SECTION 01 57 19.01

TEMPORARY ENVIRONMENTAL CONTROLS - AIR FORCE INSTALLATIONS 01/24

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications list the criteria issued by the United States Air Force (USAF), United States Forces Japan (USFJ), 18th Wing, 18th Civil Engineer Group (18CEG), and the 718th Civil Engineer Squadron/Environmental Management (718CES/CEIE). Government of Japan (GoJ) and prefectural laws and regulatory requirements defined in this section are derived from guidance in the Japan Environmental Governing Standards (

JEGS) and the practice of applicable laws, referenced or not. The publications are referred to within the text by the basic designation only.

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

ISO 14001 (2015) Environmental Management Systems - Requirements with Guidance for Use

U.S. AIR FORCE (USAF)

AFI 23-204 (2012) Organizational Fuel Tanks

AFMAN 32-1067 (4 Aug 2020) Water and Fuel Systems

AFI 32-7001 (04 Oct 2019) Environmental Management

AFMAN 32-7002 (4 Feb 2020) Environmental Compliance and Pollution Prevention

U.S. DEPARTMENT OF DEFENSE (DOD)

JEGS (Apr 2024) Japan Environmental Governing

Standards

UFC 3-460-01 (2015) Design: Petroleum Fuel Facilities

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

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

29 CFR 1910 Occupational Safety and Health Standards

U.S. AIR FORCE, MISAWA AIR BASE

18WG AST (Sept 2009) 18th WG AST Installation

Details and Standards

1.2 DEFINITIONS

In some cases, definitions are given only for illustrative purposes. Prevailing JEGS definitions shall be used for environmental compliance requirements.

1.2.1 Aboveground Storage Tank

[A portable or fixed POL aboveground storage container as defined in the JEGS with a capacity greater than 55 gallons.][A container with a capacity greater than 55 gallons which is a fixed installation or is portable and is either an aboveground storage container as defined in the JEGS or a below ground storage container as defined in the JEGS which contains POL, hazardous materials, hazardous substances or hazardous waste.]

1.2.2 Asbestos Containing Material (ACM)

Any material containing greater than or equal to one-tenth of one percent (0.1 percent) asbestos, by weight.

1.2.3 Bulky Waste

Large items of solid waste such as household appliances, furniture, large auto parts, trees, branches, stumps, and other oversize wastes whose large size precludes or complicates their handling by normal solid waste collection, processing, or disposal methods.

1.2.4 Chemical Wastes

Salts, acids, alkalis, herbicides, pesticides, organic chemicals, and spent products, which serve no purpose.

1.2.5 Class I and II Ozone Depleting Substance (ODS)

Class I and II ODS are listed in the JEGS.

1.2.6 Construction and Demolition Waste

The waste building materials, packaging, and rubble resulting from construction, remodeling, repair and demolition operations on pavements, houses, commercial buildings, and other structures.

1.2.7 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.

1.2.8 Electronics Waste

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

1.2.9 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.

1.2.10 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.

1.2.11 Food Waste

Organic residues generated by the handling, storage, sale, preparation, cooking, and serving of foods (commonly called garbage).

1.2.12 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 the JEGS. Hazardous debris also includes debris that exhibits a characteristic of hazardous waste in accordance with the JEGS.

1.2.13 Hazardous Materials

Hazardous material is any material that is capable of posing an unreasonable risk to health, safety, or the environment if improperly handled, stored, issued, transported, labeled, or disposed because it displays a characteristic listed in the JEGS. Munitions are excluded.

1.2.14 Hazardous Substances

Any substance having the potential to do serious harm to human health or the environment if spilled or released in reportable quantity. A list of these substances and the corresponding reportable quantities is contained in the JEGS.

1.2.15 Hazardous Waste

Hazardous Waste is discarded material that may be solid, semi-solid, liquid, or contained gas, and either exhibits a characteristic of a hazardous waste as defined in the JEGS. Excluded from this definition are domestic sewage sludge, household wastes, and medical wastes.

1.2.16 Hazardous Waste Accumulation Point

A shop, site, or other work center where hazardous wastes are accumulated until removed to a Hazardous Waste Storage Area (HWSA) or shipped for treatment or disposal. A HWAP may be used to accumulate no more than 208 liters (55 gallons) of hazardous waste, or 1 liter (1 quart) of acute hazardous waste, from each waste stream. The HWAP must be at or near the

point of generation and under the control of the operator.

1.2.17 Installation Pest Management Consultant

Installation Pest Management Consultant (IPMC) is the professional DoD pest management personnel located at component headquarters, field operating agencies, major commands, facilities engineering field divisions or activities, or area support activities who provide technical and management guidance for the conduct of installation pest management operations. Some pest management consultants may be designated by their component as certifying officials.

1.2.18 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, or discharge into defined drainage areas (includes drainage ditches, streams, rivers, ocean, etc.) must occur. Comply with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements.

1.2.19 Lead-Based Paint (LBP)

Paint or other surface coatings that contain greater than or equal to 1.0 milligram per square centimeter (cm), or 0.5 percent by weight, or 5,000 ppm of lead by weight.

1.2.20 Oily Wastes

Oily wastes are those materials that are, or were, mixed with Petroleum, Oils, and Lubricants (POLs) and have become separated from those POLs. Oily wastes also means materials, including wastewaters, centrifuge solids, filter residues or sludge, 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 the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation 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 the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements; 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.

1.2.21 Pesticide

Pesticide is any substance or mixture of substances, including biological control agents that may prevent, destroy, repel, or mitigate pests.

1.2.22 Pesticide Treatment Plan

A plan for the prevention, monitoring, and control to eliminate pest infestation.

1.2.23 Pests

Anthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds, undesirable vegetation, and other organisms (except for microorganisms that cause human or animal disease) that adversely affect the well-being of humans or animals; attack real property, supplies, equipment, or vegetation; or are otherwise undesirable.

1.2.24 Petroleum, Oil, and Lubricants

Refined petroleum, oils, and lubricants, including, but not limited to, petroleum, fuel, lubricant oils, synthetic oils, mineral oils, animal fats, vegetable oil, sludge, and POL mixed with wastes other than dredged spoil.

1.2.25 Polychlorinated Biphenyl (PCB)

Any PCB article, PCB article container, PCB container, or PCB equipment that deliberately or unintentionally contains or has as a part of it any detectable concentration of PCB.

1.2.26 Regulated Waste

Regulated waste are solid wastes that have specific additional Misawa AB, JEGS, Federal, or GOJ national and prefectural controls for handling, storage, or disposal.

1.2.27 Rubbish

A general term for solid waste, excluding food wastes and ashes, taken from residences, commercial establishments, and institutions.

1.2.28 Sanitary Waste

- a. Sewage: Wastes characterized as domestic sanitary sewage.
- b. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.

1.2.29 Sediment

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

1.2.30 Solid Waste

Solid waste is garbage, refuse, sludge, and other discarded materials, including solid, semi-solid, liquid, and contained gaseous materials resulting from industrial and commercial operations and from community activities. It does not include solids or dissolved material in domestic sewage or their significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluent, dissolved materials in irrigation return flows, or other common water pollutants.

Types of solid waste typically generated at construction sites may include:

1.2.30.1 Debris

Debris is non-hazardous solid material generated during the construction, demolition, or renovation of a structure that exceeds 60 mm particle size that is: a manufactured object; plant or animal matter; or natural geologic material (for example, cobbles and boulders), broken or removed concrete, masonry, and rock asphalt paving; ceramics; roofing paper and shingles. Inert materials [may][may not] 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.

1.2.30.2 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.

1.2.30.3 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.

1.2.30.4 Non-Hazardous Waste

Non-hazardous waste is waste that is excluded from, or does not meet, characteristic of a hazardous waste as defined in the JEGS or is listed as a hazardous waste in the JEGS. Excluded from this definition is medical wastes.

1.2.30.5 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.

1.2.30.6 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.

1.2.30.7 Surplus Soil

Surplus soil is existing soil that is in excess of what is required for this work, including aggregates intended, but not used, for on-site mixing of concrete, mortars, and paving. Contaminated soil meeting the definition of hazardous material or hazardous waste is not included and must be managed in accordance with paragraph HAZARDOUS MATERIAL MANAGEMENT.

1.2.30.8 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.

1.2.30.9 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). 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.

1.2.31 Surface Discharge

Surface discharge means discharge of water into drainage ditches, storm sewers, or creeks, or waters of Japan. Surface discharges are discrete, identifiable sources and require a permit from the governing agency. Comply with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements.

1.2.32 Wastewater

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

1.2.32.1 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.

1.2.33 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.

1.3 PROHIBITED PRODUCTS

The following items are forbidden for use by the JEGS or other criteria. Details of each are included in the text of each chapter of the Environmental Protection Plan (EPP) described in this section.

- a. Asbestos Containing Materials (ACM). Do not use materials containing asbestos unless deemed absolutely necessary. If necessary, asbestos concentration shall be limited to less than 0.1 percent by weight. The Contractor shall provide manufacturer certifications that state that materials utilized do not contain asbestos or justification for ACM and relevant certification.
- b. Lead-Containing Paint. Paint containing greater than 0.009 percent lead by weight. Contractor must provide manufacturer certifications that materials utilized are lead free per the JEGS. The contractor shall furnish a certificate for paint and paint related materials proposed for use attesting that the paint is lead free unless deemed necessary.
- c. Polychlorinated Biphenyls (PCBs). Materials containing PCBs greater than 0.5mg/kg shall not be used.
- d. Class I Ozone Depleting Substances (ODS). Class 1 ODS listed in the JEGS shall not be used.
- e. Lead-containing Drinking-Water Pipes, Solders, Flux, and Fittings. Comply with JEGS requirements where applicable

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Preconstruction Survey

Regulatory Notifications; G

Environmental Protection Plan; G

Environmental Manager Qualifications; G

Temporary Fuel Storage Tank Approval Request; G

Underground Fuel Storage Tank Approval Request; G

Licenses/Permits/Notifications; G

General Use Permitted Equipment

Fuel Storage Tank Installation/Removal Report; G[, [____]]

Written Assessment Of Friable Asbestos Disturbance

SD-06 Test Reports

Laboratory Analysis

Nonhazardous Solid Waste Diversion Report

SD-07 Certificates

EMS Certificate of Completion; G

Asbestos Certification; G

Lead Certification; G

SD-11 Closeout Submittals

Environmental Records Binder

1.5 PAYMENT

No separate payment shall be made for work covered under this section. Payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor, and payment of all fines/fees for violation or non-compliance with GOJ, Federal, and local laws and regulations are the Contractor's responsibility. All costs associated with this section shall be included in the Contract price.

1.6 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 the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements pertaining to the environment, including but not limited to 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. Laboratory analyses necessary to implement the JEGS shall be conducted in a laboratory certified by a U.S. or GOJ regulatory authority for the applicable test method. In the absence of a certified laboratory, contact the Contracting Officer for further guidance.

Contractor shall be responsible to ensure that subcontractors comply with all environmental protection requirements of this section.

The Contractor shall record any problems in complying with laws, regulations, permit requirements, ordinances, and corrective actions taken. The Contractor shall immediately inform the Contracting Officer of any environmental problems.

1.6.1 Environmental Management System (EMS) Training

1.6.1.1 Personnel Requirements

The Environmental Manager is responsible for environmental compliance on projects. The Environmental Manager [and other staff], must complete

applicable EMS training prior to starting respective portions of on-site work under this Contract. Contact 35 CES/CEIE for obtaining training material. If personnel changes occur for any of these positions after starting work, replacement personnel must complete applicable EMS training within 14 days of assignment to the project.EMS Training is available in English and Japanese at https://usaf.learningbuilder.com New users must create a new account. Search for EMS Training once logged in. Print out the EMS Certificate of Completion and submit with the EPP.

1.6.1.2 Certification

Submit a roster of individuals whom have completed the EMS training to 35 CES/CEIE. This training is a one time requirement; 35 CES/CEIE shall maintain a listing of Contractor personnel whom have completed the training, thereby eliminating the need for Contractors who frequently perform work at Misawa AB to take this training prior to each contract.

1.6.2 Conformance with the Environmental Management System

All contractor personnel shall be aware of and comply with the Yokota Air Base Environmental Commitment Statement. The Contractor shall also comply with the EMS program, including all base environmental plans, instructions and the Japan Environmental Governing Standards (JEGS). This also includes instructions/comments provided on planning documents such as 332's (Base Civil Engineer Work Request), and 813s (Request for Environmental Impact Analysis).

Communicate with Environmental Program Managers (EPMs) to be aware of any operational controls (permits, plans, requirements to purchase recycled content, bio-based, or energy efficient products).

Provide copies of environmental records as requested by EPMs to meet recordkeeping requirements.

Ensure that personnel are properly trained in accordance with applicable statutes and regulations.

Immediately report all hazardous waste or hazardous material releases to the installation emergency response activity, and fully cooperate with any emergency response.

Perform work under this Contract consistent with the policy and objectives identified in the installation's Environmental Management System (EMS). 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.

1.7 SPECIAL ENVIRONMENTAL REQUIREMENTS

1.7.1 Asbestos Prohibition and Certification

a. Materials or products containing more than one-tenth of one percent (0.1 percent) by total weight, of the material or product, of asbestos shall not be used in this project. The Contracting Officer, at any time prior to acceptance of the work, or during the period designated for warranty of the work, if any, may reject materials and products that contain asbestos in excess of one-tenth of one percent by weight, and direct the removal of such materials and products from the job site, at the sole expense of the Contractor, and without additional time granted for performance of the work. After completion of this Contract, if asbestos (exceeding 0.1 percent by weight) is discovered in the products or materials (excluding items permitted by the exception) installed by the Contractor, the Government reserves the right to direct the Contractor to perform asbestos abatement and restoration work, as required, at the Contractor's sole cost. Asbestos abatement work (removal and disposal of asbestos-containing materials and products) shall be accomplished in accordance with currently applicable Government standards for such work.

Exception: Where suitable asbestos-free substitutes do not exist for a material or product, the Contractor may use a material or product containing asbestos in the excess of 0.1 percent by weight, with prior written approval of the Contracting Officer. Submit a written request for substitution, accompanied by a certification from the manufacturer of the material or product that shall set forth, in specific detail, the amount of asbestos present in the material or product. When available, laboratory analysis of the material or product for asbestos content shall be included with the submittal.

