

## APPENDIX B

# REQUIREMENTS FOR ENVIRONMENTAL PROTECTION AT USCG FACILITIES

## B1. SCOPE

B1.1 Intent. This appendix describes the requirements for ensuring Contractor environmental protection compliance at/on USCG Facilities.

## B2. REQUIREMENTS

B2.1 Environmental Management Plan. The Contractor shall submit an acceptable environmental waste management plan to the KO as part of pre-award submission. 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. The plan, inventory, procedures, certifications, licenses and permits will be reviewed and determined to be consistent and conformant with Host procedures within 5 working days of submission by the local Environmental Compliance Coordinator (e.g., Facility Environmental Protection Specialist or Unit Environmental Coordinator), and shall be approved prior to the initiation of work.

- Contractor General Storage Site Plan requirements.
- An inventory of all hazardous chemicals, compounds and other agents to be brought on-site accompanied by their respective Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS). For each hazardous material brought on-site, the Contractor will identify the quantity, use, container sizes, storage, and daily product management activity.
- 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 Host Environmental Protection Agency (EPA) ID number and managed in a manner consistent and conformant with Host procedures. All HW activities will be coordinated with by the local Environmental Compliance Coordinator.
- Waste collection and containment procedures.
- A Hazardous Material (HM) Spill and Cleanup Plan per the requirements of 40 Code of Federal Regulation (CFR) 265.15 and 29CFR 1910.1200, including tools and materials that will be on hand and readily available to facilitate containment and cleanup. A Spill Prevention, Control, and Countermeasure (SPCC) activities plan in accordance with 40 CFR 112 shall be included as required.
- Training certifications for the Contractor's hazardous waste manager and all personnel conducting hazardous waste activities, including applicable personnel EPA certifications.
- Methods used to analyze and identify whether or not generated material, such as but not limited to blasting debris, paint waste, and universal wastes.

- Any HW licenses and permits.
- Air district permits. All air emissions must be detailed within Attachment A, B and C documents, and submitted to the KO. The KO will submit to the local Environmental Compliance Coordinator for determination of consistent and conformant with Host procedures.
- Any permits required by the National Pollutant Discharge Elimination System (33 U.S.C. 1342). All surface water discharges, including process and storm water, must be inventoried and submitted to the local Environmental Compliance Coordinator and determined to be consistent and conformant with Host procedures.
- A Volatile Organic Compounds (VOC) Plan. The VOC Plan shall comply with all Federal, state, and local VOC laws and regulations, and shall have an acceptable VOC compliance plan as defined herein.

B2.2 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, and comply with all Federal, state, and local laws and regulations pertaining to water, air, and noise pollution. Contractor submitted Environmental Management Plan shall additionally meet all requirements of this Standard Specification.

**NOTE**

**The Coast Guard has the right to require removal from the contract any Contractor or subcontractor whose performance fails to comply with any environmental laws and regulations, or who fails to provide appropriate evidence of compliance with regulations.**

B2.2.1 Report(s). The Contractor shall submit a CFR with the completed reports, as applicable;

- Monthly Solid Waste Management Report as per B2.2.2.2
- Waste Determination as per B2.2.2.4
- End of Project Hazardous Material Management as per B2.2.4
- Contractor Hazardous Material Inventory Log as per B2.2.4.1
- Hazardous Waste/Debris Management as per B2.2.4.3
- Regulated Waste Storage/Satellite Accumulation/90 Day Storage Areas as per B2.2.4.5
- Laboratory Analysis as per B2.2.4.7
- Disposal Documentation for Hazardous and Regulated Wastes as per B2.2.4.8
- Release/Spills of Oil and Hazardous Substances as per B2.2.7
- Responsibilities for Contractor's Disposal as per B2.2.9.3.2
- Refrigerants as per B2.2.10.1
- Disposal Requirements as per B2.2.11.1
- National Emission Standards for Hazardous Air Pollutants as per B2.2.12
- Hazardous substance abatement as per B2.2.14

B2.2.2 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 from the job site, daily. Disposal of non-hazardous wastes, industrial wastes, and construction and demolition debris must be reviewed by the local Environmental Compliance Coordinator for consistency and conformance with Host procedures. Contractor shall comply with 49 CFR 178, in regards to proper storage container and labeling of wastes, and shall comply with the HW disposal requirements specified in the "General Requirements" item, for

the locality in which the repair availability will occur.

