SECTION 01 57 19

TEMPORARY ENVIRONMENTAL CONTROLS - TYNDALL STANDARD
08/2021

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA SW-846	(Third Edition; Update IV) Test Methods for Evaluating Solid Waste: Physical/Chemical Methods

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
40 CFR 112	Oil Pollution Prevention
40 CFR 122.26	Storm Water Discharges (Applicable to State NPDES Programs, see section 123.25)
40 CFR 152	Pesticide Registration and Classification Procedures
40 CFR 152 - 186	Pesticide Programs
40 CFR 241	Guidelines for Disposal of Solid Waste
40 CFR 243	Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste
40 CFR 258	Subtitle D Landfill Requirements
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 261.7	Residues of Hazardous Waste in Empty Containers
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 262.11	Standards Applicable to Generators of Hazardous Waste - Hazardous Waste Determination and Recordkeeping

40 CFR 262.31	Standards Applicable to Generators of Hazardous Waste-Labeling
40 CFR 262.34	Standards Applicable to Generators of Hazardous Waste-Accumulation Time
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 266	Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 273	Standards For Universal Waste Management
40 CFR 273.2	Standards for Universal Waste Management - Batteries
40 CFR 273.3	Standards for Universal Waste Management - Pesticides
40 CFR 273.4	Standards for Universal Waste Management - Mercury Containing Equipment
40 CFR 273.5	Standards for Universal Waste Management - Lamps
40 CFR 273.6	Standards for Universal Waste Management - Aerosol Can
40 CFR 279	Standards for the Management of Used Oil
40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan
40 CFR 300.125	National Oil and Hazardous Substances Pollution Contingency Plan - Notification and Communications
40 CFR 355	Emergency Planning and Notification
40 CFR 403	General Pretreatment Regulations for Existing and New Sources of Pollution
40 CFR 50	National Primary and Secondary Ambient Air Quality Standards

40 CFR 60	Standards of Performance for New Stationary Sources
40 CFR 61	National Emission Standards for Hazardous Air Pollutants
40 CFR 63	National Emission Standards for Hazardous Air Pollutants for Source Categories
40 CFR 64	Compliance Assurance Monitoring
40 CFR 745	Lead-Based Paint Poisoning Prevention in Certain Residential Structures
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 172.101	Hazardous Material Regulation-Purpose and Use of Hazardous Material Table
49 CFR 173	Shippers - General Requirements for Shipments and Packagings
49 CFR 178	Specifications for Packagings

TYNDALL AFB INSTRUCTIONS AND DIRECTIVES

Tyndall AFB Hazardous Waste Management Plan

Tyndall AFB Asbestos Management Plan

Installation Restoration Program and Aqueous Film Forming Foam Guidelines For Tyndall MILCON Rebuild

Environmental Supplemental Guidance

General Environmental Requirements For Contracts

Tyndall AFB Guidelines for Non-ERP Soil Management USACE MILCON Buildout

Tyndall Soils Decision Matrix

Location Map for designated Soil Borrow Storage Area

1.2 DEFINITIONS

1.2.1 Class I and II Ozone Depleting Substance (ODS)

Class I ODS is defined in Section 602(a) of The Clean Air Act. A list of Class I ODS can be found on the EPA website at the following weblink. https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances.

Class II ODS is defined in Section 602(s) of The Clean Air Act. A list of Class II ODS can be found on the EPA website at the following weblink. https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances.

1.2.2 Contractor Generated Hazardous Waste

Contractor generated hazardous waste is materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e., methyl ethyl ketone, toluene), waste thinners, excess paints, excess solvents, waste solvents, excess pesticides, and contaminated pesticide equipment rinse water.

1.2.3 Electronics Waste

Electronics waste is discarded electronic devices intended for salvage, recycling, or disposal.

1.2.4 Environmental Management System (EMS)

Environmental Management System is a framework that establishes environmental quality program compliance and budgeting for the three key pillars of environmental management (compliance, conservation, and pollution prevention) in accordance with AFI 32-7001 Environmental Management.

1.2.5 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally or historically.

1.2.6 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.7 Hazardous Debris

As defined in paragraph SOLID WASTE, debris that contains listed hazardous waste (either on the debris surface, or in its interstices, such as pore structure) in accordance with 40 CFR 261. Hazardous debris also includes

debris that exhibits a characteristic of hazardous waste in accordance with 40 CFR 261.

1.2.8 Hazardous Materials

Hazardous materials as defined in 49 CFR 171 and listed in 49 CFR 172.

Hazardous material is any material that: Is regulated as a hazardous material in accordance with 49 CFR 173; or requires a Safety Data Sheet (SDS) in accordance with 29 CFR 1910.120; or during end use, treatment, handling, packaging, storage, transportation, or disposal meets or has components that meet or have potential to meet the definition of a hazardous waste as defined by 40 CFR 261 Subparts A, B, C, or D. Designation of a material by this definition, when separately regulated or controlled by other sections or directives, does not eliminate the need for adherence to that hazard-specific guidance which takes precedence over this section for "control" purposes. Such material includes ammunition, weapons, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos, mercury, and polychlorinated biphenyls (PCBs).

1.2.9 Hazardous Waste

Hazardous Waste is any material that meets the definition of a solid waste and exhibit a hazardous characteristic (ignitability, corrosivity, reactivity, or toxicity) as specified in 40 CFR 261, Subpart C, or contains a listed hazardous waste as identified in 40 CFR 261, Subpart D.

1.2.10 Land Application

Land Application means spreading or spraying discharge water at a rate that allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" must occur. Comply with federal, state, and local laws and regulations.

1.2.11 Municipal Separate Storm Sewer System (MS4) Permit

MS4 permits are those held by installations to obtain NPDES permit coverage for their stormwater discharges.

1.2.12 National Pollutant Discharge Elimination System (NPDES)

The NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

1.2.13 Oily Waste

Oily waste are those materials that are, or were, mixed with Petroleum, Oils, and Lubricants (POLs) and have become separated from that POLs. Oily wastes also means materials, including wastewaters, centrifuge solids, filter residues or sludges, bottom sediments, tank bottoms, and sorbents which have come into contact with and have been contaminated by, POLs and may be appropriately tested and discarded in a manner which is in compliance with other state and local requirements.

This definition includes materials such as oily rags, "kitty litter" sorbent clay and organic sorbent material. These materials may be land filled provided that: It is not prohibited in other state regulations or local ordinances; the amount generated is "de minimus" (a small amount); it is the result of minor leaks or spills resulting from normal process operations; and free-flowing oil has been removed to the practicable extent possible. Large quantities of this material, generated as a result of a major spill or in lieu of proper maintenance of the processing equipment, are a solid waste. As a solid waste, perform a hazardous waste determination prior to disposal. As this can be an expensive process, it is recommended that this type of waste be minimized through good housekeeping practices and employee education.

1.2.14 Regulated Waste

Regulated waste are solid wastes that have specific additional federal, state, or local controls for handling, storage, or disposal.

1.2.15 Sediment

Sediment is soil and other debris that have eroded and have been transported by runoff water or wind.

1.2.16 Solid Waste

Solid waste is a solid, liquid, semi-solid or contained gaseous waste. A solid waste can be a hazardous waste, non-hazardous waste, or non-Resource Conservation and Recovery Act (RCRA) regulated waste. Types of solid waste typically generated at construction sites may include:

1.2.16.1 Debris

Debris is non-hazardous solid material generated during the construction, demolition, or renovation of a structure that exceeds 60 mm 2.5-inch particle size that is: a manufactured object; plant or animal matter; or natural geologic material (for example, cobbles and boulders, including aggregates intended, but not used, for on-site mixing of concrete, mortars, and paving), broken or removed concrete, masonry, and rock asphalt paving; ceramics; roofing paper and shingles. Inert materials may be reinforced with or contain ferrous wire, rods, accessories and weldments. A mixture of debris and other material such as soil or sludge is also subject to regulation as debris if the mixture is comprised primarily of debris by volume, based on visual inspection.

1.2.16.2 Green Waste

Green waste is the vegetative matter from landscaping, land clearing and grubbing, including, but not limited to, grass, bushes, scrubs, small trees and saplings, tree stumps and plant roots. Marketable trees, grasses and plants that are indicated to remain, be re-located, or be re-used are not included.

1.2.16.3 Material not regulated as solid waste

Material not regulated as solid waste is nuclear source or byproduct materials regulated under the Federal Atomic Energy Act of 1954 as amended; suspended or dissolved materials in domestic sewage effluent or irrigation

return flows, or other regulated point source discharges; regulated air emissions; and fluids or wastes associated with natural gas or crude oil exploration or production.

1.2.16.4 Non-Hazardous Waste

Non-hazardous waste is waste that is excluded from, or does not meet, hazardous waste criteria in accordance with 40 CFR 261.

1.2.16.5 Recyclables

Recyclables are materials, equipment and assemblies such as doors, windows, door and window frames, plumbing fixtures, glazing and mirrors that are recovered and sold as recyclable, wiring, insulated/non-insulated copper wire cable, wire rope, and structural components. It also includes commercial-grade refrigeration equipment with Freon removed, household appliances where the basic material content is metal, clean polyethylene terephthalate bottles, cooking oil, used fuel oil, textiles, high-grade paper products and corrugated cardboard, stackable pallets in good condition, clean crating material, and clean rubber/vehicle tires. Metal meeting the definition of lead contaminated or lead based paint contaminated may not be included as recyclable if sold to a scrap metal company. Paint cans that meet the definition of empty containers in accordance with 40 CFR 261.7 may be included as recyclable if sold to a scrap metal company.

1.2.16.6 Surplus Soil

Surplus soil is existing soil that is in excess of what is required for this work. Surplus soil must be managed in accordance with attachments Installation Restoration Program and Aqueous Film Forming Foam Guidelines for Tyndall MILCON-Rebuild, Tyndall AFB Guidelines for Non-ERP Soil Management USACE MILCON Build-Out, and UFGS 02 61 13 EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL. Soil meeting the definition of hazardous material, hazardous waste, hazardous substance, or other regulated constituent as identified by concentrations above Florida Department of Environmental Protection's (FDEP) Soil Cleanup Target Level is not included. Contaminated soil must be managed in accordance with the requirements of the regulations associated with the classification of the contamination as indicated in attachment Installation Restoration Program and Aqueous Film Forming Foam Guidelines for Tyndall MILCON-Rebuild and UFGS 02 61 13 EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL.

1.2.16.7 Scrap Metal

This includes scrap and excess ferrous and non-ferrous metals such as reinforcing steel, structural shapes, pipe, and wire that are recovered or collected and disposed of as scrap. Scrap metal meeting the definition of hazardous material or hazardous waste is not included.

1.2.16.8 Wood

Wood is dimension and non-dimension lumber, plywood, chipboard, hardboard. Treated or painted wood that meets the definition of lead contaminated or lead based contaminated paint is not included. Treated wood includes, but is not limited to, lumber, utility poles, crossties, and other wood products with chemical treatment.

1.2.17 Surface Discharge

Surface discharge means discharge of water into drainage ditches, storm sewers, creeks or "waters of the United States". Surface discharges are discrete, identifiable sources and require a permit from the governing agency. Comply with federal, state, and local laws and regulations.

1.2.18 Wastewater

Wastewater is the used water and solids from a community that flow to a treatment plant.

1.2.18.1 Stormwater

Stormwater is any precipitation in an urban or suburban area that does not evaporate or soak into the ground, but instead collects and flows into storm drains, rivers, and streams.

1.2.19 Waters of the United States

Waters of the United States means Federally jurisdictional waters, including wetlands, that are subject to regulation under Section 404 of the Clean Water Act or navigable waters, as defined under the Rivers and Harbors Act.

1.2.20 Wetlands

Wetlands are those areas that are inundated or saturated by surface 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.

1.2.21 Universal Waste

The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (for example, thermostats), and lamps (for example, fluorescent bulbs), and aerosol cans. The rule is designed to reduce hazardous waste in the municipal solid waste (MSW) stream by making it easier for universal waste handlers to collect these items and send them for recycling or proper disposal. These regulations can be found at 40 CFR 273.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Preconstruction Survey

Solid Waste Management Permit; G

Regulatory Notifications and Permits

(Water, Air, Waste, Utility, etc); G

Environmental Protection Plan; G

Stormwater Notice of Intent and/or Stormwater Pollution Prevention Plan (SWPPP) (for NPDES coverage under the general permit for construction activities); G

Dirt and Dust Control Plan; G

Employee Training Records; G

Environmental Manager Qualifications

Hazardous Materials Forms(TAFB FORMS 81&82)and Safety Data Sheets; G

SD-06 Test Reports

Laboratory Analysis

Inspection Reports

Monthly Solid Waste Disposal Report

SD-07 Certificates

Employee Training Records

Certificate of Competency

Erosion and Sediment Control Inspector Qualifications

SD-11 Closeout Submittals

Stormwater Pollution Prevention Plan Compliance Notebook; G

Stormwater Notice of Termination (for NPDES coverage under the general permit for construction activities); G

Waste Determination Documentation; G

Disposal Documentation for Hazardous and Regulated Waste; G

Assembled Employee Training Records; G

Solid Waste Management Permit

Project Solid Waste Disposal Documentation Report; G

Hazardous Waste/Debris Management

Regulatory Notifications; G

Sales Documentation; G

Contractor Certification

As-Built Topographic Survey

Hazardous Material Usage Form (TAFB FORM 83)

1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

Provide and maintain, during the life of the contract, environmental protection as defined. Plan for and provide environmental protective measures to control pollution that develops during construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Protect the environmental resources within the project boundaries and those affected outside the limits of permanent work during the entire duration of this Contract. Comply with federal, state, and local regulations pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

Tests and procedures assessing whether construction operations comply with Applicable Environmental Laws may be required. Analytical work must be performed by qualified laboratories; and where required by law, the laboratories must be certified.

