APPENDIX A

REQUIREMENTS FOR ENVIRONMENTAL PROTECTION AT CONTRACTOR OPERATED (NON USCG) FACILITIES

A1. SCOPE

A1.1 Intent. This appendix describes the requirements for ensuring Contractor environmental protection compliance at/on Contractor Operated Facilities.

A2. REQUIREMENTS

A2.1 Environmental Management Plan. The Contractor shall submit an acceptable environmental management plan to the KO or COR prior to the initiation of work. The plan shall outline how the Contractor will handle hazardous materials, petroleum products, hazardous substances, hazardous wastes, and other solid wastes. The Plan shall comply with all Federal, state, and local regulations applicable to handling and disposal of hazardous materials, hazardous wastes, and or non-hazardous wastes; and shall address, at a minimum, the following requirements:

- A General Storage Site Plan.
- A list of all anticipated hazardous wastes (HW) to be generated and a Federal/state/local regulation cross reference list for those wastes. All HW will be managed and disposed through the Contractor's EPA ID# and managed in a manner consistent and conformant with all Federal, state, and local regulations.
- Waste collection and containment procedures.
- A Hazardous Material (HM) Spill and Cleanup Plan including tools and materials that will be on hand and readily available to facilitate containment and cleanup.
- Training certifications for the Contractor's hazardous waste manager and all personnel conducting hazardous waste activities.
- Methods used to analyze and identify whether or not generated material (blasting debris, paint waste, etc.) are hazardous wastes.
- Any HW licenses and permits required to be obtained or currently held by the Contractor in accordance with Federal, state, and local regulations.
- Air district permits required to be obtained or currently held by the Contractor in accordance with Federal, state, and local regulations.
- Any permits required by the National Pollutant Discharge Elimination System (33 U.S.C. 1342) to be obtained or currently held by the Contractor in accordance with Federal, state, and local regulations.

A2.2 General compliance. The Contractor shall provide and maintain environmental protection during the life of the contract to control pollution or to correct conditions that develop during performance of the contract. Contractor shall comply with all Federal, state, and local laws and regulations pertaining to water, air, and noise pollution.

A2.2.1 Waste Management. With the exception of materials specifically indicated or specified to be salvaged for reuse, and turned over to the Government, the Contractor shall assume responsibility for removal of all non-hazardous wastes and demolished materials. Contractor shall comply with all requirements of 49 CFR 178 regarding proper storage container and labeling of wastes.

A2.2.1.1 Facility Hazardous Waste Generator Status. The Contractor shall ensure that all work conducted within the boundaries of the facility meet the regulatory requirements of the generator designation. The Contractor will comply with all provisions of Federal, State and local regulatory requirements applicable to the generator status regarding training and storage, handling, and disposal of all wastes.

A2.2.1.2 Hazardous Waste/Debris Management. The Contractor shall be responsible for all hazardous waste/debris and provide a documented waste determination for all resultant waste streams. Hazardous waste/debris will be identified, labeled, handled, stored, and disposed of by the Contractor in accordance with all Federal, state, and local regulations including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268. Contractor shall store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178.

A2.2.1.3 Disposal Documentation for Hazardous and Regulated Wastes. The Contractor shall manifest, pack, ship and dispose of hazardous or toxic waste and universal waste in accordance with the generating facilities generator status under the Recourse Conservation and Recovery Act. The Contractor shall submit a copy of the applicable EPA and or State permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities.

A2.2.2 Pollution Prevention/Hazardous Waste Minimization. The Contractor shall minimize the use of hazardous materials and the generation of hazardous waste.

A2.2.3 Release/Spills of Oil and Hazardous Substances. The Contractor shall exercise due diligence to prevent, contain, and respond to spills of hazardous material, hazardous substances, hazardous waste, sewage, regulated gas, petroleum, lubrication oil, and other substances regulated by environmental law. Contractor shall maintain spill cleanup equipment and materials at the work site, and in the event of a spill, shall take prompt, effective action to stop, contain, curtail, or otherwise limit the amount, duration, and severity of the spill/release. The Contractor's spill response will be in accordance with 40 CFR 300 and applicable State and local regulations, and is responsible for verbal and written notifications as required by 40 CFR 355, State, local regulations, and Coast Guard Instructions.

