ENVIRONMENTAL REQUIREMENTS

7 February 2023

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including other Division 1 Specification Sections, apply to this Section.

B. Shaw Air Force Base (SAFB) Installation Facilities Standards, available from the 20 CES.

1.2 SUMMARY

A. This section contains administrative and procedural requirements for environmental issues. The Contractor should refer to the specific requirements outlined in Attachments A through C-4 for all hazardous materials, municipal solid waste, construction and demolition waste, recycling, hazardous waste, universal waste, asbestos, lead-based paint (LBP), PCB, non-regulated wastes, and refrigerant recovery training, management and disposal.

1.3 DEFINITIONS

Operable units: Operable Units (OU) are defined as a discrete response action within a comprehensive environmental restoration program. OUs are areas that have been shown by conceptual models of contaminant sources, migrations, and receptors to require specific source control and/groundwater response actions. Maps showing the locations of OUs on SAFB can be obtained from the Air Force Civil Engineer Center's Charleston Installation Support Section (AFCEC/CZOE) representative, thru 20 CES/CEIE (Chief of Environmental Programs). Current status of AOCs/SWMUs are detailed in Shaw's Resource Conservation and Recovery Act (RCRA) Corrective Action Permit maintained by 20 CES/CEIEC (Environmental Compliance).

1.4 SUBMITTALS

A. Storm Water Pollution Prevention Plan for construction sites larger than 1 acre.

B. Site Specific Spill Prevention, Control, and Countermeasure Plan and Hazardous Waste (HW) Emergency Contingency Plan (ECP) (if required by the HW Program Manager after reviewing HMs and HW Stream Characterization form and waste analysis reports).

C. Hazardous Materials (HMs) SAFB Contractor Hazardous Material (HM) Material Worksheet and Safety Data Sheets (SDS) (Appendix A-1).

D. Contractor Monthly Hazardous Material (HM) Usage Tracking Form (Appendix A-3)

E Municipal Solid Waste (MSW) and Construction & Demolition (C&D) Debris, Recycling and Landfilling Summary Report (Attachment B-2), waste disposal weight tickets, and recycling weight tickets. These will be provided to the 20 CES/CEIEC.

F Copies of HW training certificates (required by 40 CFR 262.34(a)(4) and 40 CFR 265.16), Hazardous Waste Stream Characterization form (Appendix C-1), waste analysis reports, HW manifests (EPA Form 8700-22), land disposal restriction (LDR) forms, for all hazardous wastes disposed by the contractor. Other wastes disposed as a result of the contract have disposal and labeling requirements. All disposal documentation will be provided to the 20 CES/CEIEC for review prior to disposal or recycling off the installation.

G. Hazardous Waste Stream Characterization form and waste analysis reports for waste streams

discharged to the Waste Water Treatment Plant.

H. Recycled and Reclaimed Goods Determination/Exemption forms.

I. Refrigerant Recovery Technician Certification(s).

J. Contractor Refrigerant Work Submittal Form (Appendix D-4) with amounts and quantities of refrigerants added to equipment.

1.5 STORM WATER POLLUTION PREVENTION REQUIREMENTS

A. Shaw Air Force Base is a Small Municipal Separate Storm Sewer System (SMS4). The contractor of any project requiring land disturbance that covers an area exceeding 5000 sq ft must submit a notice of intent (NOI) to 20 CES/CEIEC, Shaw Air Force Base. The contractor should refer to the SAFB Plan 32-1067, Storm Water Pollution Prevention Plan (SWPPP) (number subject to change) and all subsequent installation SWPPPs regardless of number for specific guidance and requirements for preparation of Storm water Pollution Prevention Plans and the procedures to follow to obtain a National Pollutant Discharge Elimination System (NPDES) Construction General Permit.