- b. The Government may conduct asbestos testing on suspected asbestos-containing materials and products excluding items permitted by the "exception", and such testing shall be conducted at the expense of the Government. However, wherever destructive testing is required, or a material or product must be utilized by the Government for testing, the Contractor shall, at its own expense, repair or replace the material or product, or the item of work that has been disturbed by testing, if the results confirm presence of asbestos exceeding 0.1 percent by weight. In the event test results indicate 0.1 percent or less asbestos content or complete absence of asbestos, the Contractor shall restore the test site to its original condition and the cost of restoration work, as approved by the Contracting Officer, shall be borne by the Government.
- c. As a minimum, furnish manufacturer's certification for the items listed below, excluding items permitted by the "exception", certifying that the items are asbestos-free or do not contain asbestos in excess of 0.1 percent by weight, as applicable. However, when presence of asbestos is suspected in other products and materials used in this project, the Contractor shall be required to provide such

certification for those additional items when so directed by the Contracting Officer. Asbestos certification shall be required for the items applicable to this project only.

- (1) Vinyl sheet/vinyl tile flooring, including accessories and adhesives.
- (2) Insulation materials, including facing.
- (3) Gaskets for piping and duct work.
- (4) Acoustical tiles.
- (5) Firestopping materials.
- (6) Fireproofing materials.
- (7) Special coating, including factory applied coatings, on sheet metal roofing and siding.
- (8) Wallboard for all interior and exterior applications, including joint compounds.
- (9) Adhesives (other than item 1) used in the project.
- (10) Tape materials used in the project.
- (11) Roofing and siding, nonmetallic.
- (12) Felt materials and cushion materials.
- (13)Pre-mixed mortars, grouts, leveling compounds, fillers, and other cementitious materials.
- (14) Caulking and sealing materials.
- d. All submittals shall be accompanied by a certification from the manufacturer of the material or product that the material or product is asbestos-free; or shall set forth, in specific detail, the amount of asbestos present in the material or product. Documentary evidence of laboratory analysis of the material or product for asbestos content, conducted by a qualified independent testing laboratory, shall be included with the submittal.

1.7.2 Lead Prohibition and Certification

a. Paint or product coating containing more than 0.009 percent) by total weight of lead shall not be used in this project. The Contracting Officer, at any time prior to acceptance of the work, or during the period designated for warranty of the work, if any, may reject materials and products that contain lead in excess of 0.009 percent by weight, and direct the removal of such materials and products from the job site, at the sole expense of the Contractor, and without additional time granted for performance of the work. After completion of this Contract, if lead (exceeding 0.009 percent by weight) is discovered in the products or materials (excluding items permitted by the exception) installed by the Contractor, the Government reserves the right to direct the Contractor to perform lead abatement and restoration work, as required, at the Contractor's sole

cost. Lead abatement work (removal and disposal of lead-containing materials and products) shall be accomplished in accordance with currently applicable Government standards for such work.

Exception: Where suitable lead-free substitutes do not exist for a paint or product coating, the Contractor may use a material or product containing lead in the excess of 0.009 percent by weight, with prior written approval of the Contracting Officer. Submit a written request for substitution, accompanied by a certification from the manufacturer of the material or product that shall set forth, in specific detail, the amount of lead present in the material or product. When available, laboratory analysis of the material or product for lead content shall be included with the submittal.

- b. The Government may conduct lead testing on suspected lead-containing materials and products excluding items permitted by the "exception", and such testing shall be conducted at the expense of the Government. However, wherever destructive testing is required, or a material or product must be utilized by the Government for testing, the Contractor shall, at its own expense, repair or replace the material or product, or the item of work that has been disturbed by testing, if the results confirm presence of lead exceeding 0.009 percent by weight. In the event test results indicate 0.009 percent or less lead content or complete absence of lead, the Contractor shall restore the test site to its original condition and the cost of restoration work, as approved by the Contracting Officer, shall be borne by the Government.
- c. As a minimum, furnish manufacturer's certification for the items listed below, excluding items permitted by the "exception", certifying that the items are lead-free and do not contain lead in excess of 0.009 percent by weight, as applicable. However, when presence of lead is suspected in other products and materials used in this project, the Contractor shall be required to provide such certification for those additional items when so directed by the Contracting Officer. Lead certification shall be required for the items applicable to this project only.
 - 1. Paints and Coatings
 - Any product or material with a factory applied coating
- 1.7.3 Class I and Class II Ozone Depleting Chemicals (ODC) or Substances (ODS) $\,$

Class I and II Ozone Depleting Substances listed in the JEGS are prohibited from being used. Contactor must provide certifications that materials utilized do not contain Class I and Class II ODC/ODS.

1.7.4 Polychlorinated Biphenyls (PCB)

Materials (ballasts, capacitors, transformers, dielectric fluid, switches, etc.) that contain PCBs are prohibited. Contractor must provide certifications that materials utilized do not contain PCBs, in accordance with the JEGS.

1.7.5 Hazardous Material Survey

[The Contractor shall review the [title of survey] by [Company that

performed Survey] dated [date of survey], attached at the end of this section, to familiarize themselves with the materials that have been sampled and tested for this project. The Contractor shall utilize the information contained within the report to develop their work and compliance plans with regards to Hazardous Materials. During construction, should potentially hazardous material be discovered, which has not been previously tested, the Contractor shall take action to assure that the untested material is not disturbed and contact the Contracting Officer. The quantities provided in the report represents a rough order of magnitude estimate of materials and shall not be used for bidding purposes as conditions may have changed from the date of the survey and the present existence of the material(s).]

[No existing Hazardous Material Survey for the material to be disturbed under this project, exists. The Contractor shall assume that all potential ACM is ACM and all paints and coatings contain lead. A Hazardous Material Survey is not required for this project.][The Contractor shall perform a Hazardous Material Survey prior to initiating any action that could disturb suspect Hazardous Materials as required by this contract.][A Hazardous Material Survey is not required for this project.] [The Contractor shall notify the Contracting Officer upon finding any material that will be disturbed under this contract and is suspected to contain Hazardous Materials. The Contracting Officer will handle the identified materials under, Unexpected Discovery of Hazardous Materials.]

1.8 QUALITY ASSURANCE

1.8.1 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.

1.8.2 Regulatory Notifications

Provide regulatory notification requirements in accordance with GOJ national and prefectural laws and regulations and installation requirements. Submit copies of regulatory notifications to the Contracting Officer at least [____] days prior to commencement of work activities.

1.8.3 Environmental Brief

Attend an environmental brief to be included in the preconstruction meeting. Provide the following information: types, quantities, and use of hazardous materials that will be brought onto the installation; 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.

Permits, licenses, or other forms of official approvals are not required by DoD activities and installations. Permits, licenses, or other forms of official approvals may, however, be required under GOJ law for certain contracted activities. When required, all such permits, licenses and other forms of official approval shall be obtained by the Contractor from the appropriate GOJ authorities. DoD Components shall assist Contractors when they are applying for a required permit, license or other form of official approval by providing necessary information only. Submit copies of all Licenses/Permits/Notifications obtained.

[1.8.4 Environmental Manager

Appoint in writing an Environmental Manager for the project site. Environmental Manager is directly responsible for coordinating Contractor compliance with the JEGS, Federal, GOJ national and prefectural laws and regulations, and installation requirements. The Environmental Manager must ensure adherence to the EPP; ensure all appropriate documents are submitted to 374 CES/CEIE; appoint an emergency response manager for environmental emergencies; train personnel in accordance with the requirements of the EPP; 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 JEGS 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 to indicate the training and past experience which meets the requirements of this position as described in this section.

]1.8.5 Employee Training Records

Prepare and maintain Employee Training Records throughout the term of the Contract meeting applicable JEGS 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 the JEGS and all applicable Federal, GOJ national or prefectural laws or regulations and installation requirements. Submit these Assembled Employee Training Records in the Environmental Records Binder to the

Contracting Officer at the conclusion of the project, unless otherwise directed.

Train personnel to meet the JEGS and all applicable Federal, GOJ national or prefectural laws or regulations, and Installation requirements. Conduct environmental protection/pollution control meetings for personnel prior to commencing construction activities. Conduct 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 Japan, and endangered species and their habitat that are known to be in the area.

1.8.6 Non-Compliance Notifications

The Contracting Officer shall notify the Contractor in writing of any observed noncompliance with the JEGS, applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements, 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. No time extensions will be granted or equitable adjustments allowed for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the Contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

1.9 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. The EPP consists of [14][15] chapters and requires an entry for each chapter. 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 receiving notice to proceed. Commencement of work will not begin until the Environmental Protection Plan has been approved.

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 JEGS, and applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements. During Construction, identify, implement, and submit for approval any additional requirements to be included in the EPP. Provide an electronic copy of the EPP to 35 CES/CEIE via the Contracting Officer. Maintain the current version of the EPP onsite.

1.9.1 Submission Guidance

The EPP is a required submittal for all projects, and shall be submitted a minimum of 14 days prior to the scheduled start of construction activities or delivery of materials to the site. Work impacted by the contents of the EPP cannot start prior to approval of the EPP. Maintain a copy of the approved EPP on-site at all times.

If disapproved, the Contractor shall revise and resubmit the EPP to properly address reviewer comments. Delays resulting from disapproval are the responsibility of the Contractor.

1.9.2 EPP Drafting Instructions

Address the topic of each chapter at a level of detail commensurate with the environmental issue and the scope of work. The EPP shall explain how the Contractor will meet the requirements in each chapter. [Chapters that are not applicable to this project shall be replaced with a statement indicating as such.] [Chapters that are not applicable to this project shall be replaced with the following:

"This chapter does not apply to the Contract because" followed by a brief explanation on why it does not apply.

The EPP shall not be merely a reiteration of the requirements or the text of instructions in this section, except for the "Not Applicable" chapters. The EPP shall explain how the Contractor will meet the requirements in each chapter.

Any site-specific environmental issues identified as necessary by the Government shall be addressed in the EPP even if this supplement does not specifically mention such a situation as a requirement.]

1.9.3 Emergency Review Request

The Contracting Officer may request the Environmental Representative to review an EPP in emergencies or rapidly deteriorating situations. Late submission does not justify a priority review. All other reviews shall be conducted on a first-come, first-served basis. The Contractor bears full responsibilities for any delays resulting from late approval of the EPP.

1.9.4 Work Clearance Request

AF IMT 103: Base Civil Engineering Work Clearance Request, commonly referred to as the "Dig Permit", cannot be signed and approved until the EPP has been submitted, reviewed, and approved by the Environmental Representative.

1.9.5 EPP General Overview and Purpose

1.9.5.1 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, a historical, archaeological, cultural resources, biological resources and wetlands plan, traffic control plan, Hazardous, Toxic and Radioactive Waste (HTRW) Plan, Non-Hazardous Solid Waste Disposal Plan, and borrowing

material plan.

Include a list of applicable Federal, GOJ, JEGS, prefectural laws, regulations, and permits concerning environmental protection, pollution control, and abatement that are applicable to the Contractor's proposed operations and requirements imposed by those laws, regulations, and permits. Whenever there is conflict between Federal, GOJ, JEGS, or prefectural laws, regulations, and permit requirements, the strictest applicable rule applies.

1.9.5.2 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.

Provide the name, telephone number, and address of a Primary and Alternate Environmental Representative.

1.9.5.3 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.

Provide schedule of digging or trenching actions to include date/time, location, purpose, method and depth.

1.9.5.4 Communications

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

1.9.5.5 Contact Information

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

1.9.6 General Site Information

1.9.6.1 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.

Drawings showing locations of any proposed temporary facilities, hazardous materials storage, hazardous and solid waste collection points, excavations, embankments, existing utility lines to include storm drains included in the EPP.

1.9.6.2 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.

1.9.6.3 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.

1.9.6.4 Regulatory Notification and Permits

List the required notifications and permit applications. Some permits require up to 180 days to obtain. Demonstrate that permits have been obtained or applied for by including hard copies. The EPP shall not be approved until the permits have been obtained.

1.9.7 CHAPTER 1: ENVIRONMENTAL REQUIREMENTS AND TRAINING

1.9.7.1 Work Scope Summary

The first page of Chapter 1 shall be a single-page summary that defines all of the work processes and the general sequence of execution. Describe the tasks sufficiently for EPP reviewers to determine the potential environmental impact of the work, the level of risk, and whether additional site-specific plans must be submitted. The EPP may be disapproved if the summary details are insufficient.

1.9.7.2 Criteria Summary

Provide and maintain environmental protective measures to control pollution that develops during normal construction practice during the life of the Contract.

1.9.7.3 Applicable Regulations

Comply with all laws and regulations referenced in the drawings and specifications, as well as applicable GOJ and prefectural laws or regulations, referenced or not.

1.9.7.4 EPP Mandatory Items

Include the following items in the EPP:

a. Environmental Manager Appointment Letter: Include a letter signed by an officer of the firm designating a Primary and an Alternate Environmental Manager with telephone number (office phone number, cell phone number), e-mail address, and mailing address and stating that this 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. The Environmental Manager shall

be responsible for providing all project Environmental submittals and for coordinating with the Contracting Officer on any environmental issues encountered during work.

- b. Employee Training Letter: The Environmental Manager shall implement a training program to ensure that all Contractor personnel are trained in environmental protection requirements. Include a letter that lists employee's names, types of environmental training completed, and dates of completion.
- c. Employee Training Roster: Provide a roster of individuals involved with the project who have completed the required EMS training.
- d. Include in this section the requirements outlined in paragraphs 1.9.6.1- Drawings and 1.9.6.2 Work Area.
- 1.9.8 CHAPTER 2: AIR EMISSIONS AND OZONE DEPLETING SUBSTANCES (ODS)
- 1.9.8.1 Criteria Summary

ODSs, including Hydrofluorocarbons (HFC) and perfluorocarbons (PFC) from refrigeration and fire suppression equipment, are categorized into two specific classes. See the JEGS for proper classifications.

1.9.8.2 EPP Mandatory Items

Insert the following text in Chapter 2 of the EPP:

"CHAPTER 2: AIR EMISSIONS & ODSs

- 1. No ODS containing items will be serviced, removed or installed during this project.
- 2. In the event ODS items become unexpectedly involved, the Contractor shall not disturb the item, and immediately notify the Contracting Officer's Representative, who will make a determination on how to proceed."