**B2.2.2.1 Solid Waste Management Plan and Permit.** The Contractor shall provide to the Contracting Officer and to the local Environmental Compliance Coordinator written notification of the quantity of solid waste, trash/debris that is anticipated to be generated. Include in the report the locations where various types of waste will be disposed or recycled, letters of acceptance or as applicable, submit one copy of a State and local Solid Waste Management Permit or license showing such agency's approval of the disposal plan before transporting wastes off Government property. Disposal of solid wastes will be reviewed by the local Environmental Compliance Coordinator and determined to be consistent and conformant with Host procedures.

**B2.2.2.2 Solid Waste Management Report.** The Contractor shall at least monthly, submit a solid waste disposal report to the local Environmental Compliance Coordinator, with a courtesy copy to the KO. For each waste, the report will state the classification, using the definitions provided in this section, amount, location, and name of the business receiving the solid waste. The Contractor will include copies of the waste handling facilities' weight tickets, receipts, bills of sale, and other sales documentation. In lieu of sales documentation, the Contractor may submit a statement indicating the disposal location for the solid waste which is signed by an officer of the Contractor firm authorized to legally obligate or bind the firm. The sales documentation or Contractor certification will include the receiver's tax identification number and business, EPA or State registration number, along with the receiver's delivery and business addresses and telephone numbers. For each solid waste retained by the Contractor for his own use, the Contractor will submit on the solid waste disposal report the information previously described in this paragraph. Prices paid or received do not need to be reported to the local Environmental Compliance Coordinator or Contracting Officer unless required by other provisions or specifications of this Contract or public law.

**B2.2.2.3 Control and Management of Solid Wastes.** The Contractor shall pick up solid wastes and trash, and place in covered containers which are regularly emptied, shall not prepare or cook food on the project site, and shall prevent contamination of the site or other areas when handling and disposing of wastes. At project completion, the Contractor shall leave the areas clean. Recycling is encouraged at USCG Facilities and can be coordinated with the local Environmental Compliance Coordinator and the facility. The Contractor shall remove all solid waste and trash, including non-hazardous debris, from Government property and dispose off-site at an approved landfill. Solid waste disposal off-site must comply with local, State, and Federal requirements including 40 CFR 241, 40 CFR 243, and 40 CFR 258. The Contractor shall manage spent hazardous materials, including but not limited to, aerosol cans, waste paint, cleaning solvents, contaminated brushes, and dirty/used rags per environmental laws.

**B2.2.2.4 Waste Determination** The Contractor shall complete the appropriate Waste Determination analysis and documentation for all Contractor derived wastes to be generated, and base the waste determination upon either a constituent listing from the manufacturer used in conjunction with consideration of the process by which the waste was generated, EPA approved analytical data, or laboratory analysis. Safety Data Sheets (SDS)/Material Safety Data Sheets (MSDS) by themselves are not adequate basis for this determination. Attach all support documentation to the Waste Determination form. As a minimum, a Waste Determination form must be provided for the following wastes, and may be increased based upon Contractor list of anticipated HW; oil and latex based painting and caulking

products, solvents, adhesives, aerosols, petroleum products, and all containers of the original materials. Waste determination documentation for all spent wastes or wastes derived from a process must be analyzed for hazardous waste characteristics and analysis provided with the Waste Determination form.

**B2.2.3 Petroleum Products and Refueling.** Contractor shall manage and dispose of petroleum products and petroleum contaminated water in accordance with procedures meeting Federal, state, and local laws and regulations. The Contractor shall conduct the fueling and lubricating of equipment and motor vehicles in a manner that protects against spills and evaporation, and manage all used oil generated on site in accordance with 40 CFR 279. Contractor shall determine if any used oil generated while on-site exhibits a characteristic of hazardous waste. Used oil containing 1000 parts per million of Total Halogens will be considered a hazardous waste and disposed of at Contractor's expense, as will used oil mixed with a hazardous waste.

**B2.2.3.1 Oily and Hazardous Substances.** Contractor shall prevent oil or hazardous substances from entering the ground, drainage areas, or navigable waters, and in accordance with 40 CFR 112, shall surround all temporary fuel oil or petroleum storage tanks with a temporary berm or containment of sufficient size and strength to contain the contents of the tanks, plus 10 percent freeboard for precipitation. The berm will be impervious to oil for 72 hours and be constructed so that any discharge will not permeate, drain, infiltrate, or otherwise escape before cleanup occurs. The approved SPCC activities plan applies.

**B2.2.3.2 Fuel Tanks.** The Contractor may keep petroleum products and lubricants required to sustain up to 30 days of activity on Government property. The Contractor shall ensure storage and refilling practices comply with 40 CFR Part 112, and shall provide secondary containment to be no less than 110 percent of the tank volume plus five inches of free-board. If a secondary berm is used for containment then the berm shall be impervious to oil for 72 hours and be constructed so that any discharge will not permeate, drain, infiltrate, or otherwise escape before cleanup occurs. The Contractor shall ensure drips pans are used and that tanks must be covered during inclement weather.

