <input type="checkbox"/> Mats | <input type="checkbox"/> Pallets | <input type="checkbox"/> Industrial drums |
| <input type="checkbox"/> Bike racks | | <input type="checkbox"/> Awards and plaques | <input type="checkbox"/> Signage |
| <input type="checkbox"/> Blasting grit | | <input type="checkbox"/> Sorbents | |

EXEMPTION CERTIFICATION

___ The following EPA designated guideline item is included in the specifications for the project however, compliance with EPA standards is not attainable.

Item: _____

I have determined that the EPA guidelines were considered and determined inapplicable, based on the following:

___ Item is not available within a reasonable period of time.

(Need date: _____ Date available: _____)

___ Item fails to meet a performance standard in the specifications.

Specifically, _____

___ Item was only available at an unreasonable price (i.e., recycled item cost more than non-recycled item).

Price of recycled item: _____

Price of non-recycled item: _____

___ Item is not available from 2 or more sources.

Market research was performed by calling _____ **(insert number)**

vendors, but only _____ **(enter name) was able to supply the item.**

This determination is made in accordance with FAR 23.405(c).

Procurement Originator/Contractor

Date

Signature of GPC Approving Official (if GPC used)
or Project Manager/Supervisor/Flight Chief or Deputy for all other type purchases

Date