
AF 01355 (November 2003)
UNITED STATES AIR FORCE PAFB/CCAFS

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SECTION 01355

 ENVIRONMENTAL PROTECTION
 11/03

PART 1 GENERAL

1.1 SUMMARY

The requirements of this Section apply to, and are a component part of, each section of the specifications.

1.2 REFERENCES

The publications listed below form a part of this section to the extent referenced:

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

ARI 740 (1998) Standard for Refrigerant/Recovery
 Recycling Equipment

FLORIDA ADMINISTRATIVE CODE (FAC)

FAC Chapter 40C-2 (2002) Permitting of Consumptive Uses of
 Water

FAC Chapter 62-730 (2002) Hazardous Waste

U.S. AIR FORCE (USAF) 45TH SPACE WING (SWI)

45 SWI 32-7001 (2000) Exterior Lighting Management

AFFARS Subpart 5323 (AFAC 96-24: June 1999) Hazardous Material
 Identification and Material Safety Data -
 General

AFI 32-7086 (1997) Hazardous Materials Management

OPLAN 19-14 (1998) Petroleum Products and Hazardous
 Management

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

29 CFR 1926 (2002) Safety and Health Regulations for
 Construction

40 CFR 261 (2002) Identification and Listing of

Hazardous Waste

40 CFR 262	(2002) Standards Applicable to Generators of Hazardous Waste
40 CFR 265	(2002) Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 761	(2002) Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions

UNITED STATES CODE (USC)

DFARS Subpart 223.3	(2001) Commercial Item Purchasing Financing
DFARS Subpart 252.223-7001	(1999) Hazard Warning Labels
EO 13101	(1998) Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition
FAR Part 23	(2002) Environment, Conservation, Occupational Safety, and Drug-Free Workplace
FAR Subpart 52.223-3	(2002) Hazardous Material Identification and Material Safety Data
FED-STD-313D	(1996) Material Safety Data, Transportation Data and Disposal Data
PUBLIC LAW 102-484	(1993) National Defense Authorization Act, Title III, Section 326
RCRA 6002	(1999) Guidance on Conducting Inspections of Federal Facilities

1.3 SUBMITTALS

The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES in sufficient detail to show full compliance with the specification:

SD-01 Preconstruction Submittals

The Contractor shall submit documentation for completed RCRA hazardous waste training prior to generating any waste.

The Contractor shall provide a list of all hazardous materials to be incorporated into the project including the Material Safety Data Sheet.

Forecast of Contractor's Hazardous Waste Generations form.

Lead-Based Paint Compliance Plan.

SD-03 Product Data

Copies of all laboratory analyses must be provided to the Contracting Officer. The Contractor shall provide equipment description, serial number, and location. Analyses indicating less than 50 ppm are considered non-PCB containing equipment.

SD-06 Test Reports

Contractors shall submit to the Contracting Officer a report itemizing all AP approved items used in the project.

Contractors shall submit to the Contracting Officer a written justification for all items on the EPA CPG list that are used but not AP approved.

NOTE: The following three paragraphs apply to Lead Based Paint. Delete if Lead Based Paint abatement is not identified.

The Contractor shall be responsible for sampling all wastes to determine whether they are hazardous or non-hazardous. Laboratory analyses of waste samples from site shall be submitted. All laboratory analyses shall include the laboratory name, the EPA certification number, and the EPA approved method code used for the analysis.

Provide sampling and laboratory analysis of wastes generated by the Contractor and submit analysis results.

If analysis results indicate the waste is a hazardous waste, the Contractor shall submit Records of all tests on hazardous wastes.

SD-07 Certificates

The Contractor shall provide data indicating actual monthly quantities of hazardous material used, stored, and hazardous waste generated. The Contractor shall submit copies of signed internal manifests to the Contracting Officer monthly.

SD-11 Closeout Submittals

Contractor shall submit Certification of completion and required documentation for completion of all environmental permits prior to the final inspection.

Should the Contractor HAZMAT requirements change during the contract performance period, the HAZMAT requirement changes shall

be submitted to the Contracting Officer for approval

The Contractor shall submit a list of HAZMAT usage to the HazMart Pharmacy for loading into/updating the 45 SW HAZMAT tracking system.

As part of the project completion requirements, the Contractor shall provide a close out HAZMAT report to the Contracting Officer.

1.4 ENVIRONMENTAL REQUIREMENTS

1.4.1 General Conditions

It is the Contractor's responsibility to ensure that all work to be accomplished will be in compliance with federal, state and local environmental regulations. Contractor shall perform work in strict accordance with all conditions specified in the environmental permits. The required permits shall be obtained prior to start of construction.

Environmental Permits and Certification of completion shall be prepared and submitted to the Contracting Officer where required. All requirements of the 45th Space Wing OPLAN 19-14 (Waste Petroleum Products and Hazardous Waste Management Plan) shall be met.

The Contractor shall ensure all notification required by any permits or regulations have been made to the applicable regulatory agency through 45 CES/CEV.

To reduce adverse impacts to threatened and endangered sea turtles from artificial lighting operated on CCAFS, all exterior lighting proposed for this project must be designed and installed in accordance with the 45th Space Wing Instructions 32-7001 (45 SWI 32-7001), Exterior Lighting Management dated 26 Jul 00.

1.4.2 Certification

Contractor shall provide Certification of completion and required documentation for completion of all environmental permits prior to the final inspection.