If this project involves the servicing, relocation, removal, or installation of any ODS containing items, contractor shall provide, in the EPP, an explanation of how requirements of paragraph 3.5 will be achieved/maintained.

Include the following items in the EPP as applicable:

- a. Haul Route: Submit truck and material haul routes along with a Dirt and Dust Control Plan in the EPP 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.
- b. Pollution Generating Equipment: Identify air pollution generating equipment or processes that may require compliance with the JEGS or GOJ national or prefectural laws-regulations. Determine requirements based on any current JEGS and installation requirements 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).

- c. Stationary Internal Combustion Engines: Identify portable and stationary internal combustion engines that will be supplied, used or serviced. Comply with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements. 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.
- d. Refrigerants: Identify management practices to ensure that heating, ventilation, and air conditioning (HVAC) work involving refrigerants complies with the JEGS and installation requirements. Technicians shall be trained in proper recovery/recycling procedures, leak detection, safety, shipping, and disposal in accordance with recognized industry standards or Japanese equivalent. Any refrigerant reclaimed is the property of the Government; coordinate with the Installation Environmental Office to determine the appropriate turn in location.
- e. Training/Certification Requirements: Heating and air conditioning technicians must be trained to meet requirements in the JEGS. Maintain copies of certifications at the employees' places of business; technicians must carry certification wallet cards, as provided by GOJ national or prefectural laws and regulations. Submit training certificates as part of the EPP.
- f. 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.
- g. Compliance Materials: Provide the Government a list of and SDSs for all hazardous materials proposed for use on site. Materials must be compliant with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements 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.

1.9.8.3 Other Required Submittals

For Contracts servicing, removing, or replacing ODS-containing items, such as refrigeration or fire suppression equipment, follow the guidance for submittals in accordance with the specifications under which the work is being performed (HVAC, Fire Suppression, etc.).

1.9.9 CHAPTER 3: WATER RESOURCES

1.9.9.1 EPP Mandatory Items

Include the following items in the EPP as applicable:

a. Site-Specific Storm Water Pollution Prevention Plan (SWPPP): For any

Contract where work may possibly lead to disruption of the stormwater flow, the Contractor shall develop and submit a project-specific SWPPP as a mandatory part of Chapter 3 of the EPP.

The SWPPP must include effective selection, implementation and maintenance of Best Management Practices (BMPs) as indicated in the JEGS, and include methods and drawings as necessary to prevent storm water pollution as specified in the Storm Water Pollution Prevention Measures section in Part 3. The SWPPP shall also address erosion and sediment control measures and stormwater management and control including, but not limited to ground cover, erodible soils, temporary measures – structural practices, temporary and permanent stabilization. The SWPPP must meet the requirements of the JEGS and the Installation's SWPPP.

If applicable, submit a project-specific Stormwater Pollution Prevention Plan (SWPPP) to the Contracting Officer for approval, prior to the commencement of work. The Contractor shall maintain an approved copy of the SWPPP at the construction on-site office, and continually update as regulations require, to reflect current site conditions. The Contractor may be required to install, inspect, maintain best management practices (BMPs), and submit storm water BMPs inspection reports and storm water pollution prevention plan inspection reports.

The SWPPP must meet the requirements of the JEGS and the Installation's SWPPP.

Include the following:

- a. Identify potential sources of pollution which may be reasonably expected to affect the quality of storm water discharge from the site.
- b. Comply with terms of the Installation SWPPP for stormwater discharges from construction activities. Prepare SWPPP in accordance with the JEGS and installation requirements.
- c. Select applicable BMPs from the JEGS and/or the Installation SWPPP. Applicable Best Management Practices in the JEGS shall be incorporated into the site-specific SWPPP and implemented.
- d. The SWPPP shall also address erosion and sediment control measures and stormwater management and control including, but not limited to ground cover, erodible soils, temporary measures structural practices, temporary and permanent stabilization.
- b. Wastewater Management Plan (WWMP): For any Contract that may generate wastewater, the Contractor shall submit a WWMP.
 - (1) The WWMP must identify the methods and procedures for management and/or discharge of wastewater which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines.
 - (2) If a settling/retention pond is required, the WWMP must include the design of the pond, including drawings, removal plan, and testing requirements for possible pollutants. If disposal is to a sanitary sewer, the WWMP must include documentation that the Waste

Water Treatment Plant Operator has approved the flow rate, volume, and type of discharge.

- (3) Contractor is not authorized sewage holding tanks on base and is not authorized to dispose of waste from chemical toilets/porta-potties via the installation sewer system.
- (4) When using chemical toilets, plan for procuring a porta-potty/chemical toilet service Contract. The porta-potty/chemical toilet service Contract must include the correct maintenance, waste collection, transportation, and disposal of all porta-potty/chemical toilets and content and include provisions for pest control and elimination of odors.
- (5) If the project generates wastewater from rinsing tanks, dewatering sites, etc., the Contractor shall ensure proper disposal[.][with CEIE approval. The Contractor may be required to provide further analysis and treatment based on the condition of wastewater.]

1.9.10 CHAPTER 4: HAZARDOUS MATERIALS

1.9.10.1 Criteria Summary

Hazardous Material Inventory, Material Safety Data Sheets, and Safety Data Sheets: Submit documentation and receive approval prior to bringing any hazardous materials (HAZMAT) onto the installation. Consult with the Hazardous Materials Program Manager [718 CES/CEIE at DSN 634-2600][374 CES/CEIE at DSN: 225-5440][INSERT ORGANIZATION AND PHONE NUMBER] for a determination of whether or not a product is a HAZMAT.

1.9.10.2 EPP Mandatory Items

If the project does not involve any ${\tt HAZMAT}$, insert the following text into Chapter 4 of the EPP:

"CHAPTER 4: HAZARDOUS MATERIALS

1. No hazardous materials will be brought to the worksite during this project."

For all Contracts where HAZMAT will be brought to the worksite, submit the following documents in Chapter 4 of the EPP:

- a. Hazardous Material Inventory: A table listing all hazardous materials brought onto the base, including the estimated amounts of each material that will be used. List shall include all pesticides and herbicides that will be brought onto the Installation.
- b. Hazmat SDS (in English and Japanese): An SDS sheet for each hazardous material on the inventory.
- c. AF Form 3000.
- d. If HAZMAT is suspected to contain lead or asbestos, such as paint, primer, caulking, a certificate from the manufacturer shall be provided to prove that the HAZMAT is free of asbestos/lead.

The AF Form 3000 package must be reviewed by Bioenvironmental (374 AMDS/SGPB), Safety (374 AW/SE) and Environmental (374 CES/CEIE) via

the Contracting Officer.

1.9.10.3 Other Required Submittals

If after beginning work, the Contractor discovers previously undisclosed, unexpected, or suspected HAZMAT, substances, chemicals, or contaminated areas, the Contractor shall immediately report the discovery to the Contracting Officer and to [718 CES/CEIE (DSN 634-2600)][374 CES/CEIE (DSN: 225-5440)][INSERT ORGANIZATION AND PHONE NUMBER]. Contractor personnel shall immediately cease work in the area, unless the work is of an emergency nature and the risk of exposure can be mitigated by the use of personal protective equipment (PPE) or clothing. Submit, in writing, a Notification of Unexpected Hazardous Material Discovery to the Contracting Officer outlining the events leading to the discovery.

1.9.11 CHAPTER 5: HAZARDOUS WASTE

1.9.11.1 EPP Mandatory Items

If the project does not involve any Hazardous waste, insert the following text in Chapter 5 of the EPP:

"CHAPTER 5: HAZARDOUS WASTE

- 1. No hazardous wastes will be generated during this project.
- 2. In the event hazardous waste is unexpectedly discovered, the Contractor shall not disturb the item, and immediately notify the Contracting Officer's Representative, who will make a determination on how to proceed."

For all Contracts where Hazardous Waste will be generated, submit the following information and documents in Chapter 5 of the EPP:

- a. Hazardous Waste Manager Letter: A letter designating the hazardous waste manager. The letter shall include:
 - (1) Manager's name.
 - (2) Training and experience.
 - (3) Contact information.
- b. Management Procedures for Hazardous Waste to be Generated: The elements of those procedures will coincide with the Installation Hazardous Waste Management Plan (HWMP). The Contracting Officer will provide a copy of the Installation Hazardous Waste Management Plan. As a minimum, include the following:
 - (1) List of the types of hazardous wastes expected to be generated.
 - (2) Procedures to ensure a written waste determination is made for appropriate wastes that are to be generated.
 - (3) Sampling/analysis plan, including laboratory method(s) that will be used for waste determinations and copies of relevant laboratory certifications. Follow the analytical procedure and methods in accordance with the JEGS and all applicable GOJ national or prefectural laws and regulations. Identify hazardous waste by

analyzing for the following characteristics: ignitability, corrosivity, reactivity, and toxicity based on TCLP results. Provide analytical results and reports performed to the Contracting Officer. Sample waste in accordance with appropriate Japanese or U.S. EPA testing protocols that meet the purpose of the testing. Clearly mark each sampled drum or container with the Contractor's identification number, and cross reference to the chemical analysis performed.

- (4) Methods and proposed locations for hazardous waste accumulation/storage (that is, in tanks or containers).
- (5) Management procedures for storage, labeling, transportation, and disposal of waste (treatment of waste is not allowed unless specifically noted).
- (6) Management procedures and regulatory documentation ensuring disposal of hazardous waste complies with Land Disposal Restrictions, applicable Federal, GOJ and prefectural laws and regulations, JEGS, and Installation Hazardous Waste Management Plan.
- (7) Management procedures for recyclable hazardous materials such as lead-acid batteries, used oil, and similar.
- (8) Used oil management procedures in accordance with the JEGS; Hazardous waste minimization procedures. 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.
- (9) Plans for the disposal of hazardous waste by permitted facilities; and procedures to be employed to ensure required employee training records are maintained.
- (10)Procedures to be employed to ensure required employee training records are maintained.
- (11) Hazardous Waste Disposal local permits or licenses for hazardous waste disposal in accordance with the JEGS (if required).
- (12) Hazardous Waste Disposal Statement of Agreement. From a treatment, storage, or disposal (TSD) facility that will accept the waste from the contractor and also a statement from a certified hazardous waste transporter who will transport the waste to the TSD facility in accordance with the JEGS (if required).

1.9.11.2 Other Required Submittals

- a. Hazardous Waste Analysis Report: For any materials that were sampled and analyzed for hazardous waste content, submit a Hazardous Waste Analysis Report containing:
 - (1) Who the sample was taken by.
 - (2) What type of sample was taken (soil, water, chemical, etc.).

- (3) Where the sample was taken (building number, room number, etc.).
- (4) The sampling time and date.
- (5) An explanation of why the material was sampled (disposal determination, final clearance, etc.).
- (6) Photographs of the sampled location or material (if required to positively identify the exact location or material later).
- (7) The laboratory's certified analysis results letter.

1.9.12 CHAPTER 6: SOLID WASTE

1.9.12.1 EPP Mandatory Items

Solid Waste Management Plan: To ensure the Contractor understands the solid waste reduction requirements, the Contractor is required to submit a Solid Waste Management Plan SWMP, as part of the EPP. The Solid Waste Management Plan shall be consistent with the Installation Integrated Solid Waste Management Plan (ISWMP).

The SWMP has four (4) sections: Diversion, Procedures, Training, and Permits.

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 Solid Waste Management License showing such agency's approval of the disposal plan before transporting wastes off Government property.

a. SWMP: Diversion Section

Provide the dates for the start and end of work, the types of wastes expected to be generated by the project, estimated weights for each type of waste, and the facility or facilities where each waste will be taken. Also include a list of which wastes will be salvaged, reused, and recycled, estimated weights for each recyclable commodity, and the facility or facilities where each recyclable will be taken.

To the extent practicable, all scrap metal must be sent for reuse or recycling and will not be disposed of in a landfill. 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.

- b. SWMP: Procedures Section: Describe the planned Separation, Contamination Prevention, and Transportation procedures.
 - (1) Outline how recyclables will be separated from other wastes, how wastes will be collected, and where they will be stored at the project site until transported to recycling facilities. The Separation Procedures shall also detail how other wastes will be collected and where they will be stored at the project site until

transported to disposal facilities. Containers for recyclables and other wastes must meet the requirements in the JEGS that storage of recyclables and other wastes must meet the JEGS and that storage of bulky wastes must meet the JEGS.

- (2) Contamination Prevention Procedures shall explain how recyclables will be kept free from contaminants (hazardous, toxic, or other wastes) and how other non-recyclable wastes will be kept free of contaminants (recyclables and hazardous or toxic wastes).
- (3) Transportation Procedures shall outline how spills of recyclables or other wastes will be prevented during collection, storage, loading, and transportation. They also detail how the recyclables and other wastes will be transported from the project site to the recycling or disposal facility. These procedures also must state how often recyclables and other wastes will be picked up by the transportation company.

c. SWMP: Training Section

Set forth how employees and subcontractors will be trained on solid waste management policies and procedures. Include how training will be documented and who will conduct the training. Also outline any consequences or repercussions for employees or subcontractors that fail to follow the policies and procedures.

d. SWMP: Permits Section

Include copies of all permits, licenses, and agreements for the recycling and disposal facilities and for the transportation companies utilized during the project. Include English translations for all documents in this section.

1.9.12.2 Other Required Submittals

a. Solid Waste Management Report: During project execution, the Contractor shall submit weight tickets or manifests, receipts, bills of sale, and other sales documentation (with English translations) for all materials removed from the project site. Weight tickets and manifests receipts, bills of sale, and other sales documentation shall be submitted during the project every month by the 5th day of the following month, (include this statement as part of the SWMP). Designate on each document whether the material was disposed of, recycled, or reused, and state the amounts, locations, and names of the businesses receiving the solid waste.

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. Also include any additional or renewal permits, licenses, or agreements, with recycling or disposal landfills. In addition, a copy of Contract(s) for waste collection/transportation and disposal permits issued from metropolitan/prefectural governments shall be submitted with AF Form 3000 to 374 CES/CEIE via the Contracting Officer. After the disposal, waste manifests shall be submitted to 374 CES/CEIE via the Contracting Officer along with recycling report that shows the amount of waste recycled, incinerated/landfilled (Attachment 1).