1.6 SPILL REPORTING

A. Permits: N/A

B. Licensing/Certifications:

C. Procedures: The contractor shall take every reasonable precaution to prevent the spillage of fuel, oil or other hazardous substances. Any spill or release of petroleum or hazardous material/waste into the environment shall be reported immediately to the Fire Department (call 911). The contractor shall be responsible for having the material and resources on hand for immediate containment and clean-up of the spilled material. The contractor shall perform all sampling to verify clean-up of the spill site and ensure proper disposal of the contaminated material, as required by the Contracting Officer or the South Carolina Department of Health & Environmental Control (SC DHEC).

1.7 HAZARDOUS MATERIAL

A. Permits/Authorizations: A hazardous material is commonly known as a HAZMAT. OSHA defines a hazardous material as any substance to which exposure "results or may result in adverse effects on the health and safety of employees" or "any chemical which is a physical hazardous or health hazard." There is no 'one simple list' of hazardous materials.

Contractors must obtain authorization for the usage of all HAZMAT used on SAFB as part of a contract.

Contractor Hazardous Material authorization requirements are outlined in Appendices A, A-1, and A-3. The HM Program Manager will review all submittals and provide a SAFB Contractor Hazardous Material Review form to the Contracting Officer (CO), Contracting Officer Representative (COR) and the Project Manager (PM).

Contractors are required to follow the guidelines outlined in this document as well as the SAFB Plan 32-7002A, Hazardous Material Management (HMMP), and all subsequent HMMPs, regardless of the number assigned to the plan.

Regulatory References: (FAR, DFAR, AAFAR Subpart 23.3; DoDI 6050.5, DoD HAZCOM

Program; AFMAN 32-7002, Federal Acquisition Regulations (FAR), Defense Federal Acquisition Regulation Supplement (DFARS), and Air Force Federal Acquisition Regulations Supplement (AFFARS) clauses as described in Part 23 of the FAR, DFAR, and AFFAR, plus reference DoDI 6050.05, DOD HAZCOM Program, AFMAN 32-7002, Environmental Compliance and Pollution Prevention, (current AFMAN, subject to change), and the SAFB Hazardous Materials Management Plan (32-7002A, subject to change) for the management of hazardous materials

Listed below are the general categories of hazardous materials that require the submission of Safety Data Sheets (SDS) hazardous material usage reporting to the Contracting Office:

- Compressed gases (all types)
- Adhesives
- Sealants
- Paints (including aerosols)
- Lubricants / oils / fuels
- Welding materials
- Solvents
- Chemicals used in testing or as additives
- Any fluids (except water) added to machinery / government-owned or leased equipment
- Pesticides/insecticides/rodenticides

Lead solder shall not be used for any application unless specifically required by the PM and reviewed/approved by the 20 CES/CEIEC. All paint used shall be lead-free, where lead-free is defined as 0.009% or less lead content in the dry film.

B. Licensing and Certification: Complete the SAFB Hazardous Materials Training as outlined in the SAFB HMMP.

C. Requirements and Procedures: The attached SAFB HM Appendices A through A-3 outline the complete list of requirements, instructions, and guidelines for HM management. After contract award and prior to the post-award/pre-construction meeting and monthly thereafter, contractors must provide the following:

a. An SDS for each hazardous material to be used during the contract period.
b. A complete "SAFB Contractor Worksheet" included as the first page of the stack of SDSs (see Attachment A-1). Additional forms may be used if the contractor runs out of space on a form.
c. By the 5th of each month, the Contractor must submit a Contractor Monthly Hazardous Material (HM) Usage Tracking Form for the month prior (see Attachment A-3).

1.8 MUNICIPAL SOLID WASTE (MSW), CONSTRUCTION AND DEMOLITION (C&D) DEBRIS, AND RECYCLING

A. Permits: N/A

B. Licensing/Certifications: N/A

C. Requirements and procedures: Shaw AFB strives to avoid landfill disposal for at least 40 percent of its non-hazardous waste (MSW) and to divert at least 60 percent of all construction and demolition (C&D) debris. Waste disposal data is reported to the Office of the Secretary of the Air Force.

Wastes should be minimized though green procurement, source reduction, recycling, reuse, or composting prior to disposal. C&D debris are a large portion of Shaw's generated wastes, therefore contractors must strive to divert C&D debris from the landfill (e.g. recycle) to the maximum practical extent.