1.5 MATERIAL HANDLING

1.5.1 Storage and Protection

Contractor shall be responsible for the storage and protection of all his materials, equipment, and wastes, whether incorporated into the job or not.

Hazardous Materials and Petroleum Product Containers shall be stored on an impervious surface on pallets and with proper containment in accordance with OPLAN 19-14. Incompatible materials shall be segregated and have separate containment systems. No materials or wastes shall be discharged on to land or to the storm sewers, sanitary sewers, etc. without prior approval from the Contracting Officer.

Small containers of fuel shall be:

- a. Maintained in metal lockers or structures and;
- b. Stored in Underwriters Laboratories, Factory Mutual, OSHA, or NFPA approved (listed) containers labeled 'Flammable - Keep Fire Away'

Flammables or any other volatile material shall not be stored or left overnight in any building, facility, or structure other than the locker. They must be removed at the end of each day and stored in an area designated by the Contracting Officer and the CCAFS Fire Prevention Section or removed from the installation.

Stored containers shall be sealed or covered. Leaking containers shall be pumped in another container or over-packed and removed from the storage area.

Flammable storage lockers or structures shall be located at least 50 feet from other buildings.

Wiping rags, drop cloths, paint brushes, and rollers shall be stored in covered metal containers at the end of each working day.

When floor finishes containing combustible or flammable liquids are used, all source of ignition will be eliminated and the area well ventilated.

1.5.2 Contractor Procedures for Hazardous Material Authorization

Contractor procedures for Hazardous Material Authorization shall be in accordance with FAR Requirements and AFI 32-7086.

The Contractor is responsible for ensuring compliance with these requirements by his employees and subcontractors.

Contractors who supply their own hazardous material (HAZMAT) for use in the performance of their contracts, shall obtain authorization prior to bringing HAZMAT on to 45th Space Wing Installations in accordance with FAR Part 23- "Environmental, Conservation, Occupational Safety, and Drug Free Workplace" requirements. FAR Part 23.3 - Hazardous Material Identification and Material Safety Data, FAR Subpart 52.223-3, DFARS Subpart 223.3, DFARS Subpart 252.223-7001, AFFARS Subpart 5323.2 and AFFARS Subpart 5323.302 and AFI 32-7086, Hazardous Materials Management. Contractors shall submit a HAZMAT Authorization Work Sheet, with the required supporting documentation, including a manufacturer specific Material Safety Data Sheet (MSDS) to the Contracting Officer (CO).

Should the Contractor HAZMAT requirements change during the contract performance period, the HAZMAT requirement changes shall be submitted to the Contracting Officer for approval (as stated above). This procedure shall be completed prior to introducing a new (not previously identified HAZMAT) or increasing quantities of a previously identified HAZMAT, onto the installation.

During the contract performance period at 30-day intervals and upon completion, the Contractor shall submit a list of HAZMAT usage to the

HazMart Pharmacy for loading into/updating the 45 SW HAZMAT tracking system. As part of the project completion requirements, the Contractor shall provide a close out HAZMAT report to the Contracting Officer. The HAZMAT report will determine final quantities of HAZMAT used during the contract or project performance period.

All Ozone Depleting Substance (ODS) acquisitions and usage shall be obtained and tracked through the HAZMAT Pharmacy. Excess existing Class 1 ODS disposition shall be processed through the HAZMAT Pharmacy.

**NOTE: See 45 SW Authorization/Tracking Exemption
 List Below For Material Not Requiring Reporting.**

**45th SPACE WING HAZARDOUS MATERIAL AUTHORIZATION/TRACKING EXEMPTION LIST
 (April 2002)**

ITEM NAME	SIZE	EXCEPTIONS
Acrylic Latex Caulk w/Silicone	Consumer Commodity	N/A
Air Freshener Class	Consumer Commodity	Aerosols with 1 ODS Propellant
Anti-Seize Tape (Teflon Tape)	All	N/A
Automobile Wax	Consumer Commodity	N/A
Baking Soda	Consumer Commodity	N/A
Batteries, Dry Cell/Alkaline	AAA-D, 9V, 6V	N/A
Correction Fluid	Consumer Commodity	Containing 1,1,1 Trichloroethane Industrial Concentrations
Detergents (Laundry/ Dishwasher/etc.)	Consumer Commodity	N/A
Dish/Hand Soaps/Compounds	Consumer Commodity	N/A
Duct Board (Used to Construct Air handling Ducts)	Standard Use	N/A
Dust mop Treatment Compound	Consumer Commodity	N/A
Eye Wash Additive	Consumer Commodity	N/A
Floor Finish Based	Consumer Commodity	Oil/Solvent
Floor Polish Remover	Consumer Commodity	N/A
Floor Sweeping Compound	Consumer Commodity	N/A
Floor Wax	Consumer Commodity	N/A
Flux	Standard Use	Acid Containing
Furniture Polish	Consumer Commodity	N/A
General Purpose Deodorant Class	Consumer Commodity	Aerosols with 1 ODS Propellant Industrial Concentrations
Glass Cleaner (Windex/ Glass Plus/etc.)	Consumer Commodity	N/A
Glazing Compound	Consumer Commodity	N/A
Glue Stick	Consumer Commodity	N/A
Insect Repellent (Off,etc.)	Consumer Commodity	Industrial Concentrations
Insecticide/Herbicide (Raid/	Consumer Commodity	Commercial Apps