1.9.13 CHAPTER 7: FUEL STORAGE TANKS

1.9.13.1 EPP Mandatory Item

If the project does not involve the removal or installation of any POL TANKS, insert the following text in Chapter 7 of the EPP:

"CHAPTER 7: FUEL STORAGE TANKS

No ASTs or USTs will be removed or installed during this project."

Describe in the EPP how POL tanks and containers must be stored, managed, and inspected and what protections must be provided. POL tank work cannot be performed using this section alone. All UST tank removals shall be performed in accordance with SECTION 02 65 00. Tank installations shall be performed in accordance with SECTION 33 56 10, AFI 23-204, and 35FW AST STANDARDS documents. Contact MAB Environmental Section at to obtain copies of the requirements.

1.9.13.2 Other Required Submittals

Fuel Storage Tank Removal/Installation Report: If an AST/UST (to include temporary fuel storage tanks) is installed or removed as part of the project, the Contractor shall prepare a [Fuel Storage Tank Installation/Removal Report][Fuel Storage Tank Installation/Removal Report] and submit it to [718 CES/CEIE][374 CES/CEIE][INSERT ORGANIZATION] via the COR within 30 days of the completion of site work. At a minimum, the report shall include the following as applicable:

- a. Summary of work conducted.
- b. Installation/Removal date for each installed/removed storage tank.
- c. Date placed in service, capacity, manufacturer name, model number, and serial number for each new AST/UST.
- d. As-built drawings showing the removed AST/USTs and/or the newly installed AST/USTs and associated infrastructure.
- e. Copy of the Manufacturer's Operations and Maintenance Manuals and product information.
- f. Copy of the Manufacturer's Warranty Cards.
- g. Photo documentation of construction activities, including AST/UST removals and/or new AST/UST installations. Photos shall show the initial and completed site condition, each exposed UST, each tank's condition upon removal, the completed UST excavation(s) to show any contamination, and the contaminated soil pile, if any.
- h. If a tank was removed, include a photograph of the old tank with a hole cut into the side as described in paragraph UST REMOVAL. Provide a location map and tank ID (when available).
- i. Leak check report for buried piping associated with storage tank at time of installation, modification, construction, relocation or replacement.

1.9.14 CHAPTER 8: HISTORICAL, CULTURAL, AND NATURAL RESOURCES

1.9.14.1 EPP Mandatory Items

- a. Description of measures to manage and mitigate damage to natural resources including, but not limited to land resources, tree protection, replacement of damaged landscape features, temporary construction, stream crossings, fish and wildlife resources, and wetlands areas.
- b. Objectives and methods to protect identified historical and archeological resources.

1.9.14.2 Other Required Submittals

Notification Of Discovery Or Historical Or Cultural Items: The Contractor shall immediately report the discovery of any historical and/or archaeological items or human remains in the course of work to the Contracting Officer and the [Kadena Air Base][Yokota Air Base][Misawa Air Base] [INSERT INSTALLATION NAME] Environmental Office at DSN [634-2600][225-5440][INSERT CONTACT PHONE NUMBER].

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.

Stop work immediately in the area of the discovery until the Environmental Office evaluates the site. The Contracting Officer will provide direction on how to proceed. 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.

The Contractor shall be responsible for completing and submitting official paperwork on the discovery. The Environmental Office's Cultural Resources Manager will advise the Contractor concerning the content of the report.

1.9.15 CHAPTER 9: POLYCHLORINATED BIPHENYLS (PCB)

1.9.15.1 EPP Mandatory Items

If the project does not involve the disturbance, relocation, removal, or installation of any item that historically contained PCBs, insert the following text in Chapter 9 of the EPP:

"CHAPTER 9: POLYCHLORINATED BIPHENYLS (PCB)

- Items historically containing PCBs will not be disturbed, removed, or installed during this project.
- 2. In the event of unexpected discovery of suspected PCB items, the Contractor shall not disturb the material, and immediately notify the Contracting Officer's Representative, who will make a determination on how to proceed."[Information on the PCB equipment that will be removed, including, but not limited to:
 - (a) Equipment type.

- (b) Month/year of manufacture.
- (c) Date removed from service.
- (d) Building number, circuit number or set number.
- (e) Base from which item was removed.

Items (c) - (e) shall also be written on the equipment chassis in permanent ink.]

Provide a list of any equipment which is known, or has potential to contain (contains dielectric fluid) PCBs removed under this project. List shall include equipment serial numbers and map indicating location of equipment. When listing light ballasts provide the quantity to be removed.

If the project involves the removal of an oil-filled transformer or switchgear manufactured prior to 1980, perform the work in accordance with the specification and supplement that applies to the work, such as: (Section 26 12 21 SINGLE-PHASE PAD-MOUNTED TRANSFORMERS, etc.) In Chapter 9 of the EPP, enter the following:

["CHAPTER 9: POLYCHLORINATED BIPHENYLS (PCB)

A separate PCB equipment removal plan will be submitted in accordance with [SECTION $26~\rm XX~XX.00$] and the local supplement."

If the project involves the removal of an oil-filled transformer or switchgear that was manufactured after 1980, perform the work in accordance with the specification and supplement that applies to the work, such as: (Section 26 12 21 SINGLE-PHASE PAD-MOUNTED TRANSFORMERS, etc.)

In Chapter 9 of the EPP, enter the following:

- a. (A transformer) (and) (or) (Switchgear) manufactured (insert month/year of manufacture) will be removed in accordance with (insert spec section) and placed at Bldg 1465 for storage.
 - (1) Insert the item's month/year of manufacture in the spaces above.
 - (2) Write the specification used to perform the work in the spec spaces.
- b. The Contractor shall write the following information on the chassis with permanent ink.
 - (1) "Date removed from service".
 - (2) "Building number", "circuit-number", or "set-number".
 - (3) "Base" where item was removed."]

1.9.16 CHAPTER 10: PESTICIDES

1.9.16.1 EPP Mandatory Items

If the project does not involve the supplication of pesticides insert the following text in Chapter 10 of the EPP:

"CHAPTER 10: PESTICIDES

No pesticides will be stored or applied as part of this project."

Pesticide Treatment Plan: Include and update a pesticide treatment plan, as information becomes available. Include in the plan the sequence of treatment, dates, times, locations, pesticide trade name, EPA registration numbers if applicable, authorized uses, chemical composition, formulation, original and applied concentration, application rates of active ingredient (that is, pounds of active ingredient applied), equipment used for application, and calibration of equipment. Comply with the JEGS or any applicable Federal GOJ national or prefectural and installation requirements.

1.9.17 CHAPTER 11: ASBESTOS CONTAINING MATERIALS (ACM)

1.9.17.1 EPP Mandatory Items

If the project does not involve the disturbance, removal, installation, or relocation of any ACM, insert the following text in Chapter 10 of the EPP:

"CHAPTER 11: ASBESTOS-CONTAINING MATERIALS (ACM)

- 1. All new materials installed on this project contain less than one-tenth of one percent (0.1 percent) asbestos, by weight.
- 2. Suspected ACM will not be disturbed, removed, or relocated during this project.
- 3. In the event of unexpected discovery of suspected ACM, the Contractor shall not disturb the material, and immediately notify the Contracting Officer's Representative, who will make a determination on how to proceed."

Indicate whether the project involves sampling, disturbance, and/or abatement of any ACM. [Refer to section [] for asbestos management and disposal requirements.]

[Insert the following text in Chapter 11 of the EPP:

"CHAPTER 11: ASBESTOS-CONTAINING MATERIALS (ACM)

1. An Asbestos [Sampling and Analysis Report][Hazard Abatement and Disposal Plan] will be submitted separately in accordance with the ACM specifications and supplements. The Contractor understands that the plan must be approved prior to beginning site work."]

1.9.17.2 Other Mandatory Requirements

If ACM is unexpectedly discovered at the worksite, submit an Unexpected Discovery of Asbestos Report to the Contracting Officer, briefly explaining the location of discovery, the time and date.

Consult with the Environmental Representative in advance of drafting the $\ensuremath{\mathtt{EPP}}$ if asbestos applicability is uncertain.

1.9.18 CHAPTER 12: LEAD-BASED PAINT (LBP)

1.9.18.1 EPP Mandatory Items

If the project does not involve the disturbance, removal, or application of paint, insert the following text in Chapter 11 of the EPP:

"CHAPTER 12: LEAD-BASED PAINT (LBP)

- 1. All paint and coatings applied during this project contain less than 0.009 percent lead, by weight.
- 2. LBP will not be disturbed or removed during this project.
- 3. In the event of unexpected discovery of suspected LBP, the Contractor shall not disturb the material, and immediately notify the Contracting Officer's Representative, who will make a determination on how to proceed."

Indicate whether the project involves sampling, disturbance, removal, and/or abatement of lead-containing and/or LBP. [Refer to section [] for lead paint management and disposal requirements].

If the project does involve the disturbance, removal, or abatement of LBP, insert the following text in Chapter 11 of the EPP:

"CHAPTER 12: LEAD-BASED PAINT (LBP)

1. A Lead-Based Paint Abatement and Disposal Plan will be submitted separately in accordance with the LBP specifications and supplements. The Contractor understands that the plan must be approved prior to beginning the site work."

Consult with the Environmental Representative in advance of drafting the EPP if lead applicability is uncertain.

1.9.19 CHAPTER 13: SPILL PREVENTION AND RESPONSE

1.9.19.1 EPP Mandatory Items

If the project does not store POL or hazardous materials on-site, insert the following text in Chapter 12 of the EPP:

"CHAPTER 13: SPILL PREVENTION AND RESPONSE

No POL or hazardous materials will be stored on-site during this project."

Site-specific Spill Contingency Plan (SSCP): The Contractor shall develop and submit a SSCP for any project at which POL or Hazardous Substances are used and/or stored at the project site. The SSCP shall be consistent with the Installation Spill Prevention and Response Plan (SPRP). The Contractor shall train employees on the contents of the SSCP and the use of spill response equipment and shall document such training. The SSCP shall be posted at the work site at all times.

The SSCP must be included in Chapter 13 of the EPP and be at least two pages in length:

a. (Page 1) Description of the spill response procedures, an inventory of POL and/or hazardous substances, probable spill routes, and an

inventory of spill response equipment.

- b. (Page 2) Project site layout diagram.
- c. An SSCP Plan template can be obtained from [718][374][35] CES Environmental Section by calling DSN [634-2600][225-5440][INSERT PHONE NUMBER].

1.9.19.2 Other Mandatory Requirements

Prevention: Procedures to prevent releases to the environment.

Spill Notification: The Contractor is required to submit a written Spill Notification when a worksite spill occurs. The quantity of POL spilled determines the amount of information required on the report and the deadline for submission. Consult with [Kadena Air Base][Yokota Air Base][Misawa Air Base][INSERT INSTALLATION NAME] Environmental Section on the requirements when initially reporting the spill.

1.9.20 CHAPTER 14: ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

1.9.20.1 Criteria Summary

In accordance with EO 13693, [Kadena Air Base][Yokota Air Base][Misawa Air Base][INSERT INSTALLATION NAME] has implemented the ISO 14001 to recognize environmental impacts, reduce our environmental footprint, and to always look to improve the way business is conducted at [Kadena Air Base][Yokota Air Base][Misawa Air Base][INSERT INSTALLATION NAME].

1.9.20.2 Training

In accordance with AFI 32-7001], the Contractor shall ensure that all personnel and subcontractors complete the EMS Awareness training via the Environmental Occupational Safety Health-Training Network, (https://esohtn.com/start, password: esohtn) prior to commencing construction/project activities or delivery of materials to the site. For questions, please contact [718 CES/CEIE][INSERT ORGANIZATION NAME].

1.9.20.3 EPP Mandatory Items

The Contractor is required to understand and implement EMS and shall describe how this will be accomplished in this Chapter of the EPP. For chapter 14, submit a print-out of the EMS Training Certificate (from the website) for each employee showing completion of EMS Training courses.

1.9.21 CHAPTER 15: SUSTAINABLE PROCUREMENT PROGRAM

1.9.21.1 Criteria Summary

The Sustainable Procurement Program (SPP), establishes goals for all federal employees, to include contractors, to improve sustainable environment practices and procedures through the purchase and use of recycled content, bio-based products, energy and water efficient products, and environmentally preferable products. Recycled content products are made from or contain recycled materials. Bio-based products are made with biological, agriculture, or forestry materials. Energy-efficient products use less energy than comparable equipment. Water-efficient products use less water than comparable equipment. Environmentally preferable products are materials and items that have reduced effects on health and the

environment compared to other products with the same purpose.

In the performance of this contract, the contractor shall make maximum effort to improve sustainable environmental practices and procedures as follows: reduce solid and hazardous waste generation, reduce greenhouse gas emissions, increase the use of renewable energy and bio-based products, reduce the use of ozone depleting substances and hazardous and toxic chemicals, reduce consumption of energy and natural resources, expand markets for green products and services, and reduce dependence on fossil fuel-based products. Make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:

- a. Competitively within a timeframe providing for compliance with the contract performance schedule,
- b. Meeting contract performance requirements, or
- c. At a reasonable price.

The U.S. Environmental Protection Agency (EPA) has developed the Comprehensive Procurement Guidelines (CPG) to help identify recycled content products. The CPG also provides a "Total Recovered Materials Content" percentage that is a range of how much recycled content should be in each item. CPG-listed items must be purchased at the amounts recommended by EPA (the Total Recovered Materials Content percentage).

The CPG categories are: Paper and Paper Products, Vehicular Products, Construction Products, Transportation Products, Park and Recreation Products, Landscaping Products, Non-paper Office Products, and Miscellaneous Products.

The U.S. Department of Agriculture (USDA) has developed a list of bio-based products, similar to that of EPA's CPG for recycled content products. The Contractor shall purchase bio-based products whenever possible.

The USDA's Biopreferred categories are: Construction and Road Maintenance, Furniture and Furnishings, Housewares and Cleaning, Industrial Supplies, Landscaping and Agriculture, Office Supplies, Personal Care and Toiletries, The Great Outdoors, and Utilities.

Information about this requirement and these products is available at: http://www.biopreferred.gov.