**B2.2.4 Hazardous Material Management.** No hazardous material shall be brought onto Government property by the Contractor that does not directly relate to requirements for the performance of this contract, and determined to be consistent and conformant with Host procedures. The Contractor plans shall address hazardous material control procedures and proper handling of hazardous materials, including the appropriate transportation requirements, and a MSDS and estimated quantities to be used for each hazardous material and provided to the local Environmental Compliance Coordinator and Contracting Officer prior to bringing the material on base. Typical materials requiring MSDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, solvents, adhesives, aerosol, and petroleum products. At the end of the project, provide the local Environmental Compliance Coordinator and Contracting Officer with the maximum quantity of each material that was present at the site at any one time, the dates the material was present, the amount of each material that was used during the project, and how the material was used. Contractor shall ensure that hazardous materials are utilized in a manner that will minimize the amount of hazardous waste that is generated, and ensure that all containers of hazardous materials have National Fire Protection Association (NFPA) labels or their equivalent. Contractor shall keep copies of the SDS/MSDS for hazardous materials on site at all times and provide them to the local Environmental Compliance

Coordinator and Contracting Officer at the end of the project. Contractor shall certify that all hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste per 40 CFR 261.

**B2.2.4.1 Contractor Hazardous Material Inventory Log.** The Contractor shall submit the "Contractor Hazardous Material Inventory Log", Attachment C, which provides information required by Emergency Planning and Community Right-to-Know Act (EPCRA) Sections 312 and 313, along with corresponding Safety Data Sheet (SDS)/ Material Safety Data Sheets (MSDS) to the local Environmental Compliance Coordinator and Contracting Officer at the start and within 30 days from final acceptance, and if necessary, update no later than January 31 of each calendar year during the life of the contract. The Contractor shall furnish documentation for any spills/releases, environmental reports or off-site transfers that may be requested by the local Environmental Compliance Coordinator and Contracting Officer.

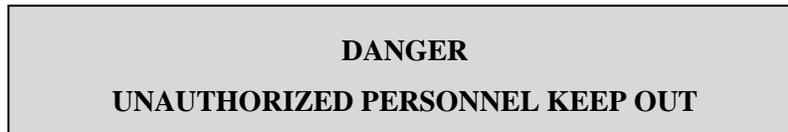
**B2.2.4.2 Facility Hazardous Waste Generator Status.** The Contractor will be provided the USCG activity Generator Status within the solicitation. The Contractor shall ensure that all work conducted within the boundaries of the USCG activity/facility meets the regulatory requirements of the generator 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 construction derived wastes, as well as Facility specific hazardous waste procedures .

**B2.2.4.3 Hazardous Waste/Debris Management.** The Contractor shall be responsible for all activities which will generate 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. Hazardous waste shall be managed by the Contractor in accordance with the approved Hazardous Waste Management Section of the Environmental Protection Plan. The Contractor shall store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178, and hazardous waste generated by the Contractor within the confines of Government facilities will be identified as being generated by the Government. Prior to removal of any hazardous waste from Government property the Contractor shall ensure all hazardous waste manifests are signed by a qualified and properly trained USCG activity personnel. No hazardous waste will be brought onto Government property by the Contractor. The Contractor shall provide to the local Environmental Compliance Coordinator and Contracting Officer a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SubPart D. For hazardous wastes spills the Contractor shall verbally notify the local Environmental Compliance Coordinator and Contracting Officer immediately.

**B2.2.4.4 Regulated Waste Storage/Satellite Accumulation/90 Day Storage Areas.** If the work requires the temporary storage/collection of regulated or hazardous wastes, the Contractor will utilize the existing Host procedures for storing or managing HW, or request from the local Environmental Compliance Coordinator the establishment of a Regulated Waste Storage Area , a Satellite Accumulation Area at the point of generation, or a 90 Day Storage Area. The local Environmental Compliance Coordinator will determine consistency and conformance with Host procedures. The Contractor must submit a request in writing to the local Environmental Compliance Coordinator providing the following information:

Contract Number	[_____]
Contractor	[_____]
Haz/Waste or Regulated Waste POC	[_____]
Phone Number	[_____]
Type of Waste	[_____]
Source of Waste	[_____]
Emergency POC	[_____]
Phone Number	[_____]
Location of the Site	[_____]

B2.2.4.5 The Contractor shall attach a waste determination form and allow ten working days for processing the request. The Contractor shall barricade the designated area where waste is being stored and at a minimum post a sign identifying as follows:



B2.2.4.6 Sampling and Analysis of Hazardous Waste. The Contractor shall sample waste in accordance with and as designated by the local Environmental Compliance Coordinator to be consistent and conformant with Host procedures, as well as Federal, state, and local requirements. Each sampled drum or container will be clearly marked with the Contractor's identification number and cross referenced to the chemical analysis performed.