**45th SPACE WING HAZARDOUS MATERIAL AUTHORIZATION/TRACKING EXEMPTION LIST
(April 2002)**

ITEM NAME	SIZE	EXCEPTIONS
Black Flag/Diazinon/etc.) etc.)		(Golf Course,
Joint Compound (For Sheetrock Work)	Consumer Commodity	N/A
Leak Detector (Soapy Water)	Consumer Commodity	N/A
Liquid Chlorine Bleach	Consumer Commodity	Greater Than 9%
Concentration		
Metal Polish	Consumer Commodity	Industrial Concentrations
Multi-Purpose Cleaner (409/ Simple Green, etc.)	Consumer Commodity	N/A
Neatsfoot Oil	Consumer Commodity	N/A
Print Cartridges/Printer Ribbon	Consumer Commodity	N/A
Rug/Upholstery Cleaner	Consumer Commodity	Industrial Concentrations
Shredder Oil	Standard Use	N/A
Soap (Toilet/Pumice/W/WO Lanolin/W Lotion)	Consumer Commodity	N/A
Stamp Pad Ink (All Colors)	Consumer Commodity	N/A
Superglue	Consumer Commodity	N/A
Talcum Powder	Consumer Commodity	Asbestos Containing
Technical Bees Wax	Consumer Commodity	N/A
Tire/Rubber Lubricant	Standard Use	N/A
Toilet/Porcelain Cleaner (Soft-Scrub/etc.)	Consumer Commodity	Acid Containing
Toner (Direct/Indirect/Kits/ Print Cartridges)	Standard Use	N/A
Urinal Cakes	Consumer Commodity	N/A

1.5.2.1 Definitions

Hazardous Material (HAZMAT)- The term HAZMAT encompasses all material (including medical supply items) covered under the EPCRA TRI reporting requirements, the OSHA Hazard Communication Standard, all Class I and II Ozone Depleting Substances (ODS), which can reasonably be anticipated to generate a hazardous waste. Reference FAR Part 23.301 definition in the latest version of FED-STD-313D, Tables I & II. It does not include munitions or hazardous waste.

Consumer Commodity - Quantity/container purchased for normal household use.

Standard Use - Product (quantity) normally purchased to service specific equipment/procedure.

1.5.3 Cleanup and Disposal

**NOTE: THE FOLLOWING PARAGRAPH IS TO BE USED FOR
CCAFS ONLY.**

[All wastes generated by the Contractor shall be managed in accordance with all federal, state, local and installation regulations and directives. The Contractor shall be responsible for sampling all wastes to determine whether they are hazardous or non-hazardous. Laboratory analyses of waste samples from site shall be provided to the Contracting Officer. All containers utilized for the management of wastes must be new and meet the Department of Transportations performance oriented packaging requirements, and be compatible with the waste. All containers must be labeled to accurately reflect the contents. All other requirements identified in Appendix F of OPLAN 19-14 must be met. The Contractor shall be responsible for the off-site disposal of solid non-hazardous waste. The Contractor shall assume all liabilities for improper disposal. Disposal of any liquid non-hazardous wastes to the CCAFS sewage treatment facilities must be approved by the Contracting Officer and coordinated with the Wastewater Treatment Plant.]

**NOTE: THE FOLLOWING PARAGRAPH IS TO BE USED FOR
PAFB ONLY.**

[Disposal of any wastes or material to the Base sewage treatment system must be approved by the Contracting Officer in writing and coordinated with Base Environmental Office. Management and disposal of any materials or non-hazardous wastes and any cleanup of contaminated property shall be in accordance with federal, state, county regulations at no additional cost to the government. Hazardous wastes shall be managed by the Contractor in accordance with 40 CFR 262 and FAC Chapter 62-730 at the Contractors expense, and shall include the following at a minimum: management of one or more hazardous waste accumulation sites; provide portable fire extinguishers, eyewash stations and required signs for each hazardous waste accumulation site; provide appropriate Department of Transportation (DOT) containers for storing hazardous wastes; properly mark and label containers; perform and document required weekly hazardous waste accumulation site inspections; provide spill equipment; provide drum handling equipment; provide sampling and laboratory analysis of wastes generated; submit analysis results to the Contracting Officer; request hazardous waste disposal services through the Contracting Officer for hazard determination; prepare internal manifest and deliver the drums of hazardous waste to the designated on-base storage facility within timeframes specified by the Government. Locations of accumulation sites shall be approved by the Government prior to generating hazardous waste. Contractor shall provide enclosed, lockable storage for hazardous waste containers.]

The Prime Contractor shall be responsible for ensuring subcontractors are in compliance with all hazardous waste requirements.

1.5.4 Fire and Chemical Spills

The Contractor shall notify the Base Fire Department (Dial 911 from any base phone or [867-7911 from cellular phones on CCAFS]) [494-7642 from cellular phones on PAFB]) in the event of any fire or release of any chemical into the environment, including air emissions and spills inside or outside of a building. The Contractor shall also notify the Contracting Officer.

1.6 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

If known historical or archaeological resources exist within the Contractor's work area, and have been designated on the contract drawings, the Contractor shall install protection for these resources as shown on the drawings and shall be responsible for their preservation during the contract.

If the Contractor observes items that may have historical or archaeological value, such observation shall be reported immediately to the Contracting Officer so that the appropriate authorities may be notified and a determination can be made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in the destruction of the resources and shall prevent his employees from trespassing on, removing or otherwise damaging such resource. For the purpose of this clause, resources shall be defined as arrowheads, Indian pottery, bones (animal or human), and any man-made artifact which predates Air Force Occupation 45th Space Wing Property.

