SECTION 01 57 20 JB CHS
(April 2020)
ENVIRONMENTAL

1 GENERAL

1.1 THIS SECTION COVERS OVERALL ENVIRONMENTAL REQUIREMENTS.

1.2 SUBMITTALS

a. Safety Data Sheets (SDS) for all potentially hazardous materials to be used during the project. This requirement is IAW AFOSH Standard 161-21, "Hazard Communication", paragraph 5.h (3) and (6).

b. Monthly Green Procurement Report to be submitted with monthly progress schedule for invoicing. See Section 01540.

c. Annual Green Procurement Report. See Section 01540.

d. Monthly Recycling Report to be submitted with monthly progress schedule for invoicing. See Section 01540.

e. Annual Recycling Report. See Section 01540.

1.3 CONSTRUCTION AND DEMOLITION DEBRIS

a. All waste materials generated by all work under this contract shall be handled, transported, stored, and disposed of off-base at no additional cost to the government, by the Contractor and his Sub-Contractors, at any time in accordance with all applicable federal, state, or local laws, ordinances, regulations, court orders, or types of rules or rulings having the effect of law, including, but not limited to the following:

1. Executive Order 11752, 17 December 1973.

2. Federal Water Pollution Control Act, as amended, 33 USC Sec. 1251 et. seq.

3. Clean Air Act, as amended 42 USC Sec.7401 et. seq.

4. Solid Waste Disposal Act, as amended, 42 USC Sec.3251 et. seq.

5. Federal Environmental Pesticide Control Act, as amended, 7 USC Seq 136 et. seq.

6. Endangered Species Act of 963, as amended, 16 USC Sec 153 et. seq.

7. Environmental Protection Agency guidelines on thermal processing and land disposal of solid waste (40 CFR 240 and 241).

b. The contractor shall recycle all recyclable materials as a result of demolition, to the maximum extent practicable to promote cost-effective waste reduction in contracted operations to support Executive Order 13101 goals of recycling and waste reduction. The contractor shall track the amount of demolition-generated recyclable materials, sorted by material type and tonnage throughout the life of the contract. The contractor shall

consolidate and provide this information to the contracting officer in a monthly report (see attached form, page 18). The contractor shall annually submit the final recycling report upon completion of each contract year of the contract to the contracting officer to summarize the total tonnage for each type of demolition-generated recyclable material. The monthly and annual reports shall be sent with the appropriate monthly invoice to the contracting officer.

c. Disposal of all hazardous wastes shall be coordinated through 628 CES/CEIE. The contractors shall provide copies of permits for transporters and treatment, storage, disposal (TSD) facilities the contractors intend to use. The contractor will identify all wastes on the government provided Waste Stream Characterization Process Document. The contractor shall provide all testing/analysis data and waste profiles to 628 CES/CEA for review and signature. Additionally, contractors shall coordinate with 628 CES/CEA to have authorized 628 CES/CEA personnel sign the hazardous waste manifests for shipment of hazardous wastes. Disposal of all PCB wastes and Universal Wastes shall also be coordinated through 628 CES/CEIE.

1.4 HAZARDOUS MATERIALS (HAZMAT)

a. Laws, Ordinances and Regulations:

1. The Contractor shall comply with all applicable requirements stated in the Toxic Substance Control Act of 1976.

2. Organizations and workers under contract to the AF are subject to the same environmental laws, regulations, and Executive Orders as the AF. To remain in compliance with environmental laws, contractors are required to register all HAZMAT with 628 CES/CEIE.

(a) JB CHS Transient Organization Material Inventory Form, (attached electronically below), shall be filled out completely and submitted to Contracting for authorization prior to use of the hazardous material. Throughout the contract, HAZMAT usage must be reported.

(b) For each individual HAZMAT, the contractor is required to provide a Safety Data Sheet (SDS). The contractor shall maintain a current SDS at the worksite for each HAZMAT stored or used on the installation and shall make SDS’s available during inspections.

(c) The following form can be used to report to the 628 CES/CEIE office the HAZMAT anticipated to be used on the job.

CONTRACTOR/TRANSIENT ORGANIZATION HAZARDOUS MATERIAL INVENTORY[1]

1. PRIME CONTRACTOR/ORGANIZATION:	2. PRIME CONT/POC	3. PHONE	4. FAX
	6. PRIME CONT EMAIL	7. CSA ID 04	8. CONT. CODE

10. CONTRACTOR SIGNATURE	11. WORKPLACE/BLDG	12. SUB-CONTRACTOR

14. CONTRACT ADMINISTRATOR/Charleston AFB OPR	15. CONTRACTING ADMINISTRATOR SIGNATURE	16. PHONE	17. FAX
19. Government QAE/OPR	20. SIGNATURE	21. PHONE	22. FAX

24. EXPECTED START DATE	25. EXPECTED END DATE	26. PROJECT/TASK DESCRIPTION

Product Name/Part Number	Material Manufacturer[2]	Stock Number[3]	Physical Form (S,L,G)	Amount & Unit of Issue[4]	Container Type	Max Amount Onsite at any Time [5]	Anticipated Amount Used for Project	Actual Amount Used During Period [6]	Pr

FOOTNOTES:

1. This form is used for initial approval of hazardous materials and to report subsequent usage. Include all materials, which contain an EHS, TRI, CERCLA hazardous substance, toxic chemical, generates a hazardous waste after use, and/or requires a Material Safety Data Sheet.
2. Attach and submit copy of MSDS of all products used with scheduled usage report
3. Identify National Stock Number if known. If unknown, leave blank, and Hazmart will complete.
4. Identify amount in container & the units gallon, ounces, lbs, etc.
5. Identify maximum amount present (stored Charleston AFB.
6. Report actual quantities used as directe reverse (Block 27)
7. See Table 1—Process Types for appropriat
8. Government will indicate authorization s (approved/disapproved).

