

APPENDIX A

GUIDANCE FOR SUBMISSION OF SAFETY DATA SHEETS (SDS) FOR HAZARDOUS MATERIAL (HAZMAT) AND REPORTING OF HAZMAT USAGE

Hazardous Materials: 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.

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 or Service Contracts:

- 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

- 1) After contract award and prior to the post-award/pre-construction meeting, contractors must provide:
 - 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 (refer to Attachment A-1). Additional forms may be used if the contractor runs out of space on a form.
- 2) After receipt / review of the “SAFB Contractor Worksheet”, and the associated SDSs, 20 CES/CEIEC will return to the contractor the “Contractor Hazardous Material Review” sheet (refer to Attachment A-2 for an example).
 - a. Depending upon the item(s) marked on the “Contractor Hazardous Material Review” sheet, the Contractor may (or may not) have additional submittal requirements.
 - b. If the Contractor does have additional hazardous material submittal requirements, the submittal(s) must be accomplished before the hazardous material is brought on base.
 - c. The contractor must receive the “Contractor Hazardous Material Review” sheet from SAFB before hazardous material is brought on base.
- 3) Hazardous materials will be tracked as identified on the “Contractor Hazardous Materials Review” sheet. The following requirements apply (FAR 23-302):
 - a. Short-term transient contractors (ex: perform specific service and then leave upon completion, such as construction) will submit a Contractor Worksheet along with SDSs for all hazardous material (HM) used during the contract period after the contract is awarded prior to the post-award/pre-construction meeting for environmental review and approval.
 - i. For contracts less than 60 days, the Contractor will submit the “Contractor Hazardous Material and Usage Data” (refer to Attachment A-3) to the Contracting Office prior to the start of the contracted work, and again at the completion of the contract.
 - ii. For contracts greater than 60 days, the Contractor will submit the “Contractor Hazardous Material and Usage Data” (refer to Attachment A-3) to the Contracting Office after contract award and prior to the contracted work, once each month of the contract, and at the completion of the contract.
 - b. Long-term embedded contractors (ex: perform mission related service otherwise accomplished by Government personnel) shall establish an account in Enterprise Environmental, Safety & Occupational

Health Management Information System (EESOH-MIS) for HAZMAT tracking and will be managed the same as any SAFB unit or organization according to the SAFB Hazardous Materials Management Plan in lieu of the monthly "Contractor Hazardous Material and Usage Data" form.

- 4) If a short-term transient contractor needs to bring hazardous material onto the installation that was not included in the original submittal [refer to step 1) above], the contractor must submit the information required in step 1) (above) to the Contracting Office to begin the review process identified in step 2) (above).
- 5) Long-term embedded contractors will submit HAZMAT requests through EESOH-MIS, which is managed by the HAZMART. The HAZMART may be contacted at 803-895-9932/9933 or hazmart3@us.af.mil.

Fill In All Information – This worksheet is to accompany your SDS submittals.

NOTE 2: The Contracting Office will forward this worksheet and attached SDSs to the Project Inspector or QAE. The Project Inspector or QAE will then forward this worksheet and SDS to the 20 CES/CEIEC Hazardous Material Program Manager.

APPENDIX A-1 (continued)
SAFB CONTRACTOR WORKSHEET INSTRUCTION GUIDE

1. This information is required in order to help the SAFB track all hazardous materials used on-base. A worksheet must be filled out for each product containing a hazardous material. All blocks must be filled in.
 - a. Prime Contractor Name: Fill in the name of the Prime Contractor performing the work.
 - b. Subcontractor Name: Fill in the name of the Subcontractor. If not applicable – use N/A.
 - c. Contract Number: Fill in contract number.
 - d. Project Number: Fill in the project number. If not applicable – use N/A.
 - e. Project Title: Fill in the title of the project. This is never N/A.
 - f. Estimated Start Date: Fill in the date the project is projected to start.
 - g. Estimated Completion Date: Fill in the date the project is projected to end.
2. Material Information: *IMPORTANT: The information recorded in this section must match-up to the submitted SDS. Refer to Appendix A for examples of common HAZMAT.*
 - a. Hazardous Material Name: Fill in the name of the material to be used. Be as descriptive as possible (e.g., Hi-Gloss Latex Paint #555).
 - b. Manufacturer: Fill in the manufacturer's name.
 - c. Part Number: Fill in the manufacturer's part number or item number.
 - d. Container Type/Size: Fill in the container type (e.g., bag, bottle, can, drum, pail, etc.) and the container size (e.g., pound, pint, gallon, etc.).
 - e. Estimated Quantity to be used: Fill in the amount to be used throughout the duration of the project. For instance, if the project will last three months (project timeframe is recorded in Block 1) and you expect to use 100 gallons each month, then record 300 gallons.
3. Project Location and Process Information: Information about how the products will be used, what the products will be used on, where the project is located, and where the materials will be stored when not in use.
 - a. Location of Project: Identify in the physical location of where the product will be used. Example: Building number, intersection street names, etc.
 - b. Project will be Performed at: Circle all boxes that apply which pertain to where and on what the process that use the hazardous material will occur.
 - c. Describe the process or process that will be performed during the duration of the work. Include additional notes if there is not enough space on the form.
 - d. Is the area occupied by USAF military or civilians: Circle the appropriate response. For instance, if painting will be done in an occupied building – then the correct response is YES.
 - e. Location of Stored Materials: Identify the physical location of where the material will be stored when not in use.
4. Additional Information:
 - a. Will the project or processes used in the project create any hazardous waste, universal waste, or PCB waste? Refer to Appendix C for examples of hazardous waste, universal waste, and PCB waste. If any waste will be generated, it must be properly stored, labeled and managed from the moment it is generated. The 20 CES/CEIEC may request access to storage areas to ensure HAZMAT and HAZWASTE is managed according to regulations and installation guidelines.
 - b. Site Diagram Available: A site diagram will be provided to 20 CES/CEIEC identifying where the product(s) will be used and stored at the jobsite.
 - c. Spills: Does the Contractor have a listing of base procedures for reporting a spill?
5. Signatures: This submittal cannot be processed without both a Contractor Signature(s) and a Contracting Office Signature. This block must be completed and signed by both parties.
6. For specific projects, each month a Contractor Hazardous Material Usage Tracking Form must be completed by the contractor and submitted to the Contracting Office/Service Contracts for any project over 60 days by the 5th of the month following the reported month (ex: February HMs will be reported by the 5th of March). Projects less than 60 days are required to turn in a usage data sheet for all HMs used during the project after completion of project. The Contracting Office will forward this information to the Project Inspector or QAE, who will in turn forward the information to the 20 CES/CEIEC Hazardous Material Program Manager.

APPENDIX A-2
SAFB CONTRACTOR HAZARDOUS MATERIAL REVIEW

TO: 20 CONS

FROM: 20CES/CEIEC

RE: CONTRACT NUMBER: _____ PROJECT NUMBER: _____

DATE: _____

The SAFB Contractor Worksheet(s) and associated Safety Data Sheets (SDS) were received / reviewed. The attached packet may require additional action. Please see below comments.

_____ Tagged SDS(s) need replacing because it is illegible or outdated.

_____ Worksheets are incomplete, additional information required. See comments below.

_____ SAFB Contractor Worksheet(s) must be filled out for each attached SDS.
Return worksheet and SDS to the Contracting Office for the 20 CES/CEIEC hazardous material tracking.

_____ Submission worksheet and SDSs are complete. The contractor will be required to manage hazardous materials (HM) via the HAZMART and EESOH-MIS for HM tracking. A shop account will be established and HMs will be entered into EESOH-MIS. See SAFB Hazardous Materials Management Plan for instructions on program management.

_____ The SDSs that were submitted have been reviewed and information entered into the hazardous materials tracking data base. The attached hazardous materials list will be the items that the 20 CES/CEIEC will track on a monthly basis using the Contractor Hazardous Material Usage Tracking form. If any additional or different types of hazardous materials will be used on this or any future project, an additional SAFB Contractor Hazardous Material Worksheet and SDSs must be submitted for review prior to the contractor using on the project.

_____ Other Comments.

Comment 1A:	
Comment 1B:	
Comment 1C:	
Comment 2:	
Comment 3	
Comment 4	

APPENDIX A-3

CONTRACTOR MONTHLY HAZARDOUS MATERIAL (HM) USAGE TRACKING FORM

Contractor: _____ EESOH-MIS Shop Code: _____
 Contractor HM POC (Name/Phone/Email): _____
 Report Date: _____ Reporting Period: _____
 Project/Contract Manager: _____ Contract Number: _____
 Project Start Date & End Date: _____ Location: _____

The following information is required for tracking of hazardous materials on-base.

- For purchase orders/contracts 60 days or less, this form is required once the contractor starts the project and at the completion of work.
- For contracts EXCEEDING 60 days, this form is required to be filed out monthly beginning the date the work begins through the project end and submitted to the Contracting Office by the 5th of the month. The Contracting Office will forward it to 20 CES/CEIEC, Attention: HAZMAT Program Manager. This information is required in order to comply with Environmental Laws and Regulations.