1.7 ENDANGERED SPECIES

Threatened, endangered, and other protected species and/or their habitat may be impacted by the work. The following species may be affected: Sea Turtles, Gopher Tortoise, Indigo Snake, Least Tern, Florida Scrub Jay and Southeastern Beach Mouse.

Impacts to protected species will be addressed in the appropriate National Environmental Protection Act (NEPA) documentation. If NEPA documentation has not been prepared/approved, the Contractor must notify the CEV Environmental Office through the Contracting Officer immediately so that impacts to protected species may be properly addressed.

If the Contractor suspects the presence of any protected species, the Contractor shall immediately notify the 45 CES/CEV through the Contracting Officer. Additionally, if any bird nests are observed in the work area, the Contractor shall immediately notify 45 CES/CEV through the Contracting Officer.

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

1.8 CONNECTION TO EXISTING WATER OR SEWER LINES

Contractor shall obtain written approval from the Contracting Officer a minimum of 14 calendar days prior to scheduling connection to existing water or sewer lines to ensure all applicable environmental permits are obtained prior to connection.

1.9 HAZARDOUS WASTE

The Contractor shall provide the Contracting Officer with documentation for completed RCRA hazardous waste training prior to generating any waste per 40 CFR 265.16. All individuals involved in generating waste must be properly trained. If any waste is determined to be hazardous, as defined in 40 CFR 261, the Contracting Officer must be notified immediately. All hazardous waste shall be managed IAW State and Federal regulations by the Contractor and shall be turned over to the Air Force for disposal under the Air Force's EPA identification number.

Contractor shall notify the Contracting Officer immediately if any contaminated soil, ground water or suspect debris is encountered during excavation, demolition or construction of the project.

At the pre-construction conference, the Contractor shall provide the Contracting Officer with a list of all hazardous materials to be incorporated into the project including the Material Safety Data Sheet in accordance with DFARS 52.223-3, Hazardous Material Identification and Material Safety Data. The list shall contain a maximum one time usage quantity, maximum storage quantities, storage location and Material Safety Data Sheets. The Contractor shall make available to the Government any information required concerning materials, processes, or application to enable the Government to determine if the waste generated by the Contractor is hazardous. The Contractor shall complete and provide to the Contracting Officer, at the pre-construction conference, a Forecast of Contractor's Hazardous Waste Generations form. The Contractor shall provide data indicating actual monthly quantities of hazardous material used, stored, and hazardous waste generated. The Contractor shall submit copies of signed internal manifests to the Contracting Officer monthly.

1.9.1 Asbestos

Asbestos Containing Material (ACM) may be hazardous and requires special handling and disposal procedures. If the Contractor suspects the presence of ACM not shown on the drawings or must disturb ACM which is not part of the contract, the Contractor shall immediately inform the Contracting Officer. The Contracting Officer will determine whether removal of the questionable material is required and who will accomplish the removal. The Contractor shall not disturb, remove, enclose, or otherwise cause a potential asbestos fiber release.

[This project contains no known ACM. In the event ACM is found and must be removed, removal of ACM is normally accomplished by the Government through the use of a separate Asbestos Removal Contractor. However, should the Contracting Officer deem necessary, the Contractor shall be tasked to perform ACM removal by issuing a change to the contract in accordance with

the changes clause and all federal, state, local and Air Force requirements.]

[ACM has been identified on the drawings in the contract area. Removal of ACM will be through the use of a separate Asbestos Removal Contractor. However, should the Contracting Officer deem necessary, the Contractor shall be tasked to perform ACM removal by issuing change to the Contract in accordance with the changes clause and all federal, state, local and Air Force requirements.]

[ACM has been identified in the contract work area. Removal of the ACM is included in the Contract as shown on the plans and in the specifications. The Contractor shall comply with all Federal, State and Local Regulations concerning the removal and disposal of asbestos containing materials and the protection of all personnel working in and around the worksite.]

[Contractor shall not proceed with asbestos abatement until: 1. 10 day notification has been completed to FDEP (if required); 2. Contractor has an approved Asbestos Abatement Plan; [approval for CCAFS projects shall be provided by 45 CES/CEV;][approval for PAFB project shall be provided by 45 ADOS/SGGB (Bioenvironmental Engineering)].]

Contractor shall not use any materials containing asbestos and shall be liable to the Government for all costs incurred to clean up, handle, remove and dispose of any ACM resulting from the Contractor's actions or non-actions that do not comply with the requirements of this section.

1.9.2 Heavy Metals in Paint and Coatings

[Lead-based paint has not been identified in the contract work area. If the Contractor suspects the presence of lead-based paint not shown on the drawings or must disturb lead-based paint which is not part of the contract, the Contractor shall immediately inform the Contracting Officer. The Contracting Officer will determine whether removal of the questionable material is required and who will accomplish the removal.]

[Lead-based paint has been identified in the contract work area. Lead-based paint removal can create potential health hazards for workers. All applicable provisions of standards and requirements listed in this specification and Occupational Safety and Health Administration requirements 29 CFR 1926.55, 29 CFR 1926.62, and 29 CFR 1926.1127 shall be observed by the Contractor. The Contractor shall submit a Lead-Based Paint Compliance Plan to the Contracting Officer for approval by the Bio-environmental Engineer, 45SW ADOS/SGGB, Patrick AFB, FL 32925, in accordance with 29 CFR 1926.62 or 29 CFR 1926.1127 as applicable. Plan must be approved prior to starting work.]