B2.2.4.7 Laboratory Analysis. The Contractor shall follow the analytical procedure and methods in accordance with the 40 CFR 261 and 262. The Contractor will provide all analytical results and reports performed to the local Environmental Compliance Coordinator and Contracting Officer.

B2.2.4.8 Disposal Documentation for Hazardous and Regulated Wastes. The Contractor shall manifest, pack, ship and dispose of hazardous or toxic waste and universal waste that is generated as a result of the contract in accordance with the generating facilities generator status under the Resource Conservation and Recovery Act (RCRA) and in a manner approved by the local Environmental Compliance Coordinator, and determined to be consistent and conformant with Host procedures. Contact the Contracting Officer, local Environmental Compliance Coordinator for the facility RCRA identification number that is to be used on each manifest. 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. Hazardous or toxic waste manifests must be reviewed, signed, and approved by the Coast Guard before the Contractor may ship waste. Specific disposal instructions will be coordinates with the local Environmental Compliance Coordinator.

**B2.2.5 Pollution Prevention/Hazardous Waste Minimization.** The Contractor shall minimize use of hazardous materials and the generation of hazardous waste, and shall include procedures for pollution prevention/ hazardous waste minimization in the Hazardous Waste Management Section of the Environmental Management Plan. The Contractor shall consult with the KO for local Environmental Compliance Coordinator suggestions and to obtain a copy of the installation's pollution prevention/hazardous waste minimization plan for reference when preparing this part of the plan. If no written plan exists, the Contractor shall contact the Contracting Officer, and provide description of the types of the hazardous materials expected to be used in the project when requesting information.

**B2.2.6 Hazardous Materials/Waste Prohibition.** No hazardous material or hazardous waste shall be disposed of on Government property by the Contractor. No hazardous material shall be brought onto Government property that does not directly relate to requirements for the performance of this contract by the Contractor. The Government is not responsible for disposal of Contractor's waste material brought on the job site and that is not required in the performance of this contract. The intent of this provision is to dispose of that waste identified as hazardous material/hazardous waste as defined herein that was generated as part of this contract and existed within the boundary of the Contract limits and not brought in from offsite by the Contractor. Incidental materials used to support the contract including, but not limited to aerosol cans, waste paint, cleaning solvents, contaminated brushes, rags, clothing, etc. are the responsibility of the Contractor. The Contractor is not authorized to discharge any materials to sanitary sewer, storm drain, or to navigable waterways or conduct waste treatment or disposal on Government property without written approval of the Contracting Officer and the local Environmental Compliance Coordinator.

**B2.2.7 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. In the event of a spill, the Contractor shall use spill cleanup equipment and materials maintained by the Contractor at the work site, and take prompt, effective action to stop, contain, curtail, or otherwise limit the amount, duration, and severity of the spill/release. In the event of any releases of oil and hazardous substances, chemicals, or gases, the Contractor shall immediately notify the Base or Activity Fire Department, the Activity Command Duty Officer, the Contracting Officer or the local Environmental Compliance Coordinator. If the Contractor's response is deemed inadequate, the Coast Guard may respond, and if this should occur, the Contractor will be required to reimburse the Government for spill response assistance and analysis. The Contractor shall be responsible for all contract/availability related spills, and perform these actions based upon the reviewed and approved SPCC plan. Be aware that this contractual authority to assume cleanup direction is in addition to, and does not affect, the Coast Guard's regulatory authority to initiate Federal spill control and cleanup operations, as prescribed under the National Oil and Hazardous Substances Contingency Plan, 40 CFR 300. The Contractor's responsibility shall also include the removal of spill response waste from the work site, upon completion of spill cleanup.

**B2.2.7.1** The Contractor is responsible for verbal and written notifications as required by 40 CFR 355, State, local regulations and Coast Guard Instructions. Immediately notify the local Environmental Compliance Coordinator and Contracting Officer along with the required agencies. The Contractor shall provide copies of the written notification and documentation that a verbal notification was made within 20 days.

