DIVISION 01 - GENERAL REQUIREMENTS
SECTION 01 57 20
ENVIRONMENTAL PROTECTION

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PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only. Unless otherwise noted, the latest published version and/or revision shall be used.

1.1.1 U.S. AIR FORCE (USAF)

a. AFI 23-204 Organizational Fuel Tanks
b. AFI 32-1053 Pest Management Program
c. AFI 32-7040 Air Quality Compliance
d. AFI 32-7044 Storage Tank Compliance
e. AFI 32-7064 Conservation and Management of Natural Resources
f. AFI 32-7065 Cultural Resources Management
g. AFI 32-7080 Compliance Assurance and Pollution Prevention
h. AFI 32-7086 Hazardous Materials Management
i. AFI 40-201 Radioactive Materials (RAM) Management
j. 30 SWI 32-702 Environmental Management Air Emission Inventories
k. 30 SW Plan 32-1002 Lead-Based Paint Management Plan
l. 30 SW Plan 32-1052-A Asbestos Management Plan
m. 30 SW Plan 32-1052-B Asbestos Operating Plan

n. 30 SW Plan 32-4002-A HAZMAT Emergency Response Plan
o. 30 SW Plan 32-4002-C Spill Prevention Control and Countermeasures Plan
p. 30 SW Plan 32-7041-C Wastewater Management Plan
q. 30 SW Plan 32-7042 Integrated Solid Waste Management Plan
r. 30 SW Plan 32-7043-A Hazardous Waste Management Plan
s. 30 SW Plan 32-7043-E Recoverable and Waste Petroleum Products Management Plan
t. 30 SW Plan 32-7080 Green Procurement Program Plan
u. Integrated Natural Resources Management Plan for Vandenberg AFB, Plan Period 2011-2016
v. Vandenberg AFB Energy Management Plan
w. Vandenberg AFB Facilities Excellence Plan & Standards
x. Vandenberg AFB Landscaping Guidelines
y. HQ AFSPC CEI Policy Letter P01009, Tracking and Reporting Solid Waste Disposal and Diversions (30 Apr 01)
z. VAFB Environmental Management System (EMS) Guide 2007
aa. California Stormwater BMP Manual (2009, California Stormwater Quality Association)
bb. Off-Highway Vehicle BMP Manual for Erosion and Sediment Control (2007, California Department of Parks and Recreation)

1.1.2 CALIFORNIA CODE OF REGULATIONS (CCR) & STATE OF CALIFORNIA

a.	8 CCR, Chapter 3.22, Subchapter 2	Article 2.6 Asbestos Consultants and Site Surveillance Technicians, §341.15 Certification of Asbestos Consultants and Site Surveillance Technicians
b.	8 CCR, Chapter 4, Subchapter 4	Article 4 Dusts, Fumes, Mists, Vapors, and Gases, §1529 Asbestos
c.	17 CCR, Division 1, Chapter 8	Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards
d.	22 CCR, Chapters 10-20	§66260-66270, Hazardous Waste Regulation
e.	California Coastal Act	Public Resources Code, Division 20
f.	California Assembly Bill AB 939	California Integrated Waste Management Act of 1989
g.	California Assembly Bill AB 32	California Global Warming Solutions Act
h.	Santa Barbara County Air Pollution Control District (SBCAPCD) Rules & Regulations	http://www.sbcapcd.org/rules/rules.htm
i.	23 CCR	Waters

1.1.3 U.S. GOVERNMENT

a.	Asbestos Hazard Emergency	Public Law 99-519, 15 USC Section 2651 Response Act of 1986 (AHERA)
b.	Archaeological Resources	16 U.S.C. 470 aa-mm Protection Act of 1979
c.	Clean Water Act of 1972	33 U.S.C., §1251 et seq.
d.	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	42 USC §§ 9601 to 9675
e.	Government's Green Procurement	Section 6002, Federal Procurement of the Resource Program Conservation and Recovery Act (RCRA)
f.	Endangered Species Act	Public Law 93-205, 35 U.S.C. §1531
g.	Energy Policy ActPublic Law 109-58	
h.	Environmental Protection Agency	Comprehensive Procurement Guidelines (EPA-CPG)
i.	Environmental Protection Agency	Toxic Substances Control Act (TSCA)
j.	Executive Order 13112	Invasive Species
k.	Executive Order 11990	Protection of Wetlands
l.	Executive Order 13150	Federal Workforce Transportation
m.	Executive Order 13186	Responsibilities of Federal Agencies to Protect Migratory Birds
n.	Executive Order 13211	Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use
o.	Executive Order 13221	Energy Efficient Standby Power Devices
p.	Executive Order 13423	Strengthening Federal Environmental, Energy and Transportation Management
q.	Executive Order 13514	Federal Leadership in Environmental, Energy and Economic Performance
r.	Marine Mammal Protection Act	50 CFR Part 218
s.	Migratory Bird Treaty Act	16 U.S.C. 703-712
t.	National Historic Preservation Act of 1966	16 U.S.C. 470 et seq.
u.	National Environmental Policy Act	Public Law 91-190
v.	Native American Graves Protection and Repatriation Act of 1990	Public Law 101-601
w.	American Indian Religious Freedom Act of 1978	Public Law 95-341
x.	White House Memorandum, Environmentally and Economically Beneficial	

Practices on Federal Landscaped Grounds

1.1.4 U.S. ARMY CORPS OF ENGINEERS (USACE)

a.	EM 385-1-1	(2003) Safety -- Safety and Health Requirements
b.	WETLAND MANUAL	Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1

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

a.	10 CFR 19	Notices, Instructions and Reports to Workers: Inspection and Investigations
b.	10 CFR 20	Standards for Protection Against Radiation
c.	10 CFR 36	Licenses and Radiation Safety Requirements for Irradiators
d.	10 CFR 39	Licenses and Radiation Safety Requirements for Well Logging
e.	29 CFR 1910	Occupational Safety and Health Standards
f.	29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
g.	29 CFR 1926	Safety and Health Regulations for Construction
h.	33 CFR 328	Definitions of Waters of the United States
i.	40 CFR 61	National Emission Standards for Hazardous Air Pollutants (NESHAPS)
j.	40 CFR 68	Chemical Accident Prevention Provisions
k.	40 CFR 82	Protection of Stratospheric Ozone
l.	40 CFR 98	Mandatory Reporting of Greenhouse Gas
m.	40 CFR 112	Oil Pollution Prevention
n.	40 CFR 122.26	Storm Water Discharges (Applicable to State NPDES Programs, see section 123.25)
o.	40 CFR 152 - 186	Pesticide Programs
p.	40 CFR 190	Environmental Radiation Protection Standards for Nuclear Power Operations
q.	40 CFR 191	Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes
r.	40 CFR 192	Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings
s.	40 CFR 241	Guidelines for Disposal of Solid Waste 40 CFR 243 Guidelines for the Storage and Collection of residential, Commercial, and Institutional Solid Waste
t.	40 CFR 258	Subtitle D Landfill Requirements

u.	40 CFR Parts 260-273	Hazardous Waste Regulations
v.	40 CFR 279	Standards for the Management of Used Oil
w.	40 CFR 280	Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)
x.	40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan
y.	40 CFR 302	Designation, Reportable Quantities, and Notification
z.	40 CFR 355	Emergency Planning and Notification
aa.	40 CFR 372-Subpart D	Specific Toxic Chemical Listings
bb.	40 CFR 761	PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
cc.	40 CFR 763	Asbestos-Containing Materials in Schools
dd.	49 CFR 171 - 178	Hazardous Materials Regulations

1.2 DEFINITIONS

1.2.1 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 and/or historically.

1.2.2 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.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means 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 etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

1.2.4 Pesticide

Pesticide is defined as any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant.

1.2.5 Pests

The term "pests" means arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of

personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

1.2.6 Land Application for Discharge Water

The term "Land Application" for discharge water implies that the Contractor must discharge water at a rate which allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" must occur. Land Application must be in compliance with all applicable Federal, State, and local laws and regulations.

1.2.7 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

1.2.8 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.2.9 Wetlands

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with all applicable Federal, State, and local laws and regulations.

1.2.10 Sediment

Soil and other debris that have eroded and have been transported by runoff water or wind.

1.2.11 Solid Waste

Garbage, refuse, debris, sludge, or other discharged material, including solid, liquid, semisolid, or contained gaseous materials resulting from domestic, industrial, commercial, mining, or agricultural operations. Types of solid waste typically generated at construction sites may include:

a. Green waste: 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.

b. Surplus soil: Excavated soil that is in excess of the volume required for the specific project, (including aggregates) intended, but not used, for on-site mixing of concrete, mortars and paving. Contaminated soil meeting the definition of a designated waste, a hazardous material or hazardous waste are not included in this definition.

c. Debris: Non-hazardous solid material generated during the construction, demolition, or renovation of a structure which exceeds 60 mm 2.5 inch particle size that is: a manufactured object; plant or animal matter; or natural geologic material (e.g. 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.

d. Wood: Dimension and non-dimension lumber, plywood, chipboard, hardboard. Treated and/or painted wood that meets the definition of lead contaminated or lead based contaminated paint is not included.

e. Scrap metal: 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.

f. Paint cans: Metal cans that are empty of paints, solvents, thinners and adhesives. If permitted by the paint can label, a thin dry film may remain in the can.

g. Recyclables: Materials, equipment and assemblies such as doors, windows, door and window frames, plumbing fixtures, glazing and mirrors that are recovered and sold as recyclable. Metal meeting the definition of lead contaminated or lead based paint contaminated [may] [may not] be included as recyclable if sold to a scrap metal company. Paint cans [may] [may not] be included as recyclable if sold to a scrap metal company. Plastics and glass, with CRV ratings are also defined as recyclables.

h. Hazardous Waste: By definition, to be a hazardous waste a material must first meet the definition of a solid waste. Regulated wastes, hazardous waste and hazardous debris are special cases of solid waste. They have additional regulatory controls and must be handled separately. They are thus defined separately in this document.

   Material not regulated as solid waste are: 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.

1.2.12 Garbage

Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.

1.2.13 Chemical Waste

This includes salts, acids, alkalizes, herbicides, pesticides, and organic chemicals.

1.2.14 Hazardous Waste

Any discarded material, liquid, solid, or gas, which meets the definition of hazardous material or is designated hazardous waste by the Environmental Protection Agency or State Hazardous Control Authority as defined in 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, 40 CFR 268, 40 CFR 270, 40 CFR 271, 40 CFR 272, 40 CFR 273, 40 CFR 279, and 40 CFR 280.

1.2.15 Hazardous Debris

As defined in Solid Waste paragraph, debris that contains listed hazardous waste (either on the debris surface, or in its interstices, such as pore structure) per 40 CFR 261; or debris that exhibits

a characteristic of hazardous waste per 40 CFR 261.

1.2.16 Hazardous Materials

Hazardous materials as defined in 49 CFR 171 and listed in 49 CFR 172. Hazardous material is any material that:

a. Is regulated as a hazardous material per 49 CFR 173, or

b. Requires a Safety Data Sheet (SDS) per 29 CFR 1910.120, or

c. During end use, treatment, handling, packaging, storage, transpiration, or disposal meets or has components that meet or have potential to meet the definition of a hazardous waste as defined by 40 CFR 261 Subparts A, B, C, or D.

   Designation of a material by this definition, when separately regulated or controlled by other instructions or directives, does not eliminate the need for adherence to that hazard-specific guidance which takes precedence over this instruction for "control" purposes. Such material include ammunition, weapons, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos,mercury, and polychlorinated biphenyls (PCBs). Nonetheless, the exposure may incur incident to manufacture, storage, use and demilitarization of these items.

1.2.17 Waste Hazardous Material (WHM)

Any waste material which because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a substantial hazard to human health or the environment and which has been so designated. Used oil not containing any hazardous waste, as defined above, falls under this definition.

1.2.18 Oily Waste

Those materials which are, or were, mixed with used oil and have become separated from that used oil. Oily wastes also means materials, including wastewaters, centrifuge solids, filter residues or sludges, bottom sediments, tank bottoms, and sorbents which have come into contact with and have been contaminated by, used oil and may be appropriately tested and discarded in a manner which is in compliance with other State and local requirements. This definition includes materials such as oily rags, "kitty litter" sorbent clay and organic sorbent material. These materials may be land filled provided that:

a. It is not prohibited in other State regulations or local ordinances

b. The amount generated is "de minimus" (a small amount)

c. It is the result of minor leaks or spills resulting from normal process operations

d. All free-flowing oil has been removed to the practical 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, a hazardous waste determination must be performed 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.

1.2.19 Regulated Waste

Regulated wastes include types of solid waste that have specific additional Federal, state, or local controls for handling, storage, or disposal. These wastes may include designated wastes and biohazardous wastes.