1.4.1 Conformance with the Environmental Management System

Perform work under this contract consistent with the policy and objectives identified in the installation's Environmental Management System (EMS) in accordance with AFI 32-7001, Environmental Management. Perform work in a manner that conforms to objectives and targets of the environmental programs and operational controls identified by the EMS. Support Government personnel when environmental compliance and EMS audits are conducted by escorting auditors at the Project site, answering questions, and providing proof of records being maintained. Provide monitoring and measurement information as necessary to address environmental performance relative to environmental, energy, and transportation management goals. In the event an EMS nonconformance or environmental noncompliance associated with the contracted services, tasks, or actions occurs, take corrective and preventative actions. In addition, employees must be aware of their roles and responsibilities under the installation EMS and of how these EMS roles and responsibilities affect work performed under the contract.

Coordinate with the installation's EMS coordinator to identify training needs associated with environmental aspects and the EMS, and arrange training or take other action to meet these needs. Provide training documentation to the Contracting Officer. The Installation Environmental Office will retain associated environmental compliance records. Make EMS Awareness training completion certificates available to Government auditors during EMS audits and include the certificates in the Employee Training Records. See paragraph EMPLOYEE TRAINING RECORDS.

1.5 QUALITY ASSURANCE

1.5.1 Preconstruction Survey and Protection of Features

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, perform a Preconstruction Survey of the project site with the Contracting Officer, and take

photographs showing existing environmental conditions in and adjacent to the site. Submit a report for the record. Include in the report a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. The Contractor and the Contracting Officer will sign this survey report upon mutual agreement regarding its accuracy and completeness. Protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference that their preservation may cause to the work under the Contract.

1.5.2 Regulatory Notifications

Provide regulatory notification requirements in accordance with federal, state and local regulations. In cases where the Government will also provide public notification (such as stormwater permitting), coordinate with the Contracting Officer. Submit copies of regulatory notifications to the Contracting Officer at least 30 days prior to commencement of work activities. Typically, regulatory notifications must be provided for the following (this listing is not all-inclusive): demolition, renovation, NPDES defined site work, construction, removal or use of a permitted air emissions source, and remediation of controlled substances (asbestos, hazardous waste, lead paint). All permit applications must be reviewed by the 325 CES/CEIE and signed by the 325 CES Commander prior to submittal. The 325 CES/CEIE shall be copied on all regulatory correspondence.

1.5.3 Environmental Brief

Attend an environmental brief to be included in the preconstruction meeting. Provide the following information: TAFB Forms 81/82 which includes the types, quantities, and use of hazardous materials that will be brought onto the installation, along with Safety Data Sheets for each material listed on the form 82 and types and quantities of wastes/wastewater that may be generated during the Contract. Discuss the results of the Preconstruction Survey at this time.

Prior to initiating any work on site, meet with the Contracting Officer and installation Environmental Office to discuss the proposed Environmental Protection Plan (EPP). Develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural and cultural resources, required reports, required permits, permit requirements (such as mitigation measures), and other measures to be taken.

1.5.4 Environmental Manager

Appoint in writing an Environmental Manager for the project site. The Environmental Manager is directly responsible for coordinating contractor compliance with federal, state, local, and installation requirements. The Environmental Manager must ensure compliance with Hazardous Waste Program requirements (including hazardous waste handling, storage, manifesting, and disposal); implement the EPP; ensure environmental permits are obtained, maintained, and closed out; ensure compliance with Stormwater Program requirements; ensure compliance with Hazardous Materials (storage, handling, and reporting) requirements; and coordinate any remediation of regulated substances (lead, asbestos, PCB transformers). This can be a collateral position; however, the person in this position must be trained

to adequately accomplish the following duties: ensure waste segregation and storage compatibility requirements are met; inspect and manage Satellite Accumulation areas; ensure only authorized personnel add wastes to containers; ensure Contractor personnel are trained in 40 CFR requirements in accordance with their position requirements; coordinate removal of waste containers; and maintain the Environmental Records binder and required documentation, including environmental permits compliance and close-out. Submit Environmental Manager Qualifications to the Contracting Officer.

1.5.5 Employee Training Records

Prepare and maintain Employee Training Records throughout the term of the contract meeting applicable 40 CFR requirements. Provide Employee Training Records in the Environmental Records Binder. Ensure every employee completes a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures compliance with federal, state and local regulatory requirements for RCRA Large Quantity Generator. Provide a Position Description for each employee, by subcontractor, based on the Davis-Bacon Wage Rate designation or other equivalent method, evaluating the employee's association with hazardous and regulated wastes. This Position Description will include training requirements as defined in 40 CFR 262.17(a)(7) for a Large Quantity Generator facility. Submit these Assembled Employee Training Records to the Contracting Officer at the conclusion of the project, unless otherwise directed.

Train personnel to meet EPA and state requirements. Conduct environmental protection/pollution control meetings for personnel prior to commencing construction activities. Contact additional meetings for new personnel and when site conditions change. Include in the training and meeting agenda: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, waters of the United States, and endangered species and their habitat that are known to be in the area. Provide copy of the Erosion and Sediment Control Inspector Qualifications as defined by EPA or Certification as required by state.

1.5.6 Non-Compliance Notifications

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with federal, state or local environmental laws or regulations, permits, and other elements of the Contractor's EPP. After receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. FAR 52.242-14 Suspension of Work provides that a suspension, delay, or interruption of work due to the fault or negligence of the Contractor allows for no adjustments to the contract for time extensions or equitable adjustments. In addition to a suspension of work, the Contracting Officer may use additional authorities under the contract or law. The Prime Contractor will have the sole responsibility to ensure all their subcontractors comply with all environmental protection requirements of

this specification section.

1.6 ENVIRONMENTAL PROTECTION PLAN

The purpose of the EPP is to present an overview of known or potential environmental issues that must be considered and addressed during construction. Incorporate construction related objectives and targets from the installation's EMS into the EPP. Include in the EPP measures for protecting natural and cultural resources, required reports, and other measures to be taken. Meet with the Contracting Officer or Contracting Officer Representative to discuss the EPP and develop a mutual understanding relative to the details for environmental protection including measures for protecting natural resources, required reports, and other measures to be taken. Submit the EPP within 15 days after Contract award and not less than 10 days before the preconstruction meeting. Revise the EPP throughout the project to include any reporting requirements, changes in site conditions, or contract modifications that change the project scope of work in a way that could have an environmental impact. No requirement in this section will relieve the Contractor of any applicable federal, state, and local environmental protection laws and regulations. During Construction, identify, implement, and submit for approval any additional requirements to be included in the EPP. Maintain the current version onsite.

The EPP includes, but is not limited to, the following elements:

1.6.1 General Overview and Purpose

1.6.1.1 Descriptions

A brief description of each specific plan required by environmental permit or elsewhere in this Contract such as stormwater pollution prevention plan, spill control plan, solid waste management plan, wastewater management plan, air pollution control plan, contaminant prevention plan, traffic control plan, Non-Hazardous Solid Waste Disposal Plan, and borrowing material plan.

1.6.1.2 Duties

The duties and level of authority assigned to the person(s) on the job site who oversee environmental compliance, such as who is responsible for adherence to the EPP, who is responsible for spill cleanup and training personnel on spill response procedures, who is responsible for manifesting hazardous waste to be removed from the site (if applicable), and who is responsible for training the Contractor's environmental protection personnel.

1.6.1.3 Procedures

A copy of any standard or project-specific operating procedures that will be used to effectively manage and protect the environment on the project site.

1.6.1.4 Communications

Communication and training procedures that will be used to convey environmental management requirements to Contractor employees and subcontractors.

1.6.1.5 Contact Information

Emergency contact information contact information (office phone number, cell phone number, and e-mail address).

1.6.2 General Site Information

1.6.2.1 Drawings

Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, jurisdictional wetlands, material storage areas, structures, sanitary facilities, storm drains and conveyances, and stockpiles of excess soil.

1.6.2.2 Work Area

Work area plan showing the proposed activity in each portion of the area and identify the areas of limited use or nonuse. Include measures for marking the limits of use areas, including methods for protection of features to be preserved within authorized work areas and methods to control runoff and to contain materials on site, and a traffic control plan.

1.6.2.3 Documentation

A letter signed by an officer of the firm appointing the Environmental Manager and stating that person is responsible for managing and implementing the Environmental Program as described in this contract. Include in this letter the Environmental Manager's authority to direct the removal and replacement of non-conforming work.

1.6.3 Management of Natural Resources

a. Land resources.

b. Tree protection.

c. Replacement of damaged landscape features.

d. Temporary construction.

e. Stream crossings.

f. Fish and wildlife resources.

g. Wetland areas.

1.6.4 Protection of Historical and Archaeological Resources

a. Objectives.

b. Methods.

1.6.5 Stormwater Management and Control

a. Ground cover.

b. Erodible soils.

c. Temporary measures.

(1) Structural Practices.

(2) Temporary and permanent stabilization.

d. Effective selection, implementation and maintenance of Best Management Practices (BMPs).

1.6.6 Protection of the Environment from Waste Derived from Contractor Operations

Control and disposal of solid and sanitary waste. Control and disposal of hazardous waste.

This item consist of the management procedures for hazardous waste to be generated. The elements of those procedures will coincide with the Installation Hazardous Waste Management Plan. The Contracting Officer will provide a copy of the Installation Hazardous Waste Management Plan. As a minimum, include the following:

a. List of the types of hazardous wastes expected to be generated.

b. Procedures to ensure a written waste determination is made for appropriate wastes that are to be generated.

c. Sampling/analysis plan, including laboratory method(s) that will be used for waste determinations and copies of relevant laboratory certifications.

d. Methods and proposed locations for hazardous waste accumulation/storage (that is, in tanks or containers).

e. Management procedures for storage, labeling, transportation, and disposal of waste (treatment of waste is not allowed unless specifically noted). The contractor shall provide applicable landfill tipping fee(s)and the projected cost of disposing of all project waste in the landfill(s), where allowed per UFGS 02 61 13 EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL.

f. Management procedures and regulatory documentation ensuring disposal of hazardous waste complies with Land Disposal Restrictions (40 CFR 268).

g. Management procedures for recyclable hazardous materials such as lead-acid batteries, used oil, and similar.

h. Used oil management procedures in accordance with 40 CFR 279; Hazardous waste minimization procedures.

i. Plans for the disposal of hazardous waste by permitted facilities; and Procedures to be employed to ensure required employee training records are maintained.

1.6.7 Prevention of Releases to the Environment

Procedures to prevent releases to the environment,

Notifications in the event of a release to the environment,

1.6.8 Regulatory Notification and Permits

List what notifications and permit applications must be made. Some permits require up to 180 days to obtain. Demonstrate that those permits have been obtained or applied for by including copies of applicable environmental permits. The EPP will not be approved until the permits have been obtained.

1.6.9 Clean Air Act Compliance

1.6.9.1 Haul Route

Submit truck and material haul routes along with a Dirt and Dust Control Plan for controlling dirt, debris, and dust on Installation roadways. As a minimum, identify in the plan the subcontractor and equipment for cleaning along the haul route and measures to reduce dirt, dust, and debris from roadways.

1.6.9.2 Pollution Generating Equipment

Identify air pollution generating equipment or processes that may require federal, state, or local permits under the Clean Air Act. Determine requirements based on any current installation permits and the impacts of the project. Provide a list of all fixed or mobile equipment, machinery or operations that could generate air emissions during the project to the Installation Environmental Office (Air Program Manager).

If emergency generators, boilers, or other sources of air pollutants will be associated with this facility, coordinate with the 325 CES/CEIEC Air Quality Program Manager, 283-4341 BEFORE source installation.
Ensure generator engines are certified to meet 40 CFR Part 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines or CFR Part 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.
Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C. Any refrigerant recycle/recovery equipment must be registered with the Air Quality Program manager (283-4341).

1.6.9.3 Stationary Internal Combustion Engines

Identify portable and stationary internal combustion engines that will be supplied, used or serviced. Comply with 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ, and local regulations as applicable. At minimum, include the make, model, serial number, manufacture date, size (engine brake horsepower), and EPA emission certification status of each engine. Maintain applicable records and log hours of operation and fuel use. Logs must include reasons for operation and delineate between emergency and non-emergency operation.

1.6.9.4 Refrigerants

Identify management practices to ensure that heating, ventilation, and air conditioning (HVAC) work involving refrigerants complies with 40 CFR 82 requirements. Technicians must be certified, maintain copies of certification on site, use certified equipment and log work that requires the addition or removal of refrigerant. Any refrigerant reclaimed is the property of the Government, coordinate with the Installation Environmental Office to determine the appropriate turn in location.

1.6.9.5 Air Pollution-engineering Processes

Identify planned air pollution-generating processes and management control measures (including, but not limited to, spray painting, abrasive blasting, demolition, material handling, fugitive dust, and fugitive emissions). Log hours of operations and track quantities of materials used.

1.6.9.6 Compliant Materials

Provide the Government a list of and SDSs for all hazardous materials proposed for use on site. Materials must be compliant with all Clean Air Act regulations for emissions including solvent and volatile organic compound contents, and applicable National Emission Standards for Hazardous Air Pollutants requirements. The Government may alter or limit use of specific materials as needed to meet installation permit requirements for emissions.

1.7 LICENSES AND PERMITS

Obtain licenses and permits required for the construction of the project and in accordance with FAR 52.236-7 Permits and Responsibilities. Notify the Government of all general use permitted equipment the Contractor plans to use on site.

1.8 ENVIRONMENTAL RECORDS BINDER

Maintain on-site a separate three-ring Environmental Records Binder and submit at the completion of the project. Make separate parts within the binder that correspond to each submittal listed under paragraph CLOSEOUT SUBMITTALS in this section.