CONTRACTOR/TRANSIENT ORGANIZATION HAZARDOUS MATERIAL INVENTORY[1]

Product Name/Part Number	Material Manufacturer[2]	Stock Number[3]	Physical Form (S,L,G)	Unit of Issue[4]	Container Type	Max Amount at a Time Onsite[5]	Anticipated Amount Used for Project	Actual Amount Used[6]	Pr

27. Usage Reporting Schedule

☐ Contract Term ☐ Monthly

COMMENTS:

TABLE 1—PROCESS TYPES

CODE	PROCESS DESCRIPTION	CODE	PROCESS DESCRIPTION
A	Asbestos removal and disposal	R	Fiberglass or composite applicat
B	Asphalt paving	S	Renovation, specify process
C	Abrasive blasting; specify substrate, blast media and surface area cleaned	T	Stationary internal combustion e burned, & hours of operation
D	Adhesives	U	Stationary internal combustion e burned, & hours of operation
E	Brazing	V	Sanding, specify substrate and s
F	Chemical or physical analysis	W	Surface coating, brush or roller
G	Cutting, oxy-fuel; specify substrate	X	Surface coating, spray applicati
H	Cutting, plasma arc; specify substrate	Y	Surface coating, HVLP spray app
I	Cutting, mechanical process, specify substrate	Z	Surface coating, airless spray ap
J	Construction, specify process	AA	Surface coating, electrostatic sp
K	Demolition, specify process	BB	Surface coating, thermal spray a
L	Degreasing operations using solvents	CC	Surface coating, spray applicati
M	Fuel combustion	DD	Surface coating, HVLP spray app
N	Grinding, specify substrate and surface area	EE	Surface coating, airless spray ap
O	Industrial boiler operations	FF	Welding, oxy-fuel; specify subst
P	Natural gas combustion	GG	Welding, electric arc; specify su
Q	Paint stripping, chemical	HH	Soldering, specify substrate and

28. Environmental Mgt Authorization	Date	29. Bioenvironmenta/Safey/Fire Review	Date	30. HAZMART Manag

3. All materials used in the performance of this contract shall be applied in strict accordance with manufacturers printed label instructions and all applicable EPA Standards.

4. No materials containing asbestos, lead, heavy metals with lead, cadmium, chromium, strontium, etc., or class I ozone depleting chemicals ODCs) are to be installed as a result of this contract. New facility systems scheduled to remain in the Air Force (AF) inventory beyond 1 January 2020 shall not require Class II ODSs in their operations or maintenance. Contractor must select alternatives that are EPA-Significant New Alternatives Policy (SNAP) program-approved with an ozone depleting potential of zero in accordance with 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. Contractors should also select low-global-warming-potential alternatives when feasible. Upon completion of this project, contractor shall submit written certification that no such materials listed above were installed/used during work on the project.

5. Disposal of Refrigerants

a. Additional requirements are applied to contractors requesting the usage of refrigerants. Furthermore, contractors handling refrigerants will provide 628 CES/CEIE with copies of the refrigeration technician's state compliant certification for working on refrigeration equipment.

b. Contractor must properly remove/contain refrigerant in properly labeled containers; do not cross contaminate/mix different types of refrigerant. Contractor responsible for containers; to be budgeted in contractor's bid. Removed Class I ODS's (CFC's R-11, R-12, R-114, R-500, and R-502; Halon's 1202, 1211, and 1301) and Class II ODS's (HCFC-22) shall remain property of the government and shall be shipped by the contractor directly to the DoD Ozone Depleting Substances (ODS) Reserve in Virginia. ODS Reserve does not accept containers filled with cross contaminated/mixed refrigerant types; contractor responsible for disposal costs if such containers are shipped/received. Contractor shall contact the ODS Reserve to confirm acceptance of the listed Class I and Class II ODS's prior to shipment. ODS Reserve contact information and Turn-In Procedures are available via the following link: https://www.dla.mil/Aviation/Offers/Services/AviationEngineering/OzoneDepRsrv.aspx

c. No Class I ODS, HCFC-22, or Halon refrigerants shall be purchased for use in government systems unless approved by the Government. In most cases, if these refrigerants are approved for use, they may be acquired from the ODS Reserve at no cost.

6. The contractor shall follow manufacturer's guidelines and professional recommendations for control of humidity, temperature, cleanliness and material handling relative to storage and use of all hazardous material.