A2.2.4 Oil Spill Response Plan. Transfers of any amount of "oil", as defined by 33 CFR 154.105, between the vessel and the Contractor's facility, or a mobile tank facility, subcontracted or otherwise arranged by the Contractor, are subject to the oil spill response plan requirements of 33 CFR 154.1010. The Contractor shall have an approved and current Facility Response Plan for any fixed or mobile facility transferring oil to or from the vessel whether the transfer is done by the Contractor or subcontractor. The Contractor plan shall provide for fuel oil containment booms to surround the CG vessel during all fuel oil, lube oil, or other petroleum cargo on loads and offloads while the cutter while at the Contractor's facility. Requirement to provide fuel oil boom include, but is not limited to, the initial

petroleum cargo offload and the final liquid load on load at the end of the availability. The Contractor shall have any other applicable Facility Response Plans, required by Federal, state, or local requirements, and these plans shall be made available for review by the COR prior to the initiation of work.

A2.2.5 Hazardous Waste Disposal. The Contractor shall dispose of hazardous, toxic, or universal waste or abandoned hazardous material in accordance with Federal, State and local regulatory requirements.

A2.2.5.1 Responsibilities for Contractor's Disposal. The Contractor shall provide all services necessary for the final treatment/disposal of hazardous material/waste in accordance with all local, State and Federal laws and regulations within sixty (60) days after the materials have been generated. The Contractor services will include all necessary personnel, labor, transportation, packaging, and detailed analysis if required for disposal, and/or transportation, including manifesting or completing waste profile sheets, equipment, and the compilation of all documentation is required.

- The Contractor shall contain all waste in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, 40 CFR 268, 40 CFR 270, 40 CFR 272, 40 CFR 273, 40 CFR 279, 40 CFR 280, and 40 CFR 761. Contractor shall obtain a representative sample of the material generated for each project to provide waste stream determination.

- The Contractor shall provide two copies of the analysis for each sample taken and results to the KO. The Contractor shall determine the DOT proper shipping names for all waste for each container requiring disposal, and will demonstrate how this determination is developed and supported by the sampling and analysis results provided to the KO.

A2.2.5.2 Disposal Turn-In Requirements. Contractor shall meet DOT requirements including requirements of 49 CFR173 for transportation of hazardous waste materials. This includes drums compatible with waste contents, banding and size limits on wooden pallets, banding sizing and location, recovery materials labeling (e.g., label location and data on the label indicating actual volume, material manufacturer, etc), as well as three (3) to five (5) inches outage space above volume of material.

A2.2.6 LBP Class I and II ODS Prohibition. Class I and II ODS will not be used, nor be provided as part of the equipment unless specifically authorized and defined in the Coast Guard specification. This prohibition will be considered to prevail over any other provision, specification, drawing, or referenced documents. Regulations related to the protection of stratosphere ozone may be found in 40 CFR 82.

A2.2.6.1 The Contractor’s heating and air conditioning technicians must be certified through an EPA-approved program. The Contractor shall maintain copies of certifications at the employees' place of business and be carried as a wallet card by the technician, as provided by environmental law.

A2.2.7 Blasting Operations. The use of silica sand is prohibited in sandblasting. The Contractor shall provide tarpaulin drop cloths and windscreens to enclose abrasive blasting operations to confine and collect dust, abrasive, agent, paint chips, and other debris. Contractor shall perform work involving removal of hazardous material in accordance with 29 CFR 1910.

A2.2.7.1 Disposal Requirements The Contractor shall manage hazardous waste generated from blasting operations in accordance with applicable Federal, State and local regulatory requirements.

A2.2.8 National Emission Standards for Hazardous Air Pollutants. The Contractor shall provide appropriate notification to regional United States Environmental Protection Agency in accordance with

the requirements of 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants, as well as notification requirements of state and local air pollution control laws.

A2.2.8.1 The Contractor shall submit one legible copy, in electronic media, of notification required by EPA that has been provided to any regulatory authority for work on board the vessel to the KO within 48 hours of providing such notice to the regulatory authority.