1.9 SOLID WASTE MANAGEMENT PERMIT

Provide the Contracting Officer with written notification of the quantity of anticipated solid waste or debris that is anticipated or estimated to be generated by construction. Include in the report the locations where various types of waste will be disposed or recycled. Include letters of acceptance from the receiving location or as applicable; submit one copy of the receiving location state and local Solid Waste Management Permit or license showing such agency's approval of the disposal plan before transporting wastes off Government property.

1.9.1 Monthly Solid Waste Disposal Report

Monthly, submit a solid waste disposal report to the Contracting Officer. For each waste, the report will state the classification (using the definitions provided in this section), amount, location, and name of the

business receiving the solid waste.

1.10 FACILITY HAZARDOUS WASTE GENERATOR STATUS

Tyndall AFB is designated as a Large Quantity Generator. Meet the regulatory requirements of this generator designation for any work conducted within the boundaries of this Installation. Comply with provisions of federal, state, and local regulatory requirements applicable to this generator status regarding training and storage, handling, and disposal of construction derived wastes.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall ensure that required environmental permits are obtained prior to start of construction and/or installing or operating any new or modified equipment or processes or disturbing any land area. The contractor shall coordinate all environmental permits with the Contracting Officer and Tyndall AFB Environmental Office. The Contractor shall prepare any required technical documentation for the permit application, and submit to the Contracting Officer and Tyndall AFB Environmental Office for review. The 325 CES/CES will sign and forward applications to the contractor for submittal to the appropriate regulatory authority. The Contractor shall be responsible for operating within permit limits and abiding by all permit conditions. The Contracting Officer and 325 CES/CEIE shall be notified immediately of any exceedances of permit limits or violation of permit conditions. The Contractor shall immediately notify the Contracting Officer and 325 CES/CEIE of any unforeseen environmental conditions, which may conflict with approved permits. Any certifications required by permits shall be the responsibility of the Contractor. Copies of all permits and certifications shall be submitted to the Contracting Officer and 325 CES/CEIE.

Assurance that subcontractors comply with all environmental protection requirements of this section will be the sole responsibility of the prime Contractor.

3.2 PROTECTION OF NATURAL RESOURCES

Minimize interference with, disturbance to, and damage to fish, wildlife, and plants, including their habitats. Prior to the commencement of activities, consult with the Installation Environmental Office, regarding rare species or sensitive habitats that need to be protected. The protection of rare, threatened, and endangered animal and plant species identified, including their habitats, is the Contractor's responsibility.

Preserve the natural resources within the project boundaries and outside the limits of permanent work. Restore to an equivalent or improved condition upon completion of work that is consistent with the requirements of the Installation Environmental Office or as otherwise specified. Confine construction activities to within the limits of the work indicated or specified.

3.2.1 Flow Ways

Do not alter water flows or otherwise significantly disturb the native habitat adjacent to the project and critical to the survival of fish and wildlife, except as specified and permitted.

3.2.2 Vegetation

Except in areas to be cleared, do not remove, cut, deface, injure, or destroy trees or shrubs without the Contracting Officer's permission. Do not fasten or attach ropes, cables, or guys to existing nearby trees for anchorages unless authorized by the Contracting Officer. Where such use of attached ropes, cables, or guys is authorized, the Contractor is responsible for any resultant damage.

Protect existing trees that are to remain to ensure they are not injured, bruised, defaced, or otherwise damaged by construction operations. Remove displaced rocks from uncleared areas. Coordinate with the Contracting Officer and Installation Environmental Office to determine appropriate action for trees and other landscape features scarred or damaged by equipment operations.

3.2.3 Streams

Stream crossings must allow movement of materials or equipment without violating water pollution control standards of the federal, state, and local governments. Construction of stream crossing structures must be in compliance with any required permits including, but not limited to, Clean Water Act Section 404, and Section 401 Water Quality.

The Contracting Officer's approval and appropriate permits are required before any equipment will be permitted to ford live streams. In areas where frequent crossings are required, install temporary culverts or bridges. Obtain Contracting Officer's approval prior to installation. Remove temporary culverts or bridges upon completion of work, and repair the area to its original condition unless otherwise required by the Contracting Officer.

3.3 STORMWATER

Do not discharge stormwater from construction sites to the sanitary sewer. Discharge of hazardous substances will not be permitted under any circumstances. Construction site runoff will be prevented from entering any storm drain by the use of best management practices from the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual. Prior to any project that disturbs greater than one acre, the contractor must complete a Notice of Intent with FDEP and have a Stormwater Pollution Prevention Plan approved by the Contracting Officer and 325 CES/CEIE. A notice of termination must also be filed at the conclusion of the project.

3.3.1 Construction General Permit

Comply with State of Florida Department of Environmental Protection Generic Permit for Stormwater Discharge from Large and Small Construction Activities. Under the terms and conditions of the permit, install, inspect, maintain BMPs, prepare stormwater erosion and sediment control inspection reports, and submit SWPPP inspection reports. Maintain

construction operations and management in compliance with the terms and conditions of the general permit for stormwater discharges from construction activities.

3.3.1.1 Stormwater Pollution Prevention Plan

Submit a project-specific Stormwater Pollution Prevention Plan (SWPPP) to the Contracting Officer for approval, prior to the commencement of work. The SWPPP must meet the requirements of 40 CFR 122.26 and the EPA General Permit and the State of Florida General Permit for stormwater discharges from construction sites.

Include the following:

a. Comply with terms of the state general permit for stormwater discharges from large and small construction activities. Prepare SWPPP in accordance with state requirements. Use state guidance located at

https://floridadep.gov/water/stormwater/content/construction-activity-cgp to prepare the SWPPP.

b. Select applicable BMPs from EPA Fact Sheets located at https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#constr or in accordance with applicable state or local requirements.

c. Include a completed copy of the Notice of Intent, BMP Inspection Report Template, and Stormwater Notice of Termination, except for the effective date.

3.3.1.2 Stormwater Notice of Intent for Construction Activities

Prepare and submit a Stormwater Notice of Intent for NPDES coverage under the general permit for construction activities to the Contracting Officer for review and approval. Create a Stormwater Pollution Prevention Plan (SWPPP) for the project meeting the Florida General Permit for Stormwater Discharge from Large and Small Construction Activities for stormwater discharges from construction sites.

Prepare and submit a Notice of Intent as a co-permittee to the Contracting Officer, for review and approval.

Submit the approved NOI and appropriate permit fees onto the appropriate federal or state agency for approval. No land disturbing activities may commence without permit coverage. Maintain an approved copy of the SWPPP at the onsite construction office, and continually update as regulations require, reflecting current site conditions.

3.3.1.3 Inspection Reports

Submit "Inspection Reports" to the Contracting Officer in accordance with the State of Florida Construction General Permit.

3.3.1.4 Stormwater Pollution Prevention Plan Compliance Notebook

Create and maintain a three ring binder of documents that demonstrate compliance with the Construction General Permit. Include a copy of the

permit Notice of Intent, proof of permit fee payment, SWPPP and SWPPP update amendments, inspection reports and related corrective action records, copies of correspondence with the State Permitting Agency, and a copy of the permit Notice of Termination in the binder. At project completion, the notebook becomes property of the Government. Provide the compliance notebook to the Contracting Officer.

3.3.1.5 Stormwater Notice of Termination for Construction Activities

Submit a Notice of Termination to the Contracting Officer for approval once construction is complete and final stabilization has been achieved on all portions of the site for which the permittee is responsible. Once approved, submit the Notice of Termination to the appropriate state or federal agency.

3.3.2 Erosion and Sediment Control Measures

Provide erosion and sediment control measures in accordance with state and local laws and regulations. Preserve vegetation to the maximum extent practicable.

Erosion control inspection reports may be compiled as part of a stormwater pollution prevention plan inspection reports.

3.3.2.1 Erosion Control

Prevent erosion by mulching, Compost Blankets, Geotextiles, temporary slope drains,and/or silt fence. Stabilize slopes by sodding, seeding, or such combination of these methods necessary for effective erosion control. Use of hay bales is prohibited.

3.3.2.2 Sediment Control Practices

Implement sediment control practices to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Implement sediment control practices prior to soil disturbance and prior to creating areas with concentrated flow, during the construction process to minimize erosion and sediment laden runoff. Include the following devices: silt fence, temporary diversion dikes, and/or storm drain inlet protection.

3.3.3 Work Area Limits

Mark the areas that need not be disturbed under this Contract prior to commencing construction activities. Mark or fence isolated areas within the general work area that are not to be disturbed. Protect monuments and markers before construction operations commence. Where construction operations are to be conducted during darkness, any markers must be visible in the dark. Personnel must be knowledgeable of the purpose for marking and protecting particular objects.

3.3.4 Contractor Facilities and Work Areas

Place field offices, staging areas, stockpile storage, and temporary buildings in areas designated on the drawings or as directed by the Contracting Officer. Move or relocate the Contractor facilities only when approved by the Government. Provide erosion and sediment controls for

onsite borrow and spoil areas to prevent sediment from entering nearby waters. See UFGS 02 61 13 EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL for additional requirements. Control temporary excavation and embankments for plant or work areas to protect adjacent areas.

3.3.5 Environmental Resource Permit

The Contractor shall comply with all Environmental Resource Permit requirements in accordance with FL Admin Code 62-330.

3.4 SURFACE AND GROUNDWATER

3.4.1 Dewatering

Construction operations for dewatering must be constantly controlled to maintain compliance with existing state water quality standards and designated uses of the surface water body. Comply with the State of Florida water quality standards and anti-degradation provisions. Do not discharge excavation ground water to the sanitary sewer, storm drains, or to surface waters without prior specific authorization in writing from the Installation Environmental Office. Discharge of hazardous substances will not be permitted under any circumstances. Use sediment control BMPs to prevent construction site runoff from directly entering any storm drain or surface waters.

If the construction dewatering is noted or suspected of being contaminated, it may only be released to the storm drain system if the discharge is specifically permitted. Obtain authorization for any contaminated groundwater release in advance from the Installation Environmental Officer and the federal or state authority, as applicable. Discharge of hazardous substances will not be permitted under any circumstances. See UFGS 02 61 13 EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL for additional requirements.

3.4.2 Waters of the United States

Do not enter, disturb, destroy, or allow discharge of contaminants into waters of the United States.

3.5 PROTECTION OF CULTURAL RESOURCES

3.5.1 Archaeological Resources

If, during excavation or other construction activities, any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, activities that may damage or alter such resources will be suspended. Resources covered by this paragraph include, but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. Cease all activities that may result in impact to or the destruction of these resources. Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources. The

Government retains ownership and control over archaeological resources.

3.6 AIR RESOURCES

Equipment operation, activities, or processes will be in accordance with 40 CFR 64 and state air emission and performance laws and standards.

3.6.1 Preconstruction Air Permits

Notify the Air Program Manager, through the Contracting Officer, at least 60 days prior to bringing equipment, assembled or unassembled, onto the Installation, so that air permits can be secured. Necessary permitting time must be considered in regard to construction activities. Clean Air Act (CAA) permits must be obtained prior to bringing equipment, assembled or unassembled, onto the Installation.

Confirm that these permits have been obtained.

3.6.2 Oil or Dual-fuel Boilers and Furnaces

Provide product data and details for new, replacement, or relocated fuel fired boilers, heaters, or furnaces to the Installation Environmental Office (Air Program Manager) through the Contracting Officer. Data to be reported include: equipment purpose (water heater, building heat, process), manufacturer, model number, serial number, fuel type (oil type, gas type) size (MMBTU heat input). Provide in accordance with paragraph PRECONSTRUCTION AIR PERMITS.

3.6.3 Burning

Burning is prohibited on the Government premises.

3.6.4 Class I and II ODS Prohibition

Class I and II ODS are Government property and must be returned to the Government for appropriate management. Coordinate with the Installation Environmental Office to determine the appropriate location for turn in of all reclaimed refrigerant.

3.6.5 Accidental Venting of Refrigerant

Accidental venting of a refrigerant is a release and must be reported immediately to the Contracting Officer.

3.6.6 EPA Certification Requirements

Heating and air conditioning technicians must be certified through an EPA-approved program. Maintain copies of certifications at the employees' places of business; technicians must carry certification wallet cards, as provided by environmental law.

3.6.7 Dust Control

Keep dust down at all times, including during nonworking periods. Sprinkle or treat, with dust suppressants, the soil at the site, haul roads, and other areas disturbed by operations. Dry power brooming will not be permitted. Instead, use vacuuming, wet mopping, wet sweeping, or wet power

brooming. Air blowing will be permitted only for cleaning nonparticulate debris such as steel reinforcing bars. Only wet cutting will be permitted for cutting concrete blocks, concrete, and bituminous concrete. Do not unnecessarily shake bags of cement, concrete mortar, or plaster. Since these products contain Crystalline Silica, comply with the applicable OSHA standard, 29 CFR 1910.1053 or 29 CFR 1926.1153 for controlling exposure to Crystalline Silica Dust.

3.6.7.1 Particulates

Dust particles, aerosols and gaseous by-products from construction activities, and processing and preparation of materials (such as from asphaltic batch plants) must be controlled at all times, including weekends, holidays, and hours when work is not in progress. Maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates that would exceed 40 CFR 50, state, and local air pollution standards or that would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators, or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp. Provide sufficient, competent equipment available to accomplish these tasks. Perform particulate control as the work proceeds and whenever a particulate nuisance or hazard occurs. Comply with state and local visibility regulations.

3.6.7.2 Abrasive Blasting

Blasting operations cannot be performed without prior approval of the Installation Air Program Manager. The use of silica sand is prohibited in sandblasting.

Provide tarpaulin drop cloths and windscreens to enclose abrasive blasting operations to confine and collect dust, abrasive agent, paint chips, and other debris. Perform work involving removal of hazardous material in accordance with 29 CFR 1910.