1.5 HAZARDOUS WASTE

All hazardous waste generated within a project shall be handled, stored and disposed of at the projects expense in accordance with federal, state, local and Air Force regulations, with coordination of 628 CES/CEIE for manifest signatures. The contractor must also provide a completed Charleston AFB

"Contractor Waste Stream Characterization Process Document" with copies of analytical results to the base Environmental Flight. The Waste Stream Characterization Process Document must be provided well in advance of shipment to allow time for review and concurrence by CEA. The Waste Stream Characterization Process Document identifies the source and composition of the waste. The contractor must contact 628 CES/CEIE to obtain approval for all hazardous waste storage sites (Satellite Accumulation and <90 Day Storage Areas) prior to generation of hazardous wastes. The contractor is required to establish these sites in accordance with Joint Base Charleston Weapons storage requirements - including performing required inspections. The contractor must dispose of generated hazardous wastes within 90 days of the start of accumulation. When disposing of soil, a hazardous waste determination must be made. This can be done one of two ways; The Environmental Element (628 CES/CEIE) shall make this determination either through base knowledge or sample analysis. Potentially petroleum contaminated soil shall be sampled at a minimum for Total Petroleum Hydrocarbons (TPH) and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX). Toxic Characterization Leachate Procedure (TCLP) metals may also be required at 628 CES/CEIE's request.

1.6 UNIVERSAL WASTE

All universal waste (lamps, batteries, mercury thermostats, pesticides) generated during project shall be disposed of at the projects expense per applicable regulations, with coordination of 628 CES/CEIE. All universal waste disposals must be manifested through 628 CES/CEIE for approval and final release signature.

1.7 POLYCHLORINATED BIPHENYLS (PCBs)

It is JB CHS's policy to test all transformers for PCB's. Testing and disposal of transformers and other PCB waste shall be at the projects expense. Other areas of concern for PCBs include fluorescent light ballasts manufactured before 1978~ If the light fixtures are not verified as manufactured after 1978 or stamped as PCB Free, the ballasts are required to be collected separately and handled as PCB waste. For this process, collect all PCB potential ballasts in a suitable waste storage container with a PCB label (note date removed from service). All transformers and PCB waste disposals must be manifested through 628 CES/CEIE for approval and final release signature. All PCB wastes generated are required to be coordinated through 628 CES/CEIE for disposal within 90 days of removal. In addition, all new ballasts are required to be PCB Free.

1.8 GREEN PROCUREMENT - See Section 01540

1.9 PESTICIDE APPLICATION

The contractor shall provide pesticide application services at Charleston AFB, SC in accordance with the provisions of DoDI 4150.7, DoD Pest Management Program, AFI 32-1053, Pest Management Program, and all applicable federal, state, local, Department of Defense, and U.S. Air Force laws, regulations, instructions, plans and manuals. Contractor pesticide operations will conform to the requirements and procedures per the Charleston AFB Pest Management Plan.

Organizations and workers under contract to the AF are subject to the same Environmental laws, regulations, and Executive Orders as the AF. DODI 4150.7

and AFI 32-1053 require the Command Pest Management Consultant review and approve all Statement of Work or performance work statements for pest management contracts. All pest management contracts will be coordinated with the Charleston AFB Pest Management shop and reviewed by the HQ AMC Pest Management consultant. The Statement of Work will include the type and approximate quantity of pesticide intended for use. Approval must be obtained prior to any pesticide application.

In addition, contractors are required to coordinate all pesticide application with the base entomologist. This includes: providing the base a current Material Safety Data Sheet for (MSDS) the product being used; breaking the seal of unopened containers and mixing the pesticide in the presence of the base entomologist; and, reporting the amount and type of pesticide used each month. Previously opened and mixed pesticide products will not be accepted for use on base.

Per DoDI 4150.7 and AFI 32-1053, the contractor will provide contract pest management employees who have a current "S.C. Certified Applicator License" in the appropriate pest management categories to perform their duties prior to the start of the contract. The contractor shall not permit contract employees who are not individually state-certified in pesticide application to use or apply pesticides on Charleston AFB. No contract pest management employee will apply pesticides under another person's or the company's certification. Evidence of state certification in the appropriate pest management categories for each contract pest management employee shall be submitted to the contracting officer, or his/her designated representative, prior to the start of the contract and shall be maintained current thereafter throughout the period of the contract

Due to heightened security issues and the potential for terrorist activities, the contractor will provide the name and a picture ID of the employee(s) assigned to apply pesticides on Charleston AFB to the 628 Contracting Officer and the 628 CES Pest Management Shop. Any changes/substitutions in assigned contract applicators will be reported immediately to the 628 Contracting Officer and 628 CES Pest Management. Failure to report changes/substitutions of contract application personnel will result in the ejection of that individual from the installation. The contract applicator shall stop at the 628 CES Pest Management Shop to notify them of his/her presences and show proper credentials and certification to the Shop Foreman or his/her designee. The Shop Foreman or his/her designee will confirm the contract employee as the assigned applicator.

Per DoDI 4150.7, the contractor shall use only those pesticides approved for use on DoD installations by the command pest management consultant. A list of these pesticides is provided by the Armed Forces Pest Management Board and the Defense Logistics Agency, and is available through the 628 CES Pest Management Shop or the HQ AMC Command Entomologist. If the contractor wishes to use pesticides not on the approved DoD list, he/she will request approval of the additional pesticides and provide justification for their need to the Contracting Officer. Final approval is provided by the HQ AMC Command Entomologist. Choice of pesticides to be used shall be established and approved prior to the start of the contract.

The contractor shall provide copies of the Material Safety Data Sheet (MSDS) and the product label of the pesticide to be used to the 628 Contracting Officer and the 628 CES Pest Management Shop. The contractor will ensure

copies of the MSDS and product label for the pesticide being used are kept with the application vehicle/equipment.