[The Contractor shall comply with all federal, state and local regulations concerning ambient air quality standard for lead in areas surrounding the lead paint removal operations. Removal of lead-based paint with abrasive blasting, high pressure water streams, power tools, etc. can produce emissions containing lead in excess of this standard. Air sampling for lead shall be conducted by the Contractor to ensure compliance with these and all other applicable standards. Environmental controls shall be

established prior to any lead-based paint removal.]

[Lead-based paint waste may be hazardous waste. All loose paint, paint chips, blast media and any other suspected contaminated soil residue shall be collected, containerized, and labeled. Wash and rinse water shall be containerized and sampled. The Contractor shall obtain written authorization from the Contracting Officer prior to discharging process waters to sanitary sewer or grade. Wash and rinse water shall not be permitted to flow to surface waters or storm sewers. Containerized waste of all toxic metals shall be tested utilizing the Toxic Characteristic Leaching Procedure. An independent testing laboratory shall perform the testing. If analysis results indicate the waste is a hazardous waste, the Contractor shall manage the waste in accordance with paragraphs titled, "Cleanup and Disposal" and "Hazardous Waste" of this section. All waste shall be managed in accordance with OPLAN 19-14. Records of all tests on hazardous wastes shall be provided to the Contracting Office.]

Contractor shall not use lead-based paint and shall be liable to the Government for all costs incurred by the Government from the Contractor's failure to comply with the requirements of the contract documents, including but not limited to costs for fines and penalties and the cost to clean up, handle, remove and dispose of any lead-based paint or lead-based paint residues.

Prior to performance of any work that will result in disturbance of lead containing materials, the Contractor shall have a site specific health and safety plan that indicates measures the Contractor will take to prevent exposure to workers and to adjacent, unprotected personnel. Work performed under OSHA standards 29 CFR 1926.62 and 29 CFR 1926.1127 for lead and cadmium in construction, respectively, must be overseen by an industrial Hygienist certified by the American Industrial Hygiene Association.

The Contractor shall be liable to the Government for all costs incurred by the Government from the Contractor's failure to comply with the requirements of the Contract documents, including but not limited to costs for fines and penalties and the cost to clean up, handle, remove, and dispose of any lead-based paint or lead-based paint residues.

1.9.3 Ozone Depleting Chemical Limitation

NOTE: In accordance with AFI 32-7086, Chapter 4, paragraph 4.4, the Air Force will not develop or procure any new weapon or facility systems scheduled to remain in the Air Force inventory beyond 01 January 2020 that require Class II ODS in their operations or maintenance. The Air Force will not modify any existing weapon or facility systems scheduled to remain in the Air Force inventory beyond 01 January 2020 in any manner that adds requirements for Class II ODS in their operations or maintenance. Any one of the three Air Force SAO approval authorities may grant an exception to these prohibitions. The SAO approval process for granting

such an exception will be the same as described in paragraph 4.3.2 of this AFI.

In accordance with the National Defense Authorization Act for Fiscal Year 1993, Title III, Section 326 (PUBLIC LAW 102-484), the Contractor shall not make use of, nor provide to the Government, any chemical, solvent, material, or any system making use of materials, classified as a Class I Ozone Depleting Chemical (ODC). Class I ODC's include chlorofluorocarbons (CFC's -11, -12, -113, -114, -115, -13, -111, -112, -211, -213, -214, 215, 126 and -217), carbon tetrachloride, methyl chloroform, methyl bromide, HC-140A/Methyl Chloroform, HC-10/Carbon Tetrachloride, and Halons 1211, 1301, 1202, 2402, and 1011. Contractor shall also comply with the requirements identified in Section 608 of the "Clean Air Act".

Venting of ODCs into the atmosphere is prohibited. ODCs must be recovered and recycled. ODC recovery operations must be performed by trained technicians using EPA approved recovery equipment. ODCs must be recovered and recycled prior to excessing containing equipment. Excessed ODC equipment must be properly disposed of. All refrigerant leaks/releases, greater than 25 lbs must be reported to [45 CES/CEV for CCAFS projects] [to 45 CES/CEVC (Environmental Flight) for PAFB projects].

Contractors working with Class I ODC refrigerants shall comply with all requirements identified in this Section, paragraph entitled "Refrigerant Recovery", and Section 603 of the "Clean Air Act".

1.9.4 Removal, Handling And Disposal Of Hazardous Material And Waste

All wastes generated by the Contractor shall be managed in accordance with all federal, state, local and installation regulations and directives. The Contractor shall be responsible for sampling all potentially hazardous wastes to determine whether they are hazardous or non-hazardous. Laboratory analyses of waste samples shall be provided to the Contracting Officer. All containers utilized for the management of wastes must be new and meet the Department of Transportations performance oriented packaging requirements and be compatible with the wastes. All containers must be labeled to accurately reflect the contents. All other requirements identified in Appendix F of OPLAN 19-14 must be met. The Contractor shall be responsible for the off-site disposal of non-hazardous waste. The Contractor will assume all liabilities for improper disposal. Disposal of any liquid non-hazardous wastes to the CCAFS sewage treatment facilities must be approved by the Contracting Officer and coordinated with the Base Wastewater Shop.