Hazardous Material Name (from SDS)	Manufacturer	Part #, NSN #, or LPN #	Initial Quantity at the start of each project	Additional Quantity Each Month

Submitted by Contractor (Print Name): _____

Signature: _____ Date: _____

Received by Contracting Officer/COR (Print Name): _____

Signature: _____ Date: _____

APPENDIX B

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

Shaw AFB, is required to divert at least 50 percent of non-hazardous waste annually, divert at least 50 percent of non-hazardous construction and demolition (C&D) waste, and minimize the quantity of toxic and hazardous chemicals and materials acquired, used or disposed. This information is reported annually, along with the quantity of waste landfilled and the quantity of waste recycled on a quarterly basis. Wastes should be minimized through green procurement, source reduction, recycling, reuse, or composting prior to disposal. Wastes generated as a result of contracts, particularly C&D debris, are a large portion of the waste generated in any quarter. **Projects shall generate the least amount of waste possible by planning and ordering carefully, following proper storage and handling procedures to reduce damaged, expired, and broken materials, and reusing materials wherever possible. Waste materials generated shall be salvaged for donation or resale, or separated for recycling to the extent that is economically feasible.**

NOTE: Waste and recycling containers will remain covered at all times, including during transport, unless adding or removing waste or recycling to ensure compliance with all environmental regulations and installation guidelines.

Municipal Solid Waste (MSW), commonly known as trash or garbage, consists of everyday items used and thrown away, such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, or appliances.

C&D debris is waste not included the MSW as a result of construction, renovation and demolition activities.

Types of C&D debris include, but are not limited to:

- Aluminum
- Asphalt
- Bricks, rock and other masonry materials
- Cardboard
- Concrete
- Doors and windows
- Drywall and plaster
- Electrical wiring and components
- Furniture
- Green waste (palm fronds, scrub brush, land clearing debris, etc.)
- Kitchen and restroom cabinets, sinks, toilets
- Lighting fixtures
- Landscaping stone
- Plumbing fixtures and piping
- Roof coverings (e.g., shingles or tiles)
- Metal scraps (from stud trim, ductwork, rebar, piping, roofing, banding, etc.)
- Wood products (scrap wood and pallets)

1) For contracts less than 60 days, the Contractor will submit the "MSW, C&D Debris Landfilling and Recycling Diversion Summary Report" (refer to Attachment B-1) to the Contracting Office at the completion of the contract.

For contracts greater than 60 days, the Contractor will submit the "MSW, C&D Debris Landfilling and Recycling Diversion Summary Report" (refer to Attachment B-1) to the Contracting Office **by the 5th of each month for the month prior** beginning at the start of the contract work and a summary at the completion of the contract.

APPENDIX B-1
EXAMPLE SUBMITTAL
CONTRACTOR MSW, C & D DEBRIS LANDFILLING AND RECYCLING DIVERSION SUMMARY REPORT

Project Number and Title: VLSB12345, Demolish Dormitory

Period of Performance: _____

Project Waste Management Coordinator(s): Ms. Jane Doe, Mr. John Smith

Material	Anticipated Quantity for the project	Recycling or Disposal Method	Handling Procedure (Good Housekeeping)	For MONTH/YEAR		Project totals to date	
				Recycled	Landfilled	Recycled	Landfilled
Wood cabinets	20 ea.	Donated to 'Help for the Homeless'	Ensure cabinets are not damaged at job site while awaiting transport to donation store.	20 ea	0	20 ea	0
Green waste (brush)	2 tons	John and Jack's Crushing Company (to be mulched for reused/resale)	Avoid contamination of green waste with other construction debris	1.5 ton	0	2	0
Scrap metal (steel window frames, copper pipe, etc.)	0.5 tons	Western Iron and Metal	Deposit all metals in roll-off labeled "Scrap metal"	0.5 ton	0	0.5	0
Concrete	10 tons	Road base Material Recycling (to be crushed for reuse/resale)	To be collected in piles then trucked to the recycling facility	0	0	2 tons	0
Clean asphalt	0.5 tons	Dee's Inert Landfill	To be trucked to the landfill on the day that it is removed	0	0	0	0
Aluminum soda cans	10 lbs	Pima County Transfer Station	Avoid contamination of cans with garbage	2 lb	0	4 lb	0
Remaining wastes (e.g., garbage and material that cannot be recycled)	8 tons	COT Los Reales Landfill	Keep job site free of windblown debris. Remove garbage daily.	0	1 ton	0	3 ton

APPENDIX C

HAZARDOUS WASTE, UNIVERSAL WASTE, ASBESTOS, LEAD-BASED PAINT, PCB, AND NON-REGULATED (CONTROLLED) WASTES: PROPER MANAGEMENT AND DISPOSAL

Hazardous Waste, Universal Waste, Asbestos, Lead-Based Paint (LBP), Polychlorinated Biphenyl (PCB), and Non-Regulated (Controlled) Wastes: The Contractor is required to manage and dispose of hazardous waste, universal waste, Asbestos waste, LBP waste, PCB waste, and non-regulated waste in accordance with local, state, and federal laws. It is the Contractor's responsibility to determine whether any of these wastes will be generated by a particular project and to properly store, label and otherwise manage such wastes. The Contractor will notify the 20 CES/CEIEC of any wastes generated as a result of the contract.

Hazardous Waste: Hazardous wastes (HW) are wastes with properties that make them dangerous or capable of having a harmful effect on human health or the environment.

HW is regulated by 40 CFR 260, Environmental Protection Agency Hazardous Waste Regulations; SC Regulation 61-79, South Carolina Hazardous Waste Management Regulations; and Shaw AFB Plan 32-7002C, Hazardous Waste Management (subject to change).

Contractors are required to meet HW training requirements as specified for Large Quantity Generators in 40 CFR 262.34(a) (4) and 40 CFR 265.16.

Contractors are responsible for determining if their waste is hazardous and must provide a Hazardous Waste Stream Characterization form (provided in Appendix C-1) along with waste analysis reports to the 20 CES/CEIEC HW Program Manager immediately upon generation of the waste.

HW requires regulatory compliance with storage, labeling, disposal, recordkeeping, i.e. the overall management of the HW. The CE HW Program Manager must review contractor submittals and work plans, including hazardous waste stream characterization(s) (using Attachment C-1), training certifications, and all HW manifests (EPA Form 8700-22A, an example is provided in Attachment C-2) and land disposal restriction (LDR) forms (master LDR, one time use, or lead-acid battery provided in Attachments C-3A through C-3C), for project activities that generate HW. Contractors may provide a copy of their LDR forms on their own form or the contractor may use the forms provided in Attachments C-3 through C-3C, below.

Listed below are examples of wastes which can be hazardous waste (this list is not all inclusive):

- Acids or caustics
- Adhesives, calks, roofing cements
- Items that contain lead (such as lead flashing, lead solder, etc.)
- Paints, varnishes, and sealers
- Waste solvents, thinners, cleaners, and fuels
- Sandpaper, sand blasting residue
- Rags, gloves, coveralls, masking paper contaminated with hazardous materials
- Aerosol cans (partially full/not empty)
- Gasoline filters, waste gasoline, and gasoline absorbents

Universal Waste: Universal Waste, (UW) are waste materials designated as "HW" but containing materials that are very common.

UW is regulated by 40 CFR 273, Universal Waste Management; SC Regulation 61-79.273, Universal Waste Rule; and Shaw AFB Plan 32-7002C, Hazardous Waste Management (subject to change).

All UW is subject to container management and storage requirements, labeling requirements and recordkeeping requirements. RCRA requires regulatory compliance with storage, labeling, disposal, recordkeeping and overall management of the UW.

Only trained and licensed professionals may apply pesticides on federal property. The CE HW Program Manager must review contractor submittals and work plans, including hazardous waste determination(s), training certifications, and all HW manifests, land disposal restriction forms (LDR), for project activities that generate HW.

Listed below are examples of universal waste (this list is not all inclusive):

- Waste Lamps Containing Mercury (LCMs): (such as compact fluorescent lamps (CFLs), fluorescent tubes, high intensity discharge lamps (mercury vapor, metal halide, high pressure sodium (used in streetlights, floodlights, parking lots and industrial lighting), and neon/argon lamps (signs)
- Waste Batteries: non-alkaline batteries (lead acid batteries not recycled/reclaimed, lithium, NiCd, Mercury, Silver, Ni-MH, and Magnesium)
- Mercury Containing Equipment (MCE) (thermometers, barometers, manometers, thermostats, temperature and pressure gages, and mercury switches).
- Waste pesticides (herbicides, insecticides and pesticides).
- Aerosol cans (empty only)

Asbestos Waste: The term “asbestos” means asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite, or actinolite.

Asbestos is regulated by the 40 CFR Part 763, Toxic Substances Control Act (TSCA), 40 CFR 61.140 through 61.157, National Emission Standard Hazardous Air Pollutants (NESHAP), and SC Regulation 61-86.1, Standards of Performance for Asbestos Projects, <https://scdhec.gov/environment/your-home/asbestos/asbestos-regulations>. The SC DHEC Lead Based Paint & Residue Disposal Advisory may be viewed in Appendix C-4.

Asbestos-Containing Material (ACM): The term “asbestos-containing material” means any material that contains more than 1 percent asbestos by weight.

Friable ACM: The term “friable asbestos-containing material” means any ACM applied on ceilings, walls, structural members, piping, ductwork or any other part of a building that when dry may crumble, pulverize, or reduced to powder by hand pressure. The term includes non-friable asbestos-containing material after damaged to the extent that when dry it may crumble, pulverize, or reduced to powder by hand pressure.