3.6.8 Odors

Control odors from construction activities. The odors must be in compliance with state regulations and local ordinances and may not constitute a health hazard.

3.7 WASTE MINIMIZATION

Minimize the use of hazardous materials and the generation of waste. Include procedures for pollution prevention/ hazardous waste minimization in the Hazardous Waste Management Section of the EPP. Obtain a copy of the installation's Pollution Prevention/Hazardous Waste Minimization Plan for reference material when preparing this part of the EPP. If no written plan exists, obtain information by contacting the Contracting Officer. Describe the anticipated types of the hazardous materials to be used in the construction when requesting information.

3.7.1 Salvage, Reuse and Recycle

Identify anticipated materials and waste for salvage, reuse, and recycling in accordance with AFMAN 32-7002, Environmental Compliance and Pollution Prevention and DODI 4715.23, Integrated Recycling and Solid Waste Management. Describe actions to promote material reuse, resale or recycling. All scrap metal should remain property of the U.S. government. Coordination with the 325 CES/CEIE recycling manager is required.

Include the name, physical address, and telephone number of the hauler, if transported by a franchised solid waste hauler. Include the destination and, unless exempted, provide a copy of the state or local permit (cover) or license for recycling.

3.7.2 Nonhazardous Solid Waste Diversion Report

Maintain an inventory of nonhazardous solid waste diversion and disposal of construction and demolition debris. Submit a report to the Contracting Officer on the first working day after each fiscal year quarter, starting the first quarter that nonhazardous solid waste has been generated. Include the following in the report:

Construction and Demolition (C&D) Debris Disposed	cubic yards or tons as appropriate
C&D Debris Recycled	cubic yards or tons as appropriate
C&D Debris Composted	cubic yards or tons as appropriate
Total C&D Debris Generated	cubic yards or tons as appropriate
Waste Sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount)	cubic yards or tons as appropriate

3.8 WASTE MANAGEMENT AND DISPOSAL

3.8.1 Waste Determination Documentation

Complete a Waste Determination form (provided at the pre-construction conference) for Contractor-derived wastes to be generated. All potentially hazardous solid waste streams that are not subject to a specific exclusion or exemption from the hazardous waste regulations (e.g., scrap metal, domestic sewage) or subject to special rules, (lead-acid batteries and precious metals) must be characterized in accordance with the requirements of 40 CFR 261 or corresponding applicable state or local regulations. Base waste determination on user knowledge of the processes and materials used, and analytical data when necessary. Consult with the Installation environmental staff for guidance on specific requirements. Attach support documentation to the Waste Determination form. As a minimum, provide a Waste Determination form for the following waste (this listing is not inclusive): oil- and latex -based painting and caulking products, solvents,

adhesives, aerosols, petroleum products, and containers of the original materials.

3.8.1.1 Sampling and Analysis of Waste

3.8.1.1.1 Waste Sampling

Sample waste in accordance with EPA SW-846. Clearly mark each sampled drum or container with the Contractor's identification number, and cross reference to the chemical analysis performed.

3.8.1.1.2 Laboratory Analysis

Follow the analytical procedure and methods in accordance with the 40 CFR 261. Provide analytical results and reports performed to the Contracting Officer.

3.8.1.1.3 Analysis Type

Identify hazardous waste by analyzing for the following characteristics: ignitability, corrosivity, reactivity, or toxicity based on TCLP results.

3.8.2 Solid Waste Management

3.8.2.1 Project Solid Waste Disposal Documentation Report

Provide copies of the waste handling facilities' weight tickets, receipts, bills of sale, and other sales documentation. In lieu of sales documentation, a statement indicating the disposal location for the solid waste that is signed by an employee authorized to legally obligate or bind the firm may be submitted. The Contractor certification must include the receiver's tax identification number and business, EPA or state registration number, along with the receiver's delivery and business addresses and telephone numbers. For each solid waste retained for the Contractor's own use, submit the information previously described in this paragraph on the solid waste disposal report. Prices paid or received do not have to be reported to the Contracting Officer unless required by other provisions or specifications of this Contract or public law.

3.8.2.2 Control and Management of Solid Wastes

Perform work under this contract consistent with the policies and objectives identified in Tyndall Integrated Solid Waste Management Plan (ISWMP) and in accordance with AFMAN 32-7002, Environmental Compliance and Pollution Prevention. Pick up solid wastes, and place in covered containers that are regularly emptied. Do not prepare or cook food on the project site. Prevent contamination of the site or other areas when handling and disposing of wastes. At project completion, leave the areas clean. Employ segregation measures so that no hazardous or toxic waste will become co-mingled with non-hazardous solid waste. Transport solid waste off Government property and dispose of it in compliance with 40 CFR 260, state, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill is the minimum acceptable offsite solid waste disposal option. Verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. Segregate and separate treated wood components disposed at a lined landfill approved to accept this waste in accordance with local and state regulations. Solid waste

disposal offsite must comply with most stringent local, state, and federal requirements, including 40 CFR 241, 40 CFR 243, and 40 CFR 258.

Manage hazardous material used in construction, including but not limited to, aerosol cans, waste paint, cleaning solvents, contaminated brushes, and used rags, in accordance with 49 CFR 173.

3.8.3 Control and Management of Hazardous Waste

Do not dispose of hazardous waste on Government property. Do not discharge any waste to a sanitary sewer, storm drain, or to surface waters or conduct waste treatment or disposal on Government property without written approval of the Contracting Officer.

3.8.3.1 Hazardous Waste/Debris Management

Identify construction activities that will generate hazardous waste or debris. Provide a documented waste determination for resultant waste streams. Identify, label, handle, store, and dispose of hazardous waste or debris in accordance with federal, state, and local regulations, including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268.

Manage hazardous waste in accordance with the approved Hazardous Waste Management Section of the EPP. Store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178. Hazardous waste generated within the confines of Government facilities is identified as being generated by the Government. Prior to removal of any hazardous waste from Government property, hazardous waste manifests must be signed by personnel from the Installation Environmental Office. Do not bring hazardous waste onto Government property. Provide the Contracting Officer with a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SUBPART D.

3.8.3.2 Waste Storage/Satellite Accumulation/90 Day Storage Areas

Accumulate hazardous waste at satellite accumulation points and in compliance with 40 CFR 262.15 and applicable state or local regulations. Individual waste streams will be limited to 208 liter 55 gallons of accumulation (or 0.95 liter 1 quart for acutely hazardous wastes). If the Contractor expects to generate hazardous waste at a rate and quantity that makes satellite accumulation impractical, the Contractor may request a temporary 90 day accumulation point be established. Submit a request in writing to the Contracting Officer and provide the following information (Attach Site Plan to the Request):

Contract Number	
Contractor	
Haz/Waste or Regulated Waste POC	
Phone Number	
Type of Waste	
Source of Waste	
Emergency POC	

Contract Number	
Phone Number	
Location of the Site	

Attach a Waste Determination form for the expected waste streams. Allow 10 working days for processing this request. Additional compliance requirements (e.g., training and contingency planning) that may be required are the responsibility of the Contractor. Barricade the designated area where waste is being stored and post a sign identifying as follows:

"DANGER - UNAUTHORIZED PERSONNEL KEEP OUT"

3.8.3.3 Hazardous Waste Disposal

3.8.3.3.1 Responsibilities for Contractor's Disposal

Provide hazardous waste manifest to the Installations Environmental Office for review, approval, and signature prior to shipping waste off Government property.

3.8.3.3.1.1 Services

Provide service necessary for the final treatment or disposal of the hazardous material or waste in accordance with 40 CFR 260, local, and state, laws and regulations, and the terms and conditions of the Contract within 60 days after the materials have been generated. These services include necessary personnel, labor, transportation, packaging, detailed analysis (if required for disposal or transportation, include manifesting or complete waste profile sheets, equipment, and compile documentation).

3.8.3.3.1.2 Samples

Obtain a representative sample of the material generated for each job done to provide waste stream determination.

3.8.3.3.1.3 Analysis

Analyze each sample taken and provide analytical results to the Contracting Officer. See paragraph WASTE DETERMINATION DOCUMENTATION.

3.8.3.3.1.4 Labeling

Determine the Department of Transportation's (DOT's) proper shipping names for waste (each container requiring disposal) and demonstrate to the Contracting Officer how this determination is developed and supported by the sampling and analysis requirements contained herein. Label all containers of hazardous waste with the words "Hazardous Waste" or other words to describe the contents of the container in accordance with 40 CFR 262.31 and applicable state or local regulations.

3.8.3.3.2 Contractor Disposal Turn-In Requirements

Hazardous waste generated must be disposed of in accordance with the following conditions to meet installation requirements:

a. Drums must be compatible with waste contents and drums must meet DOT requirements for 49 CFR 173 for transportation of materials.

b. Band drums to wooden pallets.

c. No more than three 208 liter 55 gallon drums or two 321 liter 85 gallon over packs are to be banded to a pallet.

d. Band using 32 millimeters 1-1/4 inch minimum band on upper third of drum.

e. Provide label in accordance with 49 CFR 172.101.

f. Leave 7 to 12 centimeters 3 to 5 inches of empty space above volume of material.

3.8.3.4 Universal Waste Management

Manage the following categories of universal waste in accordance with federal, state, and local requirements and installation instructions:

a. Batteries as described in 40 CFR 273.2.

b. Lamps as described in 40 CFR 273.5.

c. Mercury-containing equipment as described in 40 CFR 273.4.

d. Pesticides as described in 40 CFR 273.3 and Armed Forces Management Board (AFPMD) standard pesticides list.

e. Aerosol Cans.

Mercury is prohibited in the construction of this facility, unless specified otherwise, and with the exception of mercury vapor lamps and fluorescent lamps. Dumping of mercury-containing materials and devices such as mercury vapor lamps, fluorescent lamps, and mercury switches, in rubbish containers is prohibited. Remove without breaking, pack to prevent breakage, and transport out of the activity in an unbroken condition for disposal as directed.

3.8.3.5 Electronics End-of-Life Management

Recycle or dispose of electronics waste, including, but not limited to, used electronic devices such computers, monitors, hard-copy devices, televisions, mobile devices, in accordance with 40 CFR 260-262, state, and local requirements, and installation instructions.

3.8.3.6 Disposal Documentation for Hazardous and Regulated Waste

Contact the Contracting Officer for the facility RCRA identification number that is to be used on each manifest.

3.8.4 Releases/Spills of Oil and Hazardous Substances

3.8.4.1 Response and Notifications

Exercise due diligence to prevent, contain, and respond to spills of hazardous material, hazardous substances, hazardous waste, sewage, regulated gas, petroleum, lubrication oil, and other substances regulated in accordance with 40 CFR 300. Maintain spill cleanup equipment and materials at the work site. In the event of a spill, take prompt, effective action to stop, contain, curtail, or otherwise limit the amount, duration, and severity of the spill/release. In the event of any releases of oil and hazardous substances, chemicals, or gases; immediately (within 15 minutes) notify the Installation Fire Department, the Installation Command Duty Officer, the Installation Environmental Office, the Contracting Officer and the state or local authority.

Submit verbal and written notifications as required by the federal (40 CFR 300.125 and 40 CFR 355), state, local regulations and instructions. Provide copies of the written notification and documentation that a verbal notification was made within 20 days. Spill response must be in accordance with 40 CFR 300 and applicable state and local regulations. Contain and clean up these spills without cost to the Government.

3.8.4.2 Clean Up

Clean up hazardous and non-hazardous waste spills. Reimburse the Government for costs incurred including sample analysis materials, clothing, equipment, and labor if the Government will initiate its own spill cleanup procedures, for Contractor- responsible spills, when: Spill cleanup procedures have not begun within one hour of spill discovery/occurrence; or, in the Government's judgment, spill cleanup is inadequate and the spill remains a threat to human health or the environment.

3.8.5 Mercury Materials

Immediately report to the Environmental Office and the Contracting Officer instances of breakage or mercury spillage. Clean mercury spill area to the satisfaction of the Contracting Officer.

Do not recycle a mercury spill cleanup; manage it as a hazardous waste for disposal.

3.8.6 Wastewater

3.8.6.1 Disposal of wastewater must be as specified below.

3.8.6.1.1 Treatment

Do not allow wastewater from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, and forms to enter water ways or to be discharged prior to being treated to remove pollutants. Dispose of the construction- related waste water off-Government property in accordance with 40 CFR 403, state, regional, and local laws and regulations.

3.8.6.1.2 Surface Discharge

For discharge of ground water, obtain a state or federal permit specific for pumping and discharging ground water prior to surface discharging. Surface discharge in accordance with the requirements of the NPDES or state STORMWATER DISCHARGES FROM CONSTRUCTION SITES permit.

3.8.6.1.3 Land Application

Water generated from the flushing of lines after disinfection or disinfection in conjunction with hydrostatic testing must be discharged into the sanitary sewer with prior approval and notification to the Wastewater Treatment Plant's Operator.

3.9 HAZARDOUS MATERIAL MANAGEMENT

Address procedures and proper handling of hazardous materials, including the appropriate transportation requirements. Do not bring hazardous material onto Government property that does not directly relate to requirements for the performance of this contract. Submit an SDS and estimated quantities to be used for each hazardous material to the Contracting Officer and the 325 CES/CEIEC Hazardous Materials Management Office for approval prior to bringing the material on the installation. Typical materials requiring SDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, solvents, adhesives, aerosol, and petroleum products. Use hazardous materials in a manner that minimizes the amount of hazardous waste generated. Containers of hazardous materials must have National Fire Protection Association labels or their equivalent. Certify that hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste, in accordance with 40 CFR 261.