Non-salvageable material and debris shall be removed from work areas and disposed of daily. The Contractor may use Cape Canaveral Air Force Station (CCAFS) landfill for disposal of CCAFS and PAFB Construction and Demolition (C&D) debris and asbestos waste per the conditions of the FDEP permits. However, CCAFS landfill is mandatory for asbestos disposal. For quantities larger than 90 tons/day for C&D debris and 10 cubic yards/day for asbestos, the disposal should be coordinated with 45 CES/CEV and landfill operators through the Contracting Officer to allow for planning for the expected number of trucks per day to avoid operational issues. The Contractor is

responsible for accurately completing and coordinating the attached landfill use approval forms. An authorized Air Force Contract Monitor or a CE Representative must sign these forms. The authorization form must accompany the first vehicle working on the project number and contract number at the landfill entrance. As soon as the number of loads is exceeded, the Contract Monitor or Civil Engineering Representative must re-authorize the form.

The CCAFS Landfill is a State permitted Construction and Demolition (C&D) debris Landfill. Only refuse directly associated with construction or demolition activities will be accepted.

The hours of operation for the landfill are 0730-1130 and 1215-1500 Monday through Friday for C&D debris. Asbestos waste is accepted from 0730-1130 and 1215-1400 only on Tuesdays and Thursdays with 24 hour notice to the landfill operator through the Contracting Officer. The landfill is closed on weekends and holidays. Landfill available days and hours are subjected to change. Contact the landfill operator through the Contracting Officer to arrange for delivery. Vehicles must check in with attendant and be inspected prior to disposal of any material(s).

Concrete shall be separated from other C&D debris since concrete is disposed of at the landfill in separate cells. Concrete must be no larger than 36 inches in any direction with no more than 18 inches of protruding rebar.

Road demolition debris such as asphalt millings and chunks and lime rock are accepted by the landfill subject to the quantity limitations of the FDEP permits. Contact CHS Environmental through the Contracting Officer for guidance.

Note that the Landfill will not accept the items listed below. Disposal of these items will be coordinated with the referenced organization. Details on organizational contacts and disposal procedures will be provided by the Government at the preconstruction meeting.

- a. Polychlorinated biphenyls (PCBs); contact 45 CES/CEV through the Contracting Officer to arrange for drop off at Facility 44200.
- b. Garbage items of any kind; Use dumpsters or Brevard County Landfill.
- c. Paper, this includes, but is not limited to, office paper, newspapers, and magazines; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- d. Cardboard of any type; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- e. Cans or Bottles; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- f. Tires; CHS Environmental through the Contracting Officer for disposal guidance.

- g. Pressure Treated/Painted Wood or Lumber; use Brevard Co. Landfill.
- h. Recyclable wood, broken pallets, no bolts, not painted or treated, use appropriate CCAFS "wood recycling only" marked dumpsters.
- i. Plastic Sheeting; use Brevard Co. Landfill.
- j. Tarps; use Brevard Co. Landfill.
- k. Fluorescent Light Bulbs; contact 45 CES/CEV through the Contracting Officer to arrange drop off at Building 1708.
- l. Any metal that can be salvaged; contact DRMO Yard through the Contracting Officer to arrange for drop off.
- m. Wet Paint Cans; contact CHS Environmental through the Contracting Officer for disposal guidance.
- n. Steel cable; contact DRMO through the Contracting Officer for salvage instructions.
- o. Good Pallets; use DRMO or SGS Supply, Facility 1621.
- p. Brush (land clearing) or Yard Trash; use Brevard Co. Landfill.
- q. Sludge; contact CHS Environmental through the Contracting Officer for sampling and disposal.
- r. Batteries; they should be double-wrapped or the terminals isolated with tape. Contact DRMO through the Contracting Officer for delivery of magnesium, silver, carbon zinc, and lead acid batteries. Contact 45 CES/CEV through the Contracting Officer to arrange for delivery of nickel cadmium, lithium, and mercury batteries at Facility 1708.
- s. Oil Filters; contact Recycling Office at PAFB to arrange for drop off.
- t. Liquid Waste of any kind; contact CHS Environmental through the Contracting Officer for disposal guidance.
- u. Aerosol Cans; contact 45 CES/CEV through the Contracting Officer to arrange for instruction and drop off at Facility 1708.

During the construction activities, the Contractor shall be responsible for the management of the waste in accordance with OPLAN 19-14 and will coordinate with 45 CES/CEV the establishment of hazardous waste accumulation sites as needed.

All spills of hazardous material shall be reported immediately and immediate attempts shall be made to limit the spread of such material. Call 911 and the Contracting Officer to report spills, giving name, location, injuries, what and how much spilled, source, and current status. Consult MSDS sheets prior to starting work for exposures and safe handling

procedures, personal protective equipment requirements, and first aid procedures.

The Contractor shall coordinate the management and disposal of fluorescent lamps, silent wall switches containing mercury and ballasts containing PCB with the 45 CES/CEV and in accordance with federal and state laws and Air Force regulations, and policies. The lamps and switches shall be managed as universal wastes. Contractor shall package fluorescent lamps, bag switches and collect ballasts and deliver them to the designated on-base storage facility at no additional cost to the Government in accordance with established base procedures as follows:

- a. Lamps must not be taped or fastened to each other and should be packaged to avoid breakage.
- b. Lamps must be packaged in cardboard boxes specifically designed to ship fluorescent lamps (packages similar to new lights without the internal cardboard filler).
- c. Lamps and cardboard containers must be kept dry.
- d. All containers must be taped closed on all sides.
- e. Containers must be marked with the number of lamps in the container and the length of the lamps.
- f. Affix a universal waste label and place the following words on the label, "Spent Mercury-Containing Lamps for Recycling (DOT Non-Regulated)"
- g. Each switch must be double-bagged and sealed.
- h. The ballasts containing PCB shall be collected by the Contractor in a new container meeting the Department of Transportation's performance oriented packaging requirements (UN1A2). The container must be properly marked with a PCB label.