The contractor will comply with SCDHEC R61-86.1 Standards of Performance for Asbestos Projects. The CE HW Program Manager must review contractor submittals and work plans, including Asbestos Survey Reports, training records and certifications, all transportation manifests/documentation, and land disposal LDR forms, for project activities that generate asbestos. If asbestos is present, the Contractor must:

- Submit an SCDHEC Asbestos NESHAP Notification/ Permit Activity Application for Renovation / Demolition Activities at least 14 days prior to the start of work.
- Ensure asbestos workers are properly trained and provide documentation to SAFB 20 CES/CEIEC
- Ensure asbestos inspector is certified and provide documentation to the 20 CES/CEIEC
- Provide disposal manifests/documentation to the 20 CES/CEIEC with asbestos removal/inspection/disposal certifications.

Listed below are examples of asbestos waste (this list is not all inclusive):

- Adhesives, caulks, roofing cements
- Ceiling tiles
- Mastic on flooring tiles
- Flooring tiles
- Sandpaper, sand blasting residue
- Rags, gloves, coveralls, masking paper contaminated with hazardous materials.

Lead Based Paint (LBP) Waste: Lead based paint waste means paint or other surface coatings that contain lead in excess of regulatory guidelines. **NOTE:** Shaw AFB prohibits the use of paint with a lead content of 0.05% or greater.

LBP is regulated by 40 CFR Part 745, TSCA, and the SC DHEC. Refer to the SC DHEC Lead Based Paint & Residue Disposal Advisory in Attachment C-4 for more guidelines.

Bioenvironmental Engineering and the CE HW Program Manager must review contractor submittals and work plans, including LBP Survey Report and training certifications, for project activities that disturb LBP.

Lead based paint waste includes material such as wood, brick and metal that is painted with LBP and removed.

LBP residue includes residue that is generated from the removal of LBP from a structure/surface by scraping, chipping, sandblasting, or chemical stripping.

Listed below are examples of LBP waste (this list is not all inclusive):

- Lead-based paint chips
- Sandpaper, sand blasting residue
- Rags, gloves, coveralls, masking paper contaminated with hazardous materials.

Polychlorinated Biphenyl (PCB) Waste: PCBs are a group of man-made organic chemicals known as chlorinated hydrocarbons. PCBs have no known taste or smell, and range in consistency from an oil to a waxy solid.

PCBs are regulated by 40 CFR Part 761, TSCA and products that may contain PCBs include:

- Transformers and capacitors
- Electrical equipment including voltage regulators, switches, re-closers, bushings, and electromagnets
- Oil used in motors and hydraulic systems
- Old electrical devices or appliances containing PCB capacitors
- Fluorescent light ballasts
- Cable insulation
- Thermal insulation material including fiberglass, felt, foam, and cork
- Adhesives and tapes
- Oil-based paint
- Caulking
- Plastics
- Carbonless copy paper
- Floor finish

Non-Regulated (Controlled) Waste: Includes materials that are not required to be stored or managed as a HW, but possess characteristics that prohibits them from being thrown in the trash or stored improperly. Includes, but not limited to:

- Absorbents (non-HW, includes recycled petroleum or synthetic oils, hydraulic fluids, Jet-A, and diesel, does not include gasoline soaked absorbents)
- GAA grease and related items
- Used oil for recycling (recycled petroleum or synthetic oils, motor oil, gear oil/mineral oil, hydraulic fluids, transmission fluids, brake fluids, Jet A and Diesel)
- Alkaline batteries
- Latex paint
- Non-terne plated used oil filters (gravity hot drained and crushed/punctured)
- Silicone sealants

Storage Requirements:

- Containers must be in good condition, i.e. no severe rusting, no creases/dents, no punctures, bulging heads, or severe structural defects and compatible with wastes
- Containers **MUST** remain closed at all times unless actively adding/removing waste
 - Bungs closed tightly
 - Removable lids attached firmly to drum/container
 - If tipped, no waste should escape drum/container
 - Boxes should be structurally sound and taped closed
 - Drums/containers should have adequate headspace (do no overfill - 90% rule)
- No free liquids should be on top of the container

- Ignitable wastes should be grounded
- Be prepared for a release: know where sanitary drains, storm drains, and outfalls are located
- Secondary containment is required for:
 - All liquid hazardous materials as defined by the Secretary of Transportation, which includes any liquids capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under Section 5103 of Federal Hazardous Materials Transportation Law (49 U.S.C. 5103)
 - Secondary containment rule states that the secondary containment must hold 100% of the largest container or 10% of the total volume, whichever is greater
 - Should be free of freestanding liquids
- Spills should be cleaned up immediately

Waste Disposal: Contractors are responsible for the disposal of all wastes generated as part of a contract with the exception of long-term embedded contractors (see definition in Attachment A, Hazardous Materials). All waste documentation will be reviewed by the 20 CES/CEIEC prior to disposal.

Full or partially full containers to be disposed by the contractor may be RCRA or TSCA wastes.

RCRA HWs must be manifested off-site and must be removed by a licensed hazardous waste transporter. Hazardous waste must be disposed at a RCRA permitted facility. All HW shipments must be accompanied by a hazardous waste manifest, LDR form (Attachments C-1 through C-3C), and signed by authorized personnel from the 20 CES/CEIEC prior to removal from Shaw AFB. The contractor must provide a copy of the return manifest to the 20 CES/CEIEC within 30 days of waste shipment. If the return manifest is not received within 60 days of the waste shipment an exception report must be filed with the Environmental Protection Agency and the SC DHEC.

Universal waste, asbestos, LBP, and PCB waste must be disposed at a RCRA permitted facility. UW, Asbestos, LBP, PCB wastes must have required regulatory documentation (manifest, non-hazardous waste manifest, Bill of Lading (BOL), etc.) accompany the waste. The contractor must provide a copy of the return manifest/documentation/BOL, etc., to the 20 CES/CEIEC within 30 days of waste shipment.

Contractors must follow all waste guidelines as instructed in the Shaw Plan 32-7002C, Hazardous Waste Management (number subject to change) and all subsequent Hazardous Waste Management Plans, regardless of the number assigned to the plan.

The following table presents a list of questions that the Contractor may use to help identify whether their work will be generating a hazardous, universal waste, PCB waste, or asbestos and LBP waste (these questions are not all inclusive).

What processes will be performed during the project?	Potential Regulated Waste
Will any paint be chipped, sanded, abraded, or chemically removed?	• Many paints and primers contain lead, cadmium, or chromium, and these paint residues and sandpaper may be RCRA toxic for heavy metals. Lead based paint must be managed according to TSCA.
Will any flammable paints, varnishes, cements, adhesives, or other coatings be used?	• Many flammable coatings & adhesives contain methyl ethyl ketone (synonyms are MEK & 2-butanone) and brushes, rags, etc. contaminated with these may be RCRA toxic for MEK. • Additionally, if these are to be disposed in liquid form they may be RCRA ignitable.
Will any chemicals be used to clean or strip surfaces?	• Many solvents (e.g., chlorinated solvents, benzene, toluene, MEK, xylene, etc.) are hazardous and the stripping residues along with rags and applicators may be RCRA listed spent solvent wastes. • Corrosive strippers (acids, alkalis, etc.) may be RCRA corrosive if disposed in liquid form. • Depending on what is being removed, the residues may also contain RCRA toxic heavy metals such as lead.
Will any aerosol cans be used?	• Empty aerosol cans must be punctured according to regulations to avoid being regulated as RCRA reactive. Empty aerosol cans may not be thrown away in the trash. • Aerosol cans may be managed as UW according to 40 CFR 273, Part C • Non-empty aerosol cans that are disposed may also be RCRA ignitable.

Will any lamps containing mercury (LCM) or non-alkaline batteries be removed?	•LCMs may contain mercury and non-alkaline batteries (Lithium, NiCd, etc.) contain heavy metals but are regulated as Universal Waste and must be stored, labeled and managed according to 40 CFR 273, Part C.
Will any electronic equipment be removed (equipment containing circuit boards, switches, thermostats, transformers, soldered parts, CRTs, etc.)?	•Some types of equipment may contain heavy metals and be RCRA toxic for mercury, lead, or silver. •Transformers and lamp ballasts may contain Polychlorinated Biphenyls (PCBs). •Some types of equipment may contain batteries that have RCRA toxic metals or are RCRA corrosive or are regulated as Universal Waste.
Will any petroleum, oil or lubricant waste (POL) be generated?	Absorbents, grease, used oil for recycling must be stored and managed according to regulations.
Will all unused hazardous materials be removed by the contractor at job completion?	Full or partially full containers that are to be disposed may be RCRA hazardous wastes. RCRA hazardous wastes must be removed by a licensed hazardous waste transporter and accompanied by a hazardous waste manifest and signed by authorized personnel from the 20 CES Environmental Flight.

APPENDIX C-1 – Waste Stream Characterization Form

A fillable PDF will be provided by the Contracting Officer (CO), Contracting Officer Representative (COR) or the Project Manager (PM) if there is an issue with the embedded PDF located after the example.