1.2.20 Ozone Depleting Substance (ODS)

Class I ODS is defined in Section 602(a) of The Clean Air Act and includes the following chemicals:

- chlorofluorocarbon-11 (CFC-11)
- chlorofluorocarbon-12 (CFC-12)
- chlorofluorocarbon-13 (CFC-13)
- chlorofluorocarbon-111 (CFC-111)
- chlorofluorocarbon-112 (CFC-112)
- chlorofluorocarbon-113 (CFC-113)
- chlorofluorocarbon-114 (CFC-114)
- chlorofluorocarbon-115 (CFC-115)
- chlorofluorocarbon-211 (CFC-211)
- chlorofluorocarbon-212 (CFC-212)
- chlorofluorocarbon-213 (CFC-213)
- chlorofluorocarbon-214 (CFC-214)
- chlorofluorocarbon-215 (CFC-215)
- chlorofluorocarbon-216 (CFC-216)
- chlorofluorocarbon-217 (CFC-217)
- chlorofluorocarbon-500 (CFC-500)
- chlorofluorocarbon-502 (CFC-502)
- chlorofluorocarbon-503 (CFC-503)
- halon-1211
- halon-1301
- halon-2402
- carbon tetrachloride
- methyl bromide
- methyl chloroform

Class II ODS is defined in Section 602(s) of The Clean Air Act and includes the following chemicals:

- hydrochlorofluorocarbon-21 (HCFC-21)
- hydrochlorofluorocarbon-22 (HCFC-22)
- hydrochlorofluorocarbon-31 (HCFC-31)
- hydrochlorofluorocarbon-121 (HCFC-121)
- hydrochlorofluorocarbon-122 (HCFC-122)
- hydrochlorofluorocarbon-123 (HCFC-123)
- hydrochlorofluorocarbon-124 (HCFC-124)
- hydrochlorofluorocarbon-131 (HCFC-131)
- hydrochlorofluorocarbon-132 (HCFC-132)
- hydrochlorofluorocarbon-133 (HCFC-133)
- hydrochlorofluorocarbon-141 (HCFC-141)
- hydrochlorofluorocarbon-142 (HCFC-142)

- hydrochlorofluorocarbon-221 (HCFC-221)
- hydrochlorofluorocarbon-222 (HCFC-222)
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- hydrochlorofluorocarbon-243 (HCFC-243)
- hydrochlorofluorocarbon-244 (HCFC-244)
- hydrochlorofluorocarbon-251 (HCFC-251)
- hydrochlorofluorocarbon-252 (HCFC-252)
- hydrochlorofluorocarbon-253 (HCFC-253)
- hydrochlorofluorocarbon-261 (HCFC-261)
- hydrochlorofluorocarbon-262 (HCFC-262)
- hydrochlorofluorocarbon-271 (HCFC-271)

1.2.21 Universal Waste

The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (e.g., thermostats) and lamps (e.g., 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. These regulations can be found at 40 CFR 273.

1.3 SUBMITTALS

The Contractor shall submit the following to 30 CES/CEIE and the Contracting Officer for government review in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

a. Environmental Protection Plan; G, 30 CES/CEIE (Section 3.2).

b. Air Emissions data; G, 30 CES/CEIE (Section 3.6).

c. Source Profile Form for boilers/hot water heaters, 30 SW Form 155/156; G, 30 CES/CEIE (Section 3.6).

d. Boiler Emission Standards and/or source test with applicable compliance certifications data that complies with applicable SBAPCD rule requirements; G, 30 CES/CEIE (Section 3.6).

e. Monthly Hazardous Material (HAZMAT) usage totals; G, 30 CES/CEIE (Section 3.8.c).

f. A Recovered Materials Determination Form (RMDF); G, 30 CES/CEIE (Section 3.18.b).

g. An Estimate of Percentage of Recovered Material Content for EPA-Designated Products; G, 30 CES/CEIE(Section 3.18.d).

h. Monthly Solid Waste Report, to include the weight and quantity of Solid Waste and Construction & Demolition debris both disposed and diverted; G, 30 CES/CEIE (Section 3.5.2.c. 8).

i. Industrial Wastewater Treatment Plant Processing Request; G, 30 CES/CEIE (Section 3.13.4).

j. Discharge to Grade Characterization Form; G, 30 CES/CEIE (Section 3.13.6).

k. Notice of Intent (NOI) to comply with the Terms of the General Permit to Discharge Storm Water Associated with Construction Activity; G, 30 CES/CEIE (Section 3.4.3).

l. Risk Assessment; G, 30 CES/CEIE (Section 3.4.2)

m. Draft and Final Storm Water Pollution Prevention Plan (SWPPP) and amendments; G, 30 CES/CEIE (Section 3.4.2).

n. Annual SWPPP Report; G, 30 CES/CEIE (Section 3.4.2).

o. Notice of Termination of Coverage under the Storm Water Construction General Permit (NOT) (Section 3.4.2).

p. Inspection Reports; G, 30 CES/CEIE (Section 3.4.2)

q. Noncompliance Reports; G, 30 CES/CEIE (Section 3.4.2)

r. Aboveground Storage Tank (AST) technical information; G, 30 CES/CEIE (Section 3.15.b)

s. 30 SW Form 160 – Air Quality Recordkeeping Form Fuel Storage Tanks; G, 30 CES/CEIE

1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

Provide and maintain, during the life of the contract, environmental protection as defined. Plan for and provide environmental protective measures to control pollution that develops during normal 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. Comply with Federal, State, and local regulations pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

The Contractor may be required to promptly conduct tests and procedures for the purpose of assessing whether construction operations are in compliance with Applicable Environmental Laws. Analytical work shall be done by qualified laboratories; and where required by law, the laboratories shall be certified.

1.4.1 Conformance with the Environmental Management System

The Contractor shall perform work under this contract consistent with the policy and objectives identified in the installation's Environmental Management System (EMS). The Contractor shall perform work in a manner that conforms to objectives and targets, environmental programs and operational controls identified by the EMS. The Contractor will 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, the Contractor shall take corrective and/or preventative actions. In addition, the Contractor shall ensure that its employees are aware of their roles and responsibilities under the EMS and how these EMS roles and responsibilities affect work performed under the contract. The Contractor is responsible for ensuring that their employees receive applicable environmental and occupational health and safety training, and keep up to date on regulatory required specific training for the type of work to be conducted onsite. All on-site Contractor personnel, and their subcontractor personnel, performing tasks that have the potential to cause a significant environmental impact shall be

competent on the basis of appropriate education, training or experience. Upon contract award, the Contracting Officer's Representative will notify the installation's EMS coordinator to arrange EMS training. Refer to the Installation's EMS Coordinator for additional site specific EMS requirements related to construction. The installation's EMS coordinator shall identify training needs associated with environmental aspects and the EMS, and arrange training or take other action to meet these needs. The Contractor shall provide training documentation to the Contracting Officer. Delete, retaining contractor's training records is not a function of the EMS coordinator. That function is the responsibility of the contractor to maintain training records for onsite inspection.

1.5 QUALITY ASSURANCE

1.5.1 Preconstruction Survey

Not used unless directed by the Contracting Officer. Environmental Impact Analysis is conducted via AF Form 813 for all construction activities.

1.5.2 Regulatory Notifications

The Contractor is responsible for all regulatory notification requirements in accordance with Federal, State and local regulations. In cases where the Air Force must also provide public notification (such as storm water permitting), the Contractor must coordinate with the Contracting Officer. The Contractor shall submit copies of all regulatory notifications to the Contracting Officer prior to commencement of work activities. Typically, regulatory notifications must be provided for the following (this listing is not all inclusive): demolition, renovation, NPDES defined site work, remediation of controlled substances (asbestos, hazardous waste, lead paint).

1.5.3 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 activity; types and quantities of solid wastes and/or wastewater that may be generated during the contract. Discuss the results of the Environmental Impact Analysis at this time. Prior to initiating any work on site, meet with the Contracting Officer and activity environmental staff to discuss the proposed Environmental Management Plan. Develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural resources, required reports, required permits, permit requirements, and other measures to be taken.

1.5.4 Environmental Manager

Appoint in writing an Environmental Manager for the project site. The Environmental Manager will be directly responsible for coordinating contractor compliance with Federal, State, local, and station requirements. The Environmental Manager will ensure compliance with Hazardous Waste Program requirements (including hazardous waste handling, storage, manifesting, and disposal are all conducted in accordance with installation requirements and applicable laws and regulations); implement the Environmental Management Plan; ensure that all environmental permits are obtained, maintained, and closed out; ensure compliance with Storm Water Program Management requirements; ensure compliance with Hazardous Materials (authorizations, 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 all Contractor personnel are trained in 40 CFR requirements in accordance with their position requirements; coordinate removal of waste containers; and maintain the Environmental Records binder and required documentation, including environmental permits compliance and close-out.

1.5.5 Contractor 40 CFR Employee Training Records

Prepare and maintain employee training records throughout the term of the contract meeting applicable 40 CFR requirements. [The Contractor will ensure every employee completes a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures compliance with Federal, State and local regulatory requirements for RCRA Large Quantity Generator. The Contractor will provide a Position Description for each employee, by subcontractor, based on the Davis-Bacon Wage Rate designation or other equivalent method, evaluating the employee's association with hazardous and regulated wastes. This Position Description will include training requirements as defined in 40 CFR 265 for a Large Quantity Generator facility.] Submit these training records to the Contracting Officer at the conclusion of the project, unless otherwise directed.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 ENVIRONMENTAL COMPLIANCE REQUIREMENTS

a. General: Vandenberg Air Force Base (VAFB) Contractors, and their subcontractors, shall comply with the most stringent federal, state, and local environmental laws, regulations, and Air Force policies, instructions, and plans. The federal government is not exempt from compliance with environmental regulations. The Contractor shall maintain an awareness of changing environmental regulatory requirements to avoid environmental deficiencies for activities on VAFB.

b. Environmental Coordination: The 30th Civil Engineer Squadron, Installation Management Flight (30 CES/CEIE) is the single point of contact for coordination with all environmental regulatory agencies. Prior to coordinating with any environmental regulatory agency, the contractor shall obtain approval from 30 CES/CEIE. The Contractor shall provide copies of any regulatory agency notification, report, consultation, permit, and/or regulatory document to 30 CES/CEIE. Obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations is the Contractor's responsibility.

(1) The Contractor shall comply with all permit conditions and consultation requirements.

(2) The Contractor shall provide all required testing analysis and monitoring.

(3) The contractor may obtain VAFB environmental documents and plans from 30 CES/CEIE.

c. Environmental Planning: The Contractor shall comply with all testing, monitoring, recordkeeping, reporting, mitigation, and protection measure requirements resulting from the National Environmental Policy Act (NEPA), the Environmental Impact Analysis Process (EIAP), and the VAFB 332 process. To initiate NEPA and EIAP, submit an AF Form 813 to the Environmental Planning Office in 30 CES/CEIEA. Completion of the NEPA and EIAP processes can take between three weeks to one year to complete. Early coordination is highly advised.

d. Environmental Audits/Inspections: The Contractor shall support the government with all federal, state, local, and Air Force environmental inspections, audits, or assessments.

e. Notices of Violations (NOV): The Contractor shall be liable for any Notices of Violation (NOV), enforcement action, fine, penalty, and/or corrective action imposed by federal, state, or local environmental regulatory agencies for activities under the Contractor's control. The Contractor shall provide verbal notification to 30 CES/CEIE and the Contracting Officer within 24-hours of recei

ving an NOV followed by written notification within three (3) working days.

3.2 ENVIRONMENTAL PROTECTION PLAN

Prior to initiating any work on site, the Contractor will meet with the Contracting Officer to discuss the proposed Environmental Protection Plan and develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural resources, required reports, and other measures to be taken. The Contractor's Environmental Plan shall incorporate construction related objectives and targets from the installation's Environmental Management System. The Environmental Management Plan will be submitted in the following format and shall include the elements specified below.

a. Description of the Environmental Protection Plan

The Contractor's EPP shall include a Scope of Work, Environmental Impact Analysis document (Base Civil Engineer Work Request (AF form 332), AF Form 813 or Finding of No Significant Impact), Contractor contact information and shall describe how they will meet environmental compliance requirements and address their methods, procedures, and practices pertaining to: Air quality, to include a listing of all combustion source equipment with appropriate CARB registration and SBCAPCD permits, ozone depleting substances (ODS) and greenhouse gases (GHG); Hazardous waste management; Hazardous materials management, to include spill/release management; Lead-based paint management; Asbestos management; Green Procurement; Solid waste and construction debris management, to include recycled/recovered materials; Water quality to include waste water, drinking water and storm water; Cultural resources protection; Natural resources protection; PCBs; Underground storage tanks; and Contaminated Soils Management. The Contractor shall maintain a copy of the EPP on-site. The Contractor shall brief their personnel of the contents and procedures in the EPP and ensure pertinent information is disseminated to subcontractors in order to maintain compliance.