3.9.1 Hazardous Material (HM)

For the purposes of the document, Hazardous Materials (HM) are defined as any product, material, chemical or substance listed in 49 CFR 172.101 (revised) and 40 CFR 302-304 (revised). Specifically, a HM is any substance or material, in any quantity or form that has the potential to harm human health or the environment or displays specific characteristics (reactive, corrosive, ignitable, and toxic).

Perform work under this contract consistent with the policies and objectives identified in AFMAN 32-7002, Environmental Compliance and Pollution Prevention. A letter of review from 325 CES/CEIE Must be accomplished prior to commencement of work on each task order. The Contractor shall submit TAFB Form 81 (Contractor Questionnaire) and TAFB Form 82 (Chemical Inventory) if applicable (within 10 duty days after the Notice to Proceed is issued), for review. The Contractor should note that Tyndall AFB is required to report chemicals used such as (but not limited to) compressed gases, adhesives, aerosol cans, sealants, paints, lubricants, oils, cleaners, degreasers, pesticides, Fuels. Copies of manufacturer-specific Safety Data Sheets (SDS) must be attached to TAFB Form 82. These SDSs shall also be readily accessible at the location of each hazardous material. After submission, 325 CES/CEIE will notify the Project Manager and/or CONS of the reportable chemicals and of any special instructions. As directed by the CO, the Contractor is required to submit TAFB Form 83 (Reporting Entry Form) showing material usage monthly until completion of the task order. A letter from CEIE will be accomplished with each submittal monthly and/or completion. The CO must be notified of any changes from the original submittal (i.e., new chemical is added, size of

container or unit of issue changes or if the manufacturer changes), changes must be submitted using TAFB form 82. An up-dated letter of review indicating changes will be sent from CEIE to the Contracting Office before the material can be brought onto the installation.

3.9.2 Hazardous Waste (Includes Special and Universal Waste)

The Contractor shall be considered the primary co-generator for all hazardous wastes generated throughout the duration of the contract. However, all hazardous waste management activities shall be coordinated and approved by the Contracting Officer and Tyndall AFB. The Contractor shall identify what wastes are hazardous using specific and technical knowledge and/or sampling and analysis. This responsibility also includes preparation of waste profile sheets, packaging, marking and labeling of wastes in accordance with 49 CFR Subchapter C.

Hazardous and special waste include, but are not limited to:

1. Fuels and oils of all types
2. Used tires
3. Computer monitors
4. Lighting ballast
5. Exit signs and lighting (batteries)
6. Asbestos (survey required)
7. Lead roof vent flashing
8. All electronic devices
9. Aerosol spray cans (including empties)
10. Paints
11. Adhesives
12. Corrosives
13. Non-flammable and non-corrosive cleaners
14. Fertilizer
15. Hydraulic fluid
16. Antifreeze

Universal waste include, but are not limited to:

1. Spent fluorescent lamps
2. High Intensity Discharge (HID) lamps
3. Batteries (except alkaline)
4. Mercury thermostats
5. Silent switches
6. Mechanical switches
7. Relays and contacts
8. Aerosol spray cans (including empties)

All hazardous, special, and universal waste items mentioned-above shall be managed IAW local, state, federal, and Tyndall AFB Hazardous Waste Management Plan. Under no circumstances shall hazardous, special, or universal waste be disposed of in the dumpster. In addition, the Contractor shall ensure that all employees, including their subs, comply with the rules and procedures outlined in this specification and the Tyndall AFB Hazardous Waste Management Plan.

The Contractor shall be familiar with and have immediate access to the following publications and regulations:

a. Environmental Protection Agency (EPA): Title 40 Code of Federal

Regulations, Parts 260-279

b. Occupational Safety and Health Administration (OSHA): 29 Code of Federal Regulations Parts 1910 and 1926

c. Department of Transportation (DOT): Title 49 Code of Federal Regulations, Parts 171-177

d. Tyndall AFB Hazardous Waste Management Plan

The Contactor shall manage all hazardous waste, special waste, and universal waste IAW the Tyndall Hazardous Waste Management Plan. In addition, the Contractor shall ensure that all employees, including their subs, comply with the rules and procedures outlined in the Tyndall AFB Hazardous Waste Management Plan.

If transportation of Hazardous Wastes is required, the Contractor shall possess or ensure the transportation of hazardous waste has a valid state and federal identification number and provide such identification to the Contracting Officer and Tyndall AFB environmental office prior to any waste movement. The Contractor shall ensure a designated representative from 325 CES/CEIE signs the hazardous waste/non-hazardous waste manifests and profiles.

3.9.3 Toxic Waste

a. Asbestos: All asbestos work must be accomplished in accordance with federal, state, and local laws and the Tyndall AFB Asbestos Management Plan.

(1) Notice of Asbestos Renovation or Demolition, DEP Form 62-257.900(1) must be submitted to Florida Department of Environmental Protection at least 10 working days prior to any demolition and/or renovation regardless of whether asbestos is present or not. A copy of this notification must be provided to the Contracting Officer and 325 CES/CEIE prior to performing any work.

(2) A copy of all submittals must be provided to the Contracting Officer and 325 CES/CEIE with adequate time built in for review.

(3) The use of materials, products or equipment containing asbestos is not allowed. See sample list below.

(4) Prior to the commencement of construction, the prime Contractor, each subcontractor and material/equipment supplier shall provide the Contracting Officer and 325 CES/CEIE with a Notarized statement that to the best of their knowledge, no asbestos will be used in the construction of this project. Additionally, the Contractor must have available the most current Safety Data Sheet proving the materials contain no asbestos.

(5) Sample list of Asbestos Containing Materials (ACM):

Note: The following list does not include every product/material that may contain asbestos. It is intended as a general guide to show which types of materials may contain asbestos:

(1) Cement Pipes	(2) Cement Wallboard
(3) Cement Siding	(4) Asphalt Floor Tile
(5) Vinyl Floor Tile	(6) Vinyl Sheet Flooring
(7) Flooring Backing	(8) Construction Mastics
(9) Acoustical Plaster	(10) Decorative Plaster
(11) Textured Paints/Coatings	(12) Ceiling Tiles & Lay-in-Panels
(13) Spray-Applied Insulation	(14) Blown-in Insulation
(15) Fireproofing Materials	(16) Taping Compounds
(17) Packing Materials	(18) High Temperature Gaskets
(19) Laboratory Hoods	(20) Laboratory Gloves
(21) Fire Blankets & Table Tops	(22) Fire Curtains
(23) Elevator Equipment Panels	(24) Elevator Brake Shoes
(25) HVAC Duct Insulation	(26) Boiler Insulation
(27) Breeching Insulation	(28) Ductwork Flexible Fabric
(29) Cooling Towers	(30) Pipe Insulation
(31) Heating and Electrical	(32) Electrical Panel Partitions
(33) Electrical Cloth ducts	(34) Spackling compounds
(35) Chalkboards	(36) Roofing Shingles
(37) Roofing Felt	(38) Base Flashing
(39) Thermal Paper Products	(40) Fire doors
(41) Caulking/putties	(42) Adhesives
(43) Wallboard	(44) Joint Compounds
(45) Vinyl Wall Coverings	(46) Electrical Wiring Insulation

Caution needs to be taken to ensure materials purchased do not contain one or more % asbestos by volume.

b. Lighting Ballast: When fluorescent and mercury vapor fixtures are removed, the ballast shall be examined for PCB labeling. Ballast is presumed to contain PCBs unless they are clearly labeled "NO PCBs". Suspected ballasts shall be removed and disposed of IAW Tyndall AFB Hazardous Waste Management Plan.

c. Lead Based Paint: No paint containing lead shall be used during the course of this contract. The Occupational Health and Safety Act (OSHA) Lead Construction Standard, 29 CFR 1926.62 is in effect whenever materials are disturbed that contain any amount of lead. This will require contractors disturbing lead-based paint to institute medical surveillance, training, engineering controls, worker protection measures and employee monitoring until monitoring results per the lead paint standard demonstrate that employee exposure is below the action level and permissible exposure limit. The Contractor on site must maintain all documentation regarding lead exposure by either historical data or project data. This data shall also be made available to the Contracting Officer and 325 CES/CEIE.

(1) Prior to the commencement of construction, the prime Contractor, each subcontractor and material/equipment supplier shall provide to the Contracting Officer and 325 CES/CEIE with a Notarized statement that to the best of their knowledge, no lead based paint will be used in the construction of this project. Additionally, the Contractor must have available the most current Safety Data Sheet proving that the paint does not have any lead content.

(2) The Contractor shall be responsible for collection and disposal of

all lead paint chips and lead paint-contaminated materials, and for accumulation of these chips/materials on site. The Contractor shall test the paint materials, provide containers for proper disposal, and transport any resulting hazardous waste to an appropriate hazardous waste accumulation area should it test positive as hazardous waste. All necessary accumulation, disposal activities and documentation shall be coordinated with the Contracting Officer and 325 CES/CEIE.

(3) A copy of Contractor's exposure assessment data shall be provided to the Contracting Officer and 325 CES/CEIE.

(4) Copies of all lead paint-related documentation generated from this project, including lead testing, air monitoring and hazardous waste manifests, shall be provided by the the Contractor to the Contracting Officer. A copy shall be forwarded to 325 CES/CEIE within 10 working days of test completion.

3.10 PREVIOUSLY USED EQUIPMENT

Clean previously used construction equipment prior to bringing it onto the project site. Equipment must be free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. Consult with the U.S. Department of Agriculture jurisdictional office for additional cleaning requirements.

3.11 CONTROL AND MANAGEMENT OF ASBESTOS-CONTAINING MATERIAL (ACM)

Manage and dispose of asbestos- containing waste in accordance with 40 CFR 61. Manifest asbestos-containing waste and provide the manifest to the Contracting Officer. Notifications to the state and Installation Air Program Manager are required before starting any asbestos work.

3.12 CONTROL AND MANAGEMENT OF LEAD-BASED PAINT (LBP)

Manage and dispose of lead-contaminated waste in accordance with 40 CFR 745. Manifest any lead-contaminated waste and provide the manifest to the Contracting Officer.

3.13 CONTROL AND MANAGEMENT OF LIGHTING BALLAST AND LAMPS CONTAINING PCBS

Manage and dispose of contaminated waste in accordance with 40 CFR 761.

3.14 PETROLEUM, OIL, LUBRICANT (POL) STORAGE AND FUELING

POL products include flammable or combustible liquids, such as gasoline, diesel, lubricating oil, used engine oil, hydraulic oil, mineral oil, and cooking oil. Store POL products and fuel equipment and motor vehicles in a manner that affords the maximum protection against spills into the environment. Manage and store POL products in accordance with EPA 40 CFR 112, and other federal, state, regional, and local laws and regulations. Use secondary containments, dikes, curbs, and other barriers, to prevent POL products from spilling and entering the ground, storm or sewer drains, stormwater ditches or canals, or navigable waters of the United States. Describe in the EPP (see paragraph ENVIRONMENTAL PROTECTION PLAN) how POL tanks and containers must be stored, managed, and inspected and what protections must be provided. Storage of fuel on the project site

must be in accordance with EPA, state, and local laws and regulations and paragraph OIL STORAGE INCLUDING FUEL TANKS. The COR and Tyndall AFB Environmental Office must approve the use of fuel storage tanks on base, and the contractor must ensure adequate spill containment (spill kits) for any tanks approved for use on Tyndall AFB. The contractor must have written spill procedures for tanks and heavy equipment that they use on base.

POL/Storage Tanks: Storage tanks and POL can be a source of contamination if not managed appropriately. Contractor personnel obtaining fuels from Storage Tanks agrees to follow all 62-761 FAC and the following list of Air Force Technical Order's to ensure compliance: 37-1-1, 37A-1-101, 42B-1-1, 42B-1-1S-2, 42B-1-16, 42B-1-22, 42B-1-23, and 42C-1-12.

All fuel, oil, and chemical spills that occur on Tyndall AFB (regardless of amount) must be immediately reported to the base Fire and Emergency Services (911).

3.14.1 Used Oil Management

Manage used oil generated on site in accordance with 40 CFR 279. Determine if any used oil generated while onsite exhibits a characteristic of hazardous waste. Used oil containing 1,000 parts per million of solvents is considered a hazardous waste and disposed of at the Contractor's expense. Used oil mixed with a hazardous waste is also considered a hazardous waste. Dispose in accordance with paragraph HAZARDOUS WASTE DISPOSAL.

3.14.2 Oil Storage Including Fuel Tanks

Provide secondary containment and overfill protection for oil storage tanks. A berm used to provide secondary containment must be of sufficient size and strength to contain the contents of the tanks plus 12 centimeters 5 inches freeboard for precipitation. Construct the berm to be impervious to oil for 72 hours that no discharge will permeate, drain, infiltrate, or otherwise escape before cleanup occurs. Use drip pans during oil transfer operations; adequate absorbent material must be onsite to clean up any spills and prevent releases to the environment. Cover tanks and drip pans during inclement weather. Provide procedures and equipment to prevent overfilling of tanks. If tanks and containers with an aggregate aboveground capacity greater than 5000 liter 1320 gallons will be used onsite (only containers with a capacity of 208 liter 55 gallons or greater are counted), provide and implement a SPCC plan meeting the requirements of 40 CFR 112. Do not bring underground storage tanks to the installation for Contractor use during a project. Submit the SPCC plan to the Contracting Officer for approval.

Monitor and remove any rainwater that accumulates in open containment dikes or berms. Inspect the accumulated rainwater prior to draining from a containment dike to the environment, to determine there is no oil sheen present.

3.15 INADVERTENT DISCOVERY OF PETROLEUM-CONTAMINATED SOIL OR HAZARDOUS WASTES

If petroleum-contaminated soil, or suspected hazardous waste is found during construction that was not identified in the Contract documents, immediately notify the Contracting Officer. Do not disturb this material

until authorized by the Contracting Officer.