A2.2.9 Safety Data Sheet/ Material Safety Data Sheet. The Contractor shall maintain a current copy at the job site of the Safety Data Sheet (SDS)/ Material Safety Data Sheet (MSDS) for each hazardous material that will be utilized aboard the ship or in the facility

A2.2.10 Shipbuilding Operations National Emission Standard for Hazardous Air Pollutants (NESHAPS) for Surface Coating Information. Contractor shall comply with 40CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart II, as well as all additional state, and local regulations regulating Hazardous Air Pollutants for Source Categories involving Surface Coatings.

A2.2.11 Refrigerants. The Contractor shall at all times adhere to the requirements of the Clean Air Act, 42 U.S.C. 7401, and all other Federal, state, and local regulations. The Contractor may not knowingly vent or otherwise release or dispose of any Class I or Class II refrigerants, as defined in 42 U.S.C. 7671a, into the environment. The Contractor shall ensure that when servicing small appliances such as refrigerators, freezers, and water coolers, high pressure or low pressure systems, that all servicing and recovery requirements for the appropriate level of equipment are met. Whenever reclaimed refrigerant is used, the Contractor shall provide the COR proof that the refrigerant meets the relevant standard of purity. All Contractor servicing technicians must have obtained the required level of EPA certification necessary to service the equipment (e.g., small appliances, high pressure systems, low pressure systems, etc.). The Contractor shall submit documentation of EPA certification for each servicing technician to the KO or COR prior to the initiation of work.

A2.2.12 Hazardous material abatement.

A2.2.12.1 Government reporting of known hazardous substances. The Contractor shall be aware that the Government will make every effort to inform the Contractor of the presence of known hazardous substances, such as lead, chromium, asbestos, or PCBs; and will inform the Contractor of the presence of said substances in specification items. However, the Contractor shall be responsible for conducting all appropriate tests for determining necessary engineering controls and personnel protection actions to be taken, to protect Contractor, civilian and Government personnel, in accordance with applicable OSHA, state, and local regulations. Submit copies of all sample results to the COR prior to commencing work.

A2.2.12.2 Contractor surveying for the presence of suspected hazardous substances. If the presence of lead, chromium, asbestos, or PCB is suspected in any material which may be disturbed, and adequate survey of the work-area has not been accomplished by the Coast Guard to determine the extent of suspected hazardous substance, the Contractor shall be responsible for conducting hazard evaluations pursuant to OSHA requirements. Provide COR with a description, location, and analysis results of samples taken during personnel hazard evaluations before work commences in the affected area.

A2.2.12.3 Lead abatement compliance. When a work item requires cleaning of lead dust or abatement of coatings with a lead content in excess of 0.009 percent by weight (0.018 mg/cm2, or 90 ppm), the Contractor shall comply with all applicable Federal, state, and local laws and regulations regarding paint containing lead, when engaging in lead-based paint activities, or when addressing lead-based paint

hazards and disposal. Applicable laws or regulations include, but are not limited to: 16 CFR 1303, 29 CFR 1910, 29 CFR 1915.1025, 29 CFR 1926.62, 15 U.S.C. 2601, and the Residential Lead-Based Paint Exposure Reduction Act.

NOTE

The inorganic zinc primer specified in SFLC Standard Specification 6310 may contain concentrations of lead, but not in excess of 0.009% by weight.

A2.2.12.3.1 The Contractor shall not release lead or lead-contaminated materials into the environment. Contractor shall conduct periodic air monitoring for lead in the worker's breathing zone, during the course of any abatement work involving lead containing materials, to prevent exposure at or above the PEL. The Contractor shall submit results of all air monitoring samples to the COR within 24-hours of completing the sampling, or upon receipt of the laboratory test results.

A2.2.12.3.2 The Contractor shall dispose of lead-contaminated materials in accordance with all applicable Federal, State and local regulations. When handling and storing lead contaminated materials, the Contractor shall comply with 42 U.S.C. 9601-9675, 42 U.S.C.6901-6991, and all other applicable Federal, state, and local environmental laws and regulations.