Waste Stream Characterization Form

A. Waste process and description	
Waste description (including chemical/physical description):	
Process generating the waste:	
B. Waste stream determination	
Waste determination based on: ☐ User knowledge (Process evaluation, SDSs, and interviews) ☐ Waste analysis (List all sampling dates and attach analytical results)	Date: Date:
Is the waste a “solid waste” according to §261.2? <i>If no, specify exclusion or exemption by regulatory citation and describe:</i>	☐ Yes ☐ No
Is the solid waste excluded under §261.4 or exempt from regulation as a hazardous waste? <i>If yes, specify exclusion or exemption by regulatory citation and describe:</i>	☐ Yes ☐ No
Is the waste a listed hazardous waste? (Detail rationale, as necessary) F-listed per §261.31 K-listed per §261.32 P-listed per §261.33(e) U-listed per §261.33(f)	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No
Is the waste a characteristic hazardous waste? (Detail rationale, as necessary) Ignitable (D001) per §261.21 Corrosive (D002) per §261.22 Reactive (D003) per §261.23 Toxic (D004 – D043) per §261.24 (select constituents below)	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No
Metals (mg/L) D004 ☐ Arsenic (5.0) D005 ☐ Barium (100.0) D006 ☐ Cadmium (1.0) D007 ☐ Chromium (5.0) D008 ☐ Lead (5.0) D009 ☐ Mercury (0.2) D010 ☐ Selenium (1.0) D011 ☐ Silver (5.0)	Volatiles (mg/L) D018 ☐ Benzene (0.5) D019 ☐ Carbon Tetrachloride (0.5) D021 ☐ Chlorobenzene (100.0) D022 ☐ Chloroform (6.0) D028 ☐ 1,2-Dichloroethane (0.5) D029 ☐ 1,1-Dichloroethylene (0.7) D035 ☐ Methyl Ethyl Ketone (200.0) D039 ☐ Tetrachloroethylene (0.7) D040 ☐ Trichloroethylene (0.5) D043 ☐ Vinyl Chloride (0.2)
Semi-Volatiles (mg/L) D023 ☐ o-Cresol (200.0) D024 ☐ m-Cresol (200.0) D025 ☐ p-Cresol (200.0) D026 ☐ Cresol - total (200.0) D027 ☐ 1,4-Dichlorobenzene (7.5) D030 ☐ 2,4-Dinitrotoluene (0.13) D032 ☐ Hexachlorobenzene (0.13) D033 ☐ Hexachlorobutadiene (0.5) D034 ☐ Hexachloroethane (3.0) D036 ☐ Nitrobenzene (2.0) D037 ☐ Pentachlorophenol (100.0) D038 ☐ Pyridine (5.0) D041 ☐ 2,4,5-Trichlorophenol (400.0) D042 ☐ 2,4,6-Trichlorophenol (2.0)	Pesticides/Herbicides (mg/L) D020 ☐ Chlordane (0.03) D012 ☐ Endrin (0.02) D031 ☐ Heptachlor + epoxide (0.008) D013 ☐ Lindane (0.4) D014 ☐ Methoxychlor (10.0) D015 ☐ Toxaphene (0.5) D016 ☐ 2,4-D (10.0) D017 ☐ 2,4,5-TP (Silvex) (1.0)
Is the waste PCB-contaminated? <i>If yes, verify RCRA status at §261.8. (TSCA regulations may apply.)</i>	☐ Yes ☐ No
RCRA waste determination: ☐ Hazardous with waste codes ☐ Nonhazardous ☐ Exempt because ☐ Used oil ☐ Universal waste	

Waste Stream Characterization Form (continued)

C. Wastestorage, treatment, and disposal	
Specific description of waste management from generation point to final disposition:	
Approximate waste generation rate:	
Are land disposal restrictions (LDR) applicable? If yes, specify treatability group: ☐ Wastewater ☐ Nonwastewater	☐ Yes ☐ No
Are UHCs present above treatment standards? <i>[Only applicable to certain characteristically hazardous waste codes specified by regulation.]</i> If yes, specify UHCs:	☐ Yes ☐ No
DOT shipping name:	
Signature	Printed/typed name & title Date

IMPORTANT: Attach all supporting documentation (e.g., SDSs, laboratory analysis, generator knowledge, etc.) to this waste stream determination.

Waste Characterization Review

I have reviewed the process generating this waste and have found, to the best of my knowledge, that no changes have been made to materially affect the waste generated (e.g., require additional or elimination of codes). *If this is not the case, then a new Waste Stream Characterization Form must be completed.*

Reviewer's signature Printed/typed name & title, and date

Source: Adapted by McCoy and Associates, Inc.

Embedded Waste Characterization Form PDF

Waste_Characteriza
tion_Form.pdf

APPENDIX C-2 – EXAMPLE EPA Form 8700-22A, Hazardous Waste Manifest**Page 1**

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number		2. Page 1 of		3. Emergency Response Phone		4. Manifest Tracking Number		
		5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)						
GENERATOR		Generator's Phone:								
		6. Transporter 1 Company Name				U.S. EPA ID Number				
		7. Transporter 2 Company Name				U.S. EPA ID Number				
		8. Designated Facility Name and Site Address				U.S. EPA ID Number				
TRANSPORTER		Facility's Phone:								
		9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
						No. Type				
		1.								
		2.								
		3.								
DESIGNATED FACILITY		4.								
		14. Special Handling Instructions and Additional Information								
		15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
		Generators/Offeror's Printed/Typed Name		Signature				Month	Day	Year
TRANSPORTER INT'L		16. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: _____						
		Transporter signature (for exports only): _____		Date leaving U.S.: _____						
		17. Transporter Acknowledgment of Receipt of Materials								
		Transporter 1 Printed/Typed Name		Signature				Month	Day	Year
DESIGNATED FACILITY		Transporter 2 Printed/Typed Name		Signature				Month	Day	Year
		18. Discrepancy								
		18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection								
		18b. Alternate Facility (or Generator)		Manifest Reference Number:		U.S. EPA ID Number				
DESIGNATED FACILITY		Facility's Phone:								
		18c. Signature of Alternate Facility (or Generator)				Month	Day	Year		
		19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
		1.		2.		3.		4.		
DESIGNATED FACILITY		20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
		Printed/Typed Name		Signature				Month	Day	Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Page 2

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator ID Number	22. Page	23. Manifest Tracking Number		
24. Generator's Name						
25. Transporter _____ Company Name				U.S. EPAID Number		
26. Transporter _____ Company Name				U.S. EPAID Number		
27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No. Type		29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes
32. Special Handling Instructions and Additional Information						
33. Transporter _____ Acknowledgment of Receipt of Materials Printed/Typed Name Signature Month Day Year						
34. Transporter _____ Acknowledgment of Receipt of Materials Printed/Typed Name Signature Month Day Year						
35. Discrepancy						
36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete. DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

APPENDIX C-3A – LDR Master LDR Form

Page 1

Land Disposal Restrictions One-Time Notification/Certification

1. Generator information: Name _____ Address _____ EPA ID No. _____			2. Receiving facility information (if applicable): Name _____ Address _____ EPA ID No. _____ Manifest No. _____		
3. Waste description at point of generation:					
Line item	Waste description	Hazardous waste code(s)	LDR Subcategory	WW/NWW	Underlying hazardous constituents [§268.2(i)] ¹
1					
2					
3					
4					
4. Waste disposition:					
Line item	Subtitle C exclusion subsequent to point of generation (if applicable)	Current disposition of waste	§268.45, Table 1 technology used to treat debris (if applicable)	Date shipped (if applicable)	
1					
2					
3					
4					
5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characteristic wastes managed in wastewater treatment systems discharging under the CWA)? ☐ Yes ☐ No (If yes, this constitutes the §268.7(a)(7) one-time notification.) ²					
6. Was the waste characteristic at the point of generation, treated onsite to remove all characteristics, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☐ No (If yes, complete Certification 1, 2, 3, or 4.) ²					
7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under §261.3(f)(1) by treating it using an extraction or destruction technology in §268.45, Table 1? ☐ Yes ☐ No (If yes, complete Certification 5.) ³					
8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under §261.3(f)(2) by receiving a "no-longer-contains" determination from EPA or the authorized state? ☐ Yes ☐ No (If yes, this constitutes the §268.7(d)(1) one-time notification.) ⁴					
9. Was the waste "soil" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste via a "no-longer-contains" determination from EPA or the authorized state or by the generator determining that the soil no longer exhibits a characteristic? ☐ Yes ☐ No (If yes, this notice and all supporting information and documentation must be maintained in the facility files for at least three years per §268.7(e).)					
10. Is the waste residue from treating K061, K062, and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in §261.3(c)(2)(ii)(C), 2) does not exhibit any characteristics, and 3) is shipped to a Subtitle D land disposal facility? ☐ Yes ☐ No (If yes, complete Certification 6.) ⁵					

Land Disposal Restrictions One-Time Notification/Certification (Continued)

1. ☐ Waste that has been treated to remove characteristics and that did not contain underlying hazardous constituents at the point of generation. I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to manifest line items: _____ <i>Reference:</i> §§268.7(b)(4) and 268.9(d)			
2. ☐ Waste that has been treated to remove characteristics and to meet universal treatment standards for underlying hazardous constituents. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic and that underlying hazardous constituents, as defined in §268.2(i) have been treated on-site to meet the §268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to manifest line items: _____ <i>Reference:</i> §§268.7(b)(4)(v) and 268.9(d)			
3. ☐ Waste that has been treated to remove characteristics but does not meet universal treatment standards for underlying hazardous constituents. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to manifest line items: _____ <i>Reference:</i> §§268.7(b)(4)(iv) and 268.9(d)			
4. ☐ Soil that has been treated to meet the alternative treatment standards. I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.49 without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to manifest line items: _____ <i>Reference:</i> §268.7(b)(4)			
5. ☐ Debris that has been treated to meet the alternative treatment standards. I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware there are significant penalties for making a false certification, including the possibility of fine and imprisonment.	Applies to manifest line items: _____ <i>Reference:</i> §268.7(d)(3)(iii)			
6. ☐ HMR residue from treating K061, K062, and/or F006 wastes. I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to manifest line items: _____ <i>Reference:</i> §261.3(c)(2)(ii)(C)			
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Generator's signature</td> <td style="width: 33%;">Printed/typed name & title</td> <td style="width: 33%;">Date</td> </tr> </table>		Generator's signature	Printed/typed name & title	Date
Generator's signature	Printed/typed name & title	Date		

¹Use an attachment if necessary. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any on this notification.