3.2.1 Environmental Protection Plan Review

Within thirty days after the Contract award date, submit the proposed Environmental Protection Plan for further discussion, review, and approval. Commencement of work will not begin until the Environmental Protection Plan has been approved.

3.2.2 Licenses and Permits

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

The following existing permits will be followed by the Contractor:

a. State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) General Permit Water Quality Order No. 2009-0009-DWQ (Construction General Permit); Refer to Section 3.12.2.

b. NPDES General Permit Water Quality Order No. 2013-0001-DWQ, Municipal General Permit. Refer to Section 3.12.3.

d. Lompoc Publicly Owned Treatment Works (POTW) Permit (Permit # I004)

The following permits will be obtained by the contractor via 30 CES/CEIE (if applicable):

a. California Air Resource Board (CARB) Registration and SBCAPCD Permits.

b. Clean Water Act 401/402/404 Permits

The Contractor is responsible for conforming to all permit requirements and performing all quality control inspections of the work in progress, and to submit notifications and certifications to the applicable regulatory agency via the Contracting Officer.

3.3 PROTECTION OF NATURAL RESOURCES

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.

a. General: The Contractor shall comply with, but not limited to: the National Environmental Policy Act (NEPA); the Endangered Species Act; the Marine Mammal Protection Act, the Migratory Bird Treaty Act, Executive Order 11990, Protection of Wetlands; Executive Order 13112, Executive Order 13186, California Coastal Act of 1976; AFI 32-7064, Conservation and Management of Natural Resources; and Vandenberg's Integrated Natural Resources Management Plan. If the work is near streams, lakes, or other waterways, conform to the national permitting requirements of the Clean Water Act. The Contractor shall keep activities under surveillance and control to minimize disturbances and damage to the natural resources on VAFB.

b. Notification: The Contractor shall immediately notify 30 CES/CEIE, Chief of Natural Resources, if the Contractor or their biological monitors suspect the presence and impacts to any federally listed endangered or threatened species or their habitat. Vandenberg currently manages for 18 threatened and endangered species, including but not limited to the California red-legged frog, unarmored three-spine stickleback, Western snowy plover, California least tern, Gaviota tarplant, Vernal Pool fairy shrimp, and El Segundo Blue Butterfly.

c. Encountering Natural Resources: The Contractor shall not feed wild animals or cause litter (especially from lunch activities). The Contractor shall not travel in unauthorized areas or

off-road to avoid disturbing sensitive resources or potentially coming in contact with ticks, hantavirus, wild animals, unstable coastline areas, and unsafe water situations.

c. Nesting Sites: The Contractor shall immediately notify 30 CES/CEIE of any nesting sites for avian species, nesting sites containing eggs and/or chicks, or roosting birds.

d. Disturbance of Plants: Contractors shall adhere to requirements stated in the AF Form 332, AF Form 813 or Environmental Assessment with respect to disturbance or removal of all plants and trees on VAFB. Mitigation may be required, including restoration with native seed mixes. All vegetation cut and left standing shall be properly pruned with a sharp blade. All live vegetation left standing shall have a clean, smooth cut. No standing tree or shrub, trunk, branch, or stump shall be left with frays, incisions, or scars.

e. Contractor Equipment/Vehicles: Equipment vehicles (dozers, mowers etc.) shall be cleaned of weed seeds prior to use in the project area to prevent the introduction of weeds. Prior to site transport, any skid plates shall be removed and cleaned. If equipment vehicles move from one watershed to another, wheels, undercarriages, and bumpers will be cleaned prior to traveling. Equipment should be cleaned of weed seeds daily. For vehicles that have caked-on dirt, mud, or vegetation stuck on vehicles, vehicles need to be power washed for 6 minutes or until clean with 1) rinse water disposed in a designated area (e.g. AFEES station or possibly to grade) that will not allow water to enter storm drain inlets, drainage systems or surface waters, or 2) water properly collected and disposed (See Section 3.13). Identify wash area and disposal method. For vehicles with dry dusted dirt on vehicles (and no caked-on dirt or mud), prior to leaving a site, if washing and proper water disposal is not available, equipment vehicles may be thoroughly air blasted on site.

3.3.1 Erosion and Sediment Control Measures

Refer to Section 3.16, *Landscaping and* Section 3.12, *Storm Water Best Management Practices*. If soil disturbance is one acre or more, refer to Section 3.12, *Construction General Permit Requirements*.

3.3.1.1 Erosion Control

Preserve vegetation to the maximum extent practicable. Plan and conduct earthwork to minimize the duration of exposure of unprotected soils. Provide erosion control for all exposed soil areas upon completion of final grading or as soon as feasible. All non-biodegradable materials shall be removed by the Contractor when no longer needed.

3.3.1.2 Sediment Control

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. Use of hay bales is prohibited. All non-biodegradable materials shall be removed by the Contractor when no longer needed.

3.4 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES MANAGEMENT

a. General: The Contractor shall comply with, but not limited to: the National Historic Preservation Act of 1966, Archaeological Resources Protection Act of 1979, Native American Graves Protection and Repatriation Act of 1990, American Indian Religious Freedom Act of 1978, State of California Health and Safety Statutes; and AFI 32-7065, Cultural Resources Management.

b. Base Historic Preservation Officer (BHPO): The Contractor shall not disturb any historical, archaeological, or cultural sites or collect any prehistoric and/or historic artifacts on VAFB without proper authorization from 30 CES/CEIE, BHPO.

c. Cultural Resources: Cultural resources are sites, structures, features, artifacts, and other human derived items. These include, but are not limited to: arrowheads and other flaked stone tools, beads, ornaments, sacred objects such as charmstones, hammerstones, stone bowls, bone tools, human remains, non-human bone, charcoal concentrations, unnatural concentrations of stone, shellfish remains, fossils, asphaltum, old bottles, cans, coins, buttons, antiques, foundations, early military materials, and other historical items. As a general rule, any cultural resource item over 50 years of age is protected. If any previously unidentified materials of these types are found individually or in concentrated deposits within the project area, the Contractor shall report these to the on-site CEIE environmental representative archaeological monitor, CEIE, or the BHPO. Cultural resources are not to be collected or disturbed without approval from the on-site archaeological monitor or the BHPO.

d. Avoidance and Mitigation: The Contractor is responsible, unless otherwise noted, for implementation of any cultural resources avoidance or mitigation measures assigned to projects as a condition of approval for their activities. These measures may include, but are not limited to, literature searches, archaeological and American Indian monitoring, flagging or fencing to protect resources, avoidance of resource areas, archaeological testing, data recovery, and report preparation. The Contractor shall coordinate with the BHPO who will provide Statements of Work for contracted archaeological work that implements project specific required mitigation measures.

e. Encountering Cultural Resources: The Contractor shall cease work if undocumented cultural resource items are found during excavation, grading, or other ground-disturbing activities. Work must be temporarily suspended within 100 feet of the discovery until it has been properly evaluated and secured. In some instances, the Contractor may be directed to protect the immediate discovery area with temporary fencing. The Contractor or their Archaeological Monitor shall immediately report any discovery of previously unidentified cultural resources to the BHPO.

3.5 SOLID WASTE MANAGEMENT PLAN

Each project shall generate a site specific Solid Waste Management Plan prior to commencement of work on Vandenberg AFB. The contractor shall provide a copy of this plan to their contracting officer and the 30 CES/CEIEC Solid Waste Manager and include a written notification of the projected quantity of solid waste/debris anticipated to be generated by the project. The contractor shall include in the report all facilities and locations expected to be used for all waste disposal or recycling.

3.5.1 Solid Waste Management Report (monthly)

The Contractor shall submit monthly reports to the contracting officer for the 30 CES/CEO Solid Waste Activity Owner no later than the 5th calendar day after the end of each month. The reports shall contain the weight, type and quantity of Solid Waste and/or Construction & Demolition Debris (mixed solid waste, scrap metal, scrap lumber, inert C&D, non-inert C&D, green waste, mixed paper, soil, wood debris, tires, card board,) transported off base for recycling, sale, or disposal. Copies of the weight tickets, sales receipts, and disposal certificates shall be included in the submittal when available. The Contractor must identify where each type of material was transported for processing or disposal. Any materials shipped out of state must be annotated.

3.5.2 Control and Management of Solid Wastes

a. General: The Contractor shall comply with, but not limited to: California Integrated Waste Management Act of 1989; California Assembly Bill AB 939; HQ AFSPC CEIE policy Letter P01009, dated 30 April 2001 (Tracking and Reporting Solid Waste Disposal and Diversions); 30 SW Plans, 32-7043-A, Hazardous Waste Management Plan; 32-7080, Pollution Prevention Management Plan; and the VAFB Integrated Solid Waste Management Guide.

b. Generation: The Contractor shall generate the least amount of solid waste possible, maximize pollution prevention processes, and maximize landfill diversion efforts through source reduction, reuse of materials, and recycling. All projects will be required at minimum to divert or recycle at minimum 50% of their solid waste and 54% of their C&D waste.

c. Segregation: The Contractor shall segregate all divertible, reusable, and recyclable materials including, but not limited to: wood; green waste; concrete; asphalt; brick; cardboard; metals; paper, plastics, glass, serviceable items, salvageable items, and clean soils so that these items can be diverted for disposal.

(1) Waste generation is inevitable and should be managed in accordance with the P2 hierarchy – source reduction, reuse, recycle, treatment, and as a last resort disposal.

(2) Materials that shall be recycled to the maximum amount possible include cardboard, paper, paper packaging, clean wood, pallets, beverage containers, land clearing debris, concrete, bricks, concrete masonry units, asphalt, drywall. carpet and pad, useable paint, asphalt roof shingles, rigid foam, glass, plastics, and metals from banding, stud trim, ductwork, piping, rebar, roofing, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze. Unless otherwise specified in contract documents, all demolition or scrap items generated from the project with commodity value are the property of the government, and any revenue generated from reuse, sales or recycling transactions is to be retained by the installation QRP program.

d. Locks, Latches, and Cylinders: Must be salvaged by turning them in to the Base Lockshop, 30 CES/CEOHV, Building 11439, extension 606-5236.

e. Recycling and Refuse Containers: Containers located outside facilities on VAFB are intended for solid waste and recycling associated with the VAFB mission. Materials that are generated from off base activities or by activities not associated with the VAFB mission are not acceptable.

f. Materials Taken to Defense Logistics Agency (DLA) Disposition Services (formerly DRMO): The Contractor shall turn in all serviceable or salvageable items to the Material Diversion Center (MDC) located adjacent to DLA Disposition Services. The contractor shall enter "QRP Reimbursement: 57F3875.8900 83 LW 503000 Vandenberg AFB" in block 27 on all DD 1348-1A forms turned into DLA Disposition Services. The contractor shall segregate all scrap metal to the greatest extent possible. A separate DD 1348-1A shall be turned in for each metal type. Properly identify each metal type in block 17 (e.g. scrap steel, scrap aluminum etc.). The Contractor shall segregate all scrap metal into ferrous and nonferrous metals and cut, dismantle, palletize, test, or prepare documentation as required for acceptance by DLA Disposition Services.

(1) Metals: Mixed metals that are deemed cost prohibitive to properly segregate shall be delivered to DLA Disposition Services in building 11510.

(2) Material Acceptance: MDC staff will assess items for usability. If the items are not accepted by the MDC or DLA Disposition Services, then the contractor shall investigate other diversion alternatives prior to recommending items for disposal.

g. Vandenberg AFB Landfill: The VAFB permitted Class III Municipal Solid Waste (MSW) landfill has ceased the routine acceptance and disposal of MSW and operates at a reduced level of service. Acceptance of any waste generated from contractor related project activities are prohibited. Only preapproved loads, transported by 30 CES personnel are allowed to utilize the landfill. Contractor generated MSW and recyclables are required to be transported to off-base facilities for disposal and recycling. Contractors are required to submit Quarterly reports to their contracting officer and the 30 CES/CEO Solid Waste Activity Owner no later than the 5TH calender day after the end of each month. Each Quarterly report shall contain the total weight, type and quantity of solid waste and/or construction & demolition (C&D) debris (mixed solid waste, scrap metal, scrap lumber, inert C&D, non-inert C&D, green waste, mixed paper, soil, wood debris, tires, card board) transported off base for recycling, sale, or disposal. Copies of weight tickets, sales receipts, and disposal certificates shall be included in the submitted report. The Contractor must identify the facility where MSW or recyclables are processed or disposed. Any materials shipped out of county and/or state must be annotated.