A2.2.12.4 Additional requirements during abatement of lead-based paint (LBP) and asbestos-containing coatings. Abide by the following additional requirements, during work that involves disturbance or abatement LBP and asbestos-containing material (ACM)/vermiculite coatings:

A2.2.12.4.1 Certification documentation. At the Arrival Conference, submit documentation to the COR that all primary and sub contractors fulfilling abatement requirements related to the preceding disclosure paragraph possess all Local, State, and Federal certification licenses and applicable permits, for fulfilling those abatement requirements.

A2.2.12.4.2 Advance notification. Notify the COR 24 hours prior to any planned abatement actions. Additionally, notify the Quarterdeck and COR, prior to starting any abatement task, to ensure a timely announcement to Coast Guard personnel to vacate the affected area.

NOTE

Be aware that Coast Guard personnel are not permitted to be in the location of abated spaces while abatement is being performed.

A2.2.12.4.3 Additional protective measures. Take the following additional safety precautions:

- Separate work area from other non-affected areas.
- Do not permit non-essential personnel in the work area.
- Work in one compartment/space at a time.
- Prevent dust from migrating to other areas, as follows:
- Seal doors, hatches, and all other openings between the work area and other areas with an airtight barrier, such as fire-rated polyethylene; seal both sides (inside the construction area, and inside the adjacent area) to provide a secondary dust barrier and prevent the doors and windows from being used (post alternative emergency exits, if applicable).
- Maintain work area under negative pressure in relation to adjacent areas.
- Take, at a minimum, the following measures, to protect de-contamination workers:

- Use a HEPA (high-efficiency particulate air) vacuum.
- Workers must wear a respirator which is approved by NIOSH and has N100, P100 or R100 filters (the cartridges are usually purple); respirators must be fit-tested to insure proper seal, and employees must be medically screened and trained prior to wearing a respirator (see the OSHA Respirator Standard, 29 CFR 1910.134).
- Workers must wear full-body protective clothing, head covering and shoes (or shoe covers).
- Workers must not leave the work area without having gone through a proper decontamination process, to prevent spread of lead dust to un-affected areas.
- Eating, drinking and smoking are prohibited in work areas.
- Workers must wash hands and face before eating, drinking or smoking.
- Workers must remove work clothes and shoes before leaving the work area, and seal work clothes in plastic.
- Workers must shower and wash hair as soon as possible after leaving the work area.
- Non-disposable work clothes must be washed separately from other clothes.
- Remove and dispose of all protective covers, upon completion of work.

NOTES

1. Negative pressure means that more air is exhausted from the area than is supplied so that lead dust and/or asbestos particles are contained within the work area, and do not contaminate adjacent non-affected compartments. Exhaust air must be filtered with a suitable HEPA filter.
2. A HEPA vacuum removes 99.97% of particles that are less than 0.3 microns in size.
3. Use of compressed air, conventional vacuum, and dry-sweeping is not permissible, during abatement.

A2.2.12.4.4 Abatement, coating removal and surface preparation.

A2.2.12.4.4.1. ACM. Remove existing ACM by a suitable means such as chipping or scraping. Ensure all removed materials are carefully placed into bags that are specially designed for ACM removal, sealed and handed over to another worker to be sealed again.

A2.2.12.4.4.2. LBP. Remove LBP from identified areas, using one or a combination of the cleaning methods specified in Table A1 below, as applicable.

A2.2.12.4.4.3. Scope of spot abatement. When spot or partial abatement is required due to interference with other ship repair work (including but not limited to: hotwork, equipment and component installations, structural inspections and repairs,), do the following:

- Perform inspections of all locations that have been slated for spot abatement, to identify paths of future hull cuts and weld seams and locations of weld repairs, as applicable.
- Ensure that abatement shall also include the following:
- The area itself, including but not limited to: attached framing, stiffeners, piping, equipment support – in addition to up to a three-inch boundary segment where removal is faired into surrounding intact coating.
- All areas of the heat affected zone (estimated to be at a minimum of 3-4 inches on each

side of a weld repair), to permit welders sufficient room to safety make required repairs.