Recycled content products not listed in the CPG may also be used in the execution of any contract. Look for opportunities to maximize the use of products containing recycled content. Green products can and should be used in every construction project, including new construction, addition, renovation, or repair projects, and every service contract.

1.9.21.2 EPP Mandatory Items

For Chapter 14, list products with recycled content, environmentally preferable, bio-based, and energy and water efficient products will be purchased or utilized, if any.

1.10 LICENSES AND PERMITS

Obtain licenses and permits required for the construction of the project and in accordance with FAR 52.236-7. Notify the Government of all general use permitted equipment the Contractor plans to use on site. This paragraph supplements the Contractor's responsibility under FAR 52.236-7.

[a.	The	followi	ing	permits	have	been	obtained	by	the	Government:
]		(1)	[]]							

][(2) [____]
][(3) [____]

[b. The following permits will be obtained by the Government:
[(1) [____]

][(2) [____]][(3) [____]]]

1.11 ENVIRONMENTAL RECORDS BINDER

Maintain on-site a separate three-ring Environmental Records Binder and submit at the completion of the project. Maintain digital copies of records to submit. Make separate parts within the binder that correspond to each submittal listed below:

- a) Waste Determination Documentation
- b) Disposal Documentation for Hazardous and Regulated Waste
- c) Stormwater Inspection Reports and Stormwater Pollution Prevention Plan Compliance Notebook

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 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.

The Contractor shall take precautions to preserve all such resources as they existed at the time they were first pointed out. The Contractor shall provide and install protection for these resources and be responsible for their preservation during the life of the Contract.

Environmental protection shall be conducted as follows:

- a. Except in areas indicated on the drawing or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources, including trees, shrubs, vines, grasses, topsoil, and land forms without the Contracting Officer's permission. Any anticipated vegetation disturbance needs to be coordinated with the Government before it occurs.
- b. All construction activities shall stay out of the drip line of trees. Damaging roots and/or compacting soil within the dripline of trees is prohibited. Trees, shrubs, and other vegetation not identified for removal shall be protected against removal, injury, defacing, and scarring no ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such emergency use in permitted, the contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, earth or other material displaced into uncleared areas shall be removed.
- c. Where an exception is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times and shall be responsible for any resultant damage.

3.1.1 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.

3.1.2 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.

3.1.3 GOJ-Protected Species

GOJ-Protected species are typically found in undeveloped and unmaintained portions of the base. Projects that may affect protected species shall include mitigation measures to eliminate or minimize effects.

[3.1.4 Banyan Trees

All Banyan trees must be preserved and protected. Banyan trees mark the villages and are used as landmarks for the Okinawans. Any banyan tree requiring destruction or removal must first be coordinated with the [18 CEG/CC][INSERT ORGANIZATION NAME], or in his absence with the [18 CEG/CD][INSERT ORGANIZATION NAME] (for example, trees with 30 percent or

more of their root systems destroyed may need to be removed). Protect existing trees from injury, bruising, defacing, or other damage by construction operations.]

For Army projects, any banyan tree requiring destruction or removal must first be coordinated with the Chief of Okinawa Public Works or the designated representative.

3.1.5 Tree Replacement

The relocation of trees is preferred to removal and replacement. If trees can't be relocated, replace removed trees 3 for 1 may be authorized. Exotic plants shall not be introduced to the Installation; indigenous trees/shrubs shall be planted as much as possible. Utilize "Landscape Development Plan Reference Data, Kadena Air Base, Okinawa, Japan, 2nd Edition" for guidance on landscaping. Obtain Contracting Officer's approval before relocation or replacement.

3.1.6 Post-Construction Site Restoration

Remove traces of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other signs of construction. Grade temporary roads, parking areas, and similar temporarily used areas to conform to surrounding contours. Stabilize disturbed soils after construction to prevent erosion.]

3.1.7 Streams

Stream crossings must allow movement of materials or equipment without violating water pollution control standards of the JEGS and applicable, Federal, and GOJ national and prefectural laws and regulations, and installation requirements. Construction of stream crossing structures must be in compliance with JEGS, applicable Federal and GOJ national and prefectural laws and regulations, and installation requirements, including the Storm Water Pollution Prevention Plan.

The Contracting Officer's approval and applicable local 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.

3.1.8 Endangered Species

At any time an endangered or threatened species, flora or fauna, to include sea turtle nests are encountered, all activities shall stop and the Contracting Officer shall be notified.

3.1.9 Indigenous/Native Flora and Fauna

The Contractor shall place emphasis on the protection of habitats favorable to the reproduction and survival of indigenous flora and fauna. The Contractor shall use indigenous flora for planting/sodding.

3.1.10 Invasive Species

Invasive Species are prohibited to be raised, planted, stored or possessed on DoD installations. The Contractor shall not bring in any invasive species to DoD installations.

3.2 STORMWATER

Do not discharge stormwater from construction sites to the sanitary sewer. If the water 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 in advance from the Installation Environmental Office for any release of contaminated water. Storm water management and control shall be detailed in the SWPPP submitted as part of Chapter 3 of the EPP submittal. Refer to paragraph [1.9.9.1.a] of this section.

3.2.1 Storm Water Pollution Prevention Measures

The Contractor shall use proper control and management techniques to ensure storm water criteria are met in accordance with the JEGS storm water regulations. As required by the JEGS, erosion/sediment control measures to prevent the discharge of silt into nearby water shall be implemented. Control measures shall include the use of vegetative covers, construction of diversion drains, grading management, filter strips, and use of sediment basins.

3.2.2 Inspection Reports

Submit Inspection Reports and Stormwater Pollution Prevention Plan Compliance Notebook in the Environmental Records Binder and provide to the Contracting Officer in accordance with the JEGS and applicable GOJ or Local Laws and Regulations.

- a. Runoff from the construction site or from storms shall be controlled, retarded, and diverted, as indicated on the SWPPP drawings, to protect drainage courses by means of diversion ditches, benches, and berms. Berms, dikes, drains, sedimentation basins, grassing, and mulching shall be maintained until permanent drainage and erosion control facilities are completed and operative.
- b. Silt screens must be installed prior to start of construction. Silt screens and/or other erosion control devices shall be installed on construction sites that are in or near water. Silt screens shall consist of trenched and staked filter fabric and trenched and staked hay bales. Filter fabric must be toed 8 inches into the soil to avoid sediments that would be transported via water under the screen. Hay bales must be placed end-to-end on the downstream side of the screen and be trenched and staked firmly into the ground. Chinking is usually required to fill gaps between the bales. Silt screens must be maintained properly. Screens and other control devices must be inspected once a week and after any rainfall event totaling one-half inch or more to ensure they are in good repair and functioning properly.
- c. In areas that experience high flow rates, extra precautions shall be necessary to stabilize screens. Trenching of hay bale barriers is required to adequately control runoff. A series of screens may have to be installed in waters that are especially turbid to properly

filter out sediments. Silt screens shall remain in place and properly maintained until the site is properly stabilized with sod or seeding.

- d. Providing erosion and sediment control measures is the Contractor's responsibility. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards, listed in the JEGS are not violated as a result of construction activities. The area of bare soil exposed at any one time by construction operations shall be kept to a minimum. Construct or install temporary and permanent erosion and sediment control BMPs as indicated on the drawings and as specified in the SWPPP.
- e. BMPs may include, but are not limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. The Contractor's Best Management Practices must also be in accordance with the JEGS and the SWPPP. Remove any temporary measures after the area has been stabilized.
- f. All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Side and back slopes shall be protected as soon as practicable upon completion of rough grading. Earthwork brought to final grade shall be finished as indicated.
- g. The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings, or as directed by the Contracting Officer. Temporary movement or relocation of the Contractor's facilities shall be made only when approved. Borrow areas shall be managed to minimize erosion and to prevent sediment from entering nearby waters.
- h. Spoil areas shall be managed and controlled to limit spoil intrusion into areas designated on the drawings and to prevent erosion of soil or sediment from entering nearby waters. Spoil areas shall be developed in accordance with the grading plan indicated on the drawings. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas from despoilment.

3.2.3 Erosion and Sediment Control Measures

Provide erosion and sediment control measures in accordance with GOJ, Federal, and Local prefecture laws and regulations, and JEGS. Preserve vegetation to the maximum extent practicable.

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

3.2.3.1 Erosion Control

Prevent erosion by [mulching], [compost blankets,][geotextiles,] or [temporary slope drains][]. Stabilize slopes by [chemical stabilization,][sodding,][seeding,][____], or a combination of these methods necessary for effective erosion control. Provide seeding in accordance with Section 32 92 19 SEEDING. Use of hay bales is prohibited.

Any disturbed area with exposed soil that is not being worked on must be seeded or sodded no later than two weeks from the last disturbance

regardless of the installation of any other erosion control measures in place. Remove any temporary measures after the area has been stabilized.

3.2.3.2 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. Best Management Practices (BMPs) may include, but not limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. [Location and details of installation and construction are as indicated on the drawings.] Include the following devices:[silt fence,][temporary diversion dikes,][storm drain inlet protection,][_____,][Location and details of installation and construction are indicated on the drawings.]

3.2.4 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.

3.2.5 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. Control temporary excavation and embankments for plant or work areas to protect adjacent areas.

3.3 SURFACE AND GROUNDWATER

3.3.1 Cofferdams, Diversions, and Dewatering

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure must be constantly controlled to maintain compliance with existing water quality standards and designated uses of the surface water body. Comply with 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. Discharge of hazardous substances will not be permitted under any circumstances.

3.3.2 Waters of Japan

Do not enter, disturb, destroy, or allow discharge of contaminants into waters of Japan[.][, except as authorized herein. The protection of waters of Japan shown on the drawings in accordance with paragraph LICENSES AND PERMITS is the Contractor's responsibility. Authorization to enter specific waters of Japan identified does not relieve the Contractor from any obligation to protect other waters of Japan within, adjacent to, or in the vicinity of the construction site and associated boundaries.]

3.3.3 Water Protection

Contractor shall prevent oily wastes or other hazardous substances from entering the ground, drainage areas, or local bodies of water.

3.3.4 Sewage

Contractor is not authorized sewage holding tanks on base and must procure a porta-potty service Contract. The porta-potty Contract must include the correct removal of sewage and maintenance of the facilities.

3.3.5 Wastewater

If the project generates wastewater from rinsing tanks, dewatering sites, etc., contact the Contracting Officer on proper disposal.

3.4 PROTECTION OF CULTURAL RESOURCES

3.4.1 Archaeological Resources

[Existing historical, archaeological, and cultural resources within the Contractor's work area will be so designated by the Contracting Officer if any such areas have been identified.] 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 Installation Cultural Resources Manager via 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.

[3.4.2 Historical Resources

Existing historical resources within the work area are shown on the drawings. Protect these resources and be responsible for their preservation during the life of the Contract.]

3.5 AIR RESOURCES

Equipment operation, activities, or processes will be in accordance with the JEGS and all applicable Federal, GOJ national or prefectural air emission and performance laws and regulations.

3.5.1 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). Product data shall be provided prior to equipment installation.

3.5.2 Burning

Burning is prohibited on the Government premises.

3.5.3 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 required recovery cylinders and the appropriate location for turn in of all reclaimed refrigerant. Class I and II ODS as defined and identified herein shall not be used in the performance of this contract.

The contractor shall coordinate with the [Refrigerant, AC and Heating Shop, (DSN 652-4302)][] on the quantity of ODS recovered from system for the purpose of recycle, reuse or dilution. In the event the ODS can be recycled, reused or diluted, the entire quantity will be turned over to the [Refrigerant, AC and Heating shop][].

In cases where the ODS is sufficiently contaminated and cannot be recycled, reused and/or diluted, the Contractor shall dispose of the ODS according to the JEGS and local regulations.

In the event of a release of ODS, base personnel and/or Contractor shall inform [Fire and Emergency's Service Branch and Environmental Division][].

3.5.4 Accidental Venting of Refrigerant

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

3.5.5 Training/Certification Requirements

Heating and air conditioning technicians must be trained to meet requirements in the JEGS. Maintain copies of certifications at the employees' places of business; technicians must carry certification wallet cards, as provided by GOJ national or prefectural laws and regulations.

3.5.6 Dust Control

Keep dust down at all times, including during nonworking periods. 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.

3.5.6.1 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 the JEGS and applicable U.S. Federal, GOJ national or prefectural 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 shall be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The contractor shall coordinate with 374 CES/CEIE via the Contracting Officer before the commencement of any particulate control activities. Even sprinkling of water should be reconsidered from resource conservation standpoint. 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 the JEGS, GOJ national or prefectural laws and regulations, and installation requirements.

Responsible units/activities/stakeholders/contractors must have sufficient, competent equipment available and shall use Best Management Practice (BMP) at all times to accomplish these tasks. Air emission/pollutant control shall be performed as the work proceeds and whenever potential hazards exist, emission standards are listed in the JEGS.

3.5.6.2 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 the JEGS, GOJ national or prefectural laws and regulations, and installation requirements.]

3.5.7 Odors

Control odors from construction activities. The odors must be in compliance with applicable GOJ national or prefectural laws and regulations, and may not constitute a health hazard.

3.5.8 All Refrigerant Types

Ensure a weatherproof data plate is permanently attached to refrigeration (or air conditioning) equipment in a location visible to maintenance workers, showing refrigerant type and the full charge quantity.

3.5.9 Other Pollutants

Dust particles, aerosols and gaseous by-products from construction activities, and processing and preparation of materials shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. Responsible units/activities/stakeholders/Contractors must have sufficient, competent equipment available and shall use Best Management Practice (BMP) at all time while accomplishing tasks. Air emission/pollutant control shall be performed as the work proceeds and whenever potential hazards exist. Emission standards are listed in the JEGS.

3.5.10 Class I ODS

Class I ODS listed in the JEGS are prohibited from use in construction, remodeling, or maintenance. Provide certifications that materials utilized during the project do not contain Class I ODSs. The purchase of Class I ODS for fire suppression equipment, air conditioning, and refrigeration equipment for ground applications is prohibited by AFMAN 32-7002 on all new and/or refurbishing projects. Limited exceptions for using Class I ODS for airborne equipment exist, but shall require prior approval.

a. Phase-out of Class I ODS: Installation to comply with the requirements of EO 13148, Sec 505(b), to cost effectively phase-out Class I ODS requirements as equipment using Class I ODS reach the end of their expected service life per AFMAN 32-7002. Class 1 ODS shall not be disposed of off the installation; Contractor shall coordinate with 35 CES/CEIE for procedures to ensure Class I ODSs are turned into the DLA ODS Reserve.