3.6 WHM/HW MATERIALS PROHIBITION

No waste hazardous material or hazardous waste shall be disposed of on government property. No hazardous material shall be brought onto government property that does not directly relate to requirements for the performance of this contract. All hazardous materials must be approved by the Installation's HAZMART prior to bringing on base (See Section 3.8, *Hazardous Material Management*). The government is not responsible for disposal of Contractor's waste material brought on the job site and not required in the performance of this contract. The intent of this provision is to dispose of that waste identified as waste hazardous material/hazardous waste as defined herein that was generated as part of this contract and existed within the boundary of the Contract limits and SECTION 01 57 19.00 20 Page 26not brought in from offsite by the Contractor. Incidental materials used to support the contract

including, but not limited to aerosol cans, waste paint, cleaning solvents, contaminated brushes, rags, clothing, etc. are the responsibility of the Contractor. The list is illustrative rather than inclusive. The Contractor is not authorized to discharge any materials to sanitary sewer, storm drain, or to the river or conduct waste treatment or disposal on government property without written approval of the Contracting Officer.

3.7 HAZARDOUS MATERIAL MANAGEMENT

a. General: The Contractor shall comply with, but not limited to: AFI 32-7086, Hazardous Materials Management. Within 2 weeks of contract award, the contractor must contact the Installation Hazardous Materials Program Manager (30 CES/CEIEC) at (805) 605-7573 or (805) 605-3870 to review hazardous materials authorization procedures.

b. HAZMART: The contractor shall first obtain approval from the HAZMART for all HAZMAT (including pesticides) usage on VAFB except for the commodities exempted on the Installation Management Flight approved exemption list. The contractor with access to government computer must attend applicable training for the installation's hazardous material authorization and tracking processes (See Section 3.12.2, *Training Requirements*). The contractor must submit an AF Form 3952, Chemical/Hazardous Material Request Authorization (or an electronic equivalent) with current manufacturer's Safety Data Sheets (SDSs) for all materials purchased outside of the HAZMART supply system. Notify HAZMART to establish a shop account code and 30 CES/CEIEC, Environmental Support at (805) 605-3870 or (805) 605-7573 for authorization and approval process before using any hazardous materials on VAFB. The HAZMART Environmental Support staff will process, review and approve all submitted HAZMAT once in compliance. All HAZMART registered HAZMAT shall have appropriate bar codes issued and must be attached to each HAZMAT container. Upon contract termination, contractor must remove all excess HAZMAT on the job site and clear or return all unused and issued bar codes to the HAZMART located in Building 5500, Bay "C," Room 10, and can be reached at (805) 605-3870.

c. Reporting: The contractor shall provide a monthly hazardous materials usage report with corresponding container's bar code number to the HAZMART Environmental Support.to include electronic reporting NOTE: Contractors reporting all of their monthly hazardous materials usage through the HAZMART should meet the air emissions, Emergency Planning and Community Right-to-Know Act Section313, Toxic Chemical Release Inventory (TR)I, solvent usage, and HAZMAT VAFB database/report requirements.

e. Pesticides: The Contractor shall comply with, but not limited to: Clean Water Act; Federal Insecticide, Fungicide, and Rodenticide Act; California Regional Water Quality Control Board permits; HQ AFSPC Policy P01014, dated 24 May 2001 (NPDES permit for Pesticides); AFI 32-1053, Integrated Pest Management Program, Executive Order 13112, and the base Integrated Pest Management Plan.

(1) Contractors using pesticides on VAFB shall obtain approval from the base Pesticide Manager, 30 CES/CEOHP, phone number (805) 606-3235/7596 or (805) 606-5059, 30 CES/CEIEC, Water Resource Manager, and 30 CES/CEIE, Natural Resources Manager prior to using any "pesticide" on VAFB. Pesticides include, but are not limited to, herbicides, fungicides, algaecides, and larvicides. The contractor shall obtain approval from the Government's HAZMART for all pesticide usage by processing an AF Form 3952, Chemical/Hazardous Material Request Authorization, prior to using only DOD-approved pesticides on VAFB.

(2) The Contractor shall possess a California pest control license for the type of pesticide work being performed and type of pesticide being applied on VAFB. The Contractor shall obtain any county, local, state, or federal permits required for any pesticide work being done or pesticide materials to be used on VAFB. The Contractor will also obtain a login/password on Integrated Pest Management System (IPMIS) Web (http://web.ipmis-helpdesk.org) where they will record all chemical usage/tasks performed on VAFB. The Contractor shall prepare, maintain, and/or submit to the appropriate agency the required reports and/or records. The Contractor shall provide electronic copies of all licenses and permits to the Pesticide Manager within 10 days of contract award and 10 days after receiving a new license or getting a license renewed.

(3) The Contractor shall record on a daily basis all pesticide products that are consumed that day. The report shall include the date, location, type of operation; target pest, pesticide used, EPA number, percent concentration, amount of concentrate, amount of finished product, units of measure in square feet, and applicator's initials. This information shall be recorded in IPMIS Web, and VAFB Pesticide Manager notified that the updates have been made by the 5th of each month for the prior month's pesticide applications.

(4) The contractor shall keep copies of monthly pesticide usage. Notify VAFB Pesticide Manager when all updates have been completed as well as to the HAZMART. Pesticides do have additional compliance requirements in addition to typical HAZMAT requirements.

(5) The contractor shall not apply pesticides in or near water bodies, storm drains or channels.

(6) The contractor shall only use DoD approved pesticides on VAFB. If the contractor wants to use a pesticide that is not on the approved list, they will need to fill out an AFCEC NON-STANDARD PESTICIDE APPROVAL FORM 20140101 that can be obtained from VAFB Pest manager. Request will then be sent to command Entomologist for approval. If pesticide is approved, contractor will be contacted.

f. Preferred Substitutions: The Contractor shall evaluate all Hazardous Material requisitions for appropriate environmentally preferred substitutions in an effort to reduce or eliminate the associated wastes at the source. These preferred products will be submitted for approval (per paragraph B). In some cases, the proposed products may not require bar-coding or subsequent reporting. Also see Green Procurement Program (GPP requirements, Section 3.14).

(1) As applicable to project requirements, the Contractor is required to reduce products that contain materials found on EPA's Priority Chemical Reduction List at http://www.epa.gov/wastemin/chemlist.htm, with immediate emphasis on reducing cadmium, lead, mercury, naphthalene, and polychlorinated biphenyls (PCBs).

(2) For cleaners, floor care products, paints & coatings, paper & newsprint, and windows & doors: http://www.greenseal.org/findaproduct/index.cfm

(3) For cleaning products: http://www.epa.gov/epp/pubs/products/index.htm

f. Submittals: The Contractor shall provide the following to the Contracting Officer for any hazardous material activities on VAFB.

(1) Monthly Hazardous Material (HAZMAT) quantity usage totals.

(2) Upon contract termination, contractor must remove all excess HAZMAT on the job site. Excess hazardous materials must be properly dispose and clear or return all unused and issued bar codes to the HAZMART Environmental Support. Contact the HAZMART Environmental Support, at (805) 605-3870 or (805) 605-3976, located in Building 5500, Bay "C", Room 10.

No hazardous material shall be brought onto government property that does not directly relate to requirements for the performance of this contract. Include hazardous material control procedures in the Safety Plan. Address procedures and proper handling of hazardous materials, including the appropriate transportation requirements. Typical materials requiring SDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, stains and varnishes, solvents, adhesives, aerosol, petroleum products and asbestos containing material, At the end of the project, provide the Contracting Officer with the maximum quantity of each material that was present at the site at any one time, the dates the material was present, the amount of each material that was used during the project, and how the material was used. Ensure that hazardous materials are utilized in a manner that will minimize the amount of hazardous waste that is generated. Ensure that all containers of hazardous materials have NFPA labels or their equivalent. Keep copies of the SDS for hazardous materials on site at all times and provide them to the Contracting Officer at the end of the project. Certify that all hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste per 40 CFR 261.

3.7.1 Asbestos Management

a. General: The Contractor shall comply with the following regulations:

(1) California Health and Safety Code Section 25143.7

(2) 40 CFR Part 61 Subpart M (National Emission Standards for Asbestos)

(3) Santa Barbara County Air Pollution Control District (SBCAPCD) Rule 1001

(4) 40 CFR Part 763, Asbestos-Containing Materials in Schools

(5) 29 CFR 1926.1101, Safety and Health Regulations for Construction

(6) 8 California Code of Regulations, Subchapter 4, Section 1529, Asbestos

(7) 8 California Code of Regulations, Subchapter 2, Section 341.15

(8) 22 California Code of Regulations, Sections 66260-66270, Hazardous Waste Regulation

(9) 40 CFR Part 260-270, Hazardous Waste Regulations

(10) 30 SW Plan, 32-7043-A, Hazardous Waste Management Plan

(11) 30 SW Plan 32-7042, Solid Waste Management Plan

(12) 30 SW Plan 32-1052-A, Asbestos Management Plan

(13) 30 SW 32-1052-B, Asbestos Operating Plan

(14) Specification Section 02075, Removal and Disposal of Asbestos Materials

(15) Specification Section 02081/0282, Asbestos Abatement-Small Scale/Large-Scale

b. Asbestos Hazard Response Act (AHERA): Federal and contractor employees that affect asbestos processes in construction shall possess current certification and training in accordance with AHERA described in 40 CFR 763.92 and Appendix C, Asbestos Model Accreditation Plan.

c. VAFB Landfill usage: If contract permits, non-friable designated waste asbestos can be disposed at the VAFB landfill if preapproval is obtained from 30 CES/CEO. The non-friable asbestos-containing materials (ACM) must be double wrapped with 6-mil plastic. Contact 30 CES/CEIE in order to request a disposal manifest. Then, contact 30 CES/CEO to schedule a disposal appointment. The disposal contractor shall provide 30 CES/CEIE with a copy of the signed disposal manifest and landfill receipt.

d. Miscellaneous: The Contractor shall be competent with all relevant asbestos survey observations, results, and findings prior to the start of asbestos activities on VAFB. The government will make every effort to locate and identify all asbestos prior to contract award, however this is not always possible.

(1) The Contractor shall make a commitment not to undertake any general construction work or any other activities that would break-up, dislodge, or similarly disturb ACM until a licensed asbestos Contractor has been approved.

(2) The Contractor shall conduct an asbestos safety conference for construction projects prior to the start of actual work. The asbestos safety conference shall include representatives of the contracting agency, 30 CES/CEIE, the employer, employees, and employee representatives.

(3) In the discussion of the Contractor's asbestos safety program, the Contractor shall include, but not limited to: methods, devices, processes, practices, conditions, or activities the Contractor intends to use in providing a safe place of work.

(4) The Contractor shall maintain written documentation of topics discussed and persons attending these asbestos safety meetings, and upon request, provide a copy to the Contracting Officer.

(5) The Contractor’s competent person shall meet the definitions described in both 29 CFR 1926.1101(b) and 29 CFR 1926.32(f). 29 CFR 1926.32(f) defines the competent person as one who is capable of identifying asbestos hazards, capable of controlling the asbestos exposure, and possesses the authority to eliminate exposure to asbestos as specified in 29 CFR 1926.32(f). The Contractor’s competent person shall be trained according to the criteria specified in the EPA’s Model Accreditation Plan, which is described in 40 CFR 763 for the contractor/supervisor.

e. Work Plan: The Contractor shall submit, for approval, the Site-Specific Asbestos Work Plan to the 30 CES/CEIE Asbestos Manager prior to the start of any asbestos work on VAFB. The Contractor shall update the Site-Specific Asbestos Work Plan as required. It is a violation of California state law to design and/or provide asbestos

abatement specifications and also perform the asbestos abatement associated with the design and/or specification. The Site-Specific Work Plan shall include, at a minimum, the following:

(1) Name and contact information of all parties involved with the project, including general contractor, asbestos abatement contractor, and project monitor. The asbestos project design shall be performed by an accredited AHERA Asbestos Abatement Project Designer. The asbestos contractor/supervisor shall be accredited by AHERA.

(2) Description of methods and procedures for handling, removal, and disposal of ACM as well as the quantities of ACM to be removed

(3) Statement of compliance IAW OSHA regulation 29 CFR 1926.1101 and Title 8 CCR 1529

(4) Air monitoring plan (40 CFR 763)

(5) Description of engineering controls, equipment staging, containment construction, decontamination units and operational guidelines, clean room, equipment room, negative pressure air flow devices, and containment certification by the project monitor

(6) On-site safety and health plan, training certificates, medical and respiratory fit test records, material safety data sheets, work place entry & exit procedures, emergency contact list, California OSHA posters, OHSA Notification procedures, entry/exit logs, and air sampling monitoring results

(7) Site security plan

(8) Emergency contingency plan and contact information

(9) Personnel protective equipment list

(10) Description of work clearance and final inspection procedures

f. Encountering ACM: When suspected ACM is encountered during the construction phase, then the Contractor shall immediately cease work and make arrangements for sampling of the material prior to resuming work. The Contractor shall be responsible for identifying suspected ACM encountered during activities that were not previously identified in the asbestos survey. An updated and/or approved site specific asbestos abatement plan shall be required in this case.

g. Air monitoring: Required for all VAFB asbestos abatement contracted activities and shall meet the minimum criteria specified in 40 CFR 763, Appendix A. Air monitoring activities will include, at a minimum, a baseline analysis, work area analysis during abatement activities, and outside air monitoring. California Asbestos Consultants/California Site Surveillance Technicians shall be responsible for ensuring compliance of Contractor's asbestos abatement activities.