Refer to Attachments B and B-1 for all MSW, C&D recycling requirements. After contract award and prior to the post-award/pre-construction meeting, contractors must provide the following:

a. Contractor shall submit a monthly Contractor MSW, C&D Debris Landfilling and Recycling Diversion Summary Report for the month prior (see example in Attachment B-1). This report shall contain the total weight of material recovered for recycling or reuse. The report shall include the total weight of unrecoverable refuse transferred off base. All weight tickets for debris going to the landfill shall be included in the report. The report shall be submitted to the Government no later than the 5th day of the following month (e.g. report for June is due by 5 July).

1.9 HAZARDOUS WASTE (HW), UNIVERSAL WASTE (UW), ASBESTOS WASTE, LEAD-BASED PAINT (LBP) WASTE, POLYCHLORINATED BIPHENYL (PCB) WASTE, NON-REGULATED (NR) (CONTROLLED) WASTES

A. Permits: N/A

B. Licensing/Certifications: Contractors must be trained and certified according to all federal, state and local regulations, as defined by the Resource Conservation and Recovery Act (RCRA), Toxics Substances Control Act (TSCA), and the National Emission Standard Hazardous Air Pollutants (NESHAP).. See Attachment C for detailed information on requirements.

C. Requirements and Procedures:

1. Contractor Hazardous Waste (HW) requirements are outlined in Appendices C through C-4. The HW Program Manager will review hazardous waste stream characterizations and waste analysis reports for all wastes generated as a result of the contract action, all disposal documents, including HW manifests, land disposal restriction forms, Bill of Lading forms, etc. prior to disposal.
2. The contractor shall analyze all wastes to determine if the waste is HW, UW, asbestos, LBP, PCB or NR (CONTROLLED) waste such as petroleum, oil and lubricant (POL) waste as defined by RCRA, TSCA, and NESHAP.
3. Utilize the APPENDIX B and the SAFB Plan 32-7002C (Subject to Change) for information on HW/UW/ASBESTOS/LBP/PCB/NR (CONTROLLED) waste management, spills and ECP requirements for all waste streams.

1.10 DISPOSAL OF HW, UW, ASBESTOS, LBP, PCB, NON-REGULATED MATERIALS

All materials removed under this contract, except that noted, shall be disposed of off base in such a manner that meets federal, state and local environmental codes. NO HAZARDOUS WASTES CAN BE REMOVED OFF-SITE WITHOUT FIRST CONTACTING 20 CES/CEIEC for review. Hazardous Waste requires a manifest, land disposal restriction (LDR) form, and appropriate RCRA and DOT labels and must be transported by licensed professionals to a permitted temporary storage and disposal facility (TSDF). Universal Waste, Asbestos, LBP, PCB and Non-Regulated Waste require the appropriate manifest, or other required shipping documents, containers, and labels. All disposal documents must be to be reviewed by the 20 CES/CEIEC HW Program Manager or alternate prior to leaving the installation. Refer to Attachment C through C-4 for requirements.

1.11 INDUSTRIAL WASTE MANAGEMENT PROGRAM

The contractor shall fill out and submit for approval a Waste Stream Characterization form (Appendix C-1) and any waste analysis reports used to determine if waste is hazardous to the 20 CES/CEIEC HW Program Manager prior to discharging any waste stream down an industrial or sanitary sewer drain. No wastes will be disposed in storm drains.

1.12 CULTURAL RESOURCE PRESERVATION

A. ARCHEOLOGICAL PRESERVATION: Should the Contractor uncover human remains or other skeletons, Native American artifacts or other archaeological resources during the course of excavation, the work shall be stopped and the Base Historic Preservation Officer in the 20 CES/CEIEA office and the Contracting Officer shall be notified immediately.

B. HISTORIC BUILDING PRESERVATION: If construction activities include excavation or construction which affect any identified historic building or structure, the contractor shall consult with the Base Historic Preservation Officer. A list of identified historic buildings is maintained and available through the 20 CES/CEIEA office.