3.5.11 Class II ODS Approval Request

Class II ODS listed in the JEGS and AFMAN 32-7002 must first be approved by [718 CES/CEIE][374 CES/CEIE][35 CES/CEIE], Environmental Office prior to use. [718 CES/CEIE][374 CES/CEIE][35 CES/CEIE] recommends using non-ODS products as a substitute.

a. Phase-out of Class II ODS: Installations, Contractors, and other using agencies shall comply with USAF phase-out goal by 01 Jan 2020 per AFMAN 32-7002.

3.5.12 Refrigerant Recovery and Recycling

Prior to recovery and recycling of ODS, the Contractor is required to coordinate with the using agencies [(918 CES HVAC Shop, 718 CES Housing Maintenance)], or [718 CES][374 CES/CEIE][35 CES/CEIE] Environmental Branch) of the future intended use of the ODS. All repairs, including leak repairs or services to appliances, industrial process refrigeration units, air conditioning units, or motor vehicle air conditioners, must be performed using commercially available refrigerant recovery/recycling equipment operated by trained personnel. Refrigerant technicians shall be trained in proper recovery/recycling procedures, leak detection, safety, shipping, and disposal in accordance with recognized industry standards or Japanese equivalent.

3.5.13 Refrigerant Venting Prohibition

Any class I or class II ODS, HFC, and PFC refrigerant shall not be intentionally released in the course of maintaining, servicing, repairing,

or disposing of appliances, industrial process refrigeration units, air conditioning units, or motor vehicle air conditioners. Minor releases associated with good faith attempts to recycle or recover ODS, HFC, and PFC refrigerants are not subject to this prohibition.

3.5.14 Halon Venting Prohibition

Halons shall not be intentionally released into the environment while testing, maintaining, servicing, repairing, or disposing of Halon-containing equipment or using such equipment for technician training. This venting prohibition does not apply to the Halon releases listed in the JEGS.

- a. Halon De minims release associated with good faith attempts to recycle or recover halon (i.e. release of residual halon contained in fully discharged total flooding fire extinguishing systems).
- b. Emergency release for the legitimate purpose of fire extinguishing, explosion inertion, or other emergency applications for which the equipment or systems were designed.
- c. Releases during the testing of fire extinguishing systems if each of the following is true; systems or equipment employing suitable alternative fire extinguishing agents are not available; release of extinguishing agent is essential to demonstrate equipment functionality; failure of system equipment would pose a great risk to human safety or the environment; and simulant agent cannot be used.b. Hydrocarbons and Carbon Monoxide: Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to allowable limits at all times.

3.5.15 Generators, Incinerators, and Boilers

Generators, Incinerators, and Boilers: If generators, incinerators, or boilers are to be installed or replaced as part of the project, they must meet standards listed in the JEGS. Provide [718 CES][374 CES/CEIE][35 CES/CEIE] with the stack height, Fuel Combustion Rate (L/hr) for generators; Grate area (m2), Rate capacity (t/day), Incineration rate (kg/h) for incinerators; and heating area (m2), burner combustion rate (L/hr), Heat input rating (MMbtu/hr) for boilers, manufacturer's results from their product emission testing or other emission testing results, the heat exchange surface area in square meters for boilers, and the fuel oil consumption rate in liters per hour for boilers and generators.

3.5.16 Hydrocarbons and Carbon Monoxide

Hydrocarbons and Carbon Monoxide: Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to allowable limits at all times.

3.6 WATER RESOURCES

Keep construction activities under surveillance, management, and control, and monitor all water areas affected by construction activities in order to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation when such application may cause contamination. Prevent oily wastes or other hazardous substances from entering the ground, drainage areas, or local bodies of water.

Monitoring of water areas affected by construction shall be the Contractor's responsibility. All water areas affected by construction activities shall be monitored by the Contractor.

3.6.1 Lead-Free Drinking Water Pipe, Solders, Flux and Fittings

The maximum allowable lead content for pipes, fittings, and fixtures intended to convey or dispense water for human consumption and cooking shall be a weighted average of 0.25 percent with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures in accordance with NSF 61. Refer to section 22 00 00 PLUMBING, GENERAL PURPOSE.

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. Describe actions to promote material reuse, resale or recycling. To the extent practicable, all scrap metal must be sent for reuse or recycling and will not be disposed of in a landfill.

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.

All solid wastes and materials that have been separated for the purpose of recycling shall be stored in such a manner that they do not constitute a fire, health or safety hazard, or provide food or harborage for vectors, and shall be contained or bundled so as to not result in spillage. Containers must be: leak proof, water proof, and vermin proof including sides, seams, tops and bottoms, durable enough to withstand anticipated usage, and stored on a firm, level, well-drained surface).

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 Environmental Office through 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 meters, as appropriate
C&D Debris Recycled	() cubic meters, as appropriate
Total C&D Debris Generated	() cubic meters, as appropriate
Waste Sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount)	() cubic meters, as appropriate

Include the completed form, Disposal and Recycling Data Sheet, Attachment A, attached at the end of the section.

3.8 WASTE MANAGEMENT AND DISPOSAL

3.8.1 Waste Determination Documentation

Complete Waste Determination Documentation for Contractor-derived wastes to be generated and submit in the Environmental Records Binder. 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 the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements. 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 the JEGS, Installation Hazardous Waste Management Plan, appropriate Japanese or U.S. EPA testing protocols that meet the purpose of the testing. Clearly mark each sampled drum or container with the Contractor's identification number, and cross reference to the chemical analysis performed.

Excess excavated soil shall become the property of the Contractor and shall be disposed of off base at a properly licensed facility in accordance with the latest version of the JEGS and applicable GOJ federal and local laws and regulations. Any excess soil shall be sampled and tested according to the applicable GOJ federal and local laws and regulations and disposal facility requirements prior to disposal.

3.8.1.1.2 Laboratory Analysis

Follow the analytical procedure and methods in accordance with the JEGS

and all applicable GOJ national or prefectural laws and regulations and Installation Hazardous Waste Management Plan. 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], and [toxicity] based on TCLP results.][___]

3.8.2 Solid Waste Management

The Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this Contract. The project's recycling program shall include all Contractor employees and subcontractors.

At a minimum, the following items shall be recycled: scrap metal, cardboard, concrete, asphalt, scrap wood, wooden pallets, glass, and plastic. Green wastes should be mulched or composted. The project site(s) must be left clean and clear of all debris upon completion of work.

3.8.2.1 Solid Waste Management Report

Provide copies of the waste handling facilities' weight tickets, receipts, bills of sale, Contractor Certification and other sales documentation in the Environmental Protection Plan. 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 sales documentation[Contractor certification] must include the receiver's tax identification number and business, GOJ or prefectural registration number, along with the receiver's delivery and business addresses and telephone numbers.

3.8.2.2 Control and Management of Solid Wastes

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 the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements for solid waste disposal. Solid waste disposal offsite must comply with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements. Verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate.

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 the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements.

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.

The Contractor is responsible for managing all hazardous wastes (HW) generated throughout the duration of the Contract. The Contractor shall designate a hazardous waste manager in writing who shall be responsible for all HW management activities. The Contractor may attend the Hazardous Waste Accumulation Point Management course (English only) offered quarterly by [718][374][35]CES/CEIE.Hazardous wastes, including excavated contaminated soil, shall be stored, transported, and disposed of in accordance with the JEGS and applicable U.S. and GOJ laws and regulations, including obtaining necessary local permits, licenses, and approvals.

All HW generated by the Contractor shall be disposed/recycled off base in accordance with Japanese regulation, Article 3 of "Law of Disposal and Clearing of Waste "Haikibutsu no shori oyobi seisou ni kansuru horitsu" and local regulations. U.S./foreign made ionization smoke detectors shall be turned in to 374 CES/CEOFA (Alarm Shop). The Contractor shall not leave any hazardous waste at work site areas at the end of duty hours. If temporary hazardous waste storage is needed to accumulate hazardous waste on base, the Contractor shall submit spill response plan with site map, the list of all hazardous waste to be stored on-base and estimated quantities to 374 CES/CEIE, 374 CES/CEF, 374 AMDS/SGPB and 374 AW/SE for approval via the Contracting Officer.

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 the JEGS, U.S. Federal, GOJ, Prefectural, and local requirements.

Under no circumstances may hazardous waste be disposed of in the dumpster of any facility in accordance with Installation HWMP. 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 the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements.

Manage hazardous waste in accordance with the approved Hazardous Waste Management Section of the EPP. Store hazardous wastes in approved containers in accordance with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements. 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 the JEGS. For hazardous wastes spills, verbally notify the Contracting Officer immediately.

3.8.3.2 Hazardous Waste Disposal Procedures

For Contracts stating that the Contractor shall turn-over hazardous waste to the U.S. Government, the Contractor must package hazardous waste in a United Nations (UN) approved container labeled in English and Japanese, furnish analytical results, and submit the container(s) and information to the Kadena Hazardous Waste Storage Facility (HWSF) located in Bldg 3623. Kadena HWSF personnel will weigh the container(s) and complete a waste profile sheet for the material and manifest document (DD Form 1348-1A). If the Contractor does not provide adequate information for the HWSF to receive the hazardous waste, the Contractor shall correct any discrepancies on the spot or remove the unacceptable containers until the deficiencies can be corrected. For further information, call the Kadena Hazardous Waste Program Manager at DSN 634-2600.

All commercial hazardous waste shipments must be properly packaged, labeled, and the Hazardous Waste Manifest must be signed by a representative of the 718 CES/CEIE prior to being transported. To coordinate hazardous waste pick-up inspections, call DSN 634-2600.

- a. For Army projects, submit the analytical results to the U.S. Army Garrison Japan (USAG-J) Environmental Branch, who will assist EP and S in completing a waste profile sheet and DD Form 1348. Submit a copy of the DD Form 1348 showing the material was turned-in. For further information, contact the Hazardous Waste Manager at DSN 652-4910 or 652-5189.
- b. For Contracts stating that the Contractor is responsible for disposal of hazardous waste at a Japanese commercial facility, the Contractor shall subcontract a transportation company holding a prefecture-issued Industrial Waste Collection and Transport Business Permit. The hazardous waste shall be disposed of at a landfill or disposal company holding either an Industrial Waste Disposal Business Permit or a Specially Controlled Industrial Waste Disposal Business Permit depending upon the type of waste being disposed.

All commercial hazardous waste shipments must be properly packaged, labeled, and the Hazardous Waste Manifest must be signed by a representative of the 718 CES/CEIE prior to being transported. To coordinate hazardous waste pick-up inspections, call DSN 634-2600.

3.8.3.3 Hazardous Waste Records

The Contractor shall maintain sampling, analysis, and turn-in records for all hazardous waste generated during the project. These records shall include, but not be limited to: [waste profile sheets provided by HWSF personnel for wastes streams turned in to the HWSF, manifests (DD forms 1348-1A) for all wastes turned over to the HWSF,]logs of sample locations or container identification data (including time and date of sample collection), analytical results, and quality control data provided by the analytical lab pertaining to the samples analyzed. Copies of this data shall be submitted to [718 CES/CEIE][374 CES/CEIE][35 CES/CEIE][INSERT ORGANIZATION] via the COR after the work is completed.

3.8.3.4 Electronics End-of-Life Management

Recycle or dispose of electronics waste, including, but not limited to, used electronic devices such as computers, monitors, hard-copy devices,

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televisions, mobile devices, in accordance with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, local requirements and installation instructions.

- 3.8.3.5 Disposal Documentation for Hazardous and Regulated Waste
- [Submit a copy of the applicable local permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities in the Environmental Records Binder. Hazardous or toxic waste manifests must be reviewed, signed, and approved by the Contracting Officer before the Contractor may ship waste. To obtain specific disposal instructions, coordinate with the Installation Environmental Office.

If the Contract specifies that the Contractor is responsible for disposal at a commercial landfill, submit copies of the following documents:

- a. Copy E of the Hazardous Waste Manifest form used to transport from on-base to the off-base disposal facility (Sangyou Haikibutsu Manifesuto) within 60 days of transport.
- b. Transportation company's Industrial Waste Collection and Transport Business Permit (Sangyou Haikibutsu Shuushuu Unpangyou no Kyoka) as a part of a separate Hazardous Waste Abatement Plan.
- c. Disposal facility's Industrial Waste Business Permit (Sangyou Haikibutsu Shobungyou no Kyoka) as a part of a separate Hazardous Waste Abatement Plan.
- 3.8.4 Releases/Spills of Oil and Hazardous Substances
- 3.8.4.1 Response and Notifications

The Contractor shall conduct all operations in a manner that prevents spills of POL or other hazardous substances. The Contractor is required to familiarize personnel with spill prevention and response procedures, fire suppression systems, and SDSs for all materials used and/or stored on the project site. The Contractor shall provide and maintain spill equipment, sufficient in both type and quantity, at all sites involving the storage, use, or handling of POL and/or hazardous substances. 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 the JEGS and installation plans. Maintain spill cleanup equipment and materials at the work site.

Follow the spill prevention measures detailed in the Installation Spill Prevention and Response Plan. The Contractor is required to familiarize personnel with spill prevention and response procedures, fire suppression systems, and SDSs for all materials used and/or stored on the project site. Provide and maintain spill equipment, sufficient in both type and quantity, at all sites involving the storage, use, or handling of POL and/or hazardous substances.

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 [18 CES/CEF], Installation Fire Department[(at 911 from a landline or

098-934-5911 from a cell phone)], the Installation Command Duty Officer, the [718 CES][374 CES][35 CES] Installation Environmental Office at DSN [634-2600][225-5440][INSERT ENVIRONMENTAL OFFICE PHONE NUMBER]], and the Contracting Officer.

The Contractor shall immediately report all POL or Hazardous Substances spills to the Contracting Officer, who will report to the Fire Emergency Services (374 CES/CEF) at 911 or Commercial 042-507-6560 (direct number to Yokota Fire Dispatch) as required. Submit verbal and written notifications as required by the JEGS and installation and service component instructions and plans, and local regulations. Provide copies of the written notification and documentation that a verbal notification was made within [the timeframes required by the JEGS and installation instructions][five working days]. Spill response must be in accordance with the JEGS and installation requirements. Contain and clean up these spills without cost to the Government.