The contractor shall not store pesticides, nor wash dispersal equipment and safety gear, on Charleston AFB property. The contract service provider shall mix pesticides at the mixing facilities available at the 628 CES Pest Management Shop, Bldg 717. The contract service provider shall ensure that the water source(s) used for mixing has a backflow prevention device at any time water is drawn for mixing. The contractor will provide to the Quality Assurance Evaluator (QAE) the amounts of pounds of active ingredient of pesticide applied at the designated treatment sites at the end of each day. The QAE shall report this information to 628 CES Pest Management.

If the contract service provider spills or releases any hazardous substances or pesticides into the environment due to a mishap, the contract service provider shall immediately notify the government representative/QAE and the base environmental coordinator. The contractor shall ensure telephone numbers of spill notification/response personnel are kept with the application vehicle/equipment. The contractor shall be responsible for remediation costs and fines associated with any chemical spills or environmental violations.

1.10 AIR COMPLIANCE REQUIREMENTS

CAUTION: SCDHEC permits and exemptions may take up to 90 days to receive; please plan accordingly. The contractor is responsible for completing all paperwork associated with required SCDHEC construction permits.

Boilers/ Heating Units/ Curing Ovens
All boilers, radiant heaters, space heaters, water heaters, curing ovens, or stationary units using natural gas or fuel, must be reported to 628 CES/CEIE before being brought on base. The contractor must complete the construction permit applications and/or other documents, as required by SCDHEC, and submit the forms to 628 CES/CEIE. Contact 628 CES/CEIE for specific permit and exemption requirements.

Generators
All generators scheduled for installation must be reported to 628 CES/CEIE before being brought on base. The contractor must complete construction permit applications and/or other documentation and bring to 628 CES/CEIE. Contact 628 CES/CEIE for specific requirements.

Refrigerant Management
Any potential work evolutions that affect refrigerant management are handled per the CFC Management Plan (ETL 95-1) and needs to be coordinated with 628 CES/CEIE and 628 CES/CEFT. All CFCs (HVAC systems and Halon systems) are required to be reclaimed or returned to the USAF prior to removal from service/demolition.

Concrete/Asphalt Plant
If a concrete/asphalt plant is set up on-site, a permit from SCDHEC is required. Contact 628 CES/CEIE for specific requirements.

Paint Booths or Painting Facilities
The contractor must complete the construction permit applications, as required by SCDHEC, and submit the forms to 628 CES/CEIE. Contact 628 CES/CEIE for specific permit requirements.

Fuel Storage Tanks
The contractor must complete the construction permit applications, as required by SCDHEC, and submit the forms to 628 CES/CEIE. Contact 628 CES/CEIE for specific permit requirements. The contractor shall comply with all applicable Spill Prevention Control and Countermeasure Plan (SPCC) regulations. Specifically, provide secondary containment for fuel storage tanks, 55-gallon drums of oil, etc.

Aircraft Wash Racks
The contractor must complete the construction permit applications, as required by SCDHEC, and submit the forms to 628 CES/CEIE. Contact 628 CES/CEIE for specific permit requirements.

Engine Testing Facilities
The contractor must complete the construction permit applications, as required by SCDHEC, and submit the forms to 628 CES/CEIE. Contact 628 CES/CEIE for specific permit requirements.

1.11 STORMWATER AND LAND DISTURBANCE CONSTRUCTION PERMIT

Contractors are required to have a complete Notice of Intent (NOI) for stormwater discharges from construction activities (DHEC Form 2617 latest version) in accordance with the requirements from the NPDES General Permit SCR10000 (Construction General Permit (CGP)) and the Municipal Separate Storm Sewer System (MS4) NPDES permit, SCR030000. The Project Owner/Operator from Sections I. Project Information and VI.B. Signatures and Certifications of the NOI are defined in the CGP as the party having "operational control over construction plans and specifications and day-today activities". In some cases this will be the contractor or site specific Stormwater Pollution Prevention Plan (SWPPP) preparer. The Storm water pollution prevention and sediment and control measures for each project should be designed to satisfy the requirements of the SCDHEC Standards for stormwater Management and Sediment Reduction and the NPDES CGP. All applications for Land disturbance permits are routed through the Environmental Office.

NPDES land disturbance coverage and Coastal Zone Consistency Certification are required if one of the following conditions are met. Total calculated acreage disturbance for the project is 1) equal to 1 acre or greater or, 2) exceeds 0.5 acres AND is within 0.5 miles of a receiving water body or, 3) is between 0 and 0.5 acres AND is within 0.5 miles of a receiving water body AND meet certain other conditions based on the nature of the project. After package submittal and Coastal Zone Consistency review, the land disturbance permit by SCDHEC requires a minimum of 7 calendar days for review and issue. The Initiation of Construction Placard takes 15 days. Notice of Termination is required for all permitted projects after final stabilization has been completed.

Plans must be kept on site and adhered to at all times. Sites may be subject to a SCDHEC unannounced inspection.

The need to complete a Notice of Intent (NOI) (DHEC Form 2617) for stormwater discharges from construction activities (DHEC Form 2617 is based on the type of construction to be completed and the total cumulative acreage of land disturbed. The need for a land disturbance permit will be based on the criteria set forth in the Construction General Permit from DEHC (CGP – SCR100000). Contact the 628 CES/CEIE for specific requirements. If a NOI

Form 2617 is required, the contractor will be required to obtain the necessary signatures and documentation, and then submit the package to SCDHEC with a $125 check along with the Small Municipal Separate Storm Sewer System (MS4) approval letter.