3.16 CHLORDANE

Evaluate excess soils and concrete foundation debris generated during the demolition of housing units or other wooden structures for the presence of chlordane or other pesticides prior to reuse or final disposal.

3.17 SOUND INTRUSION

Make the maximum use of low-noise emission products, as certified by the EPA. Blasting or use of explosives are not permitted without written permission from the Contracting Officer, and then only during the designated times. Confine pile-driving operations to the period between 8 a.m. and 4 p.m., Monday through Friday, exclusive of holidays, unless otherwise specified.

Keep construction activities under surveillance and control to minimize environment damage by noise. Comply with the provisions of the State of Florida rules.

3.18 POST CONSTRUCTION CLEANUP

Clean up areas used for construction in accordance with Contract Clause:

"Cleaning Up". Unless otherwise instructed in writing by the Contracting Officer, remove traces of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. Grade parking area and similar temporarily used areas to conform with surrounding contours.

3.19 INSTALLATION RESTORATION PROGRAM (IRP)

Contractor must follow these guidances:

a. Installation Restoration Program and Aqueous Film Forming Foam Guidelines for Tyndall MILCON Rebuild (dated 25 August 2021, Attached);

b. Environmental Supplemental Guidance (Version 8, Attached);

c. General Environmental Requirements For Contracts (Version 2, Attached);

d. Tyndall AFB Guidelines for Non-ERP Soil Management USACE MILCON Buildout (Attached);

e. Tyndall Soils Decision Matrix (Attached)

f. Location Map for designated Soil Borrow Storage Area (Attached)

g. Tyndall AFB Hazardous Waste Management Plan;

h. Tyndall AFB Asbestos Management Plan;

i. 40 CFR 262.11

j. 40 CFR 273.6

-- End of Section --

Installation Restoration Program and Aqueous Film Forming Foam Guidelines
PWS Language for MILCON-rebuild

Construction projects within Installation Restoration Program (IRP) and Aqueous Film Forming Foam (AFFF) Related Waste site boundaries shall be conducted within the following guidelines. For groundwater, the guidelines apply to dewatering effluent within 500 feet of an IRP/AFFF site boundary and/or known contamination. To the extent these guidelines conflict with provisions contained within the construction contract, Statement of Work, or approved work plans, those documents control. The Contractor shall obtain and comply with all FDEP issued wastewater permits which generally contain requirements for, depending on the type of facility and disposal means, the treatment of the wastewater, disposal to surface water (NPDES), discharge to ground water, and the land-application of reclaimed water.

1. It is the responsibility of the contractor to fulfill its obligation under 29 CFR 1910.120, Occupational Safety and Health Administration Standards (OSHA), Hazardous Waste Operations and Emergency Response (HAZWOPER), and address the health and safety of its employees associated with construction activities relative to this project.

2. Soil from excavation or construction activities may be moved within the boundaries of the applicable IRP/AFFF site, as long as it is subsequently redeposited at the point of generation, or to an approved on-base waste accumulation area (if designated available). Soil cannot be moved to the approved on-base waste accumulation area until a hazardous waste determination has been made in accordance with UFGS section 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS – TYNDALL STANDARD. Soil is to be staged in accordance with UFGS section 02 61 13, EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL, and cannot leave the IRP/AFFF site from which it originated or from an approved on-base waste accumulation area until it is characterized for disposal at an authorized off-base disposal facility or reuse at an on-base location other than the point of generation. All generators of waste materials are required by law to characterize their waste to determine whether or not the waste is hazardous. Characterization, handling, stockpiling, permitting, accumulation time, storage, and disposal of soil shall be in accordance with UFGS section 02 61 13, EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL and section 02 81 00 TRANSPORTATION AND DISPOSAL OF HAZARDOUS MATERIALS. Best management practices shall be utilized to prevent spreading contamination into previously uncontaminated or less contaminated areas within the IRP/AFFF site.

3. Soil that cannot be redeposited at the point of generation shall be disposed of at an authorized off-base disposal facility, an approved soil borrow storage area (if designated available), or reused at a location other than the point of generation. Soils destined for disposal at an authorized disposal facility shall be tested utilizing the Toxic Characteristic Leaching Procedure (TCLP), analyzed for characteristic hazardous chemicals (40 CFR 261, Subpart C) and/or as required by the authorized disposal facility. Results are to be provided to the Tyndall Restoration Program Manager (RPM) and the 325 Civil Engineer Squadron (CES) Hazardous Waste Program Manager (HWPM) prior to any transportation for proper disposal at an authorized disposal facility or may be conservatively handled as hazardous waste in accordance with appropriate hazardous waste laws and regulations if approved by Tyndall RPM and the 325 CES HWPM or required by the contract or statement of work. Additionally, soils that exhibit a hazardous waste characteristic are to be further sampled to determine applicability of Land Disposal Restrictions and any Underlying Hazardous Constituents (40 CFR 268). Copies of transportation and disposal documents (profiles, manifests, bills of lading) are to be provided to Tyndall RPM and the 325 CES HWPM. The contractor is responsible for the sampling, profiling, proper handling, and disposal of any contaminated media. The contractor is required to utilize the services of a

qualified environmental professional for sampling and certified laboratory for testing. Soils destined for soils borrow storage area (if designated available) or for reuse at a location other than the point of generation shall be tested as described in Item 4 below.

4. Prior to reusing soils as backfill at a location other than the point of generation, soils are to be staged in stockpiles of 400 CY within the IRP/AFFF site or approved on-base waste accumulation spoil site area (if designated available), sampled, and analyzed in accordance with the parameters identified in Item 7 below. One composite sample of eight aliquots is to be collected from each 400 CY stockpile. Analytical results are to be compared to the Florida Department of Environmental Protection (FDEP) residential Soil Cleanup Target Levels (SCTL) and/or provisional residential soil cleanup target level (PSCTL) for AFFF to determine acceptability of the proposed material for reuse anywhere on base. Analytical results are to be compared to the FDEP industrial SCTL and PSCTL (for AFFF) to determine acceptability of the proposed material for reuse along the flightline. The contractor is required to utilize the services of a qualified environmental professional for sampling and certified laboratory for testing.

   At contractor's discretion, if a composite soil sample exceeds its respective FDEP residential direct exposure SCTLs/PSCTLs, then the stockpile may be resampled to confirm the constituent(s) that failed. This is to be accomplished by collecting eight discrete soil samples from the approximate locations of the eight aliquots that comprised the initial composite sample. The 400-cy soil stockpile is to be divided into eight equal sections of 50 cy each (e.g., spokes dividing a wagon wheel). The "A" sample is to be always collected on the north side of the stockpile, and the subsequent samples are to be collected in a clockwise manner. Each discrete sample is to be analyzed only for the constituent(s) that failed. Collection of eight discrete soil samples per soil stockpile (or one sample per 50 cy of soil) is viewed as a conservative approach to confirming the analytical results because it more accurately reflects the constituent concentrations of the soil stockpile by increasing sample density and resolution. If the results of the discrete sampling/resampling indicate four or fewer spokes within the soil stockpile contain a constituent at a concentration that exceeds its FDEP residential direct exposure SCTL/PSCTL, then those 50-cy hotspot spokes are to be excavated from the soil stockpile and moved to the waste pad for off-site disposal. The remaining portions/spokes of the stockpile with discrete samples results less than the FDEP residential direct exposure SCTLs/PSCTLs can be used as backfill in the excavation areas as appropriate. If more than four spokes contained a constituent at a concentration that exceeded its FDEP residential direct exposure SCTL/PSCTL, then the entire stockpile should be moved to the waste pad for off-site disposal.

5. Documentation of any sampling and testing results, and reuse or disposal actions shall be provided in a summary report prepared by the contractor in accordance with UFGS section 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS, section 02 61 13, EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL and section 02 81 00 TRANSPORTATION AND DISPOSAL OF HAZARDOUS MATERIALS.

6. Construction activities are to avoid damaging or disturbing any monitoring wells (and are to protect wells from the introduction of contaminants (mud/dirt or PVC glue introduced/caps or plugs removed/risers compromised) that may be located in the construction area. Cost to sample, repair and/or replace damaged wells, as a result of construction, shall be incurred by the contractor. No wells may be abandoned without prior approval of the Tyndall RPM. If wells must be abandoned, they are to be abandoned properly (and/or replacements installed) and surveyed by a Florida licensed water well driller. Monitoring well abandonment or installation documentation is to be provided to Tyndall RPM. Placement of replacement wells will require coordination with Environmental Protection Agency (EPA), FDEP, and Tyndall RPM.

7. Any soils brought on-site and used for backfill are to be properly tested or certified clean (with appropriate documentation) to ensure that contaminants are not being applied on-site. The source of backfill is to be natural or virgin material (other than the operation of a borrow pit facility) and in an area which has not previously been used for commercial or industrial activities. If the soils to be used for backfill are not certified clean with appropriate documentation, testing of the soils is required and include at least one (1) soil sample collected from the borrow source and analyzed for the following parameters:
    - Volatile Organic Compounds (VOCs) per Method 8260
    - Semi-volatile Organic Compounds (SVOCs) [Base/Neutrals (e.g., PAHs, Pesticides, PCBs) and Acid Extractables (e.g., Phenols)] per Methods 8270/8081/8082
    - RCRA metals by Method 6020
    - Petroleum Residual Organics (by FL-PRO)
    - Soil: ASTM D7968-17a (if from AFFF site)

   Analytical results will be compared to the FDEP residential SCTLs/PSCTLs to determine acceptability of the proposed material as clean fill.

8. If any contamination is encountered (i.e. suspicious odors, fuel smells, soil staining, odd soil colors, unfamiliar liquids, buried materials, etc.) at the site, contact Tyndall RPM and 325 CES HWPM through the Contracting Officer Representative (COR). These soils are to be separated, stockpiled on and covered with visqueen until properly tested and disposed.

9. The contractor is responsible for addressing permitting, handling, storage, characterization, treatment, and disposal of any potentially contaminated dewatering effluent in accordance with UFGS section 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS, section 02 61 13, EXCAVATION AND HANDLING OF CONTAMINATED MATERIAL, and section 31 00 00 EARTHWORK. Dewatering within a groundwater plume may be allowed as long as effluent is allowed to percolate back into the known plume areas (FDEP to approve infiltration plan), other approved on-site method(s) of disposition are used, and/or it is disposed of off-site. Dewatering effluent destined for disposal at an authorized disposal facility requires analysis for characteristic hazardous chemicals (40 CFR 261, Subpart C) and other constituents as required by treatment/disposal facilities and the results provided to 325 CES HWPM prior to any transportation.

10. Proper decontamination is required for any equipment which contacts contaminated soils or groundwater prior to mobilization off-site. Decontamination fluids are to be collected and stored in 55-gallon drums, properly labeled and stored on pallets on site in the manner not to exceed the time requirements of Resource Conservation Recovery Act (RCRA) and applicable laws until sampled, tested, and disposed of at a proper disposal facility.

ADDITIONAL AFFF-RELATED WASTE MANAGEMENT GUIDELINES

The below additional guidance addresses AFFF-related waste streams that result from Air Force responses to releases of C6 and legacy C8 formulations of AFFF product resulting from a spill, accidental release, emergency response, fire training activities, environmental investigations, and management of AFFF (e.g. management and disposal of legacy products).

Determine media-specific treatment / disposal decision points

In general, containerize and characterize Aqueous Film Forming Foam (AFFF)-related waste to determine appropriate disposal method. Handling of all regulated co-contaminants in AFFF-related waste must comply with applicable federal and state promulgated standards. If other contaminants of

concern (COCs) exceeding regulatory standards are identified in the waste, the waste will be managed to address the regulated COC according to applicable legal requirements. Refer to the AFFF-Related Disposal Determination Table (see below) for preferred and alternate methods of treatment/disposal and in the following text:

Evaluate media-specific final disposition and treatment technology options before final disposition:

1. Return small quantities of solid and liquid waste with both perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) detected at less than or equal to the EPA Soil Regional Screening Levels (RSL) of 1.26 mg/kg or EPA Groundwater Lifetime Health Advisory (LHA) of 70 ng/L respectively, to source location at point of generation.

- Tyndall AFB has determined 55 gallons or less of waste is to be considered a small quantity. Avoid leaving mounded soil or standing liquid when returning waste to its source location.
- Containerize, sample and store AFFF-related waste generated from environmentally, culturally, and/or mission sensitive areas prior to disposal.
- Base Environmental through the COR will determine, on a case-by case basis, if small quantity waste is feasible to return to the source location at the point of generation without sampling, based on site specific conditions and best engineering judgement.

2. Return large quantities (greater than 55 gallons) of solid and liquid waste with both PFOS and PFOA detected at less than or equal to the RSL or LHA, contaminant dependent, to its source location at point of generation. Sample recovered groundwater from dewatering activities at the influent and effluent locations of the dewatering and /or treatment systems at a frequency of 10,000 gallons or less and analyze samples at a certified laboratory. Large quantities of excess soil shall be evaluated and sampled as described in Item 4 above.

- Large quantities of liquid AFFF waste are to be characterized and treated, using either Granular Activated Carbon (GAC), ion exchange, or other approved treatment technology to below the LHA, before returning it to its source location at the point of generation in accordance with Air Force (AF) requirements. FDEP permit is required for re-infiltration of treated groundwater.
- Alternative on-site (next to the point of generation, within the MILCON-rebuild Zone, or within an approved disposal area) disposal options may be approved for use. Contractor is responsible for coordinating with the AF and FDEP to ensure regulatory compliance.
- Treated and/or non-treated dewatering effluent may be discharged to stormwater system/surface water discharge under permitted conditions (including compliance with surface water standards and provisional PFOS/PFOA surface water screening levels). This action would be considered an on-site disposal option.