²This one-time notification is placed in the facility's onsite files only. For compliance with the §268.9(d) one-time notification and certification, if the waste does not meet universal treatment standards for underlying hazardous constituents (i.e., Certification 3 above), the generator must somehow communicate the need for UHC treatment to the Subtitle D facility; the notification and certification must be updated if the process or operation generating the waste changes and/or if the Subtitle D receiving facility changes.

³This one-time notification must be sent to EPA or the authorized state and placed in the facility's files. It is not sent with the shipment to the Subtitle D receiving facility. The notification must be updated if 1) a different type of debris is treated, 2) a different §268.45, Table 1 technology is used to treat the debris, and/or 3) the Subtitle D receiving facility changes. The certification (Certification 5 above) must be placed in the facility's files for each shipment of treated debris.

⁴This one-time notification must be sent to EPA or the authorized state and placed in the facility's files. It is not sent with the shipment to the Subtitle D receiving facility. The notification must be updated if the Subtitle D receiving facility changes.

⁵This one-time notification and certification must be sent to EPA or the authorized state and placed in the facility's files. It is not sent with the shipment to the Subtitle D receiving facility. The notification and certification must be updated if the process or operation generating the waste changes and/or if the Subtitle D receiving facility changes.

Source: McCoy and Associates, Inc.

Embedded LDR Master Form PDF



LDR_Master_Form.pdf

APPENDIX C-3B – LDR One-Time Notice to File Form

Land Disposal Restrictions One-Time Notice to File [§268.7(a)(7)]

1. Generator information:		
Name		
Address		
EPA ID No.		
Section 268.7(a)(7) states: "If a generator determines that he is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or is exempted from Subtitle C regulation under 40 CFR 261.2 through 261.6 subsequent to the point of generation (including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to the Clean Water Act (CWA) as specified at 40 CFR 261.4(a)(2) or that are CWA-equivalent, or are managed in an underground injection well regulated by the SDWA), he must place a one-time notice describing such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from RCRA Subtitle C regulation, and the disposition of the waste, in the facility's on-site files."		
2. Waste description at point of generation:		
Waste stream(s)		
Waste codes		
Description of waste generation		
3. Waste disposition:		
Subsequent exclusion or exemption		
Current disposition		
4. Signature:		
Generator's signature	Printed/typed name & title	Date

Source: McCoy and Associates, Inc.

LDR One-Time Notification Form PDF



LDR_One-Time_Noti
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APPENDIX C-3C – LDR Lead-Acid Battery Form

Land Disposal Restrictions Lead-Acid Battery Notification [§268.7(a)(2)]

1. Generator information: Name _____ Address _____ _____			2. Other information (if applicable): Manifest No. ¹ _____ EPA ID No. _____		
3. Waste information/description:					
Line item	Waste description	Waste codes	Subcategory	WW/NWW	UHCs §268.9(a) ²
4. Waste management: This LDR notification is for lead-acid batteries that are managed per the requirements of 40 <i>CFR</i> 266.80 and thus are subject to the LDR requirements of 40 <i>CFR</i> Part 268 but are not subject to 40 <i>CFR</i> Parts 262 (except §262.11), 263, 264, 265, 266, 270, and 124 or the notification requirements at Section 3010 of RCRA. This is a restricted waste that does not meet the applicable treatment standards set forth in Subpart D of 40 <i>CFR</i> Part 268. [§268.7(a)(2)]					
Line item	Description of waste management ³				
5. Signature:					
Generator's signature		Printed/typed name & title		Date	

¹A manifest is not required for shipments of lead-acid batteries per 40 *CFR* 266.80.

²Use an attachment if necessary.

³Use this section to identify the different storage and treatment facilities that will manage the waste. This notice should be sent to each treatment or storage facility that will manage the waste per §268.7(a)(2).

LDR Lead-Acid Battery Notification Form PDF



LDR_Lead-Acid_Battery_Form.pdf

APPENDIX C-4 – SC DHEC Lead Based Paint & Residue Disposal Advisory

Lead-Based Paint Waste & Residue Disposal Advisory



Summary for Contractors, Landfill Operators and Residents

Definitions

- **Lead-based Paint Waste** – material such as wood, brick and metal that is painted with lead-based paint
- **Lead-based Paint Residue** – residue that is generated from the removal (e.g., scraped, chipped, sandblasted or chemical) of lead-based paint from a structure
- **mg/l** – milligrams per liter
- **Toxicity Characteristic Leaching Procedure (TCLP)** – an analysis used to determine if a waste is hazardous

For More Information ...

For more information, contact DHEC's Division of Solid Waste Compliance at (803) 898-0456.

Changes to state and federal regulations have changed the disposal options for lead-based paint waste and residue. The changes were made to help accelerate the safe and proper removal of lead-based paint from homes and buildings.

The regulations allow lead-based paint waste from residential or commercial sources to be disposed of in Class 2 (construction and demolition debris) and Class 3 (municipal solid waste or industrial) landfills in South Carolina.

The management of lead-based paint residue is based on source and/or lead concentration.

Specifically, lead-based paint residue generated from a:

- HOME, APARTMENT or RESIDENTIAL FACILITY may be

disposed of in a Class 2 or Class 3 landfill;

- **COMMERCIAL FACILITY** may be disposed of in a Class 3 landfill if the lead concentration is less than 5 mg/l – determined non-hazardous by using the Toxicity Characteristic Leaching Procedure (TCLP); and
- **COMMERCIAL FACILITY** must be disposed of in a Subtitle C (hazardous waste) Landfill if the lead concentration is equal to or greater than 5 mg/l – determined hazardous by using the TCLP.

NOTES: Unless otherwise approved by DHEC, waste painted with lead-based paint cannot be composted, mulched or used as fill material or as roadbed. Metal painted with lead-based paint may be recycled without removing the paint.

Disposal Options

TYPE	ORIGIN	TCLP TESTING	DISPOSAL OPTIONS
Lead-Based Paint Waste	Residential/Commercial	None	Class 2, Class 3 Landfill
Lead-Based Paint Residue	Residential	None	Class 2, Class 3 Landfill
Lead-Based Paint Residue	Commercial	<5 mg/l lead	Class 3 Landfill
Lead-Based Paint Residue	Commercial	≥ 5 mg/l lead	Subtitle C Landfill (Hazardous Waste)

Household Help: Reduce Your Family's Risk of Lead Exposure

One of the most common sources of lead exposure may be right at home. If your home was built before 1978 it may have lead-based paint on it or in it. If it does, paint chips and

dust from deteriorating paint may contain dangerous levels of lead, especially to children. In addition, repairs and renovations can create significant amounts of lead-based paint dust and must be done properly to prevent exposure.

Please visit www.scdhec.gov/administration/epht/Lead.htm or www.epa.gov/lead/pubs/parents.html#older or www.epa.gov/lead/index.html to learn more about

possible lead exposure in your home and how to protect your family.

Contractors doing renovations and repairs that disturb lead-based paint in homes, child-care facilities and schools built before 1978 must be trained and certified in lead-safe practices. Visit www.epa.gov/lead/pubs/lscp-press.htm to learn more about the U.S. Environmental Protection Agency's Renovation, Repair and Painting (RRP) Rule.

APPENDIX D REFRIGERANT RECOVERY REQUIREMENTS

Refrigerant Recovery: 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.

Contractors are required to meet training and certification requirements as specified in 40 CFR 82, Section 608. Technicians are required to pass an EPA-approved test to earn Section 608 Technician Certification. The tests are specific to the type of equipment the technician seeks to work on. Tests must be administered by an EPA-approved certifying organization. Section 608 Technician Certification credentials do not expire.

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.

For most recovery and recycling equipment, these requirements are detailed in Appendix B2 to 40 CFR 82, Subpart F. Requirements for equipment manufactured or imported after January 1, 2017, are detailed in 40 CFR 82, Subpart F, Appendix B3 (for non-flammable refrigerants) or Appendix B4 (for flammable refrigerants). These standards are based on the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) 740 test protocol. Small appliance recovery and recycling equipment may be tested under these requirements or the ones detailed in Appendix C to 40 CFR 82, Subpart F.

Contractors are responsible for determining if the recovered refrigerant is classified as a Class I or Class II ozone depleting substance (ODS). Contractors will provide a completed Contractor Refrigerant Work Submittal to Determine Compliance with Ozone Depleting Substances (ODS) (Clean Air Act§ 608) (provided in Appendix D-1) along with required certifications to the 20 CES/CEIEC.