1.12 WASTEWATER:

Any releases to the sanitary sewer or dewatering operations shall be approved by the 638 CES/CEIE (Mr. Evans, 963-1483) prior to being discharged.

In accordance with South Carolina Regulation R61-67.300A facilities needing a construction permit include: Main Sewers, Wastewater Collection and Transmission Systems, Pump Stations and Force Mains, Wastewater Treatment Facilities, and Components. Activities not requiring a construction permit include replacement of a component (same or similar), as long as there is no change in capacity, routine maintenance, and the construction of buildings. However, for all other modifications, including relocation of sewers and revisions to existing construction permits DHEC shall be contacted for a decision on whether or not a construction permit is required.

1.13 DRINKING WATER

In accordance with South Carolina Regulation R.61-58.1B, before the construction, expansion or modification of any public water system, application for a permit to construct shall be made to, and a permit to construct obtained from SCDHEC. Piping associated with a service connection will not require a construction permit for the conditions described in R.61-58.1.B (11)(a)-(d).

For all permits, the Contractor shall fill out permit application and route through CEIE for CES/CC signature.

1.14 ASBESTOS

All asbestos abatement and demolition projects require SCDHEC notification and/or permit prior to start of work. CEAN shall be provided a copy of the project permit prior to project commencement.

1. The requirements of SCDHEC Regulation 61-86.1, "Standards of Performance for Asbestos Projects", shall apply for any owner/operator, building inspector, management planner, project designer, contractor, asbestos abatement entity, consultant, air sampler, commercial labor provider, supervisor or worker involved in the inspection, in-place management, design, removal, encapsulation, enclosure, renovation, repair, demolition or any other disturbance of regulated asbestos containing material (RACM).

2. The Occupational Safety and Health Administration (OSHA) has rules for workers affected by asbestos containing materials (ACM). 29 CFR 1926.1101, "Occupational Exposure to Asbestos", requires compliance by all contractors and facility owners and includes specific work practices, respiratory protection, and asbestos training requirements, even for activities involving only non-friable ACM.

3. Written notification must be submitted to SCDHEC prior to demolition even if there is no asbestos present. Written notification must be submitted at least 10 working days before demolition begins. The notification must include

certain required items of information about the owner, the contractor, the facility and the demolition. A copy of the building inspector's report must accompany the notification of demolition.

4. Demolition is wrecking or taking out any load-supporting structural member of a facility and any related handling operations. Intentional burning of a facility is also demolition. An operation, which does not include wrecking, or taking out a load-supporting structural member is a renovation, to which additional requirements apply.

5. Renovation means altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. "Remodeling" is also renovation.

6. Renovation and demolition of most facilities, including buildings, structures, and other installations, are subject to State and Federal asbestos regulations. The facility owner and the renovation or demolition contractor are responsible for ensuring compliance with these regulations.

7. Written notification must be submitted to SCDHEC before the asbestos removal project begins (up to ten working days in advance, depending on the amount of asbestos to be removed). The notification must include certain required items of information about the owner, the contractor, the facility and the asbestos removal project. SCDHEC may request that a copy of the building inspector's report accompany the notification of demolition.

8. As required by the National Emission Standard for Hazardous Air Pollutants (NESHAPS), 40 CFR 61, Subpart M and SCDHEC Regulation 61-86.1, an owner/operator shall ensure that a building inspection to detect the presence of ACM has been performed prior to any renovation or demolition activity at a regulated facility.

9. Before a facility or a portion of a facility is renovated or demolished the owner/operator of the renovation or demolition activity must ensure that the facility or portion of the facility being renovated or demolished has been thoroughly inspected for the presence of asbestos. A person who has been trained and licensed as an asbestos building inspector or management planner in accordance with State training and licensing requirements must perform the inspection.

10. A legible copy of the building inspection report must be provided to the SCDHEC prior to each demolition, and upon request for renovations.

11. A building inspection report will only be acceptable to SCDHEC if performed within three years prior to the demolition. If an inspection report is greater than three years in age, then it must be confirmed and verified by a licensed building inspector or management planner.

12. SCDHEC requires that a building inspector and or management planner provide an assessment of all materials suspected to contain asbestos, including an evaluation to the materials current condition and potential for disturbance. SCDHEC requires a building inspector or management planner who has performed and an inspection to prepare a report detailing the findings of the inspection. The inspection report shall include the date of inspection and the name, license number, and signature of the licensed building inspector or management planner who performed the inspection and completed

the report. In addition, the report must include the following information specified in 40 CFR 763 Subpart E, Asbestos Containing Material in Schools:

a. An inventory of the locations of the homogenous areas where samples were collected.
b. Exact location of where the samples were collected.
c. If applicable, information on homogenous areas where friable suspect ACM was assumed to be ACM.
d. A description of the manner used to determine sampling locations.
e. Name and signature of each licensed building inspector or management planner that collected samples.
f. Identification of each homogenous area as either surfacing material, thermal insulation or miscellaneous material.

13. In performing inspections, SCDHEC requires a building inspector and/or management planner follow specific sampling procedures. According to SCDHEC Regulation 61.86.1, a building inspector and or management planner shall comply with the procedures specified in 40 CFR 763 in determining sample locations and the number of representative samples to be collected. An inspection shall include samples from suspect friable and non-friable ACM on interior and exterior portions of a facility or its facility components.