Submit verbal and written notifications as required by the JEGS and installations instructions. Provide copies of the written notification and documentation that a verbal notification was made within the timeframes required by the JEGS and installation instructions. Spill response must be in accordance with the JEGS and installation requirements. Contain and clean up these spills without cost to the Government.

3.8.4.2 Clean Up

[The Contractor is responsible for the cleanup of POL and/or hazardous substance spills and disposal of clean-up material. The Contractor shall determine, as quickly as possible, the nature of the spilled substance and implement necessary safety precautions to protect both human health and the environment. Cleanup shall be in accordance with applicable local laws and regulations, as determined by the Fire Department and [718 CES/CEIE, or the Environmental Branch for the Army][374 CES/CEIE][35 CES/CEIE]. Cleanup shall only be performed by personnel adequately trained in spill response and cleanup techniques for the severity of the spill incident.][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.

The Contractor shall be responsible for all costs incurred from any Contractor spills. The Contractor shall be held liable for all costs associated with performing emergency spill response and cleanup by the U.S. Government due to the non-availability of designated personnel or the limited capability of designated personnel. The U.S. Government's cost of cleanup shall be considered a Contract debt and collected in accordance with FAR subpart 32.6. If remaining Contract payments are insufficient, the Government reserves the right to pursue other offsets or administrative or civil actions to satisfy the debt.

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

Disposal of wastewater must be as specified below.

3.8.6.1 Treatment

Do not allow wastewater from construction activities, such as on-site material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, and forms to enter water ways[.][or to be discharged without proper approval from the Contracting Officer.] Dispose of the construction-related waste water off-Government property in accordance with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements, or by collecting and placing it in a retention pond where suspended material can be settled out or the water can evaporate to separate pollutants from the water. The site for the retention pond as well as its use must be coordinated and approved with the Contracting Officer. The residue left in the pond prior to completion of the project must be removed and disposed of off-Government property in accordance with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations, and installation requirements. Backfill the area to the original grade, top-soiled, and seeded or sodded. [Consult with the Installation Environmental Office on specific testing requirements for water in the retention pond. If required, test the water in the retention pond for [____] and have the results reviewed and approved by the Installation Environmental Office via the Contracting Officer prior to being discharged or disposed of off-Government property].]

3.8.6.2 Surface Discharge

For discharge of ground water, [if applicable, obtain a GOJ or local prefectural permit specific for pumping and discharging ground water prior to surface discharging.][Surface discharge in accordance with federal, state, and local laws and regulations.][Surface discharge shall be done in accordance with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations and installation requirements.]

3.8.6.3 Land Application

Water generated from the flushing of lines after[disinfection or disinfection in conjunction with hydrostatic testing][hydrostatic testing] must be[land-applied in accordance with the JEGS and applicable Federal, GOJ, prefectural and local laws and installation requirements for land application][discharged into the sanitary sewer with prior approval and notification to the owner of the sanitary sewer system].

3.8.7 Contaminated Soil Stockpile Request

The Contractor shall submit a Contaminated Soil Stockpile Request to [718][374][35] CES/CEIE for stockpiling contaminated soil for testing prior to disposal. Upon receipt of request, [718][374][35] CES/CEIE will inform the Contractor of an approved stockpile location. The Contractor shall be responsible for containment and monitoring of the contaminated soil stockpile at no additional cost to the U.S. Government.

3.9 HAZARDOUS MATERIAL MANAGEMENT

Include hazardous material control procedures in the Safety Plan, in accordance with Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. 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 a Safety Data Sheet and estimated quantities to be used for each hazardous material to the Contracting Officer 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.

Storage and handling of hazardous materials will adhere to the DoD Component policies, including Joint Service Publication on Storage and Handling of Hazardous Materials. Defense Logistics Agency Instruction (DLAI) 4145.11, Army Technical Manual (TM) 38-410, Naval Supply Publication (NAVSUP PUB) 573, Air Force Joint Manual (AFJMAN) 23-209, and Marine Corps Order (MCO) 4450.12A, "Storage and Handling of Hazardous Materials, " January 13, 1999 provide additional guidance on the storage and handling of hazardous materials. The International Maritime Dangerous Goods (IMDG) Code and appropriate DoD and Component instructions provide requirements for international maritime transport of hazardous materials originating from DoD installations. International air shipments of hazardous materials originating from DoD installations are subject to International Civil Aviation Organization Technical Instructions or DoD Component guidance, including Air Force Manual 24-204, (Interservice) TM 38-250, NAVSUP PUB 505, MCO P4030.19J, and DLAI 4145.3, DCMAD1, Ch3.4 (HM24), "Preparing Hazardous Materials for Military Air Shipments," 3 December 2012. Certify that hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste, in accordance with the JEGS and installation requirements.

3.9.1 Hazardous Material Approval

Contractors seeking approval to bring HAZMAT onto the installation must submit an [AF Form 3952][AF Form 3000]. A Safety Data Sheet (SDS) or Safety Data Sheet (SDS), in English and Japanese, must accompany the [AF Form 3952][AF Form 3000]. For specific details on information required for submitting an [AF Form 3952][AF Form 3000], contact the Hazardous Material Program Manager at DSN [634-2600][INSERT PHONE NUMBER]. The Contractor must coordinate and route the [AF Form 3952][AF Form 3000] through [18th Wing][] Safety, Fire Department, Bioenvironmental, and [718][374][35] CES/CEIE. All excess materials and empty containers are the responsibility of the Contractor and shall be removed at the end of the Contract. If HAZMAT requirements change during the project, submit a new or revised [USAF Form 3952][AF Form 3000] and obtain approval before bringing the HAZMAT onto the installation. For Army projects, the AF Form 3952 shall be coordinated through the Directorate of Logistics (DOL) HAZMAT and approved by Fire Department, Safety, and Environmental. When occupants of the facility request that the contractor leave the excess HAZMAT, the Contractor shall coordinate with and obtain approval from 374 CES/CEIE.

3.9.2 Hazardous Material Storage, Handling and Marking

HAZMAT must be stored, handled, used, and disposed of in accordance with 29 CFR 1910, JEGS, and local regulations. The Contractor shall observe HAZMAT storage practices in accordance with regulations, policies, plans, and procedures employed by the Installation. All containers with HAZMAT shall be correctly marked/labeled with DD Form 2522 or an equivalent label. The label shall include the container's contents, shall be legible, and shall be protected from damage (e.g., by covering label with plastic or tape). Labeling requirements apply to all HAZMAT containers, including compressed gas cylinders, fuel containers, acid containers, and ODS containers. Consult with HAZMAT at [DSN 652-4739] to determine if an item is a HAZMAT or not.

Storage of oils, greases, chemicals, fuels or other liquids will require spill prevention and security. Contractor is not allowed to store HAZMAT on base for over 24 hours without authorization. If on-base HAZMAT storage areas are needed, Contractor shall submit the list of all items that are to be stored on-base and estimated quantities to 374 CES/CEIE, 374 CES/CEF and 374 AW/SE for approval. Hazardous materials storage areas may be inspected by 374 CES/CEIE, 374 CES/CEF and 374 AW/SE. SDSs must be available at storage and on site at all times.

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.

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

Manage and dispose of asbestos- containing waste in accordance with the JEGS and applicable Federal, GOJ national or prefectural laws and regulations. [Contact JED Environmental for the most current version of][Refer to] Section 02 82 00 ASBESTOS REMEDIATION. Manifest asbestos-containing waste and provide the manifest to the Contracting Officer. Notifications to the Contracting Officer and Installation Air Program Manager are required before starting any asbestos work.

Removal of mastics, necessary to achieve the contract's objectives, shall be performed in a manner as if the material contains asbestos.

When applicable, a minimum of 14 calendar days prior to the demolition or renovation of a facility that involves removing or disturbing friable ACM, the Contractor shall prepare a written assessment of friable asbestos disturbance and submit to the COR, who will, in turn submit to the Installation Commander in accordance with the JEGS.

For any previously untested material suspected to contain asbestos and located in areas impacted by the work, notify the Contracting Officer, who will order up to [_____] bulk samples to be obtained and analyzed at the Contractor's expense. Samples shall be collected in sufficient amounts such that a follow-on test utilizing TEM or 1000 point count analysis can be performed, should it be necessary. The Contractor shall deliver the sample(s) to a laboratory accredited under the National Institute of Standards and Technology (NIST) "National Voluntary Laboratory Accreditation Program (NVLAP)" and analyzed by PLM. The laboratory shall have a working definition of "Trace" amounts of asbestos, and the laboratory shall report any detectable amount of asbestos in a bulk sample

that is less than the PLM Limit of Quantification of 1 percent as a "Trace" concentration. If PLM does not detect the presence of asbestos (e.g. "non-detect"), the material shall be considered less than 0.1 percent asbestos. If PLM analysis detects asbestos in any discernible amount (to include "trace" or "less than 1 percent"), the material shall be considered greater than 0.1 percent asbestos unless proven to be non-ACM by the use of quantification methods capable of achieving an analytical sensitivity of less than 0.1 percent, such as Transmission Electron Microscopy (TEM) or 1000 point counting.

The Contracting Officer (CO) will order, testing by TEM or 1000 point counting, for up to [] samples, to be obtained at the Contractor's expense and delivered to a laboratory accredited under the National Institute of Standards and Technology (NIST) "National Voluntary Laboratory Accreditation Program (NVLAP)", for those samples with results of < 1% ACM as analyzed by PLM.

Any additional components identified as ACM that have been approved by the Contracting Officer for removal shall be removed and will be paid for by an equitable adjustment to the Contract price under the CONTRACT CLAUSE titled "changes". Sampling shall be conducted by personnel who have successfully completed the EPA Model Accreditation Plan (MAP) "Building Inspector" training course and is AHERA certified as a "Building Inspector".]

3.11.1 Sample Result Reporting

The contractor shall submit to the Contracting Officer a "Suspected ACM Discovery Report" within 5 days of receiving the final laboratory analysis. The report shall contain, at a minimum, a text description of the location, building and room number of the discovery, and the condition of the material; a copy of the sampler's "Building Inspector" certificate; copies of the laboratory's accreditations; a color photograph of the sampled location; the chain of custody document; a certified copy of laboratory analysis sheet discerning the non-detect/detect threshold at 0.1 percent.

3.11.2 Contract Changes

ACM-related work beyond the scope of this specification, such as the removal of ACM identified by the contractor after beginning site work, must be approved by the Contracting Officer, in advance, and will be paid for by an equitable adjustment to the Contract price under the CONTRACT CLAUSE titled "changes".

3.11.3 New Materials

All materials provided by the Contractor shall contain less than 0.1% asbestos per weight in accordance with the JEGS. The COR may request the contractor to provide documentation from the manufacturer for any material suspected of containing asbestos to confirm asbestos content.

3.11.4 Flooring/Base Cove Mastic

Removal of mastics, necessary to achieve the contract's objectives, shall be performed in a manner as if the material contains asbestos.

3.11.5 Additional Requirements

All such work "changes" must be performed in accordance with Section ASBESTOS REMEDIATION [02 82 00 ASBESTOS REMEDIATION][and is subject to the submittal requirements listed therein] [specifications not included in this contract that will be added as a part of the contract "changes"].]]

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

[Manage and dispose of lead-contaminated waste in accordance with the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations and installation requirements. [Contact JED Environmental for the most current version of][Refer to] Section [02 83 00 LEAD REMEDIATION]. The Contractor is to assume that all existing paint encountered in this Contract contain detectable levels of lead, and the OSHA regulations referenced in these specification applies. Any attached lead material survey information is provided for disposal purposes only. Manifest any lead-contaminated waste and provide the manifest to the Contracting Officer.]

[For LBP and other lead abatement projects, refer to the JEGS and Section [02 83 00 LEAD REMEDIATION].

3.12.1 New Materials

The JEGS defines LBP as any paint or coating containing greater than 0.5 percent lead, by weight, and mandates the implementation of a program to reduce LBP hazards. U.S. law requires all new paint to contain less than 0.009 percent lead, by weight. Some Japanese and other foreign paints containing greater than 0.5 percent lead are legally manufactured and sold, but are classified as LBP under U.S. law, and not suitable for use on USFJ projects.

The Contracting Officer may request the Contractor to provide manufacturer's documentation for any material suspected of containing high levels of lead or other hazardous materials.

3.12.2 Suspected LBP and Specially Controlled Industrial Wastes

The Contractor shall assume existing paint or other materials encountered on this Contract may contain detectable levels of lead or other hazardous substances. If such materials are disturbed during the work, the contractor is responsible to comply with the applicable sections of the JEGS, OSHA, Japanese Labor Safety and Health Law and prefectural waste disposal regulation. Refer to the JEGS to determine if C&D waste exceeds the regulatory levels for disposal as general industrial waste.

Contractors are required to identify, sort, test, and dispose of all C&D waste in accordance with Japan National and local laws and regulations regardless of their identification, or lack of, as hazardous materials by the government in this contract.

[3.13 CONTROL AND MANAGEMENT OF POLYCHLORINATED BIPHENYLS (PCBS)

Manage and dispose of PCB-contaminated waste in accordance with the JEGS, installation requirements, and Section 02 84 33 REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCB). Purchase of electrical equipment and transformers containing PCBs is prohibited.

The JEGS prohibits the acquisition of any new items containing any detectable PCBs. Items that historically contained PCB includes, but are not limited to: any dielectric oil-filled items such as transformers, switchgear, capacitors, rectifiers, high-voltage paper insulated lead cable (PILC), magnetic lighting ballasts (including some labeled No-PCB), high-voltage potheads, High Intensity Discharge (HID) lighting ballasts, hydraulic oil-filled machinery, etc.

Some items manufactured for the U.S. market that are labeled "No-PCB" may legally contain as high as 49ppm PCBs. However, these items are regulated under the JEGS and not suitable for use on USFJ projects.