- Areas intended for tack welds used during fit up.
- Areas that asbestos material could be disturbed by personnel transiting the work site, setting up/moving equipment, setting up containment measures, or any activity by contractor personnel that could damage asbestos material adjacent to the site of any hotwork activity.
- Ensure that the presence of ACM and/or LBP adjacent to future weld repairs is readily apparent to welders through the use of signs on the compartment entry and local markings adjacent to repairs using a suitable means such grease pencils. Be aware that any accidental disturbance ACM and/or LBP by subsequent hot work or grinding associated with weld repairs shall require clean up in and clearance testing, at no cost to the Government.

TABLE A1 - SURFACE PREPARATION METHODS

MECHANICAL CLEANING		CHEMICAL STRIPPING
STEEL SUBSTRATE	**ALUMINUM SUBSTRATE**	Use a suitable chemical stripper to safely remove all existing coatings – and expose the bare substrate, in accordance with manufacturer's instructions.
1. Waterjet to a SSPC-SP WJ-2/NACE WJ-2 standard. 2. Abrasive-blast to SSPC-SP10/NACE No. 2, using grit conforming to MIL-A-22262 (1.5 to 2.5 mil anchor profile). 3. Power tool clean to a SSPC-SP 11 (1.0 mil anchor profile), with vacuum attachment, to capture lead dust and debris.	1. Waterjet to a SSPC-SP WJ-2/NACE WJ-2 standard. 2.Brush blasting with clean, fine aluminum oxide, garnet or equivalent inert material conforming CID A-A-59316, Type I & IV, to remove all existing coatings and rust spots, down to bare metal (and produce a 1.0-1.5 mil anchor profile). 3. Mechanical cleaning, using power sanders and abrasive paper with no metallic content, remove all existing coatings and rust to bare metal.	

NOTES

1. Abrasive-blasting creates lead dust, which requires extensive post-surface preparation cleaning in affected compartments. Wet-abrasive blast cleaning (water introduced into the blast stream) may be used, to contain/eliminate dust.

2. Abrasive-blasting and waterjetting are not permissible inside machinery spaces or other outfitted spaces due to the difficulty of containing water spray and contamination of blasting dust particles. These methods are allowed to be performed in voids and tanks where full containment, negative ventilation, and isolation of the affected areas can be performed.

3. Known paint strippers meeting the requirements specified in Table 1 include, but are not limited to the following:

a. Franmar LeadOut
b. STRIP-TOX Paint Stripper
c. Aquastrip ACB
d. Smart Strip™ Advanced Paint Remover

WARNING

Paint strippers formulated with the following hazardous materials are strictly prohibited for use onboard CG vessels:

a. Methylene chloride
b. Chlorinated solvents
c. Phenols
d. Chromates
e. Ammonia
f. Amines

CAUTION

Any action that has the potential to generate dust (blasting, hand tooling) shall be rigorously monitored to ensure contamination of the ship does not occur. Certifications are required for any personnel who engage in these practices.

A2.2.12.4.4.4. Precautionary measures when using chemical stripping. Take the following precautionary measures, when chemical stripping is selected as one of coating removal methods:

A2.2.12.4.4.4.1. Ventilation. In addition to all temporary ventilation requirements specified in SFLC Std 0000 and the "General Requirements" item, ensure the following:

- A flow rate ventilation (minimum 100 cfm) is installed in the affected compartment - and ventilation system inspected by COR, prior to commencement of work.

- Exhaust ducts from ventilation fans are run outside and away from the ship's ventilation intakes and downwind from cutter location. This shall be monitored and adjusted as necessary if there are changes in wind location.

A2.2.12.4.4.4.2. Chemical residue removal. After completion of coating removal, wash down all affected surfaces with suitable soap and water, required to ensure all solvents or solvent residues are removed.

A2.2.12.4.5 Treatment of existing coating edges bordering abated areas. In lieu of abiding by the feathering guidance provided in SFLC Std Spec 6310, paragraph 3.1.13 (Touch-ups and minor coating repairs), build up new coating to overlap all existing adjacent coating edges.

WARNING

Feathering of edges will generate lead/asbestos dust.