14. Suspect ACM is divided into three categories: surfacing materials, thermal system insulation and miscellaneous. 40 CFR 763 contains sampling procedures specific to each category of material.

15. At no time will negative assumptions about a suspect material's asbestos content be acceptable. There are only two acceptable options: 1) Positive assumptions of suspect materials or 2) Sampling of suspect materials.

16. A homogenous area is considered not to contain ACM only if the results of all samples required to be collected form the area are less than one percent asbestos.

17. If friable ACM (for example, pipe insulation or drywall) is present, it must be removed prior to being disturbed during renovation or demolition activities. Removal (abatement) must be performed by trained, licensed persons using procedures detailed in State and Federal regulations.

18. A project design shall be prepared for each asbestos abatement project involving the abatement of greater than 300 square feet, 1,500 linear feet and/or 656 cubic feet of performed in a facility to be reoccupied. A person licensed by SCDHEC as an asbestos project designer must prepare such designs.

19. During renovations, removal of non-friable materials (for example, vinyl asbestos floor tiles and sheet flooring, mastics, asphalted roofing and asbestos cement siding and roofing tiles) may be regulated. Applicability is dependent upon the removal method to be used.

20. Prior to any demolitions, non-friable cement products (for example, transite siding, exterior siding and roofing shingles) must be removed before demolition. Asbestos containing sheet flooring and floor tiles, as well as asphalted roofing products, need not be removed if they are in good condition and have not become brittle and are not peeling, cracking, or crumbling. Otherwise, they must also be removed before demolition. If it can be anticipated that non-friable materials will be ground, crumbled, .or pulverized, the removal is subject to the same rules as removal of friable

materials. The amount of any non-friable asbestos that will remain in place during demolition must also be indicated on the written notification form.

21. Use of destructive methods to remove asbestos containing flooring materials renders them friable.

22. Grinding, sanding, or chipping mastic off the floor renders the mastic friable. Asbestos-containing mastic can be removed using citrus-based cleaners. Solvent-contaminated residues are subject to Hazardous Waste Management Regulations if they have a flash point of 140 degrees F. Petroleum based solvents are generally not recommended because they may contain components which cause wastes to be categorized as hazardous wastes, regardless of flash point.

23. Do not burn any asbestos containing or asbestos contaminated materials.

24. If demolition is reported on the same notification form as asbestos removal, all required information about the demolition must be included. If demolition data are not included when notification for removal is submitted, the removal is considered a renovation.

25. Materials should be taken to a landfill as soon as possible but may be stored temporarily in a secure area subject to SCDHEC approval. Transport the materials so as to prevent them from leaking, spilling, or blowing off the vehicle.

26. You should contact the landfill directly to make sure it will accept the material. You must obtain written approval from SDCHEC in advance for the disposal. You can get this approval by writing to the following:

South Carolina Department of Health and Environmental Control
Attn: Bureau of Air Quality, Asbestos Section
2600 Bull St.
Columbia, SC 29201

27. Be sure to include the following: (1) the address where the material is to be removed, (2) a brief description of the content (cement tiles, asphalted shingles, etc.), (3) the volume of waste in cubic yards agreed to accept the waste.

28. The removal of asbestos containing materials, such as transite pipe, is subject to the guidelines set forth in South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1 "Standards of Performance for Asbestos Projects" and Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101 "Occupational Exposure to Asbestos".

29. Keep the material wet at all times during removal to minimize potential fiber release. Note: The use of water is only a control measure and by no means prevents a material from becoming friable.

30. SCDHEC Regulation 61-86.1 requires that containers (bags, drums, wrapped bundles) holding asbestos waste must be labeled with the following: DANGER - CONTAINS ASBESTOS FIBERS -AVOID CREATING DUST -CANCER AND LUNG DISEASE HAZARD.

31. Waste should be taken to a landfill as soon as possible but may be stored temporarily in a secure area. Transport materials in a way that keeps them

from leaking, spilling or blowing off the transporting vehicle. SCDHEC Regulation 61-86.1 requires a written waste disposal authorization request prior to taking waste to a landfill.

32. JB CHS 628 CES/CEIE requires that all renovation, demolition and asbestos abatement project documentation be submitted for review prior to start of work. This documentation includes, but not limited to: 1) renovation, demolition, abatement application; 2) project licenses; 3) personnel licensing, medical statement, training records, respirator fit test and 4) project work plan.

33. In addition, a copy of all asbestos abatement air sampling (personal, area and clearance) and asbestos waste disposal documentation shall be provided to CES/CEA.

34. All JB CHS facilities and projects are subject to Environmental Compliance Assessment and Management Program (ECAMP), either internal or external audits, per Air Force Instruction (AFI)32-7045.

Transite Pipe:

1. JB CHS historically has a presence of in-service and abandoned asbestos transite sewer and water pipe which as built drawings do not always correctly identify the locations.

2. The removal of asbestos containing materials, such as transite pipe, is subject to the guidelines set forth in South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1 "Standards of Performance for Asbestos Projects" and Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101 "Occupational Exposure to Asbestos".

3. The Contractor will immediately notify 628 CES/CEIE (963-2708) whenever transite pipe is encountered during any renovation or demolition project. JB CHS will coordinate SCDHEC notification and removal procedures approval.