**B2.2.7.2** The Contractor's spill response shall be in accordance with 40 CFR 300 and applicable State and local regulations. The Contractor shall maintain spill cleanup equipment and materials at the work site, and shall clean up all hazardous and non-hazardous waste spills. The Contractor shall contain and

clean up these spills without cost to the Government. If Government assistance is requested or required, the Contractor shall reimburse the Government for all material, equipment, sample analysis materials and protective clothing generated during any spill cleanup. The Government must initiate its own spill cleanup procedures for Contractor responsible spills, when the Contractor has not begun spill cleanup procedure within one hour of spill discovery/occurrence, or if, in the Government's judgment, the Contractor's spill cleanup is not adequately abating life threatening situation and/or is a threat to any body of water or environmentally sensitive areas.

**NOTE**

**The Coast Guard will assume control of the spill response, if the Contractor's response is deemed inadequate by Government. The Contractor shall be responsible for reimbursing the Coast Guard for all expenses incurred.**

**B2.2.8 Oil Spill Response Plan.** The Contractor shall be aware that transfers of any amount of "oil", as defined by 33 CFR 154.105, between the vessel and the Contractor's mobile tank facility or Marine Transportation Related (MTR) 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 Response Plan for any mobile facility transferring oil to or from the vessel whether the transfer is done by the Contractor or Subcontractor, if required by 33 CFR 154.1010. As part of this oil spill response plan, the Contractor shall provide fuel oil containment booms to surround the CG vessel during all fuel oil, lube oil, or other petroleum cargo on loads and offloads. Requirement to provide fuel oil boom includes, but is not limited to, the initial petroleum cargo offload and the final liquid load on load at the end of the availability. The required plans shall be made available for review by the local Environmental Compliance Coordinator and Contracting Officer prior to the initiation of work.

**NOTE**

**A current USCG Marine Safety Office (MSO) / Captain of the Port (COTP)-approved Facility Response Plan per 33 CFR Section 154.1017 will be considered acceptable in meeting these requirements.**

**B2.2.9 Hazardous Waste Disposal.** The Contractor shall not dispose of hazardous, toxic, or universal waste or abandoned hazardous material on Government property. Unless otherwise noted in the contract, the Government is not fiscally responsible for disposal of Contractor generated waste material. The disposal of incidental materials used to accomplish the work including, but not limited to aerosol cans, waste paint, cleaning solvents, contaminated brushes, rags, clothing, etc. are the responsibility of the Contractor.

**B2.2.9.1** The Contractor is not authorized to discharge any materials to sanitary sewer, storm drain, or water way or conduct waste treatment or disposal on Government property without written approval of the Contracting Officer and the local Environmental Compliance Coordinator.

**B2.2.9.2** The Contractor shall maintain control of stored waste, packaging, sampling, analysis, and disposal.

**B2.2.9.3 Responsibilities for Contractor's Disposal.** Contractor responsibilities include any generation of HW solid or liquid. The Contractor agrees to provide all service necessary for the final treatment/disposal of the hazardous material/waste in accordance with all local, State and Federal laws and regulations, and the terms and conditions of the contract. 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.

B2.2.9.3.1 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. Obtaining a representative sample of the material generated for each task to provide waste stream determination.

B2.2.9.3.2 The Contractor shall provide analysis for each sample taken and provide two copies of the results to the Contracting Officer and Local Environmental Compliance Coordinator. The Contractor shall determine the DOT proper shipping names for all waste, each container requiring disposal, and will demonstrate how this determination is developed and supported by the sampling and analysis requirements contained herein to the Contracting Officer and local Environmental Compliance Coordinator.

B2.2.10 Class I and II ODS Prohibition. Class I and II Oxygen Depleting Substances (ODS) will not be used nor be provided as part of the equipment, unless specifically authorized and defined within 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.

B2.2.10.1 Refrigerants. The Contractor shall adhere to the requirements of the Clean Air Act, 42 U.S.C. 7401, and 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, COR, or local Environmental Compliance Coordinator at the Arrival Conference.

B2.2.10.2 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. The Contractor shall report accidental venting of a refrigerant release to the Contracting Officer and local Environmental Compliance Coordinator.

B2.2.11 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.

B2.2.11.1 Disposal Requirements The Contractor shall submit analytical results of all non-recyclable debris generated from abrasive blasting operations per paragraph entitled "Laboratory Analysis". Hazardous waste generated from blasting operations will be managed in accordance with paragraph entitled "Hazardous Waste\Debris Management" and with the approved Environmental Management Plan. Disposal of non-hazardous abrasive blasting debris will be in accordance with paragraph entitled "Control and Disposal of Solid Wastes".

B2.2.12 National Emission Standards for Hazardous Air Pollutants. The Contractor shall provide appropriate notification to regional United States Environmental Protection Agency (EPA) 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.