A2.2.12.4.6 Post-surface preparation cleaning, inspection, and clearance. Upon completion of coating removal procedures, do the following, as applicable:

A2.2.12.4.6.1. Lead dust clean-up. Clean all lead dust from the worksite by suitable clean-up cleaning methods, or as follows:

- Step 1 - debris removal: Remove all gross debris, paint chips, etc. using either a vacuum with a HEPA filter or by spraying the materials with water in a spray bottle and picking up chips or large pieces of contaminated debris by hand.
- Step 2 – vacuum cleaning: Using a suitable HEPA vacuum, clean all affected surfaces, in accordance with the following guidelines:
- Begin cleaning with high areas first – with overhead surfaces and bulkheads working downward.
- Vacuum all surfaces in the compartment.
- Work in the direction furthest from the entry door toward it.
- Step 3 – wet cleaning: Following thorough HEPA vacuuming, wash all surfaces with any suitable cleaning detergent following the same cleaning pattern (high to low/ furthest from and toward entrance). Change the cleaning solution as it becomes dirty. Rinse all areas with a fresh cloth/mop. Do not reuse contaminated mops and cloths. Use a three-bucket system for cleaning. (Detergent solution in first bucket/ rinse water for mop in second/ surface rinse on deck and/or bilge surfaces in third).
- Step 4 – vacuum cleaning: Perform a HEPA vacuum again as specified in "Step 2".
- Step 5 – waste disposal: Properly dispose of contaminated materials, in accordance with all applicable Federal, state, and local regulations.

WARNING

1. Work Wet, Work Smart, and Work Clean. DO NOT GENERATE DUSTS. It is easier to effectively clean an area when dusts are not being generated to resettle on previously cleaned areas. Worker exposures may be high during wet sweeping.

2 A wet/dry HEPA unit is ideal for working with hazardous dust clean up.

3. Lead-contaminated objects that are porous or materials that may suffer damage from water may not be able to be sufficiently decontaminated by these methods and should be discarded.

A2.2.12.4.6.2. Substrate inspection. Conduct a visual inspection, in the presence of the Coast Guard Inspector, to ensure that none of the following is present, and submit a CFR:

- Visible coatings on any part of the substrate, including pitted areas.
- Lead dust.

- Cleaning material haze.

A2.2.12.4.7 Post- abatement clearance. Upon acceptance of the visual inspection results by the COR, do the following:

A2.2.12.4.7.1. Lead dust wipe sampling. Conduct wipe sampling clearance testing, in accordance with ASTM 6966, in three locations in each affected compartment/space, as designated by the Coast Guard Inspector; to ensure that there exist no lead dust residues in excess of the below-listed concentrations, as specified below in TABLE A2. Submit a CFR with sample results. If a Change Request (CR) has been authorized and released, conduct additional wipe sampling and testing, as designated on the CR. Ensure that dust lead samples are analyzed by a laboratory certified by the National Lead Laboratory Accreditation Program (NLLAP) or the American Industrial Hygiene Association.

TABLE A2 - ACCEPTABLE LEAD CONCENTRATIONS

BERTHING AND/OR FOOD PREPARATION AREAS	ALL OTHER AREAS
40 micrograms/square foot (mcg/ft 2)	200 micrograms/square foot (mcg/ft 2)

A2.2.12.4.7.2. Additional lead dust cleaning and sampling. If laboratory analysis proves lead concentrations in excess of the thresholds specified in TABLE A2, then perform lead dust cleaning, and take subsequent wipe samples until the concentration of lead falls below the above standards.

NOTES

1. Be aware that the Coast Guard reserves the right to coordinate additional wipe clearance testing, at no cost to the contractor, to verify the sample results.

2. All additional wipe clearance testing conducted by the Coast Guard must be witnessed by the Contractor, to verify where and how samples were collected – and thus, prevent contract disputes.

A2.2.12.4.7.3. Aggressive sampling – asbestos. After the completion of abatement, take at least five aggressive air samples in each affected compartment/space, using the Phase Contrast Microscopy (PCM) method to determine that the level of airborne fibers for each sample inside the work site is 0.01 or less fiber per cubic centimeter. Perform aggressive air sampling in accordance with EPA 600/4-85-049. Submit a CFR.