4. Transite pipe, which has not been rendered friable during renovation or demolition, shall be considered a non-regulated asbestos abatement project. SCDHEC Regulation 61-86.1 provides disposal guidance of non-regulated asbestos removal projects. However, all guidelines of OSHA 29 CFR 1926.1101 shall be met.

5. Keep the material wet at all times during removal to minimize potential fiber release. Note: The use of water is only a control measure and by no means prevents a material from becoming friable.

6. Avoid breaking, chipping, sawing or grinding transite pipe. These actions create new surfaces where there is the greatest potential for release of asbestos fibers.

7. Do not throw or drop transite pipe when removing or transporting.

8. It is anticipated that a minor amount of transite pipe will be generated. All removed transite pipe will be double-wrapped in 6 mil polyethylene, taped at all seams and each end, and disposed of in accordance with SCDHEC Regulation 61-86.1.

9. SCDHEC Regulation 61-86.1 requires that containers (bags, drums, wrapped bundles) holding asbestos waste must be labeled with the following: DANGER - CONTAINS ASBESTOS FIBERS -AVOID CREATING DUST -CANCER AND LUNG DISEASE HAZARD.

10. Waste should be taken to a landfill as soon as possible but may be stored temporarily in a secure area. Transport materials in a way that keeps them from leaking, spilling or blowing off the transporting vehicle. SCDHEC Regulation 61-86.1 requires a written waste disposal authorization request prior to taking waste to a landfill.

11. Contact the landfill directly to make sure it will accept the material. Obtain written approval for disposal from SCDHEC by writing to:

12. Include the address where the material where the material is to be removed, a brief description, the amount in linear feet and the name and location of the landfill to be used. In return, SCDHEC will respond with a disposal authorization letter.

13. Note: Please remember to include your name, return address and phone number.

14. Transite pipe is usually considered non-friable under normal service conditions. However, even non-friable materials can become friable if they are crumbled, pulverized or reduced to power by the forces, which act on them during renovation or demolition operations. If such materials are likely to be rendered friable, the removal immediately becomes subject to rules of SCDHEC 61-86.1 for friable asbestos removal, including training, licensing, notification, and work practices.

15. In the event transite pipe removal becomes friable, the Contractor shall immediately stop work and notify 628 CES/CEIE (963-2708). 628 CES/CEIE will in turn notify SCDHEC of the situation and removal/cleanup procedures.

16. Prior to starting any asbestos related work, contractor shall provide copies of current asbestos worker and asbestos supervisor licenses, or a company asbestos operations and maintenance (O&M) license. Contractor shall properly notify DHEC of regulated asbestos work in accordance with SCR 61-86.1, and shall provide the contracting officer and the Charleston AFB (JB CHS) Environmental Flight office a copy of contractor notification to DHEC. Lead-Based Paint (LBP) (POC: Carey Stringer 963-2708)

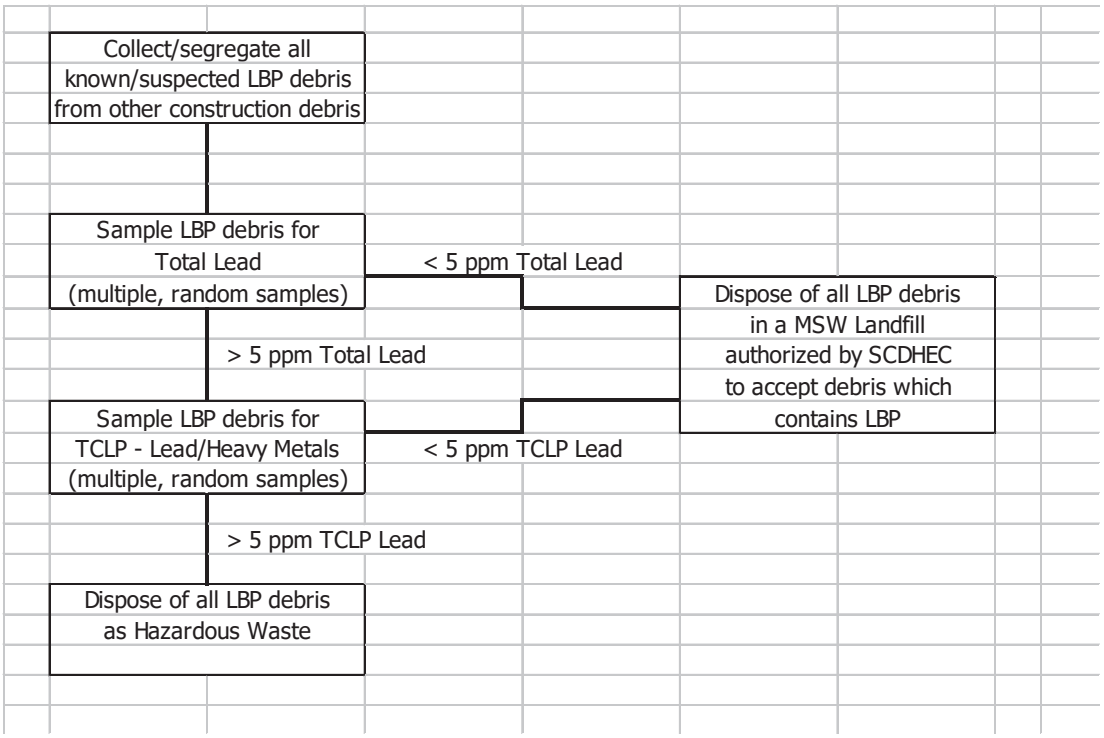
1.15 LEAD BASED PAINT

Individuals conducting lead based paint (LBP) activities in target housing or child occupied facilities must be trained and EPA certified in accordance with 40 CFR 745, "Lead Requirements for LBP Activities in Target Housing and Child Occupied Facilities".