3.7.2 Polychlorinated Biphenyls (PCB) Management

a. General: The Contractor shall comply with, but not limited to: Toxic Substances Control Act (TSCA), 40 CFR 761 (PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions); and 30 SW Plans, 32-7043-A, Hazardous Waste

Management Plan, Appendix 12, Special Topics; 32-7086, Hazardous Materials Management Plan, Chapter IX, PCB Management.

b. PCB Generated on VAFB: The Contractor shall coordinate all PCB waste disposal documentation through the base CCAP contract operator prior to PCB waste handling.

c. Management: The Contractor shall, if required, test all electrical equipment removed for the presence of PCBs or the potential to contain PCBs. The Contractor shall manage the PCB waste or potential PCB waste as a PCB waste until it is determined that the items do not contain PCBs. The Contractor shall pay for testing and laboratory analyses. The Government will make every effort to locate and identify all PCBs prior to contract bid, however, this is not always possible. If positive PCB identification has been made, then the Contractor shall coordinate with 30 CES/CEIE prior to handling any PCB waste or PCB contaminated equipment. All PCB containing waste shall be coordinated and managed through 30 CES/CEIE and the CCAP (NO EXCEPTIONS). Please contact the Hazardous Waste Program Manager at 606-2359 for all projects with PCB containing equipment or waste.

3.7.3 Radioactive or Radionuclides Material Management

a. General: The Contractor shall comply with, but not limited to: 40 CFR Part 61, 190, 191, and 192; 10 CFR 19; 10 CFR 20; 10 CFR 36; 10 CFR 39; 20 CFR 21; Air Force Instruction (AFI) 40-201, Managing Radioactive Materials In The USAF; 30 SW AFI 40-101, Managing Radioactive Materials; and 30 SW Plan 32-7043-A, Hazardous Waste Management Plan (especially Appendix 12, Special Topics titled Radioactives/Radionuclides).

b. Transporting Material onto Base: The Contractor shall contact the Contracting Officer, via the Vandenberg Radiation Safety Officer, 30 MDOS/SGOAB, in order to submit the appropriate documents and permits. They are required at least 30 days prior to bringing the radioactive material or equipment containing radioactive material onto VAFB. Radioactive or Radionuclide materials brought onto VAFB are subject to inspections by the Nuclear Regulatory Commission. The Contractor shall support all regulatory agency inspections on VAFB.

c. Radioactive Exit Signs: The Contractor shall contact the Vandenberg Radiation Safety Officer, 30 MDOS/SGOAB in order to determine proper disposal requirements of these signs. These exit signs cannot be disposed of in the VAFB landfill or the hazardous waste CCAP. The contractor shall not install any new radioactive exit signs on VAFB.

3.7.4 Lead Based Paint (LBP) Management

a. General: The Contractor shall comply with, but not limited to: Title 17, CCR, Division 1 Chapter 8, Accreditation, Certification, and Work Practices For Lead-based Paint and Lead hazards; 30 SW Plans, 32-1002, Lead-Based Paint Management Plan; 32-7042, Solid Waste Management Plan; Plan 32-7043-A, Hazardous Waste Management Plan (especially Appendix 12, Special Topics); and Specification Section 02084, Lead based Paint Abatement and Disposal.

b. Management Plan: The Contractor shall submit the LBP Management Plan for approval to 30 CES/CEIE prior to the start of any LBP work on VAFB.

c. Encountering LBP: If unspecified LBP is encountered during the construction phase, the Contractor shall cease work and make arrangements for sampling of the material prior to resuming. The Government will make every effort to locate and identify all LBP prior to bidding, however this is not always possible. These materials are often hidden and cannot be discovered until demolition activities begin or after the start of construction activities. The Contractor shall not resume LBP work until the sampled material results are known and the LBP Management Plan has been submitted, updated, and any compliance actions required or approved by 30 CES/CEIE.

3.8 PETROLEUM PRODUCTS AND REFUELING

Conduct the fueling and lubricating of equipment and motor vehicles in a manner that protects against spills and evaporation. Manage all used oil generated on site in accordance with 40 CFR 279. Determine if any used oil generated while on-site exhibits a characteristic of hazardous waste. Used oil containing 1000 parts per million of solvents will be considered a hazardous waste and disposed of at Contractor's expense. Used oil mixed with a hazardous waste will also be considered a hazardous waste.

3.8.1 Oily and Hazardous Substances

Prevent oil or hazardous substances from entering the ground, drainage areas, or navigable waters. In accordance with 40 CFR 112, surround all temporary fuel oil or petroleum storage tanks with a temporary berm or containment of sufficient size and strength to contain the contents of the tanks, plus 10 percent freeboard for precipitation. The berm will be impervious to oil for 72 hours and be constructed so that any discharge will not permeate, drain, infiltrate, or otherwise escape before cleanup occurs.

3.8.2 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, the contractor shall immediately notify the contracting officer. The contractor shall not disturb this material until authorized by the contracting officer.

3.9 FUEL TANKS

Petroleum products and lubricants required to sustain up to 30 days of construction activity may be kept on site. Storage and refilling practices shall comply with 40 CFR Part 112. Secondary containment shall be provided and be no less than 110 percent of the tank volume plus five inches of free-board. If a secondary berm is used for containment then the berm shall be impervious to oil for 72 hours and be constructed so that any discharge will not permeate, drain, infiltrate, or otherwise escape before cleanup occurs. Drips pans are required and the tanks must be covered during inclement weather.

3.10 RELEASES/SPILLS OF OIL AND HAZARDOUS SUBSTANCES

a. General: The Contractor shall comply with, but not limited to: 30 SW Plans, 32-4002-C, Spill Prevention Control and Countermeasures Plan; 32-7043-A, Hazardous Waste Management Plan; 32-7043-E, Recoverable and Waste Petroleum Products Management Plan; 32-7086, HAZMAT Management Plan; and 32-4002-A, HAZMAT Emergency Response Plan.

b. Notification: When the Contractor has a spill or release, then the Contractor shall immediately notify 30 CES/CEIE, (805) 606-1921 / 605-2015, fax (805) 734-1339, the Command Post, (805) 606-9961, and the Contracting Officer. Based on the Reportable Quantity of the contractor's spill or release, 30 CES/CEIE will determine if an environmental regulatory agency Incident Release Report will need to be prepared and submitted based on the Reportable Quantity of the contractor's spill or release. (Note: If a regulatory agency incident release reporting action is required for the Contractor's spill or release on VAFB, then 30 CES/CEIE is responsible to notify the appropriate regulatory agency within the mandated reporting period).

c. Reporting: When the Contractor has a spill or release, then the Contractor shall provide a copy of the Community Awareness and Emergency Response (CAER) Hazardous Materials Incident Reporting Form and any other required documentation to 30 CES/CEIE, (805) 606-1921 / 605-2015, fax (805) 734-1339, for 30 CES/CEIE to provide the appropriate regulatory agency's mandatory reporting. (References: 30 SW Plan, 32-7043-A, Hazardous Waste Management Plan, Appendix 8; EPP; or 30 SW Plan, 32-4002-A, HAZMAT Emergency Response Plan).

d. Clean-up: The Contractor shall take immediate actions involving hazardous material spill or release to properly contain, clean up, make notifications, and provide final cleanup documentation for their spill or release. When the Contractor is unable to conduct proper cleanup activities for a spill or release, then immediate notification to the government is required. The Government reserves the right to conduct the mandatory clean-up activities until the Contractor is able. All costs incurred by the Government until the Contractor is capable of taking control of the clean-up activities are the sole responsibility of the Contractor.

e. 30 SW 32-7043-A: The contractor is responsible for the characterization and disposal of cleanup materials and/or hazardous waste generated from its spill, release, and cleanup activities. (Reference the 30 SW Plan, 32-7043-A, Hazardous Waste Management Plan).

(1) For generally "large" hazardous waste or hazardous material spills or releases, the Contractor shall comply with, but not limited to: 30 SW Plan 32-4002-A, Hazardous Materials (HAZMAT) Emergency Response Plan.

(2) For generally "small" hazardous waste or hazardous material spills or releases, the Contractor shall comply with, but not limited to: 30 SW Plan 32-7043-A, Hazardous Waste Management Plan.

3.11 CONTROL AND MANAGEMENT OF HAZARDOUS WASTES

Minimize the use of hazardous materials and the generation of hazardous waste. Include procedures for pollution prevention/ hazardous waste minimization in the Hazardous Waste Management Section of Environmental Protection Plan Consult with the Installation Pollution Prevention Manager (30 CES/CEIEC) for suggestions and to obtain a copy of the installation's pollution prevention/hazardous waste minimization plan for reference material when preparing this part of the plan. Describe the types of the hazardous materials expected to be used in the construction when requesting information.

a. General: The Contractor shall comply with, but not limited to: Resource Conservation and Recovery Act; 40 CFR Parts 240-299 (Protection of Environment), 49 CFR Parts 171-180 (Transportation), EPA Hazardous Waste Training Modules; Title 22 California Code of

Regulations (CCR), Division 4.5 (Environmental Health Standards for Management of Hazardous Waste); the California Hazardous Waste Source Reduction and Management Act of 1989 (Senate Bill 14); 30 SW Plans 32-4002-A, *Hazardous Materials Emergency Response Plan*, 32-7043-A, *Hazardous Waste Management Plan*, and DOD Instruction 4000.19, *Interservice and Intragovernmental Support*.

b. Hazardous Waste Disposal on VAFB: The Contractor shall manage, track and dispose of all hazardous waste generated on VAFB through the Government contracted and operated Consolidated Collection Accumulation Point (CCAP). The CCAP personnel assist the waste generators with waste stream classification including Land Disposal Restrictions and generate shipping documents and manifests to ensure hazardous waste transportation and disposal regulations are strictly adhered to.

c. Hazardous Waste Removal from VAFB: The Contractor shall not remove any hazardous waste generated on VAFB without approval from 30 CES/CEIEC or the authorized CCAP representative. Only the 30 CES/CEIEC or the CCAP representative is authorized to sign Uniform Hazardous Waste Manifests. The Contractor shall not sign any of their own Uniform Hazardous Waste Manifests unless they have their own established EPA Generator ID number.

d. Reimbursement: In accordance with DoD Instruction 4000.19, *Interservice and Intragovernmental Support,* the Contractor generating hazardous waste may be held responsible for the direct costs and support costs incurred by VAFB to dispose of hazardous wastes that are directly attributable to contract activities. Reimbursement for such costs is subject to conditions specified in the contract-specific support agreement, memorandum of agreement (MOA) or memorandum of understanding (MOU). The decision to seek reimbursement lies with the Government agent, and should consider the anticipated expense of billing and disbursing funds.

e. Miscellaneous: The Contractor is required to provide hazardous waste characterization documentation, including Material Safety Data Sheets, sample requests and product and or process user knowledge for coordination through the CCAP. Coordination is requested prior to waste generation in order for the Government to properly characterize and manage all hazardous waste generated on VAFB.

    (1) The Contractor is responsible for all costs and management processes associated with the proper site management, Site-Specific Contingency Plan, Spill Control and Cleanup Equipment/Supplies, profiling, accurate waste characterization, temporary site storage areas, containerization, labeling, obtaining drum numbers, and transportation to the CCAP facility, and the implementation of source reduction measures prior to waste turn-in. The Contractor is responsible for their hazardous waste management up to and until their waste is delivered and signed over to CCAP personnel via a hazardous waste turn-in sheet.

    (2) To establish new hazardous waste accumulation sites, waste generators are required to submit an authorization request to 30 CES/CEIEC as required by the 30 SW Plan 32-7043-A, Hazardous Waste Management Plan, Appendix 4. The 30 CES/CEIEC Hazardous Waste Program Manager will provide a letter of authorization and conduct a site visit to ensure all waste generation compliance concerns are in practice.

f. 30 SW Plan 32-7043-A: The Contractor shall provide a “Certification of Hazardous Waste Compliance” on company letter head to the Contracting Officer for 30 CES/CEIEC

indicating that the Contractor shall comply with the 30 SW Plan 32-7043A, Hazardous Waste Management Plan for all hazardous waste activities. The Contractor is required to include this certification as an Appendix to their Environmental Protection Plan.

(1) The Contractor shall understand and comply with the Hazardous Waste Generator's Responsibilities in 30 SW Plan 32-7043-A, Hazardous Waste Management Plan, Basic Plan.