B2.2.12.1 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 Environmental Compliance Coordinator within 48 hours of providing such notice to the regulatory authority.

B2.2.12.2 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 Coast Guard facility during the performance of this Contract.

B2.2.12.3 The Contractor shall submit one legible copy, in hard copy or electronic media, to the local Environmental Compliance Coordinator and Contracting Officer upon request. Each SDS/MSDS requires a one-time submittal/acceptance unless the SDS/MSDS changes.

B2.2.13 Shipbuilding Operations National Emission Standard for Hazardous Air Pollutants (NESHAPS) for Surface Coating Information. The following are specific requirements to meet 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart II.

B2.2.13.1 Government facility availabilities: The Contractor shall provide certification to the local Environmental Compliance Coordinator or Contracting Officer using Attachment A for VOC Option 1, 2, and 3 thinning requirement use only, or Attachment B for Volatile Organic Hazardous Air Pollutants (VOHAP) for Option 4 thinning requirement, on the as-supplied coating by the manufacturer, or similar form as authorized by the Contracting Officer.

B2.2.14 Hazardous material abatement.

B2.2.14.1 Government reporting of known hazardous substances. The Contractor shall be aware that the Government will make every possible effort to inform the Contractor of the presence of hazardous substances, such as lead, chromium, asbestos, and polychlorinated biphenyl (PCB); and will inform the Contractor of the presence of said substances in specification items, when applicable. 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 COR prior to commencing work.

B2.2.14.2 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, before work commences as well as monitoring during work activities. Provide COR with a description, location, and analysis results for all materials samples taken during personnel hazard evaluations before work commences in the affected area.

B2.2.14.3 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/cm<sup>2</sup>, 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.**

B2.2.14.3.1 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 inside encapsulated spaces(s) as well as immediately adjacent to these encapsulated space(s), to prevent exposure at or above the Permissible Exposure Limit (PEL). Submit results of all air monitoring samples to COR within 24-hours of completing the sampling, or upon receipt of laboratory test results.

B2.2.14.3.2 The Contractor shall dispose of lead-contaminated materials in accordance with all applicable Federal, State and local regulations. When handling, storing or shipping lead contaminated materials, the Contractor shall comply with 42 U.S.C. 9601-9675, 42 U.S.C.6901-6991,49 CFR 171-177 and all other applicable Federal, state, and local environmental laws and regulations.

B2.2.14.4 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:

B2.2.14.4.1 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.

B2.2.14.4.2 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.**

B2.2.14.4.3 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.**

#### B2.2.14.4.4 Abatement, coating removal and surface preparation.

B2.2.14.4.4.1 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.

B2.2.14.4.4.2 LBP. Remove LBP from identified areas, using one or a combination of the cleaning methods specified in Table B1 below, as applicable.

B2.2.14.4.4.3 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,), Contractor shall ensure that abatement includes;

- 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.
- 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 safely 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 as grease pencils. Be aware that any accidental disturbance of ACM and/or LBP by subsequent hot work or grinding associated with weld repairs shall require clean up and clearance testing, at no cost to the Government.

**TABLE B1 - SURFACE PREPARATION METHODS**

<b>MECHANICAL CLEANING</b>		<b>CHEMICAL STRIPPING</b>
<b>STEEL SUBSTRATE</b>	<b>ALUMINUM SUBSTRATE</b>	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 to 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 sandpaper with no metallic contents, to remove all existing coatings and rust spots, down 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 stripper 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.

B2.2.14.4.4.4 Precautionary measures when using chemical stripping. Take the following precautionary measures, when chemical stripping is selected as one of coating removal methods:

B2.2.14.4.4.4.1 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 with changes in wind direction.

B2.2.14.4.4.2 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.

B2.2.14.4.5 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.**

B2.2.14.4.6 Post-surface preparation cleaning, inspection, and clearance. Upon completion of coating removal procedures, do the following, as applicable:

B2.2.14.4.6.1 Lead dust clean-up. Clean all lead dust from worksite by suitable 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 resettling on 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.**

B2.2.14.4.6.2 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.

B2.2.14.4.7 Post- abatement clearance. Upon acceptance of the visual inspection results by the COR, do the following:

B2.2.14.4.7.1 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 B2. 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 B2 - 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)

B2.2.14.4.7.2 Additional lead dust cleaning and sampling. If laboratory analysis proves lead concentrations in excess of the thresholds specified in TABLE B2, 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.**

B2.2.14.4.7.3 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.

B2.2.14.4.8 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.