Recovery equipment standards vary depending on the size and type of air-conditioning or refrigeration appliance being serviced:

- Recovery and recycling equipment used with most air-conditioning and refrigeration equipment must meet the standards identified in the following table.
- Small appliance recovery equipment must be able to recover either:
 - 90 percent of the refrigerant in the small appliance when the small appliance compressor is functional, or
 - 80 percent of the refrigerant in the small appliance when the compressor is not functional.

Recovered refrigerant requires regulatory compliance with storage, labeling, disposal, recordkeeping, i.e. the overall management of the recovered refrigerant(s).

Listed below are examples of wastes which can be hazardous waste (this list is not all inclusive):

- HVAC systems
- Heat pumps
- Cooling towers
- Chillers
- Condensers
- Dehumidifiers
- Evaporators
- Refrigerated air dryers
- White goods

Disposal: 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.

Below are the refrigerants required to be recovered and sent to the DLA:

CFCs	CHEMICAL NAME
• R-11	Trichlorofluoromethane
• R-12	Dichlorodifluoromethane
• R-114	Dichlorotetrafluoroethane
• R-500	Azeotropic mixture of CFC-12 and HFC-152A (1,1 Difluoroethane)
• R-502	Azeotropic mixture of CFC-115 and HCFC-22

HCFCs	CHEMICAL NAME
• R-22	Chlorodifluoromethane

HALONS	CHEMICAL NAME
• Halon 1202	Dibromodifluoromethane
• Halon 1211	Bromochlorodifluoromethane
• Halon 1301	Bromotrifluoromethane

SOLVENTs	CHEMICAL NAME
• Methyl Chloroform	1,1,1 Trichloroethane
• CFC-113	Trichlorotrifluoroethane

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. 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 – 1 OVERVIEW OF SECTION 608 OF CLEAN AIR ACT



Section 608 of the Clean Air Act: Stationary Refrigeration and Air Conditioning

Importance of Protecting the Ozone Layer

The stratospheric ozone layer shields the Earth from the sun's harmful ultraviolet radiation. Emissions of certain synthetic chemicals – including chlorofluorocarbons (CFCs), halons, and hydrochlorofluorocarbons (HCFCs) – that are commonly used as refrigerants, solvents, and insulating foams destroy the ozone layer and have created an “ozone hole” over the South Pole.

In addition, many of these ozone-depleting substances (ODS), as well as their substitutes such as hydrofluorocarbons (HFCs), are greenhouse gases that contribute to climate change. The purpose of this fact sheet is to help you understand requirements under the National Recycling and Emission Reduction Program.

National Recycling and Emission Reduction Program

The Clean Air Act (CAA) defines EPA's responsibilities for protecting and improving the nation's air quality and the stratospheric ozone layer. Section 608 establishes the National Recycling and Emission Reduction Program.

Prohibition on Venting

Section 608 prohibits individuals from intentionally venting ODS refrigerants (including CFCs and HCFCs) and their substitutes (such as HFCs), while maintaining, servicing, repairing, or disposing of air-conditioning or refrigeration equipment.

The purpose of this program is to:

- Implement the venting prohibition.
- Reduce the use and emission of CFCs and HCFCs.
- Maximize the recapture and recycling of CFCs and HCFCs.
- Ensure the safe disposal of CFCs and HCFCs.

Phaseout of HCFCs

Through the Montreal Protocol on Substances that Deplete the Ozone Layer, the U.S. has committed to a collaborative international effort to end use of ozone-depleting substances. The U.S. phased out CFCs and halons in the mid 1990s. EPA is currently in the process of reducing HCFC production and import.

The schedule to phase out HCFCs follows:

January 1, 2010

Ban on production, import, and use of HCFC-22 and HCFC-142b, except for continuing servicing needs of existing equipment, achieving 75% of reduction goal.

January 1, 2015

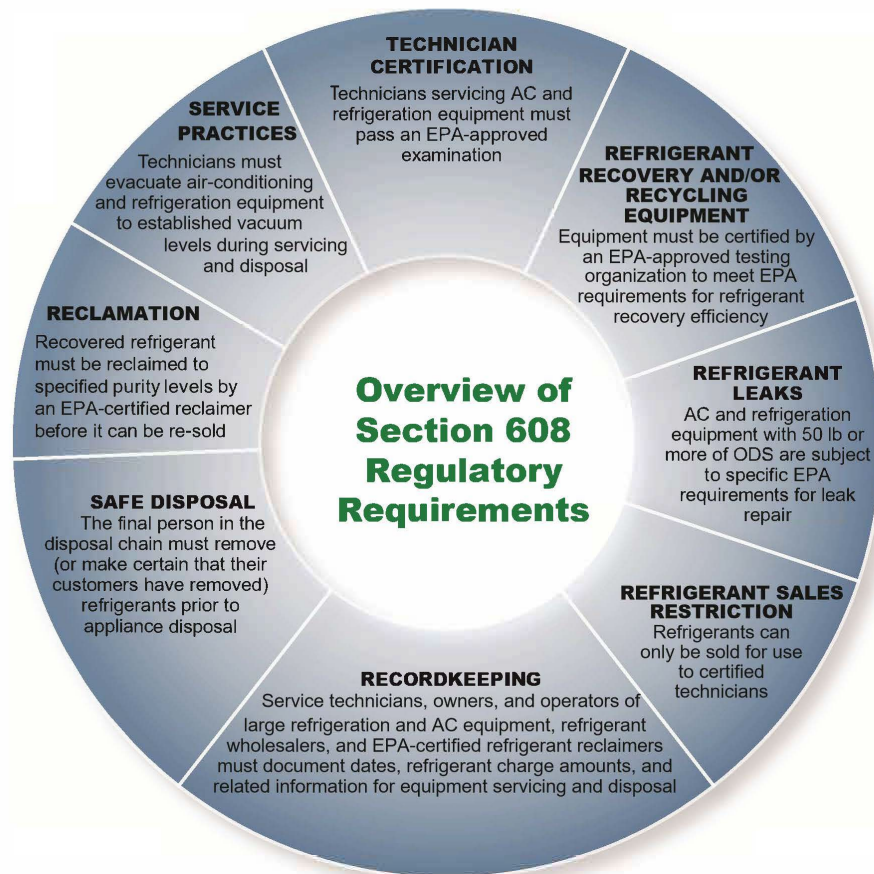
Ban on production, import, and use of all HCFCs, except for continuing servicing needs of refrigeration equipment, achieving 90% of reduction goal.

January 1, 2020

Ban on production and import of HCFC-22 and HCFC-142b, achieving 99.5% of reduction goal.

January 1, 2030

Ban on remaining production and import of HCFCs, resulting in complete HCFC phase out.

APPENDIX D - 1 (CONTINUED)**Section 608 Regulatory Requirements: Stationary Refrigeration and Air Conditioning**

Unless otherwise specified, section 608 requirements apply to all refrigerants, excluding a limited number of exemptions.

Enforcement

EPA performs random inspections, responds to tips, and pursues potential cases against violators of the Section 608 regulations. EPA is authorized to assess fines for any violation of these regulations.

Additional Resources

EPA Ozone Layer Protection
Website: epa.gov/ozone-layer-protection

EPA Section 608 Website:
epa.gov/section608

EPA Enforcement Website:
epa.gov/tips

EPA Motor Vehicle Air Conditioning Website:
epa.gov/mvac

EPA Responsible Appliance Disposal Website:
epa.gov/rad/

EPA GreenChill Website:
epa.gov/greenchill/

APPENDIX D - 2 TECHNICIAN REQUIREMENTS

EPA's Refrigerant Management Requirements

What Technicians Need to Know



What is Section 608?

Section 608 of the Clean Air Act prohibits the knowing release of refrigerant during the maintenance, service, repair, or disposal of air-conditioning (AC) and refrigeration equipment. EPA requires proper refrigerant management practices by those who buy or sell refrigerant, technicians, owners and operators of AC and refrigeration systems, and others. These requirements apply for all refrigerants that contain ozone-depleting substances, e.g., hydrochlorofluorocarbons (HCFCs), and non-exempt substitute refrigerants, e.g., hydrofluorocarbons (HFCs), hydrofluoroolefins (HFOs) and blends thereof.

Some refrigerants are exempt from the refrigerant management requirements. Examples include carbon dioxide, nitrogen, and water. For a full list of exempt refrigerants, see 40 CFR § 82.154(a).

What are the Section 608 refrigerant management requirements for technicians?¹

Only certified technicians can use non-exempt refrigerants to service AC and refrigeration equipment. Technicians must comply with the following provisions for ozone-depleting and non-exempt substitute refrigerants. With the exception of the applicability of the leak repair provisions to substitutes, these provisions did not change as a result of EPA's 2020 update.

Sales Restriction

- Refrigerant can only be sold to technicians certified under Sections 608 or 609 of the Clean Air Act, where individuals may only purchase refrigerant consistent with the appliances covered by their certification.
 - There is an exception for small cans (under two pounds) of substitute refrigerant, which can be sold to individuals for use in a MVAC if the can has a self-sealing valve.
- Recovered refrigerant may not be resold unless it has been reclaimed by a certified reclaimer; is being transferred to equipment belonging to the same owner; or was used only in a motor vehicle air conditioner (MVAC) or MVAC-like appliance and was recycled.²

Technician Certification

Technicians servicing AC and refrigeration equipment must:

- Pass a certification exam offered by an approved technician certification program in order to maintain, service, repair, or dispose of appliances containing refrigerants.
- Keep a copy of their certificate at their place of business.
- Maintain a copy of their certificate until three years after no longer operating as a technician.