(2) The Contractor shall understand and comply with the Hazardous Waste Site Storage Timelines and criteria in 30 SW Plan 32-7043-A, Hazardous Waste Management Plan, Appendix 4, Hazardous Waste Accumulation.

(3) The Contractor shall understand and comply with the construction procedures in 30 SW Plan 32-7043-A, Hazardous Waste Management Plan, Appendix 12, Special Topics, "Construction".

(4) The Contractor shall have access to and maintain a copy (electronic or hard copy) of the latest 30 SW Plan 32-7043-A, Hazardous Waste Management Plan, onsite for each hazardous waste accumulation area under the contractor's purview.

g. Training Requirements: The Contractor shall complete all required hazardous waste training requirements for their hazardous waste site management. This can be completed through 30 CES/CEIEC's training program or the EPA hazardous waste training modules available for site Collection Accumulation Point (CAP) / Satellite Accumulation Point (SAP) managers. If the Contractor uses the EPA training modules for their CAP / SAP hazardous waste training, then the Contractor shall provide a copy of the signed training module completion to 30 CES/CEIEC Hazardous Waste Manager, and keep a copy with the Contractor's Environmental Protection Plan or CAP / SAP authorization letter as proof of completed required hazardous waste training. The Contractor shall also attend a one-time training session with the CCAP Contractor to review hazardous waste turn in procedures. CAP / SAP turn in training is offered on the third Tuesday of every month. The 30 CES/CEIEC Hazardous Waste Program Manager can make special arrangements for out of cycle training.

Identify all construction activities which will generate hazardous waste/debris. Provide a documented waste determination for all resultant waste streams. Hazardous waste/debris will be identified, labeled, handled, stored, and disposed of in accordance with all Federal, State, and local regulations including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268.

Hazardous waste will also be managed in accordance with the approved Hazardous Waste Management Section of the Environmental Protection Plan. Store hazardous wastes in pproved containers in accordance with 49 CFR 173 and 49 CFR 178. Hazardous waste generated within the confines of Government facilities will be identified as being generated by the Government. Prior to removal of any hazardous waste from Government property, all hazardous waste manifests must be signed by the Hazardous Waste Program Manager or an appointed representative. No hazardous waste will be brought onto Government property. Provide to the Contracting Officer a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SUBPART D. For hazardous wastes spills, verbally notify the Contracting Officer immediately.

3.11.1 Facility Hazardous Waste Generator Status

Vandenberg AFB is designated as a Large Quantity Generator. All work conducted within the boundaries of this activity must meet the regulatory requirements of this generator designation. The Contractor will comply with all provisions of Federal, State and local regulatory requirements applicable to this generator status regarding training and storage, handling, and disposal of all construction derived wastes.

3.11.2 Regulated Waste Storage/Satellite Accumulation/90 Day Storage Areas

If the work requires the temporary storage/collection of regulated or hazardous wastes, the Contractor will request the establishment of a Regulated Waste Storage Area, a Satellite Accumulation Area, or a 90 Day Storage Area at the point of generation. The Contractor must submit a request in writing to the Contracting Officer providing the following information:

Contract Number _____ Contractor _____

Haz/Waste or Regulated Waste POC _____ Phone Number _____

Type of Waste _____ Source of Waste _____

Emergency POC _____ Phone Number _____

Location of the Site: _____ (Attach Site Plan to the Request)

To establish new hazardous waste accumulation sites, waste generators are required to submit an authorization request to 30 CES/CEIEC as required by the 30 SW Plan 32-7043-A, Hazardous Waste Management Plan, Appendix 4. The 30 CES/CEIEC Hazardous Waste Program Manager will provide a letter of authorization and conduct a site visit to ensure all waste generation compliance concern are in practice.

Allow ten working days for processing this request. The designated area where waste is being stored shall be barricaded and a sign identifying as follows:

"DANGER - UNAUTHORIZED PERSONNEL KEEP OUT"

3.11.3 Class I [and II] ODS Prohibition

Class I [and II] ODS as defined and identified herein will not be used in the performance of this contract, nor be provided as part of the equipment. This prohibition will be considered to prevail over any other provision, specification, drawing, or referenced documents.

Regulations related to the protection of stratosphere ozone may be found in 40 CFR 82.

Heating and air conditioning technicians must be certified through an EPA-approved program. Copies of certifications shall be maintained at the employees' place of business and be carried as a wallet card by the technician, as provided by environmental law. Accidental venting of a refrigerant is a release and shall be reported to the Contracting Officer.

3.11.3.1 *Universal Waste/e-Waste Management*

Universal waste including but not limited to some mercury containing building products such florescent lamps, mercury vapor lamps, high pressure sodium lamps, CRTs, batteries, aerosol paint containers, electrical equipment containing PCBs, and consumed electronic devices,

shall be managed in accordance with applicable environmental law and installation instructions. Contact 30 CES/CEIEC or refer to the HWMP for additional assistance.

3.12 WATER RESOURCES AND WATER QUALITY Requirements

3.12.1 Surface and Ground Water

a. There will be no discharge of wastewater, waste or debris into storm drains, stormwater conveyance systems or surface waters. The discharge of potable water into storm drains or stormwater covenyance systems may or may not be authorized under the NPDES MS4 General Permit. There will be no discharge of excavation ground water to the sanitary sewer, storm drains, or to surface waters. Discharge of hazardous substances will not be permitted under any circumstances. Notify a 30 CES/CEIE, Water Resources Program Manager prior to any planned discharge or threat of discharge into storm drains, stormwater conveyance systems or surface waters to maintain compliance with Section 402 of the Clean Water Act.

b. The Contractor shall follow all Clean Water Act Section 401 Water Quality Certification and Section 404 Permit requirements for activities that affect Waters of the United States. The Contractor shall notify 30 CES/CEIE prior to any activity expected to affect jurisdictional waters (by discharge of pollutant, dredge, or fill material or by structural modification within Waters of the United States). Any affect will require a State 401 Water Quality Certification and Section 404 permit.

3.12.2 Storm Water

3.13.2.1 Storm Water Best Management Practices (BMPs)

The Contractor shall implement and maintain BMPs in or similar to the current California Stormwater BMP Manual (California Stormwater Quality Association) to effectively prevent sediment, chemicals, or other pollutants from migrating into the storm water system, Waters of the U.S. and surface waters via stormwater, non-stormwater or wind. The 2007 Off-Highway Vehicle BMP Manual for Erosion and Sediment Control (California Department of Parks and Recreation) may also be referenced for erosion and sediment control. BMPs will include erosion and sediment controls, tracking controls, vehicle and equipment fueling and maintenance, spill prevention and control, concrete waste management, solid waste management, liquid waste management and stockpile management.

a. Exposed soils remaining upon completion of construction shall be permanently stabilized with vegetation to prevent erosion due to wind and rain. Refer to Section 3.16, *Landscaping.* When the construction activity is covered by the Construction General Permit refer to Section 4.12 and the Construction General Permit for Conditions for Termination of Coverage.

b. Netting of permanent fiber rolls (wattles) and erosion control blankets shall be of biodegradable material only.

c. Do not use sand bags as inlet and drainage protection. Use gravel bags, inlet protection devices, inlet covers or absorbents as applicable.

d. Do not use straw bales for sediment control.

3.12.2.2 Construction General Permit Requirements

a. The contractor shall obtain coverage under the State Water Resources Control Board NPDES General Permit Order No. 2009-0009-DWQ (Construction General Permit) for construction activities of one acre or greater of disturbed soil unless a permit exemption applies. Contact 30 CES/CEIE Water Resources one month prior to construction to begin the process.

b. A Storm Water Pollution Prevention Plan (SWPPP) and Risk Assessment or Erosivity Waiver documents shall be developed by a Qualified Developer per the Construction General Permit. The Contractor shall provide a draft and final copy of their SWPPP and Risk Assessment to 30 CES/CEIE Water Resources for review and certification by 30 CES/CD.

c. The Contractor shall assist 30 CES/CEIE with electronic filing of Permit Registration Documents (NOI, Risk Assessment, SWPPP, and Signed Certification Statement) with the SWRCB. The Contractor shall file the associated annual fee with the SWRCB.

d. <u>SWPPP Implementation</u>

   The Contractor shall implement a SWPPP, including but not limited to BMPs, inspections, reporting and Sampling and Analysis requirements, in accordance with the Construction General Permit.

   Contractor personnel implementing SWPPPs shall meet Permit requirements for Qualified Stormwater Inspectors and shall have attended one storm water Construction General Permit compliance and BMP training within the last five years.

   The Contractor shall maintain a current copy of their SWPPP at the construction site per the permit requirements and shall provide a copy of any amendments to 30 CES/CEIE Water Resources.

   The Contractor shall provide copies of required inspection forms, Construction Site and Run-on Evaluations and effluent monitoring results (as applicable) to 30 CES/CEIE Water Resources.

e. <u>Annual Report</u>

   The Contractor shall provide 30 CES/CEIE Water Resources, an unsigned Annual Report by 15 August every year that the permit is active (between 1 July of the current year and 30 June of the previous year and for which a Notice of Termination (NOT) has not been submitted). 30 CES/CEIE will obtain certification from 30 CES/CD.

   30 CES shall electronically file the Annual Report with the SWRCB by the due date of 1 September.

   As part of the annual report, the Contractor shall electronically submit water quality sampling results to the SWRCB.

   The Contractor shall pay their annual fee before the end of their billing month every year until the NOT has been approved. This requirement may be waived by the SWRCB upon 30 CES/CEIE request.

f. Notice of Termination of Coverage under the General Construction Storm Water Permit (NOT).

The Construction General Permits' Conditions for Termination of Coverage shall be met prior to NOT submittal. Vegetation shall cover 70 percent of 100 percent of the disturbed soil area or it must be demonstrated that the site will not pose any additional sediment discharge risk per the Construction General Permit Conditions. Refer to Section 3.17, *Landscaping.*

The Contractor shall submit the unsigned NOT and photos of the entire stabilized disturbed soil area to 30 CES/CEIE Water Resources. 30 CES/CEIE will obtain the required certification signature from 30 CES/CC or CD. 30 CES shall electronically file the NOT with the SWRCB.

It may take several months before a NOT can be approved by the SWRCB. Permit requirements are still enforceable until the NOT is approved by the Regional Water Quality Control Board. Once construction is completed, the Contractor will be required to perform storm water inspection monitoring, water quality sampling, BMP maintenance and may be required to repair erosion, reseed, mulch and provide irrigation to ensure seeded or planted areas achieve 70 percent soil coverage.

3.12.3 Post-Construction Storm Water

California and Vandenberg Post-Construction Storm Water Standards apply if there will be over 2,500 SF of new or replaced impervious area.This is a design requirement.

a. Projects that create and/or replace 2,500 square feet or more square feet of impervious surface will implement one or more of the following site design measures to reduce project site runoff: Preservation of existing vegetation to the maximum extent feasible (minimum requirement), Stream Setbacks and vegetated buffers (30-foot minimum); Improvement and maintenance of soil through soil amendments; Tree planting and preservation; Rooftop and Impervious Area Disconnection; Vegetated Swales; Green Roofs; or equivalent measures.

b. Projects that create and/or replace 5,000 square feet or more of impervious surface shall implement Low Impact Development measures to include: Site Design Measures, Source Control Measures, and Storm Water Retention and Treatment Measures. Storm water retention and treatment measures will maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the drainage area or areas with regard to the temperature, rate, volume, and duration of flow.

Project design A-E consultants or in-house design engineers shall use the *Low Impact Development (LID) Sizing Toolbox* (Tool) for selecting and sizing appropriate structural runoff controls (i.e., sand filter, bioretention, infiltration basin, infiltration trench, and permeable pavers). This Tool can be obtained from the 30th Civil Engineer Squadron, Installation Management Flight/ Environmental Section (30 CES/CEIEC, 805-606-7541) or Programs Flight/Design Section (30 CES/CENMP, 805-605-8744).

If design A-E consultants or in-house design engineers determine that structural runoff controls are unnecessary based on the Site Design Measures selected then the engineer shall demonstrate via Option 1 or Option 2 how the chosen methods satisfy Section 438 of the *Energy Independence and Security Act* (EISA) in the Storm Water Control Plan.

Reference: *Vandenberg AFB Post-Construction Storm Water Standards*, September 2014 pursuant to requirements of *Water Quality Order, No. 2013-0001-DWQ, NPDES General Permit CAS000004, Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)* (State Water Resources Control Board 2013; Small MS4 General Permit), and Section 438 of the *Energy Independence and Security Act* (EISA), adopted in 2008.