These packaged lamps and bagged switches must be delivered to the universal waste site at Facility 1708 on CCAFS. This facility is open on Tuesdays and Thursdays between 1300 and 1400 hours. The bagged ballasts must be delivered to and off-loaded at Facility 44200 on CCAFS. The Contractor shall contact 45 CES/CEV through the Contracting Officer to make arrangements for delivery. [At PAFB contact Environmental office at 494-7288 for instructions.]

1.9.5 Refrigerant Recovery

Contact the Contracting Officer at least 5 days prior to demolition of existing AC equipment for notification of refrigerant recovery requirement.

Refrigerant will be recovered by others. The base Air Conditioning (AC) shop will salvage the window type AC units and will recover the Freon from the central units.

Existing refrigerant (including refrigerant in sealed coils, tubing, etc.)

shall be recovered from all existing AC equipment. The existing AC system shall be pumped down to near vacuum condition using the system compressor or a Contractor provided vacuum unit. The refrigerant shall be stored in the existing system receiver tank and/or a Contractor provided portable recovery/receiver tanks. All remaining refrigerant in the tubing system shall be recovered using an EPA Certified Refrigerant Reclamation "Portable Refrigerant Recovery Unit". Recovery shall be performed in accordance with ARI 740. All refrigerant shall be collected/stored in labeled and dated containers, each permanently identified as "Used Refrigerant" with the "Date Collected" added to each container. All refrigerant storage containers shall be transported off of CCAFS and properly disposed of off-site per all local, state and federal hazardous waste disposal regulations.

1.9.6 Removal and Disposal Of Electrical Potheads

NOTE: Include this paragraph only if electrical pothead disposal is required.

All potheads to be removed shall be transported to 45 CES/CEV Facility 44200 on CCAFS. Coordinate transport with the Contracting Officer. Prior to transport, each pothead shall be completely inspected to ensure insulating compound is not leaking and packaged on a wood pallet. If there is any evidence of leaking, the pothead must be double-bagged in plastic prior to being placed on the pallet. Leaking items that are not properly wrapped will be rejected at Facility 44200 on CCAFS unless immediately corrected by the Contractor.

NOTE: Use the following section only if PCB containing equipment requires removal.

1.9.7 Removal and Transportation of Electrical Equipment That May Contain PCB

The Contractor is responsible for determining the PCB concentration in accordance with 40 CFR 761 of dielectric fluid contained in electrical equipment effected by the contract. This determination can be made by referencing the current Air Force PCB database (maintained by 45 CES/CEV) and/or by sampling and testing. Note: Any item without a current (within seven years) analysis or manufacture certification on file shall be sampled by the Contractor. Copies of all laboratory analyses shall be provided to the Contracting Officer. The Contractor shall provide equipment description, serial number, and location. Analyses indicating less than 50 ppm are considered non-PCB containing equipment. Analyses indicating greater than or equal to 50 ppm but less than 500 ppm are considered PCB-contaminated equipment. Analyses greater than or equal to 500 ppm are considered to be PCB equipment.

Equipment containing PCBs: The Contracting Officer shall be notified immediately after a piece of equipment is determined to contain PCBs

(greater than the 50 ppm regulatory limit). This equipment shall be delivered to Facility 44200 on CCAFS. The Contractor is responsible for the safe transportation of this equipment to Facility 44200 on CCAFS. The Contractor is also responsible for off-loading this equipment into the facility. The Contracting Officer will make the necessary arrangements with the 45 CES/CEV to gain access into this secured facility and will provide 45 CES/CEV with a copy of the laboratory analyses. If the equipment has any leaks, the Contractor is responsible for repairing these prior to delivery to Facility 44200. No leaking equipment will be accepted into this facility. If a leak is severe and the item is small enough, the Contractor shall over pack the electrical equipment into a container meeting the Department of Transportation's performance oriented packaging requirements (UN1A2). If this is not a viable alternative, the Contractor shall be responsible for draining the dielectric fluid from the item. All liquids must be placed in proper DOT containers (UN1A1). The Contractor shall provide secondary containment for the equipment when the oil is removed. All containers shall be marked with a "Contains PCBs" label and the serial number of the equipment the oil was removed from should be noted on the top of the container(s). If any oil is spilled onto the ground, immediately notify the Contracting Officer and 911 so that emergency response personnel can be dispatched. The Contractor shall make every effort to contain the release while ensuring worker safety.

1.9.8 Removal, Transportation and Disposal of Non PCB Recorded Electrical Equipment

All electrical equipment determined to be non-PCB shall be transported to the Cape Canaveral AFS DRMO by the Contractor after all arrangements have been made by the Contracting Officer. The Contracting Officer will provide the necessary DD form 1348-1 for turn-in to DRMO. The Contractor shall include a laboratory analysis less than seven years old. DRMO must be contacted at least 48 hours prior to any items being delivered. DRMO will accept this equipment only if it is free of leaks. If the equipment has any leaks, the Contractor is responsible for repairing these prior to requesting turn-in to DRMO. All leaks are to be repaired immediately after they are discovered. If a leak is severe and the item is small enough, the Contractor shall over pack the electrical equipment into a container meeting the Department of Transportation's performance oriented packaging requirements (UN1A2). If this is not a viable alternative, the Contractor shall be responsible for draining the dielectric fluid from the item. All liquids must be placed in proper DOT containers (UN1A1). The Contractor shall provide secondary containment for the equipment when the oil is removed. All containers shall be marked with a "Non-PCB" label and the serial number of the equipment the oil was removed from should be noted on the top of the container(s). If any oil is spilled onto the ground, immediately notify the Contracting Officer 911 so that emergency response personnel can be dispatched. The Contractor shall make every effort to contain the release while ensuring worker safety. The Contractor assumes full responsibility if DRMO refuses the equipment because of leaks.