1.13 NATURAL RESOURCE PRESERVATION AND PROTECTION

A. WETLANDS: If construction activities include excavation or construction in jurisdictionally delineated wetlands, the contractor shall consult with the base Natural Resource Manager in the 20 CES/CEIEA office. A map of delineated wetlands is maintained and available through the 20 CES/CEIEA office.

B. WILDLIFE HABITAT: Construction activities including excavation or construction which has real or potential impacts to animal burrows, nests, feeding sites or other potential wildlife habitat shall be reported to the base Natural Resource Manager at 20 CES/CEIEA.

C. LAND MANAGEMENT: Construction activities shall consider non-point source pollution control measures, provide for erosion control, water management, runoff disposal, landscaping and special soil problems and report to the 20 CES/CEIE.

1.14 EXCAVATION ENVIRONMENTAL RESPONSE PROCEDURES

A. Purpose – Beginning when SAFB was activated in 1941, burial or dumping was an industry accepted practice often used to dispose of materials no longer needed or wanted. Accidental spills also occurred periodically. Since the mid 1980's, SAFB environmental programs have been identifying, investigating, and remediating as necessary, waste disposal and spill sites. Unless specifically noted otherwise in the contract documents, there are no known waste disposal or spill sites that affect the specified work. However, during any grading or excavation there is the potential to uncover previously unknown waste or spilled material. Unusual Material - Unusual material as used in this section shall mean any materials other than soils, rock or bedrock encountered during excavation that is not specifically identified as part of the work in the contract document. This includes but is not limited to: stained soils; free product fuels, oils, etc.; suspicious odors; bottles, cans, drums, or other containers; wooden, metal, or cardboard boxes; rags, gloves, or personal protective equipment; trash or common landfill debris; concrete, concrete block, wood, metal, or other building materials and construction debris; or any other unidentified materials.

B. Response - If the contractor encounters any unusual materials during any excavation or grading, the contractors shall:

1. Immediately stop the excavation or grading operation.
2. Shut down the equipment and leave it in its present location.
3. Do not attempt to determine the contents of any bottles, containers, boxes, etc.
4. Withdraw personnel from the equipment and the excavation a distance of at least 50 feet upwind or cross wind or as directed.

5. Contact the escort, inspector, contracting officer or the contracting officer's designated representative immediately, or call 911.
6. Remain in the area until released by the CO or designated representative.

C. Every contractor and subcontractor employee shall be briefed on the response procedures in this section prior to beginning work on SAFB. Training shall be documented by the employee signing and dating a training log sheet. Log sheet shall be maintained on the immediate jobsite in the contractor's project office and shall be available for inspection by the contracting officer or designated representative. Response procedures review shall be included in the contractor's periodic safety meetings.

1.15 GREEN PROCUREMENT

A. Contractor shall comply with Shaw's affirmative procurement program.

1. Per the Department of Defense and United States Air Force, the Contractor is required to purchase Environmentally Preferable Products (EPP) manufactured from recycled and reclaimed goods. The Environmental Protection Agency (EPS) Comprehensive Procurement Guideline (CPG) Program is found at https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program. Environmentally preferable products are listed on the EPA's Comprehensive Procurement Guidelines – Product Resource Guides for CPG directory may be found at https://www.epa.gov/smm/product-resource-guides-comprehensive-procurement-guideline-cpg-program.

2. Exemptions to purchasing the listed products within the Comprehensive Procurements Guidelines – Products are as follows;

   a. Item/Material not available within a reasonable period of time.
   b. Item/Material fails to meet performance standards set forth in applicable specifications.
   c. Item/Material is not available from a sufficient number of sources to maintain a satisfactory level of competition (item available from only one source)

3. Item/Material is only available at an unreasonable cost (the price of the recycled content product exceeds the cost of a comparable no-recycled product).For each item considered on the Comprehensive Procurement Guidelines – Products list, contractor shall submit an Environmentally Preferable Products Determination/Exemption form (provided at the end of this section) for approval.