A2.2.12.4.8 Surface coating and contaminant removal. Prior to applying primer coat, and in accordance with SFLC Std Spec 6310, paragraphs 3.1.8.7 (Flash rusting/surface oxidation limitations) and 3.1.8.6 (Hydrocarbon substance removal), respectively,

- Remove all flash rusting, as applicable.
- Remove all grease and oil surface contaminants.

A2.2.12.4.9 Coating application. Coat all prepared surfaces, in accordance with Table A3.

TABLE A3 - COATING SYSTEM

SPOT ABATED AREAS	FULLY-ABATED SURFACES AND COMPARTMENT/SPACES
Prime and coat all abated surfaces, including adjacent structural members, in accordance with SFLC Std Spec 6310, to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, Appendix A and Appendix B, as applicable.	Prime and coat all abated surfaces, including adjacent structural members, as specified in applicable work item(s).

A2.2.12.4.10 Waste Disposal. Collect, test, dispose of all generated wastes, including waste water from cleaning of work spaces, in accordance with all applicable Federal, state, and local regulations.

A2.2.12.5 Asbestos abatement compliance. When a work item requires the removal of asbestos-containing materials, the Contractor shall comply with all applicable Federal, state and local laws and regulations including 40 CFR 61.150 and 29 CFR 1915.1001. The Contractor shall provide all notices to the EPA, as required by 40 CFR 61.145 and other applicable state and local agencies, prior to commencing asbestos removal work. In addition, the Contractor shall provide 48 hours written notice to the KO or COR before commencing any asbestos work.

A2.2.12.6 PCB abatement compliance. When a work item requires the removal of PCB-containing materials, the Contractor shall comply with the Toxic Substances Control Act, 15 U.S.C. 2601-2692; 40 CFR 761, and all other applicable Federal, state, and local laws and regulations related to the removal and disposal of PCB containing articles.

A2.2.12.7 Chromium abatement compliance. When a work item requires the removal, disposal or hazards of application of a chromium-containing coating, the Contractor shall comply with all applicable Federal, state, and local laws and regulations regarding coatings containing chromium.

A2.2.12.7.1 The Contractor shall not release chromium, chromium-contaminated contaminated materials into the environment. The Contractor shall conduct periodic air monitoring for chromium in the worker's breathing zone, during the course of any abatement work involving chromium containing materials, to prevent exposure above the PEL.

A2.2.12.7.2 The Contractor shall dispose of materials containing chromium contaminated materials in accordance with all applicable Federal, state and local laws and regulations. When handling and storing chromium contaminated materials, Contractor shall comply with 42 U.S.C. 9601-9675, 42 U.S.C.6901-6991, and all other applicable Federal, state, and local environmental laws and regulations.

A2.2.13 Volatile Organic Compounds - regulations governing VOC emissions and solvent content in paints, coatings, solvents, adhesives and cleaners. The Contractor shall submit a VOC Plan to the KO or COR prior to the initiation of work. The VOC Plan shall comply with all Federal, state, and local VOC laws and regulations, and shall have an acceptable VOC compliance plan. The plan shall demonstrate that the use of paints, solvents, adhesives and cleaners comply with local VOC laws and regulations. All required permits shall be obtained, prior to starting work involving VOC, in the air quality district in which the work will be performed. An acceptable compliance plan shall contain, as a minimum: a listing of each material subject to restrictions in the air quality management district in question, the rule governing its use, a description of the actions which the Contractor will use to comply with the laws and

regulations, and any changes in the status of compliance during the life of the contract. Alternatively, if no materials are subject to the restrictions in the air quality management district where the work will be performed, or if there are no restrictions, the compliance plan shall so state.

A2.2.14 Containment - general. The Contractor shall employ suitable containment methods to include, but not be limited to those listed below; to protect the air and waterways, during the performance of exterior surface preparation and coating application procedures, and performance of other tasks involving dust creation.

A2.2.14.1 Containment during preservation tasks.

A2.2.14.1.1 The Contractor shall utilize fixed or floating platforms as work surfaces, when working at the water surface. The Contractor shall ensure that platforms are also used to provide a surface to catch spent abrasives, slag, paint products, trash, and other debris/pollutants. The Contractor shall collect and dispose of all debris at the end of each work shift.