To assist in reissuing lost certification cards, certifying organizations must post online lists of newly certified technicians. Technicians may opt out of the online lists if they so choose.

¹ This fact sheet highlights select provisions that may be of most interest to this community. Please see the regulations at <https://go.usa.gov/xpKhq> for the full requirements. Requirements for individuals servicing motor vehicle air conditioners (MVAC) or MVAC-like appliances are discussed in more detail at www.epa.gov/mvac.

² This does not apply to the sale of used refrigerant for reclamation or destruction.

APPENDIX D - 2 (CONTINUED)

Recordkeeping for Appliances with 5 to 50 Pounds of Refrigerant

Technicians who dispose of mid-sized appliances (e.g., residential split AC systems), must keep records of:

- The location, date of recovery, and type of refrigerant recovered for each disposed appliance;
- The quantity of refrigerant, by type, recovered from disposed appliances in each calendar month; and
- The quantity of refrigerant, and type, transferred for reclamation or destruction, the person to whom it was transferred, and the date of the transfer.

Maintenance, Servicing, Repair, and Disposal

Technicians must:

- Evacuate refrigerant before opening or disposing of appliances to the evacuation levels specified in the regulations using certified recovery and/or recycling equipment.
- Before opening or disposing of MVACs or MVAC-like appliances (e.g., construction equipment),
 - Evacuate refrigerant from the appliance in accordance with 40 CFR Part 82, Subpart B; or
 - Reduce the system pressure to below 102 mm of mercury vacuum.

Important Changes to the Section 608 Leak Repair Regulations

The Section 608 regulations include leak inspection and verification test requirements for owners/operators of appliances that contain ozone-depleting refrigerant. These regulations do not apply to appliances containing solely substitute refrigerant such as HFCs.

Leak inspections are required for appliances that have exceeded the applicable leak rate, according to the schedule below. All visible and accessible components of an appliance must be inspected, using a method or methods that are appropriate for that appliance.

Equipment	Full Charge	Frequency of Leak Inspections
Commercial Refrigeration and Industrial Process Refrigeration	> 500 pounds	<i>Once every three months</i> until the owner/operator can demonstrate through leak rate calculations that the leak rate has not exceeded 20% (commercial refrigeration) or 30% (IPR) for four quarters in a row.
	50 to 500 pounds	<i>Once per calendar year</i> until the owner/operator can demonstrate through the leak rate calculations that the leak rate has not exceeded 20% (commercial refrigeration) or 30% (IPR) for one year.
Comfort Cooling	50 or more pounds	<i>Once per calendar year</i> until the owner/operator can demonstrate through the leak rate calculations that the leak rate has not exceeded 10% for one year.

Initial and follow-up verification tests of leak repairs are required for appliances that exceed the applicable leak rate. The verification tests must demonstrate that leaks were successfully repaired.

- An initial verification test must be performed before any additional refrigerant is added to the appliance.
- A follow-up verification test must be performed only after the appliance has returned to normal operating characteristics and conditions. There is no minimum timeframe.

Technicians are required to provide service invoices and records of the results of leak inspections or verification tests to owners/operators.

APPENDIX D - 2 (CONTINUED)**Additional Resources**

Update to the Refrigerant Management Requirements Final Rule:

www.epa.gov/section608/revised-section-608-refrigerant-management-regulations

EPA's Section 608 Webpage: www.epa.gov/section608

Section 608 Technician Certification: www.epa.gov/section608/section-608-technician-certification

Section 609 Technician Training and Certification: www.epa.gov/mvac

Contact EPA: www.epa.gov/section608/forms/contact-us-about-stationary-refrigeration-and-air-conditioning

**APPENDIX D - 3 DEFENSE LOGISTICS AGENCY (DLA) OZONE DEPLETING
SUBSTANCE (ODS) REQUISITIONING PROCEDURES**

**DEPARTMENT OF DEFENSE
OZONE DEPLETING SUBSTANCES
REQUISITIONING PROCEDURES**

FEBRUARY 2022

APPENDIX D - 3 DEFENSE LOGISTICS AGENCY (DLA) OZONE DEPLETING SUBSTANCE (ODS) REQUISITIONING PROCEDURES (CONTRACTING)

PROCEDURES

The Defense Logistics Agency (DLA) is responsible for managing the Department of Defense (DoD) Ozone Depleting Substances (ODS) Reserve for weapon system support. The material manager of the Reserve is DLA Aviation with operational support and storage provided by the co-located DLA Distribution Richmond.

The Reserve consists of various Class I refrigerants (R-11, 12, 114, 500, 502), halons (1211, 1301, 1202), solvents (1, 1, 1 Trichloroethane and CFC-113) and associated containers.

Empty ODS recovery cylinders can be requisitioned "almost" free of charge (DLA System accounting requires we set the unit price at one cent, \$.01), provided the ODS and cylinders are returned to the Reserve. A list of the NSNs for recovery cylinders is provided at Enclosure 1.

ODS (except for halon fire extinguishers and system cylinders) are also "almost" free issue (unit price \$0.01) (Enclosure 2). However, customers must be authorized by their Service to requisition those chemicals from the Reserve.

-Army and Navy/USMC and Coast Guard provide DLA with an Authorized Users List (AUL), and requisitions are checked against the AUL to determine if the requisitioning activity is authorized to requisition ODS products.

- Air Force does not require pre-approval for the following NSNs, if the quantity requisitioned is below the indicated threshold.

COMMODITY	CYLINDER CAPACITY SIZE (LBS)	NSN	MAXIMUM THRESHOLD (<i>quantity of U/I</i>)
Halon 1211(Fire Ex)	5	6830-01-128-1673	25
Halon 1211	200	6830-00-285-5887	3
Halon 1211	1,500	6830-01-219-8529	3
Halon 1301 (Virgin Type II)	150	6830-00-543-6623	2
CFC-12	45	6830-00-264-5913	3

-Air Force users that need to requisition quantities higher than the maximum thresholds or require an ODS NSN that is not listed, must submit an email request to HQ AF and receive approval before DLA can process the requisition. Transmit email requests to the AF points of contact identified in Enclosure 3. Do not submit multiple requisitions to evade the thresholds listed above. HQ Air Force will follow-up with MAJCOMs and installations that have unusual requisition patterns.

-A Services' Point of Contact (POC) list is provided at Enclosure 3.

Each ODS NSN has an inventory system freeze in the DLA supply system and will require Manager's review before release. Requisitions (sales orders) submitted to DLA Aviation by non-authorized activities will be processed with Status Code "D8" (Rejected) to the requisitioner, indicating the material is a commodity requiring advance service authorization.

The Military Standard Requisition and Issue Procedure (MILSTRIP) is used to requisition ODS. The DLA preferred method to input a requisition (sales order) into the supply system is through FEDMALL, but requisitions can be phoned in to DLA Customer Interaction Center. The Center is available 24 hours a day at DSN 661-7766 or COMM toll free (877) 352-2255 (877-DLA-CALL) to answer questions concerning MILSTRIP and requisition status.

**APPENDIX D - 3 DEFENSE LOGISTICS AGENCY (DLA) OZONE DEPLETING
SUBSTANCE (ODS) REQUISITIONING PROCEDURES (CONTRACTING)**

The Customer Account Specialist for the Reserve inventory may be reached at DSN 695-6451 or COMM (804) 279-6451. Additional contact phone numbers for the ODS Reserve Program Management Office are DSN 695-5202, 5004 and 4525 or COMM (804) 279-5202, 5004 and 4525. The email address is avnodsreserve@dla.mil.

Program Manager
DoD ODS RESERVE

APPENDIX D - 3 DEFENSE LOGISTICS AGENCY (DLA) OZONE DEPLETING SUBSTANCE (ODS) REQUISITIONING PROCEDURES (CONTRACTING)

NSNs FOR EMPTY RECOVERY CYLINDERS (FILLED CYLINDER NOT TO EXCEED 80% OF WATER CAPACITY)				
COMMODITY	WATER CAPACITY (LBS.)	MAX FILL CAPACITY (LBS.)	EMPTY RECOVERY CYLINDER NSN	
<u>HALONS</u>				
Halon 1202	122	98	8120-01-356-1781	
Halon 1202	1000	800	8120-01-447-3636	
Halon 1211	122	98	8120-01-356-1248	
Halon 1211	1,000	800	8120-01-356-1249	
Halon 1301	95	76	*8120-01-371-0533	
Halon 1301	122	98	8120-01-356-5963	
Halon 1301	1,000	800	8120-01-356-5962	
Halon 2402	122	98	8120-01-469-2550	
Halon 2402	1000	800	8120-01-469-2774	
<u>REFRIGERANTS</u>				
R- 11	42	34	8120-01-356-5960	
R- 11	122	98	8120-01-356-9756	
R- 11	1,000	800	8120-01-355-9763	
R- 12	42	34	8120-01-355-4017	
R- 12	122	98	8120-01-355-4018	
R- 12	1,000	800	8120-01-355-4019	
R- 114	42	34	8120-01-356-1245	
R- 114	122	98	8120-01-356-1246	
R- 114	1,000	800	8120-01-356-1247	
R- 500	42	34	8120-01-357-6774	
R- 500	122	98	8120-01-357-7656	
R- 500	1,000	800	8120-01-357-7657	
R- 502	42	34	8120-01-357-6770	
R- 502	122	98	8120-01-357-6771	
R- 502	1,000	800	8120-01-357-6769	
R-22	42	34	8120-01-357-9140	
R-22	122	98	8120-01-357-9139	
R-22	1,000	800	8120-01-357-9141	

* DENOTES A HIGH-PRESSURE CYLINDER for use when recovering Halon 1301 from nitrogen charged fire suppression system cylinders. This cylinder can accommodate pressure up to 2265 psi.