Individuals conducting LBP activities in commercial or industrial buildings must receive training mandated by OSHA in accordance with 29 CFR 1926.62 "Lead Exposure in Construction".

A copy of all employee lead training/certification shall be provided to Charleston AFB Environmental Flight to be kept on file.

Recommend that an additional statement be added to the LBP specifications (13283) and the Demolition specifications (02050) to require that metal equipment/structures painted with LBP that are slated for removal should be recycled to eliminate the need for handling this material as LBP debris. This should be included in the recycling report. Ensure the specifications provide adequate controls for handling all LBP debris, even though industrial areas are not specifically covered by LBP regulations. LBP debris needs to be segregated from other construction & demolition debris, sampled/tested with a minimum of three (3) representative samples, and handled as follows:



LBP debris (as a minimum) is required to be disposed of at a licensed, Subtitle D landfill and if it is deemed a hazardous waste, it is required to be processed as hazardous waste. Testing required for disposal should be Total Metals and TCLP Metals, as landfills will generally require both testing results.

1.16 MONITORING WELLS

If there are any groundwater monitoring wells located in the vicinity of the project, every effort should be made to ensure these wells are not damaged or destroyed. If these wells are damaged or destroyed, the Installation Support Section (ISS) Charleston must be notified so that the contractor can, at their expense, properly abandon and replace the well(s) using a SCDHEC certified well driller.

1.17 INSTALLATION RESTORATION PROGRAM (IRP) SITES

If the worksite is in an Installation Restoration Program (IRP) investigation area, it may be necessary to contain excavated soil and groundwater, including dewatering fluids, for potential processing as hazardous waste. Contact the Installation Support Section (ISS) Charleston with details

concerning the worksite location. Normal handling methods for potentially hazardous soils and groundwater, including dewatering fluids, include removal under controlled conditions (utilize proper personal protective equipment), storage out of the weather (55-gallon drums, plastic-lined roll-off containers, or frac tanks), composite sampling/analysis from each roll-off container and frac tank, or one composite sample per 5 drums, and proper disposal with 628 CES/CEIE (Mr. Tommy Hardin, (843)963-2727) approval.

All hazardous waste generated within an IRP site shall be handled and disposed of at the projects expense in accordance with federal, state and Air Force regulations, with coordination of 628 CES/CEIE for manifest signatures. The contractor must also provide a completed Charleston AFB "Contractor Waste Stream Characterization Process Document" (WSCPD) with copies of analytical testing results to the base Environmental Flight (Mr. Barry Lewis). The WSCPD must be provided well in advance of shipment to allow time for review and concurrence by 628 CES/CEIE. The WSCPD identifies the source and composition of the waste.

1.18 NATURAL RESOURCES

If the project involves removal of trees, shrubbery or landscaping, a mitigation plan must be generated that will replace the trees etc. in-kind. In other words if a project will take down ten 2-inch trees, then the mitigation plan should replace those trees with ten 2-inch replacement trees (hardwoods preferred). However, if replacing larger trees, the replacement becomes cost prohibitive and therefore larger trees should be replaced with a greater number of smaller trees. For instance, a 30-inch oak could be replaced with ten 3-inch oaks, fifteen 2-inch oaks, etc. The project should be designed to keep larger trees as is and should ensure that specific plans are in place to prevent damage to those trees during the demolition/construction process. A physical barrier should be constructed at the drip line of trees that are to be preserved to prevent damage to limbs and root systems.

If a project is sited near or may affect wetland areas CES/CEIE must be consulted prior to work to ensure permitting requirements are addressed. Wetland boundaries have been clearly marked with signs, however, if there is any doubt please contact the Asset Management office.

1.19 CULTURAL RESOURCES

If items that may be of historical or archaeological significance are discovered or excavated during the course of work, work in the immediate area will be stopped and the procedures outlined in the Cultural Resource Management plan will be implemented. The contracting officer will notify the 628 CES/CEIE who will investigate the site and inform the contracting officer when it is acceptable for the Contractor to resume work. All items discovered will be considered to be the property of the government.

1.20 ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

JB CHS has implemented an Environmental Management System (EMS); in order to become more fully aware of the adverse environmental impact of our facility and our activities with the focus on reducing or eliminating those impacts, to reduce the amount and cost of resources by eliminating wasteful practices, and to comply with Executive Order 13423. ISO 14001 is the framework on which JB CHS choose to base the EMS. Currently, JB CHS's significant

environmental aspects are Energy & Water Consumption/Conservation and Fuel Consumption/Conservation in Vehicles. If a supplier or contractor is supplying goods or services associated with our significant environmental aspects, it is our expectation that the supplier or contractor take action to implement applicable procedures to mitigate, minimize, or otherwise control the potential environmental impacts associated with those significant environmental aspects.

MONTHLY CONSTRUCTION AND DEMOLITION REPORT

Project #: **Date:**

Project Title:

Contractor:

CONSTRUCTION AND DEMOLITION DEBRIS			
Recycled/Reused Material	**Quantity (tons)**	**Disposed Material**	**Quantity (tons)**

Signature: _____

Contractor Representative