A2.2.14.1.2 The Contractor shall ensure that the bottom edges of free hanging barriers are weighted, in order to hold them in place during light breezes. When performing topside surface preparation procedures, the Contractor ensure that all vessel openings and open areas between decks, including but not limited to scuppers, railings, freeing ports, ladders, and doorways, are properly covered to prevent discharges into waterways.

A2.2.14.1.3 The Contractor shall direct all shipboard cooling water and process water away from contact with spent abrasives, paint and other debris. The Contractor shall ensure proper segregation and control of wastewater streams.

A2.2.14.1.4 The Contractor shall ensure that all mixing tasks involving paints and solvents are done in locations and under conditions such that no accidental spills will enter adjacent waterways.

A2.2.14.1.5 The Contractor shall not mix paints and solvents in areas where spillage would have direct access to waterways, unless containment measures are employed. The Contractor shall employ suitable drip pans or other protective devices such as drop cloths or tarpaulin for all paint mixing and solvent transfer operations, unless the mixing operation is carried out in controlled areas away from storm drains, surface waters, shorelines and piers. The Contractor shall ensure absorbents are always on hand, to soak up liquid spills.

A2.2.14.1.6 The Contractor shall ensure that all paint and solvent spills are treated as oil spills and are prevented from reaching storm drains or deck drains and subsequently discharging into the water.

NOTE
Other forms of containment include, but are not limited to:
1. Total or mini enclosures.
2. Use of surface preparation tools equipped with vacuum attachments.
3. Water injection into abrasive stream during abrasive blasting, to reduce/eliminate dust.

A2.2.14.1.7 The Contractor shall capture, contain, and dispose all run-offs from waterjetting and washing operations, to prevent from entering the ground, waterways, stormwater and sewer systems.

A2.2.14.1.8 The Contractor shall control painting overspray, to minimize the spreading of wind blown materials. Contractor shall perform frequent cleanups of affected areas to prevent paint wastes from

being washed into storm sewers or adjacent waterways.

A2.2.14.2 Dust control. The Contractor shall minimize airborne and waterborne dust release at all times. As such,

- No dry power brooming is permitted. Contractor shall use vacuuming, wet mopping, wet sweeping, or wet power brooming.
- Air blowing is permitted only for cleaning non-particulate debris.
- No abrasive blasting is permitted unless dust is confined. Contractor shall control blasting dust to minimize windblown materials, and perform cleanup of affected areas to prevent blasting wastes from being washed into storm sewers or adjacent waterways.
- No unnecessary shaking of bags is permitted where bagged material is used.

A2.2.15 Noise control. The Contractor shall make the maximum use of "low-noise-emission products" as certified by EPA and described by 40 CFR Part 204. Contractor shall comply with applicable portions of 42 USC §4901 to 4918. The Contractor is responsible for complying with all other Federal, state, and local noise control laws and regulations.

A2.2.16 Use of recovered materials. The Contractor shall, to the greatest extent possible and at no additional cost to the Coast Guard, use recovered materials that meet existing performance standards when performing work under this specification. The Contractor shall be aware that it is the Government's policy to use, in a cost-effective manner, products composed of the highest percentage of recovered materials practical without adversely affecting performance requirements or exposing vendor employees to undue hazards from the recovered materials.

A2.2.17 Booming requirements during the offload or onload of petroleum products. The Contractor shall provide a containment boom system and boom off the cutter during all petroleum cargo on loads and offloads. The cutter shall be boomed off by the Contractor during both shipyard functions and the final bunkering of the cutter by ship's force. The Contractor is responsible to provide the labor to deploy and recover the boom during all operations, including operations conducted by ship's force. The containment boom shall at a minimum fully encapsulate the cutter from the pier wall in front of the cutter to the pier wall at the stern of the cutter. When moored alongside a pier that does not provide a fully intact pier wall that will contain a spill, the containment boom shall wrap completely around the cutter on all sides to provide spill containment. For tug and barge configurations, the containment boom shall encapsulate both the cutter and the barge, as applicable.