B2.2.14.4.9 Coating application. Coat all prepared surfaces, in accordance with Table B3.

**TABLE B3 - 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).

B2.2.14.4.10 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.

B2.2.14.5 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, 29 CFR 1915.1001 and 49 CFR 171-177. 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, Contractor shall provide 48 hours written notice to the KO, and local Environmental Compliance Coordinator before commencing any asbestos work.

B2.2.14.6 PCB abatement compliance. When a work item requires the removal of PCB-containing materials, the Contractor shall comply with the Toxic Substances Control Act (TSCA), 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.

B2.2.14.7 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.

B2.2.14.7.1 The Contractor shall not release chromium or chromium 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. The Contractor shall submit results of all air monitoring samples to COR within 24-hours of completing the sampling, or upon receipt of the laboratory test results.

B2.2.14.7.2 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, as well as other applicable Federal, state, and local environmental laws and regulations.

B2.2.15 Volatile Organic Compounds (VOCs) - regulations governing VOC emissions and solvent content in paints, coatings, solvents, adhesives and cleaners. Contractor shall submit a VOC Plan to the KO. 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.

B2.2.16 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.

B2.2.16.1 Containment during preservation tasks.

B2.2.16.1.1 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.

B2.2.16.1.2 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 shall 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.

B2.2.16.1.3 The Contractor shall direct all shipboard cooling water and process water away from contact with spent abrasives, paint and other debris.

B2.2.16.1.4 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.

B2.2.16.1.5 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 any liquid spills.

B2.2.16.1.6 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.**

B2.2.16.1.7 The Contractor shall ensure proper segregation and control of wastewater streams. The Contractor shall capture, contain, and dispose all run-offs from waterjetting and washing operations, to prevent from entering the ground, waterways, and stormwater and sewer systems. All wastewater shall be removed from Government property for processing.

B2.2.16.1.8 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.

B2.2.16.2 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 abrasive-blasting wastes from being washed into storm sewers or adjacent waterways.
- No unnecessary shaking of bags is permitted where bagged material is used.

B2.2.17 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.

B2.2.18 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. 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.

B2.2.19 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 onloads 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.

Attachments: Attachment A: Volatile Organic Compounds (VOC) (for Option 1, 2, and 3 thinning requirement use only)

ATTACHMENT A  
(For Option 1,2,& 3 Thinning Requirement Use Only)  
VOC DATA SHEET  
PROPERTIES OF THE COATING "AS SUPPLIED" BY THE MANUFACTURER

Coating Manufacturer: \_\_\_\_\_  
Coating Identification: \_\_\_\_\_  
Batch Identification: \_\_\_\_\_  
Supplied To: \_\_\_\_\_

Properties of the coating as supplied to the customer:

- A. Coating Density:  $(D_c)_2$  \_\_\_\_\_ g/L  
\_\_\_\_ ASTM D 1475-90 \_\_\_\_ Other<sup>1</sup>
- B. Total Volatiles:  $(m_v)_s$  \_\_\_\_\_ Mass Percent  
\_\_\_\_ ASTM D 2369-93 \_\_\_\_ Other<sup>1</sup>
- C. Water Content:
1.  $(m_w)_s$  \_\_\_\_\_ Mass Percent  
\_\_\_\_ ASTM D 3792-91 \_\_\_\_ ASTM D 4017-90 \_\_\_\_ Other<sup>1</sup>
2.  $(v_w)_s$  \_\_\_\_\_ Volume Percent  
\_\_\_\_ Calculated \_\_\_\_ Other<sup>1</sup>
- D. Organic Volatiles:  $(m_o)_s$  \_\_\_\_\_ Mass Percent
- E. Nonvolatiles:  $(v_n)_s$  \_\_\_\_\_ Volume Percent  
\_\_\_\_ Calculated \_\_\_\_ Other<sup>1</sup>
- F. VOC Content (VOC)<sub>s</sub>:
1. \_\_\_\_\_ g/L solids (nonvolatiles)
2. \_\_\_\_\_ g/L coating (less water and exempt compounds)
- G. Thinner Density:  $D_{th}$  \_\_\_\_\_ g/L  
\_\_\_\_ ASTM \_\_\_\_\_ Other<sup>1</sup>

Remarks: (use reverse side)

H. Certification:  
Signed: \_\_\_\_\_ Date: \_\_\_\_\_

<sup>1</sup> Explain the other method used under "Remarks"

Attachment B: Volatile Organic Hazardous Air Pollutants (VOHAP) (for Option 4 thinning requirement)