3.12.4 Domestic Wastewater

a. Sanitary Sewer: VAFB sanitary sewer connections are authorized for discharges of approved domestic wastewater as defined by discharge standards set by the City of Lompoc. Discharge of any wastewater on VAFB, other than routine domestic wastewater, into the sanitary sewer system requires pre-authorization from 30CES/CEIE. Ensure that sanitary sewer lines that are no longer needed are capped, permanently closed, and/or made inert to prevent storm water/groundwater inflow infiltration into the wastewater collection system. Report any sanitary sewer blockages and/or sewer system overflows to 30 CES/CEIE.

b. Grease Interceptors, Traps, and Oil Water Separators: Grease traps and oil water separators (OWS), must be routinely cleaned and maintained to ensure they are functioning properly. Oil, grease, or oily sludge removed from restaurant traps, interceptors, and OWS units must be removed from base for disposition.

c. Septic Systems: Septage recovered from routine maintenance or decommissioned septic systems must be disposed of by discharge into a sanitary sewer manhole (approved by 30 CES/CEIE) or an off-base collection point.

3.12.5 Industrial Wastewater

a. Discharge: Approval from the City of Lompoc, an industrial discharge permit, or waiver from the Regional Water Quality Control Board is required to discharge process or industrial wastewater. 30 CES/CEIE Water Resources coordination and approval is required.

b. Treatment: If contract allows generator to dispose of their industrial or process wastewater at the VAFB Industrial Wastewater Treatment Plant (IWTP), 30 CES/CEIE coordination and approval of an Industrial Wastewater Treatment Plant Processing Request is required. Sampling is required to determine hazardous characteristics. A Sampling Request Form and Industrial Wastewater Characterization Form are required for sampling conducted by the Water Resources consultant. The VAFB IWTP may not be able to accept all industrial or process wastewater.

3.12.6 Miscellaneous Wastewater

a. Discharge to Grade (DTG): A DTG Characterization Form must be completed and approved by 30 CES/CEIE Water Resources prior to discharge of any low-level contaminated wastewater. Discharge of hazardous substances will not be

permitted under any circumstances. A DTG Form may also be required for discharge of other types of wastewater to grade.

b. Aqueous Unknowns: Storm water, non storm water, groundwater, or wastewater that is collected in any kind of structure or container must be analyzed prior to removal and disposition. 30 CES/CEIE coordination and approval is required.

c. Vehicle and Equipment Cleaning: The Contractor shall not perform vehicle and equipment cleaning onsite using soaps, solvents, degreasers, steam cleaning equipment or equivalent methods. The Contractor shall perform vehicle or equipment cleaning offsite or onsite with water only, in a designated area that will not allow water to enter storm drain inlets, drainage systems or surface waters.

d. Building and Structural Preparation Washing: If pressure washing will occur on an area that is not painted, sediment and debris shall be prevented from entering a storm drain inlet or conveyance. Prior to pressure washing, the paint content of the affected area must be known. If the paint contains hazardous constituents (lead, chromium, zinc, etc), another method of structural surface preparation may be required. If paint content is unknown, representative samples of washdown waters shall be collected prior to wash-down in order to determine the chemical properties of the effluent. Separate representative samples are required for each specific material (roof and exterior walls must have separate analysis). Based on the results of the analysis, the effluent will either require capture, collection, and removal or be allowed to discharge to grade. Prior to disposition, 30 CES/CEIE coordination and approval is required. Prior to using any chemical cleaner, an MSDS must be submitted in order to determine whether the wastewater must be captured, collected and removed or allowed to discharge to grade. Wastewater that requires capture and removal may require additional sampling to determine proper disposal (IWTP or hazardous waste).

3.12.7 Drinking Water

a. Backflow Prevention: Ensure that new or renovated drinking water supply connections and valves are equipped with backflow assemblies to protect Potable water quality from contact with non-potable irrigation system backflows, stagnant water distribution lines, fire suppression system lines, and other backflow sourced cross-contamination. All new or renovated backflow assemblies must be tested and test results submitted to the cross-connection control program manager at the 30th Civil Engineering Utilities Shop.

b. Cross Connection: All abandoned potable water tanks, distribution lines, hydrants, and drinking water system components must be capped off, removed, permanently closed, or made inert. Maintained potable lines must be protected against cross-contamination by preventing contact with abandoned line segments or non-potable connections. If necessary, backflow assemblies must be installed to remediate the potential for cross- connections. Ensure all encountered storm sewer lines, sanitary sewer lines, industrial feeder lines, and drinking water distribution lines no longer needed are capped off, removed, permanently closed, or made inert in order to prevent inflow-infiltration issues, cross-connections, and/or health-related hazards.

c. Non-potable Water: All non-potable water supplies must be clearly identified as non-potable through use of visible markings or signage.

d. Potable Water Supply – Tanks: New or refurbished water tanks that have recently undergone interior coating maintenance must be VOC water-tested prior to placement into use as a water supply reservoir.

3.13 AIR QUALITY REQUIREMENTS

a. General**:** The Contractor, and their subcontractors, shall comply with all applicable, but not limited to: Federal and state Clean Air Acts; Santa Barbara County Air Pollution Control District (SBCAPCD) rules and regulations; SBCAPCD Permit To Operate (PTO) or Authority to Construct requirements (ATC); California Air Resources Board (CARB) regulations, standards, controls, and portable equipment registration requirements; any applicable US EPA Maximum Achievable Control Technology (MACT) standards; AFI 32-7040, Air Quality Compliance; AFI 32-7086, Hazardous Materials Management; 30 SWI 32-702, Environmental Management Air Emission Inventories; and base Fuel Use Monitoring Plan (FUMP) and Greenhouse Gas (GHG) Monitoring Plan. The contractor/subcontractor shall comply with all the applicable air quality requirements and implement accepted construction best management practices.

b. Authority to Construct or Permit to Operate**:** Prior to beginning an activity on VAFB which requires an ATC or PTO, the Contractor will coordinate with 30 CES/CEIEC. ATCs and PTOs are required for the installation of new generators, internal combustion engine powered equipment or devices, and modification or installation of boilers, steam generators, furnaces, process heaters, water heater units, paint spray booths, abrasive blasting booths, gasoline dispensing facilities, etc. The ATC or PTO approval can take up to 210 days. Due to strict emissions requirements, all equipment or processes requiring a permit must comply with applicable SBCAPCD rules and be approved by 30 CES/CEIEC Air Quality staff prior to procurement.

c. Violations: The Contractor shall immediately report air permit violations to 30 CES/CEIEC and to the Contracting Officer within 24-hours.

d. Submittals: The Contractor shall provide the following to the Contracting Officer.

(1) Air Emissions data, to include Greenhouse Gases

(2) 30 SW Form 154/155/156/157/158/159, prior to installation of an abrasive blast equipment; boiler hot water heater; internal combustion engine; fuel storage tank; degreaser or solvent cleaning machine; or other emission source.

(3) Boiler Emission Certification and/or Source Test with applicable compliance certification data that verifying compliance with applicable boiler, steam generator, furnace, process heater, and/or water heater regulations. Submittal required prior to purchase and installation.

(4) Generator engine specifications indicating compliance with Federal, State and Local regulatory requirements. Submittal required prior to purchase and installation.

(4) Any logs, records or reports required by SBCAPCD ATCs and/or PTOs as applicable.

3.13.1 Demolition, Site Clearing, Grading, Excavation, Backfilling, and Trenching

Contractor shall implement measures to comply with the requirements of SBCAPCD Rule 345, Control of Fugitive Dust from Construction and Demolition Activities. When

work involves demolition of load bearing wall; asbestos abatement and/or removal; or work trailer removal from VAFB, the Contractor shall submit the SBCAPCD "Notification for Renovation and Demolition" form to 30 CES/CEIEC for approval and signature a minimum of 15 working days prior to the proposed start date of demolition or trailer removal.

3.13.2 Paving

Contractor shall comply with the VAFB Cutback and Emulsified Asphalt Paving Materials Recordkeeping and Compliance Plan which incorporates the ROC content and recordkeeping requirements specified by SBCAPCD 329, Cutback and Emulsified Asphalt Paving Materials. This plan is only applicable to the use of cutback and emulsified asphalt paving materials as defined in the plan.

3.13.3 Coating, Painting, Adhering, and Sealing

Contractor shall use compliant coatings as specified in SBCAPCD Rule 323.1, Architectural Coatings; Rule 330, Surface Coating of Metal Parts and Products; Rule 351, Surface Coatings of Wood Products; and Rule 353, Adhesives and Sealants. The contractor must also comply with the operational requirements specified in SBCAPCD Rules. The Contractor shall not dispose of solvents by evaporation. Recordkeeping requirements can be met through enrollment in the HAZMART.

3.13.4 Abrasive Blasting and Corrosion Control

Contractor shall use CARB approved abrasive blasting media and implement dust control measures in order to prevent the creation of a nuisance dust incident. If the Contractor would like to use an abrasive blasting cabinet, the Contractor will contact 30 ES/CEIEC for assistance. The Contractor shall report the amount of materials used to 30 CES/CEIEC at the end of the contract or by January 31st for the previous year's activities, whichever occurs first.

3.13.5 Use of Portable Equipment Powered by Internal Combustion Engines

Contractor shall provide proof of registration in the California Air Resources Board (CARB) Portable Equipment Registration Program (PERP) for all portable equipment used for projects on VAFB with a rated brake horsepower of 50 bhp or greater. A 30 SW Form 156, Source Profiling Form, will be completed and submitted to 30 CES/CEIEC for all contractor owned and/or operated portable equipment operated on VAFB.

a. Fuel usage and hours of operation as required by the PERP regulation must be submitted to 30 CES/CEIEC at the end of the contract, or by 31 January for the previous year's activities, whichever occurs first.

b. If the equipment is not registered in the CARB PERP, all internal combustion engines (ICEs) greater or equal to the brake horsepower thresholds listed above must be properly permitted by the SBCAPCD for use at various locations within the county.

3.13.6 Gasoline/E-85 Storage Tanks

Contractor shall only use fuel storage tanks with a capacity less than 250 gallons and is only allowed one storage tank for each commodity (No multiple tanks for storing the same commodity). If the Contractor would like to use more than one tank for each

commodity or a tank greater than 250 gallons, prior approval is required by 30 CES/CEIEC. The Contractor shall submit a 30 SW Form 157, Source Profiling Form for Fuel Storage Tanks, detailing tank specific information to 30 CES/CEIEC prior to installing the tanks. The Contractor shall report the amount of gasoline and E-85 used to 30 CES/CEIEC at the end of the contract or by 31 Jan for the previous year's activities, whichever occurs first. A 30 SW Form 160, Recordkeeping Form Fuel Storage Tanks, shall be used for reporting fuel usage.

3.13.7 Ozone Depleting Substances (ODS)

When the Contractor is required to work on any equipment with ODS refrigerants, the Contractor shall comply with, at a minimum, all of the requirements identified in 40 CFR Part 82, Section 608, Ozone Protection Regulations: Stationary Refrigeration and Air Conditioning, Halon Handling of the Clean Air Act. The Contractor shall supply copies of the technician certifications to 30 CES/CEIEC. The Contractor shall report the amount of ODS used to 30 CES/CEIEC at the end of the contract, or by 31 Jan for the previous year's activities, whichever occurs first. If work is done on regulated refrigerant systems, the Contractor must also hold a current and active California contractor's license in the C38-Refrigeration Contractor licensing classification, or by an employee of a contractor with these qualifications. As applicable to project requirements, the Contractor is required to use non-Ozone Depleting Substance (non-ODS) replacement products found on EPA's Significant New Alternatives Policy (SNAP) at www.epa.gov/ozone/snap/lists/index.html. The Contractor must also comply with California Greenhouse Gas (GHG) requirements, regulating ODS/GHG with high global warming potential refrigerants. For ODS/GHG recordkeeping purposes the Contractor shall notify 30 CES/CEIEQ with the nameplate data and refrigerant type and capacity of any refrigerant system installed on VAFB.

3.13.8 Operation of Vandenberg Owned Permitted Equipment

All permitted equipment operated by the Contractor shall be operated in compliance with the requirements of the PTO. All records required by such permits will be maintained according to the permit and will be provided to 30 CES/CEIEC as requested.

3.13.9 Installation of Boilers, Hot Water Heaters, Furnaces, Process Heaters and Internal Combustion Engines

Contractor shall contact 30 CES/CEIEC prior to procurement to ensure selected boilers, water heaters, furnaces, process heaters and internal combustion engines comply with the most current emission standards, and greenhouse gas regulations.