3. Treatment (liquid waste streams only). AFFF-contaminated liquid waste (that is, liquid waste with PFOS or PFOA detected above the LHA) may be treated on-site, (next to the point of generation, within the MILCON-rebuild Zone, and/or within an approved on-base waste accumulation area for storage and/or treatment, if designated available) prior to discharge. Effluent must achieve reduction to less than or equal to LHA and/or applicable state or local promulgated standards. If other COCs exceeding regulatory standards are identified in the liquid waste, the liquid waste will be managed to address the regulated COC according to applicable legal requirements. FDEP permitting is required.

4. RCRA Subtitle D landfill. Used for disposal of non-hazardous municipal, industrial, and construction and demolition (C&D) solid waste. Coordinate with the disposal facility for waste acceptance.

5. RCRA Subtitle C landfill. Used for disposal of hazardous solid waste. Waste includes but not limited to AFFF-related solid or liquid waste with both PFOS and PFOA detected above the RSL or LHA or co-mingled AFFF-related waste with another COC with concentrations exceeding regulatory standards and regulated hazardous waste. Coordinate with the disposal facility for waste acceptance.

On-site (at the point of generation, within the MILCON-rebuild Zone, and/or within an approved on-base waste accumulation area and/or treatment area) disposal options approved by the Air Force and FDEP

Groundwater

- Re-infiltration. Re-infiltration (i.e. discharge to groundwater) of produced groundwater is considered an option for managing recovered groundwater. Contractor is required to coordinate with the AF and FDEP prior to implementing to ensure regulatory compliance. Per FDEP, this option does not require a permit unless treatment is introduced to meet AF AFFF-related waste treatment requirements. However, their review and approval to the dewatering and re-infiltration work plan is expected.
- Re-injection. The use of temporary well points to re-inject produced groundwater is considered an option for managing recovered groundwater. Contractor is required to coordinate with the AF and FDEP prior to implementing to ensure regulatory compliance. According to FDEP regulations, the use of temporary well points requires an injection well permit as they are considered "connector wells" under Rule 62-528.600.
- Alternative on-site (next to the point of generation, within the MILCON-rebuild Zone, and/or within an approved on-base waste accumulation area and/or treatment area, if designated available) disposal options may be approved for use. For example: The Contractor may obtain a National Pollutant Discharge Elimination System (NPDES) permit from FDEP to discharge large quantities of recovered groundwater to a stormwater drain. Contractor is required to coordinate with the AF and FDEP prior to implementing to ensure regulatory compliance.

Soil

- Redeposit at the point of generation.
- Reuse at an on-base location other than the point of generation.
- Stockpile at an approve on-base soils borrow storage area (if designated available)

Recovered soil from demolition and construction activities, that is not returned to the point of generation, is to be containerized and characterized in an area located within the IRP/AFFF sites or in an approved on-base waste accumulation area (if designated available) awaiting final disposition.

Construction Work Plans

- Contractor is responsible for developing and obtaining approval of work plans detailing means and methods to ensure proper management of waste soil and water, ensuring contamination is not spread during construction, dewatering, and containerizing activities.

- Contractor activities are required to adhere to all Air Force, Federal and State of Florida regulations and standard operating procedures pertaining to these concerns.

AFFF-Related Disposal Determination

AFFF-Related Media Type	Non Detect		Detected Below EPA LHA (liquid) or approved RSL (soil)		Detected Above EPA LHA or state promulgated standard (liquid)		Detected Above EPA RSL (soil)		Eligible for disposal as solid waste in off-base landfill	
	Pref A	Alt B	Pref A	Alt B	Pref A	Alt B	Pref A	Alt B	Pref A	Alt B
Liquid	1, 2	4	1, 2	3, 4, 5	3	5, 6				
Soil	1, 2, 7	4	1, 2	4, 5, 6, 7			5	6, 7		
Spent treatment media (non-residential)			4	5, 6	5	6				
Other solids (e.g., PPE, rags, brooms, construction debris)									4	
Sludge (from on-site operations managing AFFF)	1, 2	4	1, 2	4, 5	1,2	3, 5, 6	1, 2	5, 6		

1 – Return small quantities of solid and liquid waste below the RSL or LHA, respectively, to source location at point of generation
2 – Return large quantities of solid and liquid waste below the RSL or LHA, respectively, to source location at point of generation
3 – Treatment (liquid waste streams only). AFFF-contaminated waste liquid must be treated on-site prior to discharge. Effluent must achieve reduction to less than or equal to LHA and/or applicable state or local promulgated standards
4 – RCRA Subtitle D landfill
5 – RCRA Subtitle C landfill
6 – Other available treatment technology
7– Tyndall Soils Borrow Storage Area, if designated available in solicitation

Environmental Supplemental Guidance

The A/E is required to address all environmental regulations as well as guidance provided by Tyndall BCE, including but not limited to: *Installation Restoration Program and Aqueous Film Forming Foam Guidelines for MILCON Rebuild* dated 16 Mar 2021; *Environmental Protection* "General Environmental Requirements for Contracts v2"; Tyndall Map PFOS & PFOA Areas; Final AFFF SI Report delivered to regulators; Basewide Conceptual Site Model, Tyndall Air Force Base; DoD Vapor Intrusion Handbook; Environmental Restoration Program Site Reports; IRP Map 2016 May 10 Base Map – Restoration Sites (with wetlands); Wetlands Delineation Survey; AF813s; and Final NEPA guidance.

The following information is supplemental guidance for <u>vapor intrusion risk determination</u> for projects located within IRP and/or AFFF sites.

1. Follow the requirements of the DoD Vapor Intrusion Handbook

    1.1. Vapor intrusion shall be evaluated when volatile chemicals are present in soil, soil gas, or groundwater that underlies existing structures or has the potential to underlie future buildings and there may be a complete human exposure pathway. A/E shall conduct screening level evaluations as required for facility designs. If design model data exceeds the generic screening levels then the A/E shall provide the requirements for a vapor intrusion system in the RFP.

The following information is supplemental guidance for <u>demolition</u>:

1. Existing buildings shown to be demolished within the zone limits shall be demolished by others prior to construction contract award.
2. Any data required for design (construction methods and environmental testing) shall be provided by Tyndall Base Civil Engineering Office (BCE).
3. The A-E is responsible for showing demolition of any pavements and underground utilities interfering with construction and including related design requirements in the contract drawings and specifications.

The following information is supplemental guidance for <u>boring activities</u>.

1. General Requirements:
    1.1. The Contractor shall develop a Site-specific Safety and Health Plan (SSHP) in accordance with 29 CFR 1910.120 and EM 385-1-1. SSHP will be submitted to USACE PM and TL for Mobile District Safety Office approval prior to drilling. The plan shall define emergency procedures, discuss any site hazards that could be encountered during execution of this performance work statement, address accident prevention, and present appropriate action levels for potential contaminants to be encountered.

    For all drilling sites that are within documented areas of known soil and/or groundwater contamination, this SSHP must include at a minimum: the identification of the known contaminants and respective hazard evaluations, procedures for managing Investigative Derived Wastes (IDW), the selected personal protective equipment, and address all decontamination procedures for personnel and equipment

    1.2. All borings and piezometers outside of designated IRP sites or AFFF site boundaries, which penetrate depths greater than 9 feet, shall be backfilled and tremie grouted per contract requirements. Cuttings that are not redeposited in bore hole shall be spread in the vicinity of the bore hole or handled in accordance with Environmental requirements and guidance addressed above. Note that storage of containerized materials shall remain within the vicinity of the boring location on the site.

2. Installation Restoration Program (IRP) Sites:

1.1. Boring activities within designated IRP sites, including soil and/or within 50 feet of and within groundwater contamination plume, are required to adhere to the following:

1.1.1. All cuttings shall be recovered and containerized in 55 gallon drums, sampled and tested for full Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic Leaching Procedure (TCLP), evaluated based on industry limits and disposed of at an appropriate offsite facility. All test results shall be provided to the appropriate facility environmental representative. Note that storage of containerized materials shall remain within the vicinity of the boring location on the site until time of removal.

1.1.2. Waste Profile and all waste manifests to be signed by 325th CES prior to disposal.

1.1.3. The entire borehole shall be grouted using tremie pipe from the bottom of the maximum penetration depth continuously to the ground surface.

1.1.4. Borings that approach and/or exceed a confining layer are required to adhere to the following:

1.1.4.1. Continuous sampling for the entire exploration depth.

1.1.4.2. If required to bore through a confining layer to satisfy the required sampling depth for geotechnical design purposes, a casing shall be installed between the ground surface and the top of the confining layer and sealed with grout before boring may extend below the top of the confining layer.

1.1.5. Decontamination of drilling equipment is required after completion of drilling within each IRP site, and within 50 feet of and within each IRP groundwater plume.

2. Aqueous Film Forming Foam (AFFF) Sites:

2.1. Borings within AFFF site boundaries are required to follow the Installation Restoration Program and Aqueous Film Forming Foam Guidelines for MILCON Rebuild dated 16 Mar 2021. Preferred disposal will follow Tyndall RPM guidance.

2.1.1. Decontamination of drilling equipment is required after completion of drilling within designated AFFF sites.

ENVIRONMENTAL PROTECTION

1. General:

All projects shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work must be protected during the entire duration of a project. Contractor shall comply, and assure that all sub-contractors comply, with all applicable federal, state, and local laws and regulations, Air Force Instructions, Air Force Manuals, Engineering Technical Letters, regulations, ordinances, policies and standards related to environmental matters. Copies of local policies and procedures will be provided to the contractor upon request.

The use of materials which have been identified by Governmental agencies as being hazardous or creating potentially hazardous conditions will not be allowed on any project. Specifically, products containing lead, asbestos, polychlorinated biphenyl (PCB), and Ozone depleting chemicals are prohibited. The contractor shall assume a strict and cautious position in responding to reports of other materials, which may be identified as hazardous during construction period.

If any material originally specified or approved for use in the work should become listed as suspected or verified as being hazardous, the contractor shall immediately notify the Contracting Officer and initiate efforts to postpone the installation or use of the material until the matter can be investigated.

All contractors must comply with requirements for the protection of natural resources (e.g. wetlands) and cultural resources (archeological sites and historic buildings). In the event of any unexpected discoveries of intact archaeological deposits or human remains, all ground-disturbing activity near the find shall cease and the contractor shall contact 325 CES/CEIE. Contractor shall not resume any work near the find until consultation with Native American Tribes and State Historical Preservation Office is concluded.

The contractor shall reimburse the Government for any remediation undertaken to clean up releases by the contractor and for any civil or criminal fines or penalties for any environmental infraction caused by the contractor.

2. Environmental Permits:

a. Obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations is the Contractor's responsibility.

b. All permits applications will be staffed through 325 CES/CEIE for signature and forward to Florida Department of Environmental Protection or US Army Corps of Engineers as necessary.

c. Typical environmental permitting process for execution methods:

1. Design-Build: The prime contractor’s A/E shall provide the necessary design work, payment, and application forms to obtain any permits for potable water, sanitary sewer, stormwater treatment facility, and 62-621 construction activity as part of the overall contract. The prime contractor is responsible for completion of the necessary as-built permit certifications once the items are complete.

2. Design-Bid-Build: The A/E of record shall provide the necessary design work, payment, and application form to obtain any ERP permits for wetland fill activities, potable water, sanitary sewer, and stormwater treatment facility and provide to 325 CES/CEIE at final design. The construction contractor

is responsible for obtaining the 62-621 construction activity permit. The contractor shall provide as-built certifications for permitted items at the end of construction.

3. As-built certifications shall be staffed by the contractor through 325 CES/CEIE for signature and forward to Florida Department of Environmental Protection (FDEP).

d. Sanitary sewer and drinking water permits: The A-E shall bear full responsibility to accurately conceive, and design the proposed utility system and/or modifications to the existing system(s) based on acceptable practices for design as required by state and federal regulations.

3. National Environmental Protection Act (NEPA):

In the event that the government has prepared any NEPA Documentation, i.e. Environmental Impacts Statement (EIS), Environmental Assessments (EA), or a Finding of No Significant Impact (FONSI), the designer shall prepare the design so that it is entirely compatible with any and all requirements of the NEPA documents.

4. Fuel Tanks:

For any new fuel tanks, the Storage Tank Manager (325 CES/CEIE) must approve prior to install to ensure that proper registration and coordination with State agencies is performed as needed.

5. Air Quality:

a. Many operations are subject to specific air quality regulations. State-specific emission standards are identified in Chapter 62-296 of the Florida Administrative Code (F.A.C.). Florida regulates hazardous air pollutants (HAP) in accordance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40 of the Code of Federal Regulations (CFR): Part 61 is regulation by HAP and Part 63 is regulation by industrial category. There are also federal New Source Performance Standards specified for criteria air pollutants in Title 40, Part 60 of the CFR.

b. Contractors working on projects that involve the creation or changing, in any way, of an air pollution source located at Tyndall AFB shall coordinate with 325 CES/CEIE to modify the existing air operating permit or, for a new air source, apply for a construction permit. The cost of any fees involved shall be paid by the conbtractor. Conduct a thorough site/plan survey to identify all activities that generate and/or control air emissions. Air permitting requirements are specified in Chapters 62-4, 62-204, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). Projects utilizing regulated equipment are required to obtain permits prior to beginning construction on new emissions units, modifying an existing emissions unit or installing air pollution control equipment. These permits will specify applicable emissions standards and work practices to control the emissions of pollutants such as particulate matter, carbon monoxide, nitrogen oxides, sulfur oxides, volatile organic compounds, and hazardous air pollutants.

c. Prior to the start of the project, the Contractor will submit a listing of all stationary and mobile emission sources and associated criteria and hazardous air pollutants for each source. During the project, the list will be maintained by the Contractor, and updates submitted to 325 CES/CEIE as changes occur. Air pollution sources include, but are not limited to, external combustion sources (boilers), internal combustion sources (gas, diesel, propane, natural gas – fired generators and other internal combustion driven types of equipment), woodworking shops, paint spray booths, fuel storage and dispensing operations, welding operations, abrasive cleaning, degreasers and emitters of ozone depleting substances and/or hazardous air pollutants (HAPS).