1.16 AIR EMISSION SOURCES

A. Any source that has a stack is a point source air emission source. Shaw AFB is a major source for criteria air emission pollutants. As a major source, all air emission sources must be permitted. Permits may be either a "Title V modification" or a "construction permit required" permit.
   a. All Title V modification permits may be produced by 20 CES/CEIEC at the request of the contractor. The Contractor must supply 20 CES/CEIEC a specification sheet on the source *after* contract award and prior to the post-award/pre-construction meeting, contractors must provide specification sheets on the source to the 20 CES/CEIEC.
   b. All "Construction Permit Required" permits must be obtained by the Contractor and will require the signature of a Registered Professional Engineer to certify the emissions of the new source. To identify the need of a construction permit the contractor should consult http://www.scdhec.gov/environment/baq/docs/regs/pdf/r61-62_1.pdf#page=14 at Section II or contact 20 CES/CEIEC 803-895-5071 to determine if the project is of sufficient size to require a construction permit.

c. All contractors should review the above link for all projects because of the considerable time required to obtain a construction permit.

B. Some emission sources such as tanks, parts washers, storage batteries, acid containers, or other sources that emit pollutants without stacks also need a Title V permit modification. The contractors who install these sources will also need to contact 20 CES/CEIEC After contract award and prior to the post-award/pre-construction meeting, contractors must provide specification sheets on the source to the 20 CES/CEIEC. At that time the contractor may request 20 CES/CEIEC to obtain the Title V modification permit.

C. Refrigerant Recovery (requirements and instruction are in Appendix D): EPA regulations (40 CFR Part 82, Subpart F) under Section 608 of the Clean Air Act require that technicians who maintain, service, repair, or dispose of equipment that could release ozone depleting refrigerants into the atmosphere must be certified. Starting on January 1, 2018, this requirement will also apply to appliances containing most substitute refrigerants, including HFCs.

D. EPA regulations (40 CFR Part 82, Subpart F) under Section 608 of the Clean Air Act also requires refrigerant recovery and recycling equipment to be tested to ensure it meets EPA requirements.

E. Any contractor who adds or removes refrigerant must complete a Contractor Refrigerant Work Submittal Form prior to turnover to the government. Also any refrigerant equipment removed or installed must be filed with 20CES/CEIEC personnel on the Contractor Refrigerant Work Submittal Form.

F. Disposition of Certain Refrigerants: The Department of Defense requires the recovery of various Class I and Class II refrigerants. Recovered refrigerants in the designated categories below will be shipped to the Defense Logistics Agency (DLA) ODS Reserve in Virginia. Contractors will ensure a Contractor Refrigerant Work Submittal Form prior to turning over the designated categories of recovered refrigerants to the installation. Cylinders will be labeled and tagged according to all federal, state and local guidelines (Appendix D).

G. Disposal of Refrigerants and Equipment: Contractors are responsible for the disposal of all other recovered refrigerants and equipment generated as part of a contract. Recovered refrigerant ODSs must have required regulatory documentation to accompany the ODSs for disposal. The contractor must provide a copy of the recovery and disposal return documentation, etc.to the 20 CES/CEIEC within 30 days of shipment for environmental tracking (Appendix D).

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

Contractor shall comply with all Installation Environmental Management provisions and Attachments A through D, as well as all applicable federal, state, and local laws. Contractor shall comply with all applicable Air Force regulations.

Environmentally Preferable Products Determination/Exemption Form

Project Title: _____

Project Number: _____

Contract Number: _____

Contractor: _____

Description of Item/Material: _____

_____

Item/Material listed in Comprehensive Procurement Guideline status is as follows:

_____Compliant: meets EPA Comprehensive Procurement Guidelines

_____Non-Compliant: does not meet EPA Comprehensive Procurement Guidelines for one or more of the following reasons;

_____a) Recycled product costs more than non-recycled product

_____b) Recycled product does not meet performance standards

_____c) Recycled product is not available in a reasonable amount of time

_____d) Recycled product is not available from a sufficient number of sources