3.14 ABOVE GROUND STORAGE TANK (AST) MANAGEMENT

a. General: The Contractor shall comply with, but not limited to: SBCAPCD rules and regulations; AFI 23-204, Organizational Fuel Tanks; AFI 32-7044, Storage Tank Compliance; 30 SWI 32-702, Environmental Management Air Emission Inventories; 30 SW Plans, 32-4002-C, Spill Prevention Control and Countermeasures Plan (especially Appendix 3, Figure 3-1 and 3-2); 32-7041-C, Wastewater Management Plan; 32-7043-E, Recoverable and Waste Petroleum Products Management Plan; and 32-7086, Hazardous Materials Management Plan.

b. Installing, modifying, or removal: The Contractor must provide the following information to 30 CES/CEIE for approval:

(1) Contract and/or Civil Engineer project number and emergency point of contact

(2) Time period the AST is expected to be in operational use

(3) Size and type of the AST and type of material to be used in the AST

(4) Maps to include site location, include GPS information if available

(5) Information on secondary containment (capacity equal to or greater than the tank)

(6) Overfill protection features (alarm, automatic shut off system, and fill sump)

(7) Access and security of the AST and spill/release cleanup procedures

8) Spill Prevention Plan and Rainwater Release Plan for secondary containment system (Reference the 30 SW Plan 32-7041C, Wastewater Management Plan, Appendix 11, Discharge to Grade Program and Characterization Form).

c. PTO and ATC requirements: When the Contractor uses a gasoline AST of 250 gallons or greater capacity, the Contractor shall coordinate with 30 CES/CEIE prior to acquiring a PTO and/or ATC.

(1) The Contractor shall provide a 30 SW Form 160, Air Quality Recordkeeping Form, Fuel Storage Tanks, to the Contracting Officer through 30 CES/CEIE.

d. Spill Prevention Control and Countermeasure Plan (SPCC): The Contractor shall provide a site specific SPCC to the Contracting Officer through, 30 CES/CEIE, for any storage tank capacity to be used for activities on VAFB.

(1) Containers, tanks, or vessels with capacity of 55 gallons or more must be added to the SPCC Plan. All containers, tanks, and vessels must have secondary containment or double-walled.

(2) *Construction Sites or Temporary Tank Use*: Portable equipment with fuel tank 55 gallons or more must be double-walled or positioned on a secondary containment structure.

(3) *New Tank Installation or Replacement*: Tanks must be double-walled or a secondary containment structure must be constructed to contain 100 percent of the tank capacity.

(4) All oil-filled equipment including but limited to transforms, transmitters, elevators, cooking oil, mobile towers, hydraulic equipment must be added to the SPCC Plan.

e. Reporting: The Contractor shall comply with release or spill procedures and immediately report any releases per 30 SW Plan 32-4002-A, the Hazardous Materials (HAZMAT) Emergency Response Plan, Chapter 4, Response Functions, Section A, Initial Notification of Response Functions, and the 30 SW Plan 32-4002-C, SPCC Plan, Appendix 3, paragraph 9, Spill Response.

f. Submittals: The Contractor shall provide the following to the Contracting Officer for approval through 30 CES/CEIE prior to the start of any Storage Tank activities on VAFB.

(1) AST technical information

(2) 30 SW Form 160

3.15 UNDERGROUND STORAGE TANK (UST) MANAGEMENT

a. General: The Contractor shall comply with, but not limited to: Clean Water Act; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); California Regional Water Quality Control Board; Santa Barbara County Air Pollution Control District rules and regulations; 30 SWI 32-702, Environmental Management Air Emission Inventories; AFI 23-204, Organizational Fuel Tanks; AFI 32-7044, Storage Tank Compliance; 30 SW Plans, 32-4002-C, Spill Prevention Control and Countermeasures Plan (especially Appendix 3); 32-7041-C, Wastewater Management Plan; and 32-7086, Hazardous Materials Management Plan.

   (1) USTs are permitted and must be coordinated before any action occurs.

   (2) USTs are permitted with the SCAPCD and the CUPA.

b. Coordination: Prior to installing, modifying, or removing a UST, the Contractor shall obtain approval from and provide required technical information to 30 CES/CEIE, Storage Tank Manager and Installation Restoration Manager.

3.15.1 SOIL CONTAMINATION MANAGEMENT

a. General: The Contractor shall comply with, but not limited to: Clean Water Act; Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); California Health and Safety Codes; California Regional Water Quality Control Board; and the California Department of Toxic Substances Control.

b. Encountering Contaminated Soil and USTs: The Contractor shall report to 30 CES/CEIE any unidentified potential or actual contaminated soil, UST, associated UST piping, and oil-based soil beneath storage tanks. The Contractor shall characterize, through sampling, and dispose of the soil or UST and its parts. The Contractor shall provide sample results to prove that the contaminated soil was removed. The Contractor shall obtain government approval prior to backfilling all "clean" excavated areas with clean fill material. The Contractor shall immediately notify the Contracting Officer of this situation. The Contractor shall take the appropriate actions to protect their personnel working around the area identified as potential or actual contaminated soil.

3.16 LANDSCAPING REQUIREMENTS

a. General: The Contractor shall comply with, but not limited to: the White House Memorandum, Environmentally and Economically Beneficial Practices on Federal Landscaping Grounds, 26 April 1994; AFI 32-7064, Integrated Natural Resources Management; Executive Order 13112; Vandenberg Facility Excellence Standards; and Vandenberg's Base Lands and Grounds Maintenance Management Plan. Refer to Natural Resources Conservation Service (NRCS) Specification for Range Planting 550A sections III, IV, V, and VI.

b. Restoration: The Contractor shall restore all landscape features disturbed during construction activities to the site's original or improved condition, as required.

c. Disturbed soil areas remaining upon completion of construction shall be permanently stabilized with native vegetation to prevent erosion due to wind and rain. It is recommended that a professional landscape contractor familiar with the local area be

contracted to provide landscaping and maintenance services. It is recommended that seed and mulch be applied at the beginning of the rainy season (15 October – 30 April). Planting may take place outside of the rainy season if sufficient irrigation can take place to ensure establishment. If construction or demolition is completed during the dry season, and it is not feasible to water, disturbed soil areas shall be stabilized with temporary soil cover, such as certified compost, as needed to prevent erosion and meet Construction General Permit requirements. Seeding then must take place as close to the beginning of the rainy season as possible.

Contractor's erosion control designer shall conduct a soil assessment to properly determine the condition of the soil and determine appropriate soil amendments if needed for successful establishment of California native seeds and vegetation.

Soils test will be taken to analyze macro and micro nutrients, pH and organic matter content to determine fertilizer and soil amendment needs. Fertilizer and pH modifier shall be added as needed to establish vegetation and ensure its success. Fine grade compost certified by the US Composting Council (USCC), and that has undergone macro and micro nutrient testing, may also be used in the proper proportions indicated by the soil testing. Native plants must not be over-fertilized. Seeds will be chosen based on the soils and their endemic species as described in the NRCS Ecological Site Description for the area and as approved by 30 CES/CEIEA. Native plants chosen must also be compatible with the texture, pH and chemistry of the soil to be planted. Native plant lists and seeding rates will be developed by Contractor and submitted to 30CES/CEIEA for approval.

The soil surface shall be loosened and properly prepared, or topsoil added to a sufficient depth to allow for seed germination as approved by the 30 CES/CEPM Project Manager. Seeding may be conducted by band seeding and fertilizing with grain drill, drilling with special range drills including no-till drills, or by broadcasting using a calibrated broadcast seeder or aircraft with appropriate calibrated machinery designed to evenly distribute seed. If a no-till drill is used, drill directly into existing annual plant community after excess mulch has been removed. If a drill is not used, proper seed bed preparation will be conducted by lightly disking or harrowing to loosen the top 1" of soil, and broadcast the seed. Sites with compacted surfaces will be disked or ripped 4-16 inches deep prior to seeding to prepare a proper seedbed. Hydro-seeding will be acceptable on slopes of 33.33% or greater only.

d. When the construction activity is covered by the Construction General Permit (Water Quality Order No 2009-0009-DWQ) refer to Section 3.4.2 and the Construction General Permit for Conditions for Termination of Coverage.

e. In unimproved areas, the seed mix shall be submitted to and approved by 30 CES/CEIEA Natural Resources Section. The seed mix shall include Triticale or other sterile annual grass to serve as a nurse crop and California native vegetation to provide erosion control. The Contractor shall ensure that any local or imported soil used shall be free of weed seeds. If local topsoil is salvaged and re-used, methods to successfully remove weed seeds shall be specified. Local topsoil shall be capable of sustaining healthy plant life. Any imported topsoil shall consist of fertile, friable soil, with similar texture, chemical and organic matter content characteristics of surrounding soil types. It shall be obtained from well-drained arable land and shall be reasonably free from subsoil, refuse, roots, stones larger than one inch in size, noxious seeds, sticks, brush, litter and other deleterious substances. Imported topsoil shall be capable of sustaining healthy plant life.

f. The soil surface shall be loosened and properly prepared, or topsoil added to a sufficient depth to allow for seed germination. The depth of loose soil is 6 inches at a minimum and up to 1 meter (39 inches) if acceptable to the 30 CES/CEPM Project Manager.

g. Certified weed-free wood or straw mulch shall be applied at a minimum rate of 3,000 lbs per acre covering 80% of the soil surface. Paper mulch shall not be used.

h. The Contractor shall adequately water seeded areas to achieve germination and permanent vegetation establishment. Certain native plants must not be over irrigated. Watering by truck or temporary irrigation system shall not cause erosion or disturb seed application.

i. Seed applied during the rainy season (15 November – 30 April) which has failed to germinate after 21 days shall be re-seeded and mulched. Seed applied during the dry season (May – October) which has failed to germinate after 45 days shall be re-seeded and mulched. Seed applied during the dry season must be irrigated until cover reaches an even minimum height of 6 inches. Please confirm minimum height requirements with Water Resource Manager and Natural Resources of 30 CES/CEI.

j. Erosion in seeded areas shall be repaired as soon as possible.

k. Temporary barriers shall be installed to prevent vehicles from damaging seeded areas.

l. Water Efficient Landscaping: Contractor and government shall select drought-tolerant plants.

3.17 GREEN PROCUREMENT PROGRAM (GPP)

a. General: The Contractor shall comply with the Government's Green Procurement Program (GPP), formerly known as Affirmative Procurement (AP), requirements include, but are not limited to: Section 6002, Federal Procurement, of the Resource Conservation and Recovery Act; (RCRA); Executive Order (EO) 13423, Strengthening Federal Environmental, Energy and Transportation Management; EO 13150, Federal Workforce Transportation; EO 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use; EO 13221, Energy Efficient Standby Power Devices; AFI 32-7080, Compliance Assurance and Pollution Prevention; and 30 SW Plans, 32-7080, Green Procurement Program (GPP) Plan; and 32-7042, Solid Waste Management Plan.

b. GPP: The Contractor's green procurement program shall use specified Environmental Protection Agency's Comprehensive Procurement Guidelines (EPA-CPG, http://www.epa.gov/cpg/products) materials with recycled and recovered content as the minimum standard. The Contractor shall consider other green materials and products not listed, but commonly used in industry outside of the Government as a means of further reducing hazardous waste and solid waste. The Contractor shall ensure these materials and products meet the requirements of the specifications, must not delay the progress of construction, and must not be cost-prohibitive. The Government's Green Procurement programs are mandated to use recycled and recovered materials and products identified in the EPA-CPG. The Contractor shall use the Recovered Materials Determination Form (RMDF) to document the products that fall into the Recycled Content Product categories.

c. Mandatory Products: Contractors shall use products made from biobased materials, rapidly renewable materials, and certified wood.

d. Contracts over $100,000: The Contractor, on completion of the contract, shall estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of post-consumer material content, per FAR Clause 52.223-9.

e. Submittals: The Contractor shall provide the following to the Contracting Officer for any project on VAFB that contains EPA-CPG items.

(1) A Recovered Materials Determination Form (RMDF) (paragraph b).

(2) An Estimate of Percentage of Recovered Material Content for EPA-Designated Products (paragraph d).

3.18 ENERGY USAGE MANAGEMENT

a. General: The Contractor shall comply with, but not limited to: the Energy Policy Act (EPACT), along with its amendments to the National Energy Conservation Policy Act, as specified in Subtitle F of EPACT 1992 and EPACT 2005; Executive Order (EO) 13423, Strengthening Federal Environmental, Energy and Transportation Management; EO 13221, "Energy Efficient Standby Power Devices; 30 SW Plans 32-7080, Green Procurement Program (GPP) Plan; 32-7042, Solid Waste Management Plan; and the Vandenberg Energy Management Plan.

b. Optimize Energy Performance: Use Energy-Efficient Products listed under the Energy Star® and the Federal Energy Management Program (FEMP) Energy-Efficient Products lists, including appliances and equipment used in building construction and renovation projects, computers, peripherals, fax machines and Low Stand-by Power items. Also, generating power from renewable resources must also be implemented, as applicable to the program requirements. Product information and sources of supply are available at the following links:

(1) Energy-efficient products and services: Energy Star®, Low Standby Power and Federal Energy Management Program (FEMP) Energy Efficiency

(2) Renewable energy sources: DOE Energy Efficiency and Renewable Energy.