6. Asbestos Containing Materials: The Contractor and subcontractors are prohibited from using any Asbestos Containing Materials (ACM) on any assigned project. In the event the Contractor encounters previously unidentified ACM or suspected ACM during work, the Contractor shall take all necessary precautions to ensure the ACM is not disturbed. The Contractor shall immediately notify the 325 CES Project Manager and Contracting Officer and await further guidance. The Government will take steps, as necessary, to ascertain the material's composition and determine any necessary remedial action.

a. The Contractor or subcontractors performing asbestos removal must be licensed/certified by the State of Florida, show proof of acceptable Federal/State approved disposal site, and must have properly certified and trained asbestos abatement workers. Contractor must perform in strict compliance with all applicable State, Local, and Federal regulations.

b. Notice of Demolition or Asbestos Renovation, DEP Form 62-257.900(1) must be submitted to Florida Department of Enviro Many operations are subject to specific air quality regulations. State-specific emission standards are identified in Chapter 62-296 of the Florida Administrative Code (F.A.C.). Florida regulates hazardous air pollutants (HAP) in accordance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40 of the Code of Federal Regulations (CFR): Part 61 is regulation by HAP and Part 63 is regulation by industrial category. There are also federal New Source Performance Standards specified for criteria air pollutants in Title 40, Part 60 of the CFR, postmarked or received at least 10 working days prior to the start of all demolitions (i.e. load-bearing structures) and for the removal of asbestos-containing material from all applicable sources meeting or exceeding the thresholds identified in the Asbestos National Emission Standards for Hazardous Air Pollutants regulations. A copy of this notification must be provided to the Contracting Officer and 325 CES/CEIE prior to performing any work.

c. Contractors will coordinate with 325 CES/CEIEC Hazardous Waste Program Manager or designee for approval and signature of disposal shipping documents.

7. Hazardous Waste:

a. The Contractor shall conduct and record hazardous waste determinations for all Solid Wastes to identify, characterize, store and dispose of any hazardous waste generated during work in strict accordance with Federal and State guidelines found in the Code of Federal Regulations..

b. The contractor shall comply with all provisions of 40 CFR 260 through 281 regarding the generation, storage, and disposal of hazardous waste. The contractor shall stop all work in the event 325 CES/CEIE identifies noncompliance with federal and state regulations and shall correct any discrepancies immediately within 2 hours of notification. All hazardous waste shall be labeled and an inventory management system will be initiated to insure timely removal and proper disposal. No on-base disposal will be allowed.

c. All drums will be labeled with a hazardous waste label. The label shall include the proper DOT shipping name, UN or NA number, EPA waste number, generator information. The label shall be placed on the side of the drum. All drums used to store hazardous waste shall be non-leaking and safe to handle. Contractor shall be responsible for over packing drums that are rusted, dented, or leaking. Drums and/or over-packs shall be provided by the contractor. All drums shall be "new" DOT approved containers.

d. Hazardous waste transportation and disposal shall be coordinated through 325 CES/CEIE. The contractor shall be responsible for transportation and disposal of all hazardous waste at an EPA approved treatment, storage, disposal facility (TSDF). The transportation and disposal facilities shall be approved

by 325 CES/CEIE prior to their use. Manifests and profiles shall be signed only by 325 CES/CEIE. Drums shall be disposed of within 90 days of placing the first drop in the container.

8. Solid, Liquid, and Gaseous Contaminants: The Contractor shall be responsible for the proper disposal of all solid, liquid, and gaseous contaminants in accordance with all applicable Federal, State, and Local codes and regulations, as described elsewhere herein.

9. Covered Chutes: All chutes for refuse, and the like, shall be covered or of such a design to fully confine the material to prevent dust dissemination.

10. Management of Liquid Wastes: The contractor shall not dispose of any waste or residual material on the ground or in any storm sewer or drainage system. This includes but is not limited to paints, coatings, solvents, petroleum products, etc. Discharge of any material or diluted material into sanitary or industrial sewer systems shall be coordinated with the Base Environmental Element through the Contracting Officer, and shall be approved by the Base Environmental Element. Waste material for disposal shall be disposed of in accordance with Federal and State waste regulations and with local base policies. If in doubt, consult with the Base Environmental Element, Tyndall AFB, through the Contracting Officer.

11. Hazardous Chemical and Liquid Petroleum Products Spill Prevention: All hazardous materials and wastes shall be stored and handled in a manner to minimize the potential for spills. Liquid containers of 55 gallons or greater will be stored on or in a secondary containment compatible with the material being stored, and capable of containing the entire contents of the largest single container. (e.g. A secondary containment pallet capable of holding 60 gallons may have more than a single 55 gallon drum stored upon it). Spill response materials and tools shall be available in the immediate area to contain and control a spill. In the event of a spill every effort will be made to prevent the material from entering a storm water or sanitary sewer inlet. If the spill is a result of negligence or failure to adhere to these requirements the contractor will be solely responsible for the cost of cleanup and restoration of the area. Copies of the Spill Prevention, Containment and Countermeasures Plan and the Hazardous Material Management Plan will be provided to the Contractor by the Contracting Officer upon request.

12. Hazardous Material Inventory and Tracking:

a. A letter of review from 325 CES/CEIEC Must be accomplished prior to commencement of work on each task order.

b. The contractor shall submit TAFB Form 81 (Contractor Questionnaire) and TAFB Form 82 (Chemical Inventory) for review and approval to the 325 CES/CEIEC Hazardous Materials Office (HAZMO) 7-10 business days prior to commencement of work.

c. The Contractor should note that Tyndall AFB is required to report chemicals used such as (but not limited to) compressed gases, adhesives, aerosol cans, sealants, paints, lubricants, oils, cleaners, degreasers, pesticides, and fuels. Copies of manufacturer-specific Safety Data Sheets (SDS) must be attached to TAFB Form 82. These SDSs shall also be readily accessible at the location of each hazardous material. **Materials Safety Data Sheets (MSDS) are no longer accepted.**

d. After submission, the 325 CES/CEIEC HAZMO will notify the Project Manager and/or CONS of the reportable chemicals and of any special instructions. **The contractor or subcontractor cannot bring any materials onto the installation until they have received a hazardous materials approval letter from the 325 CES/CEIEC HAZMO.** As directed by the CO, the Contractor is required to submit TAFB Form 83 (Reporting Entry Form) showing material usage monthly until completion of the task order. A letter from 325 CES/CEIEC HAZMO will be accomplished with each submittal monthly and/or

completion. The CO must be notified of any changes from the original submittal (i.e. new chemical is added, size of container or unit of issue changes or if the manufacturer changes), changes must be submitted using TAFB form 82. An updated letter of review indicating changes will be sent from 325 CES/CEIEC HAZMO to the Contracting Office before the material can be brought onto the installation. Prime contractors shall be responsible to ensure all sub-contractors comply with this requirement.

e. The contractor shall identify a single Point of Contact (POC) in writing to the HAZMO. Submit changes in writing to the HAZMO as they occur.

f. All containers will be labeled and the Contractor will provide the 325 CES Environmental Element, the Fire Department, and Readiness Flight with a listing of all Extremely Hazardous Substances (as defined in 40 CFR Part 355, Appendix A), approximate volumes of petroleum based substances (i.e., lubricants, fuels, etc.) and hazardous materials as defined in 40 CFR Part 302.4. This information will be updated any time different materials are brought on base.

g. All contractors and subcontractors must comply with the requirements for hazardous materials in accordance with AFMAN 32-7002, Environmental Compliance and Pollution Prevention.

13. The contractor shall notify the Contracting Officer upon encountering any material thought to be hazardous that was not generated by the contractor during the work. The Government shall be responsible for characterization, transportation, storage and disposal of the material if it is determine to be hazardous.

14. Non-Hazardous Solid Waste Diversion Reporting: The Contractor shall maintain an inventory of non-hazardous solid waste diversion and disposal of construction and demolition debris. The Contractor shall submit a report to 325 CES/CEIE through the Contracting Officer on the first business day after each fiscal year quarter, starting the first quarter that non-hazardous solid waste has been generated. The following shall be included in the report:

a. Construction and Demolition (C&D) Debris Disposed = in thousands of pounds

b. Non-C & D recycled items (i.e. cardboard, paper, metal, plastic, glass, etc.) = in thousands of pounds

c. Total C&D Debris Generated = in thousands of pounds.

15. Burning of any type of materials will not be permitted to accomplish the work.

16. All pesticide usage must be coordinated with the Base Entomologist (283-4358). Pesticides must be applied by certified personnel.

17. Stormwater

a. If disturbing 1 acre or more, the contractor needs an NPDES construction permit which meets standards set forth in FDEP Doc. No. 62-621.300(4)(a), Oct 22, 2000. The Notice of Intent shall be submitted along with the appropriate fee to the NPDES Stormwater Notice Center 48 hours before beginning construction. A copy of the permit application and permit letter must be provided to the Environmental Element within 1 week of submittal or receipt. A copy of the Stormwater Pollution Prevention Plan (SWPPP) must be kept on-site. Additionally, a Notice of Termination (NOT) shall be submitted to the NPDES Stormwater Notice Center with a copy provided to 325 CES/CEIE when project is completed.

b. Work specific Best Management Practices (BMP's) shall be implemented prior to construction activities and maintained at all times during construction to prevent siltation and turbid discharges. Identify and cover Stormwater structures using protection devices before performing any work. The BMP's are to be installed along the perimeter of all work areas to prevent the displacement of fill material outside the work area into surface waters, stormwater inlets, etc. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using approved sod, seeding, degradable mats, staked hay bales, staked filter cloth, barriers, turbidity screens, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized and verified by USAF personnel.

c..There shall be no storage or stockpiling of tools, materials (i.e. lumber, pilings, debris) within wetlands, ditches, swales, or elsewhere within waters of the state.

d. All stormwater conveyance structures shall remain in operable condition and shall not be allowed to deteriorate or otherwise contribute to a water quality violation.

e. The contractor shall provide at least one person on each land-disturbing project site who is certified in the *Florida Stormwater, Erosion, and Sedimentation Control Inspector Training and Certification Program*. This person will conduct and document site inspections weekly and after rainfall events according to FDEP Document No. 62-621.300(4)(a), for land-disturbing projects 1 acre and over conducted within Tyndall's fence line. This inspection log shall be made available as needed to project managers, base environmental office or FDEP.

18. Disposal of waste water will be as specified below:

a. Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. will not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. Dispose of the construction related waste water off-Government property in accordance with all Federal, State, Regional and Local laws and regulations.

b. For discharge of ground water, the Contractor will obtain a State or Federal permit specific for pumping and discharging ground water prior to surface discharging.

19. Petroleum, Oils, & Lubricants (POL)/ Tanks: Contractors with POL tanks must maintain a maintenance log, reconciliation records and also ensure secondary containment valves are closed. Employees must have proper training for spill cleanup and response. Contractor shall ensure all areas are free of spill residues. Tyndall AFB's Environmental Compliance POL/Tank Program Manager can be reached at 283-2723.

20. Scrap metal generated from base projects shall remain the property of the US Government unless otherwise specified in the contract. The contractors and/or subcontractors must coordinate with the 325 CES/CEIEC Recycling Manager and the Tyndall Recycling Center Manager for turning over materials to the base for recycling. All revenue generated from the sale of scrap metal should be returned to the Tyndall AFB Recycling Program.

21. Storage: Storage areas for material designated for reuse or recycling should be coordinated with the 325 CES/CEIEC Solid Waste/Recycling Manager. Any solid waste generated by the project is the responsibility of the contractor to dispose of off the installation.

22. Environmental Management Systems (EMS). Contractors must perform work consistent with the policy and objectives identified in the installations Environmental Management Systems in accordance with AFI 32-7001, Environmental Management. Perform work in a manner that conforms to objectives and targets of environmental programs and operational controls identified by the EMS. Provide monitoring and measurement information as necessary to address environmental performance relative to environmental, energy, and transportation management goals. In the event of an EMS nonconformance or environmental noncompliance associated with the contracted services, tasks, or actions occurs, take corrective and preventative actions. In addition, employees must be aware of their roles and responsibilities under the installation EMS and of how these EMS roles and responsibilities affect work performed under the contract. Coordinate training needs associated with environmental aspects and the EMS, and arrange training or take other action to meet these needs. Provide training documentation to the Contracting Officer. Make EMS Awareness training completion certificates available to Government auditors during EMS audits and include the certificates in the Employee Training Records.

23. References:

a. Air Force

1. AFI 32-7001, Environmental Management
2. AFMAN 32-1053, Integrated Pest Management
3. AFMAN 32-1067, Water and Fuel Systems
4. AFMAN 32-7002, Environmental Compliance and Pollution Prevention
5. AFMAN 32-7003, Environmental Conservation

b. Florida Department of Environmental Protection

1. Florida Administrative Code (F.A.C) Chapters 62-210-300 and 62-296, Air Regulations
2. Chapter 62-730, Hazardous Waste
3. Chapter 62-762, Aboveground Storage Tanks Systems
4. Chapter 62-710, Used Oil Management
5. Chapter 62-4, Permits
6. Chapter 62-330, Environmental Resources Permitting
7. Chapter 62-331, State 404 Program
8. 62-25 Regulation of Stormwater Discharges

c. Environmental Protection Agency

1. 40 Code of Federal Regulations (CFR) 260-281, Hazardous Waste Management

2. 40 CFR Part 302.4, Designation of Hazardous Substances

3. 40 CFR Part 60-63, National Emissions Standards for Hazardous Air Pollutants