All procurement of transformers or any other equipment containing dielectric or hydraulic fluid shall be accompanied by the manufacturer's certification that all materials/equipment (e.g., ballasts, capacitors, transformers, Paper Insulated Lead Covered (PILC) Cable, etc.) contain non-PCB dielectric fluid. All Non-PCB certificates shall be submitted to the 374 CES/CEIE and CEOFE with the list of the new material/equipment information prior to transformer or equipment installation (Atch D). Newly procured transformers and equipment shall have permanent plate affixed stating they are PCB-free in Japanese and in English. The plate should be a 200mm long and 50mm wide acrylic plate with heat treated paint. Base color should be green and letter color should be white. plate must state "PCB Free by Japanese standard; date of installation, manufacturer, and serial number" in both Japanese and English. The sample of PCB Free Plate is attached (Attachment B). The plate should be affixed to the outside of transformer or cubicle enclosure in an easily identifiable location.

Follow the JEGS regarding the strict handling, storage, marking, transportation, disposal, and recordkeeping for all equipment containing less than $0.5~\rm ppm$ PCB.

All transformers or any other equipment containing dielectric/hydraulic fluid shall be considered and treated as PCB containing unless information to the contrary exists. All suspected PCB materials removed for disposal must be sampled for analysis. The Contractor shall identify if the material contains PCB by using Japanese approved method required by the Ministry of the Environment. After the material is confirmed as PCB, the Contractor shall provide the sample result to 374 CES/CEIE. In addition, all sample results, regardless of PCB contamination, must be provided to 374 CES/CEIE. Material and equipment which cannot be sampled such as those hermetically sealed shall be treated as PCB containing. If the material is confirmed as Non-PCB, the Contractor is able to dispose of it as a regular industrial waste or recycle it by following applicable local Japanese regulations. Government will provide PCB sampling results to the Contractor, if available. If the material is confirmed as PCB, the Contractor shall turn in the material to 374 CES/CEIE for proper disposal. All PCB containing materials must be containerized in appropriate UN certified drum or placed in a metal secondary containment which holds 125 percent of total oil volume. PCB item(s) and secondary containment must be placed on a pallet and secured with metal strap bands. Prior to turn in, the Contractor shall provide a list of PCB items to 374 CES/CEIE (01 57 19-X). The list must contain country of origin, name of manufacturer, year of manufacture, serial number, KVA, PCB concentration, oil volume, weight of item, weight of drum/secondary containment, weight of pallet and total weight. The list needs to be reviewed by 374 CES/CEIE prior to turn in. The Contractor must not remove any PCB identification label affixed on the material, and ensure the PCB

items do not spill during handling, storage and transportation.

3.13.1 Removal Or Installation

Work on PCB equipment is forbidden using this supplement alone. If the project involves the disturbance, relocation, installation, or removal of products that have historically contained PCBs, follow the instructions in the supplement to the specification that pertains to that product's installation or removal (Transformer Replacement, Lighting Replacement, etc.). Should the project scope of work require the installation of a new transformer or the removal of an existing transformer, the Contractor shall fill and submit attachments D and E, respectively.

][3.14 CONTROL AND MANAGEMENT OF LIGHTING BALLAST AND LAMPS CONTAINING PCBS

Manage and dispose of contaminated waste in accordance with the JEGS and installation requirements. [[Contact JED Environmental for the most current version of][Refer to] Section 02 84 16 HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBS AND MERCURY

Lighting ballasts removed under Section 02 84 16 HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBs AND MERCURY(if applicable) shall be turned in at [Kadena Air Base Building 3625][] on [any Friday (except for federal holidays) between the hours of 0800 and 1200][]. The Contractor must [complete a Ballast Turn-in Inventory form that can be obtained by calling the Kadena Air Base Environmental Section at DSN 634-2600][].

The Contractor shall identify if lighting fixture/ballast(s) contain PCBs. Japanese lighting fixtures/ballasts may be identified with the manufacturer's website. All U.S. lighting fixtures/ballasts shall be treated as PCBs unless there is a label stating as Non-PCB. All U.S. made ballasts with or without a label stating PCB Free shall be treated as PCB containing materials in Japan unless information to the contrary exists. U.S. made ballasts without label may contain greater than 500ppm PCBs, and those with "PCB Free" label may contain less than 50ppm PCBs. If the lighting fixture/ballast is confirmed as Non-PCB item, the Contractor is able to dispose of it as a regular industrial waste or recycle it following local Japanese regulations. If the lighting fixture/ballast is confirmed as to contain PCBs, the Contractor shall segregate ballasts by country and manufacturer, and shrink wrap each individually for turn in to the 374 CES/CEIE. Prior to turn in, the Contractor shall submit a list of PCB waste including country of origin, name of manufacturer, serial number, year of manufacture, weight and quantity of ballasts to 374 CES/CEIE for proper disposal (attachment C).

Small quantities can be brought in "as-is". However, quantities over 100 must be stacked on pallets and sorted by manufacturer type. Assistance unloading pallets may be available, but Contractor is required to call to make an appointment to ensure the service is available.

Do not attempt to open sealed ballasts or perform an oil analysis. If ballasts are leaking when removed, notify the Contracting Officer and call the [Kadena Air Base][Yokota Air Base][Misawa Air Base] Environmental Section immediately for instructions on how to proceed.

]3.15 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 the JEGS and installation requirements. 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 Japan. 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 oil, including fuel, on the project site is not allowed. Fuel must be brought to the project site each day that work is performed.] [Storage of fuel on the project site must be in accordance with the JEGS and installation requirements, and local laws and regulations and paragraph OIL STORAGE INCLUDING FUEL TANKS.]

3.15.1 Used Oil Management

"Used oil," means any oil or other waste petroleum, oil, or lubricant (POL) product that has been refined from crude oil, or is synthetic oil, has been used and as a result of such use, is contaminated by physical or chemical impurities, or is off specification and cannot be used as intended. Although used oil may exhibit the characteristics of reactivity, toxicity, ignitability, or corrosivity, it is still considered used oil, unless it has been mixed with hazardous waste. Manage used oil generated on site in accordance with the JEGS and installation requirements. 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.

3.15.2 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 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 will be used onsite (only containers with a capacity of 208 liter 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.

3.15.3 Temporary Fuel Storage Tanks

The use of temporary fuel storage tanks on base as part of a project must

be approved by [718 CES/CEIE][374 CES/CEIE][35 CES/CEIE]. The Contractor shall submit a Temporary Fuel Storage Tank Approval Request to [718 CES/CEIE][374 CES/CEIE][35 CES/CEIE]. The approval request must contain justification for the use of a temporary tank and design details, including a layout diagram indicating the proposed location of the tank within the project site.

If approved, temporary fuel storage tanks shall be installed in accordance with all applicable regulation (JEGS, AFIs, UFCs, etc.) and the [18WG AST standards][INSERT STANDARD], which are maintained by [718][374][35] CES/CEIE and are available upon request. In addition, a site-specific Spill Contingency Plan (SSCP) must be developed. After construction/installation of a temporary fuel storage tank, the Contractor shall contact [718][374][35] CES/CEIE at DSN [634-2600][225-5440][INSERT PHONE NUMBER] and the Fuels Management Flight [(18 LRS/LGRF) at DSN 634-7039 or 634-7037][INSERT ORG CODE AND PHONE NUMBER] to coordinate an initial inspection of the tank before it is put in service.

3.15.4 Aboveground Storage Tank (AST) Installation

If the Contractor is installing a permanent aboveground fuel storage tanks as part of the project, it must be approved by 35 CES/CEIE, Storage Tank Program Manager. Tank approval request must contain justification for the installation tank and design details, including a layout diagram indicating the proposal location of the tank within the project site. the tanks shall be installed in accordance with all applicable regulations (JEGS, AFIS, UFCs, etc.) and the [18WG AST][] standards, which are maintained by [718 CES/CEIE][374 CES/CEIE][35 CES/CEIE] and are available upon request. The Contractor is responsible for conducting all operational checks, including providing fuel for the tests, prior to turnover to the Installation. The Contractor shall ensure that design drawings contain adequate detail to demonstrate that the AST will be installed in accordance with all applicable regulations.

[718][374][35] CES/CEIE will assign a Tank ID Number to each AST that will be used on tank signage and in project documentation. After construction/installation of an AST, the Contractor shall contact [718][374][35] CES/CEIE at DSN [634-2600][225-5440][INSERT PHONE NUMBER] and the [Fuels Management Flight (18 LRS/LGRF) at DSN 634-7039 or 634-7037][INSERT ORG CODE AND PHONE NUMBER] to coordinate an Initial Inspection of the tank before it's put in-service in accordance with [AFI 23-204 KADENAABSUP][INSERT INSTALLATION REFERENCE].

3.15.5 Underground Storage Tank (UST) Installation

As per PACAF UST Policy, USTs shall not be installed. Fuel storage tanks shall be installed above ground, unless overriding requirements exist against above ground installation such as safety, fire protection measures, or force protection measures. Installation of a UST requires the approval of [718][374][35] CES/CEIE and approval will only be granted if adequate justification of overriding requirements against installation of an AST is provided.

To request approval for installation of a UST, the Contractor shall submit an Underground Fuel Storage Tank Approval Request to [718][374][35] CES/CEIE. The approval request must contain a detailed justification of the overriding requirements against installation of an AST. If a UST is approved for installation as part of a project, the Contractor shall ensure that design drawings contain adequate detail to demonstrate that

the UST will be installed in accordance with all applicable regulations. After construction/installation of a UST, the Contractor shall contact [718 CES/CEIE at DSN 634-2600 and the Fuels Management Flight (18 LRS/LGRF) at DSN 634-7039 or 634-7037][] to coordinate an initial inspection of the tank in accordance with AFI 23-204 KADENAABSUP before it's put in-service.

3.15.6 AST Removal

When a facility with a fuel storage tank(s) is demolished, demolition of the tank(s) and associated infrastructure, including above ground piping, underground piping to the building serviced by the tank, indoor piping to the equipment serviced by the tank, secondary containment curbing, tank saddles, tank pads, Oil Water Separators (OWS), grounding stations, signage, fencing around the AST, and sidewalks leading to the AST shall be included in the scope of the project. The Contractor shall comply with applicable regulations, including, but not limited to AFMAN 32-1067, UFC 3-460-01, and 33 01 50.55 CLEANING OF PETROLEUM STORAGE TANKS.

3.15.7 UST Removal

The following standards shall be applied when removing a UST, as required by the UST Removal Procedures appendix of the PACAF UST Policy. Additional UST standards shall also be applied, including but not limited to the JEGS , AFMAN 32-1067, UFC 3-460-01, Section 02 65 00 UNDERGROUND STORAGE TANK REMOVAL,, and 33 01 50.55 CLEANING OF PETROLEUM STORAGE TANKS.:

- a. Tank Removal. Notify the Environmental Representative at least 24 hours before removing a tank. Deactivate any electrical power connected to the tank or associated infrastructure. Clean the tank (triple rinse) and render tank inert (vapor must not exceed 10 percent Lower Explosive Limit for the substance(s) that were in the tank).
- b. Excavation. Place barricades around all excavations, excavated soils, removed tanks, and equipment until completion. The Contractor must have an approved AF IMT 103 prior to any excavation.
- c. Tank Cutting. Cut a 0.6 m by 0.6 m opening on each side of the tank to prevent reuse, paint the Tank ID Number (obtained from [718][374][35] CES/CEIE) and date of removal on the tank, and take photos for documentation purposes.
- d. Soil Removal. If exposed free product and/or obviously contaminated soil is encountered during UST removal, contact [718][374][35] CES/CEIE immediately. When a leaking UST is removed, exposed free product and/or obviously contaminated soil in the immediate vicinity of the tank will be removed and appropriately disposed of in accordance with the JEGS. If soil contamination is caused by the Contractor's mismanagement, the Contractor is responsible for cleanup and disposal in accordance with spill response procedures outlined in this specification and local applicable regulations.

If additional contaminated soil is present beyond the immediate vicinity of the tank, [718][374][35] CES/CEIE will provide additional guidance on necessary actions. Segregate clean soil from the contaminated soil. Only clean soil shall be used as backfill. If the soil is contaminated with Petroleum, Oil, and Lubricants (POL), it shall be disposed of in accordance with local regulations. If it is contaminated with hazardous substances, the Contractor shall dispose of it in accordance with

Paragraph CHAPTER 5: HAZARDOUS WASTE and the JEGS. If additional information is needed, consult the Environmental Representative.

3.16 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.

3.17 PEST MANAGEMENT

In order to minimize impacts to existing fauna and flora, coordinate with the [Installation Pest Management Consultant (IPMC) and the Natural Resources Manager], through the Contracting Officer, at the earliest possible time prior to pesticide application. Discuss integrated pest management strategies with the IPC and receive concurrence from the IPM through the Contracting Officer prior to the application of any pesticide associated with these specifications. Provide Installation Project Office Pest Management personnel the opportunity to be present at meetings concerning treatment measures for pest or disease control and during application of the pesticide. The use and management of pesticides are regulated under the JEGS and all applicable Federal, GOJ national or prefectural laws and regulations and installation requirements.

3.17.1 Application

Apply pesticides using a DoD-certified or equivalent Japanese-certified pesticide applicator in accordance with guidance given on the pesticide label. Labels will bear the appropriate use instructions and precautionary message based on the toxicity category of the pesticide. The certified applicator must wear clothing and personal protective equipment as specified on the pesticide label. If local nationals will be using the pesticides, the precautionary messages and use instructions shall be in English and Japanese. The Contracting Officer shall designate locations for water used in formulating. Do not allow the equipment to overflow. Inspect equipment for leaks, clogging, wear, or damage and repair prior to application of pesticide.

3.17.2 Pesticide Treatment Plan

Include and update a pesticide treatment plan, as information becomes available. Include in the plan the sequence of treatment, dates, times, locations, pesticide trade name, EPA registration numbers if applicable, authorized uses, chemical composition, formulation, original and applied concentration, application rates of active ingredient (that is, pounds of active ingredient applied), equipment used for application, and calibration of equipment. Comply with the JEGS or any applicable Federal GOJ national or prefectural and installation requirements.

3.18 PESTICIDES IN SOIL

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

3.19 SOUND INTRUSION

Make the maximum use of low-noise emission products, as certified by the EPA or Japanese equivalent. 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 0800 and 1600, 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 29 CFR 1910, and applicable GOJ, U.S. Federal, and local rules and regulations.

3.20 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 and seed disturbed areas to conform to surrounding contours.

-- End of Section --