ATTACHMENT B  
(For Option 4 Thinning Requirement Use Only)  
VOHAP DATA SHEET

PROPERTIES OF THE COATING "AS SUPPLIED" BY THE MANUFACTURER

Coating Manufacturer: \_\_\_\_\_  
Coating Identification: \_\_\_\_\_  
Batch Identification: \_\_\_\_\_  
Supplied To: \_\_\_\_\_

Properties of the coating as supplied to the customer:

- A. Coating Density:  $(D_c)_2$  \_\_\_\_\_ g/L  
\_\_\_\_ ASTM D 1475-90 \_\_\_\_ Other<sup>1</sup>
- B. Total Volatiles:  $(m_v)_s$  \_\_\_\_\_ Mass Percent  
\_\_\_\_ ASTM D 2369-93 \_\_\_\_ Other<sup>1</sup>
- C. Water Content:
1.  $(m_v)_s$  \_\_\_\_\_ Mass Percent  
\_\_\_\_ ASTM D 3792-91 \_\_\_\_ ASTM D 4017-90 \_\_\_\_ Other<sup>1</sup>
2.  $(v_w)_s$  \_\_\_\_\_ Volume Percent  
\_\_\_\_ Calculated \_\_\_\_ Other<sup>1</sup>
- D. HAP Volatiles:  $(m_{hap})_s$  \_\_\_\_\_ Mass Percent
- E. Nonvolatiles:  $(v_n)_s$  \_\_\_\_\_ Volume Percent  
\_\_\_\_ Calculated \_\_\_\_ Other<sup>1</sup>
- F. VOHAP Content  $(VOHAP)_s$ :
1. \_\_\_\_\_ g/L solids (nonvolatiles)
2. \_\_\_\_\_ g/L coating (less water and exempt compounds)
- G. Thinner VOHAP Density:  $D_{th(vohap)}$  \_\_\_\_\_ g/L  
\_\_\_\_ ASTM \_\_\_\_\_ Other<sup>1</sup>

Remarks: (use reverse side)

H. Certification:

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

<sup>1</sup> Explain the other method used under "Remarks"





**Attachment D: Code of Federal Regulations**  
**For Reference Only**

**Title 16 Commercial Practices**

PART 1303 BAN OF LEAD-CONTAINING PAINT AND CERTAIN CONSUMER PRODUCTS BEARING LEAD-CONTAINING PAINT

**Title 29 Labor**

PART 1910 OCCUPATIONAL SAFETY AND HEALTH STANDARDS

PART 1915 OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR SHIPYARD EMPLOYMENT

PART 1926 SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

**Title 33 Navigation and Navigable Waters**

PART 154 FACILITIES TRANSFERRING OIL OR HAZARDOUS MATERIAL IN BULK

**Title 40 Protection of the Environment**

PART 61 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

PART 82 PROTECTION OF STRATOSPHERIC OZONE

PART 112 OIL POLLUTION PREVENTION

PART 204 NOISE EMISSION STANDARDS FOR CONSTRUCTION EQUIPMENT

PART 241 SOLID WASTES USED AS FUELS OR INGREDIENTS IN COMBUSTION UNITS

PART 243 GUIDELINES FOR THE STORAGE AND COLLECTION OF RESIDENTIAL, COMMERCIAL, AND INSTITUTIONAL SOLID WASTE

PART 256 GUIDELINES FOR DEVELOPMENT AND IMPLEMENTATION OF STATE SOLID WASTE MANAGEMENT PLANS

PART 258 CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS

PART 261 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

PART 262 STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

PART 263 STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

PART 264 STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

PART 265 INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

PART 266 STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

PART 268 LAND DISPOSAL RESTRICTIONS

PART 270 EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

PART 272 APPROVED STATE HAZARDOUS WASTE MANAGEMENT PROGRAMS

PART 273 STANDARDS FOR UNIVERSAL WASTE MANAGEMENT

PART 279 STANDARDS FOR THE MANAGEMENT OF USED OIL

PART 280 TECHNICAL STANDARDS AND CORRECTIVE ACTION REQUIREMENTS FOR OWNERS AND OPERATORS OF UNDERGROUND STORAGE TANKS (UST)

PART 300 NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN

PART 355 EMERGENCY PLANNING AND NOTIFICATION

PART 372 TOXIC CHEMICAL RELEASE REPORTING: COMMUNITY RIGHT-TO-KNOW

PART 761 POLYCHLORINATED BIPHENYLS (PCBs) MANUFACTURING, PROCESSING, DISTRIBUTION IN COMMERCE, AND USE PROHIBITIONS

**Title 49 Transportation**

PART 173 SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

PART 178 SPECIFICATIONS FOR PACKAGINGS