Encl 1

APPENDIX D - 3 DEFENSE LOGISTICS AGENCY (DLA) OZONE DEPLETING SUBSTANCE (ODS) REQUISITIONING PROCEDURES (CONTRACTING)

NSNs FOR REQUISITIONING ODS HALONS

<u>COMMODITY</u>	<u>CYLINDER CAPACITY</u>	<u>NATIONAL STOCK NUMBER(NSNs)</u>
	<u>SIZE (LBS)</u>	
Halon 1202	160	6830-00-985-7284
Halon 1202	2000	6830-01-370-8671
 Halon 1211(Fire Ex)	 2.5	 6830-01-254-5030
Halon 1211(Fire Ex)	5	6830-01-128-1673
Halon 1211(Fire Ex)	20	6830-01-570-7231
 Halon 1211	 200	 6830-00-285-5887
Halon 1211	1500	6830-01-219-8529
Halon 1211	1904	6830-01-399-3032
 Halon 1301 (Fire Ex)	 2.75	 6830-00-555-8837
 Halon 1301 (Type I)	 137	 6830-01-392-4154
Halon 1301 (Virgin Type II)	150	6830-00-543-6623
Halon 1301 (Reclaimed Type II)	150	6830-01-392-5012
Halon 1301 (Type I)	1123	6830-01-392-4999
Halon 1301 (Virgin Type II)	1240	6830-01-356-9751
Halon 1301 (Reclaimed Type II)		6830-01-392-5017
1240		
Halon 1301 (Type I)	1800	6830-01-430-2879
Halon 1301 (Reclaimed Type II)	1925	6830-01-430-2885
Halon 1301 (Type II)	1925	6830-01-387-1008

Encl 2

**APPENDIX D - 3 DEFENSE LOGISTICS AGENCY (DLA) OZONE DEPLETING
SUBSTANCE (ODS) REQUISITIONING PROCEDURES (CONTRACTING)****NAVY HALON 1301 SYSTEM CYLINDERS**

<u>SIZE</u>	<u>ANSUL</u>	<u>KIDDE-FENWAL</u>
10 lb	6830-01-171-7361	6830-01-073-6543
15 lb	6830-01-221-2192	6830-01-284-5852
60 lb	6830-01-252-2428	6830-01-294-4455
95 lb	6830-01-196-8338	6830-01-302-2555
125 lb	6830-01-140-6150	6830-01-275-1637

**MARINE AMPHIBIOUS ASSAULT VEHICLE
HALON 1301 SYSTEM CYLINDERS**

<u>SIZE</u>	<u>NSNs</u>
7 LBS	6830-01-321-6527
7 LBS	6830-01-331-6714
9 LBS	6830-01-160-9653
17 LBS	6830-00-435-9415

Encl 2

APPENDIX D - 3 DEFENSE LOGISTICS AGENCY (DLA) OZONE DEPLETING SUBSTANCE (ODS) REQUISITIONING PROCEDURES (CONTRACTING)

REFRIGERANTS

<u>COMMODITY</u>	<u>CYLINDER CAPACITY SIZE (LBS)</u>	<u>NSN's</u>
R-11	100 drums	6830-00-079-4694
R-11	200 drums	6830-00-281-3036
R-11	1400	6830-01-355-9753
R-12	10	6830-00-264-9089
R-12	45	6830-00-264-5913
R-12 (Dual Port Valve)	45	6830-01-443-0387
R-12	145	6830-00-292-0133
R-12	1190	6830-01-355-4011
R-22	44	6830-01-567-8641
R-22	128	6830-01-567-8542
R-22	1050	6830-01-567-9038
R-114	11.5	6830-00-290-4378
R-114	57	6830-00-290-4379
R-114 (Dual Port Valve)	57	6830-01-443-0397
R-114 (10"x49" For Ship Rack)	165	6830-00-088-3385
R-114 (12"x36")	165	6830-00-782-6232
R-114	1360	6830-01-356-1201
R-114 (Dual Port 10"x 49")	165	6830-01-430-2857
R-500	43	6830-01-357-7648
R-500	127	6830-01-357-7646
R-502	44	6830-01-357-4840
R-502	128	6830-00-138-2482

SOLVENTS

<u>COMMODITY</u>	<u>CONTAINER CAPACITY SIZE (LBS)</u>	<u>NSN's</u>
CFC-113	1 Gal (11 LBS.)	6850-01-426-4813
Methyl Chloroform	1 Gal (11 LBS.)	6810-01-411-5954

Encl 2

APPENDIX D - 3 DEFENSE LOGISTICS AGENCY (DLA) OZONE DEPLETING SUBSTANCE (ODS) REQUISITIONING PROCEDURES (CONTRACTING)

SERVICE/AGENCY POINTS OF CONTACT						
SERVICE	NAME	OFFICE	PHONE NUMBERS		FAX	E-MAIL
			COMMERCIAL	DSN		ADDRESS
				PREFIX		EXTENSION
AIR FORCE	KENNETH DORMER	HQ-USAF	571-256-0313	260	No FAX	kenneth.i.dormer.ctr@mail.mil
	SHERMAN FORBES	HQ-USAF	571-256-0309	260	No FAX	Sherman.forbes@us.af.mil
ARMY	GEORGE EVANS	HQDA	703-697-1367			george.h.evans.ctr@mail.mil
MARINES	JIM LETTINHAND	HQ-USMC	703-695-8934, X 2433	225	8905	edmond.lettinhand@usmc.mil
NAVY	PETE MULLENHARD	NAVSEA	410-279-6460			pmullenhard@dandp.com
	TINA LERKE	NAVSEA	301-227-5157			tina.g.lerke.civ@us.navy.mil
	LINDA CHRISTENSEN	717-605-9144	717-605-9144	430	3480	linda.christensen@navy.mil
	MATTHEW ICHNIOWSKI	NAVAIR	240-561-3022			matthew.f.ichniowski.civ@us.navy.mil
	MATTHEW MATSON	MSC	757-443-2771			matthew.s.matson@navy.mil
COAST GUARD	JOHN CEPHAS	HQ-USCG	202-475-5668		4516	john.w.cephas@uscg.mil
	HENRY HERZBERG	HQ-USCG	202-475-5666		4516	henry.i.herzberg@uscg.mil
DLA	BRIAN HOWARD	DLA AVIATION RICHMOND- VO	804-279-5202	695	804-279-5224	avnodsreserve@dla.mil
	PHILIP NOTT	DLA AVIATION RICHMOND- VO	804-279-5004	695	804-279-5224	avnodsreserve@dla.mil
	SCOTT JOHNSON	DLA AVIATION RICHMOND- VO	804-279-6451	695	804-279-5224	avnodsreserve@dla.mil
	MICHAEL PALYA	DLA AVIATION RICHMOND- VO	804-279-4525	695	804-279-5224	avnodsreserve@dla.mil

Encl 3

**APPENDIX D - 4 – CONTRACTOR REFRIGERANT WORK SUBMITTAL FORM TO
DETERMINE COMPLIANCE WITH OZONE DEPLETING SUBSTANCES (CAA §40CFR82,
SECTION 608)**

This form applies to any project which adds or removes refrigerants. Copies of required certificates are to be attached to this form. Use as many copies of the attached form as needed. Refer to Attachment D for requirements.

Questions should be directed at 20 CES/CEIEC Air Program Manager, Jamal Lewis at 803-895-5071.

1) Technician Name: _____

2) Technician Address: _____

3) Telephone (land line): _____ Cell Phone: _____

4) Project Number and Title: _____

5) Service Date: _____

6) Description of Work (indicate installation, repair, removal of equipment containing refrigerants and general description of the refrigerant work performed by the contractor):

7) Refrigerants added or removed (indicate added or removed):

Type: _____

Quantity: _____

Equipment Type (ex: commercial refrigeration appliance, industrial refrigeration appliance, comfort cooling appliance or other type of refrigeration):

Equipment Manufacturer Name: _____

Serial Number: _____

Model Number: _____

8) Disposition of Certain Refrigerants: The Department of Defense requires the recovery of various Class I and Class II refrigerants. Contractor should indicate using an "X" if refrigerants are packaged according to regulatory and Defense Logistics Agency (DLA) Ozone Depleting Substance (ODS) guidelines: Y____ N____

9) Contractor accepts responsibility for disposal of recovered refrigerant and disposal of refrigerant containing equipment. Contractor certifies amount of refrigerant added or removed.

Signature of Responsible Person: _____

10) Copies of Certificates Attached: (please check all that apply below):

Technician(s) (copy of refrigerant certification card): _____

Disposal of refrigerant: _____

Disposal of equipment: _____

Other: _____