1.10 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction,

the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. The Contractor shall remove stone, soil, or other materials displaced into uncleared areas.

1.10.1 Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area, which are not to be disturbed, shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

1.10.2 Erosion and Sediment Controls

NOTE: This paragraph must be edited to reflect the specific requirements of the project. In place of the blank brackets, enter the name of the Installation, Facility, or Project Office. If the National or State Pollutant Discharge Elimination System Permit for Storm Water Discharges from Construction Sites over 5 acres of Land Disturbance is not required, but the project site is covered under an existing NPDES Industrial Storm Water Permit, the requirements of that permit will be added to this paragraph, shown on the drawing, and/or attached to this specification. Section 01356 is an Army specification and is located on the UFGS website listed as Section 01356A.

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. The Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs) [as indicated on the drawings] [as specified in Section 01356 STORM WATER POLLUTION PREVENTION MEASURES]. BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, Inlet and outfall protection, diversion channels, and sedimentation basins. [The

Contractor's best management practices shall also be in accordance with the [_____] National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP) which may be reviewed at the [_____] Environmental Office.] Any temporary measures shall be removed after the area has been stabilized.

1.10.3 Construction Dewatering

The Contractor shall discharge dewatering effluent to an upland area to promote recharge of the parent aquifer. Dewatering effluent may not be discharged to surface water. The Contractor shall perform all dewatering in accordance with FAC Chapter 40C-2. When dewatering manholes, if water in the manholes appears to be storm/groundwater that has infiltrated in, then discharge to grade at the site. If water in the manhole has obvious contamination (e.g., a visible sheen) then containerize this water and pump the remainder to grade. Do not pump water into canals, ditches, or other surface waters. Water from the manholes cannot be discharged to the Wastewater Treatment Facility (this is not a permitted activity).

1.10.4 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

1.10.5 Wetlands

NOTE: All wetlands on the site or adjacent to the site must be identified on the drawings and this paragraph edited accordingly. If the wetlands on site must be disturbed, the Designer is responsible for the coordination with the regulatory agencies during design for identification of Section 404 of the Clean Water Act permits whether the permit is an Individual, Nationwide, Regional, State, or Local 404 or similar permit. The Designer must coordinate any mitigation requirements for the project. If no wetlands are onsite or adjacent to the site, delete this paragraph in its entirety. Otherwise, the first sentence should normally remain intact. This will require the Contractor to be cognizant of the responsibility to protect wetlands regardless of whether they are identified on drawings or in the event site conditions have changed since design.

The Contractor shall not enter, disturb, destroy, or allow discharge of contaminants into any wetlands[.] [except as authorized herein.] The

Contractor shall be responsible for the protection of wetlands shown on the drawings as required by the contract documents and the applicable environmental permits. Authorization to enter specific wetlands identified shall not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries.

PART 2 PRODUCTS

NOTE: It is the responsibility of the designer to be aware of current EPA requirements for Affirmative Procurement and to determine the suitability of an EPA designated item in the work. Level of competition, delivery time, performance requirements and price should all be considered in making the determination.

2.1 POLLUTION PREVENTION/AFFIRMATIVE PROCUREMENT

The Contractor and all Subcontractors involved in this project shall comply with Air Force Affirmative Procurement (AP) requirements. Affirmative Procurement is the purchase of environmentally friendly products and services (e.g., products made from recycled or recovered materials). Federal agencies, their Contractors and Subcontractors are required to maximize the purchase materials on the list of "EPA Designated Guideline Items" with the minimum recycled or recovered materials content whenever practicable according to RCRA 6002 and EO 13101 (<http://www.ofee.gov/eo/13101.htm>). The list includes, but is not limited to:

CONSTRUCTION PRODUCTS

Structural fiberboard and laminated paperboard
 Railroad grade crossing surfaces
 Flowable fill
 Hydraulic mulch (paper or wood based)
 Cement and concrete materials containing ground granulated blast furnace slag and coal fly ash
 Parking stops
 Shower/restroom dividers
 Floor tiles
 Steel
 Patio blocks
 Latex paint
 Carpet
 Channelizes
 Cement and concrete
 Building Insulation

LANDSCAPING PRODUCTS

Lawn and garden edging
 Hydraulic mulch
 Plastic lumber

Park and recreation products
Park benches and picnic tables

Detailed information on EPA AP approved products and manufacturers providing these products is available at www.epa.gov/cpg/products.htm. Contractors shall maximize the purchase of AP approved items; that is, items that meet the minimum recycled or recovered material content guideline. Contractors shall provide the Contracting Officer with a report itemizing all AP approved items used in the project. Contractors shall also provide to the Contracting Officer a written justification for all items on the EPA CPG list that are used but not AP approved.

PART 3 EXECUTION (Not Used)

-- End of Section --