USCGC HUDSON (WLIC 801)

SPECIFICATION FOR DOCKSIDE REPAIRS

FY2026

Developed By: Erik C Elasik

WORK ITEM 5: Main Diesel Engine, MDE, Exhaust Piping, Commercial Clean

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean the Main Diesel Engine (MDE) exhaust piping system, including the associated stack uptakes.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 160 WLIC 1107-1, Rev L, Dk House Eng Casing & Stacks

Coast Guard Drawing 160 WLIC 4105-3, Rev H, Arrgt Eng & Boiler Exhaust

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

Code of Federal Regulations (CFR) Title 29, Part 1915, 2014, Occupational Safety and Health Standards for Shipyard Employment

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3. (Interferences). Known interferences include, but are not limited to the following:

- Access covers
- Exhaust stack
- MDE
- Piping
- Pipe insulation
- Vent ducting
- Wiring
- Exhaust pipe expansion joints
- Exhaust insulation blankets
-

3.2 Staging or scaffolding, netting. The Contractor must erect suitable staging or scaffolding in accordance with 29 CFR 1915, Subpart E (Scaffolds, Ladders and Other Working Surfaces) to facilitate work, as required.

3.2.1 Rig suitable safety netting, to protect workers during possible falls, and to protect the Engine Room and machinery from falling tools.

3.3 Work plan. The Contractor must develop and submit, to the COR, a plan for collecting and disposing of waste extracted during cleaning process. Ensure that the proposed plan must detail how and where exhaust piping will be disconnected, how entire length of exhaust piping will be divided/sectioned for cleaning, and precautions to protect the MDE. The Contractor must perform this work upon receiving Coast Guard approval of the plan.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.4 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.5 Cleaning. The Contractor must clean the interior surfaces of the exhaust piping and stack uptakes to the MDE, shown on Coast Guard Drawings 160 WLIC 1107-1 and 160 WLIC 4105-3, to a condition free from soot, tar, and any other foreign matter as follows:

3.5.1 Disconnect the exhaust piping as necessary to facilitate cleaning.

3.5.2 Thoroughly sweep, mechanically clean, and vacuum the interior of each exhaust pipe system, including the mufflers, from the exhaust outlet to the topmost location outside the vessel. Clean all adjacent stack uptake surfaces. Ensure that all tar deposits, soot deposits, and all other surface contaminants are removed.

3.5.3 Remove all debris from the pipe surfaces, stack deck, and Engine Room areas by vacuuming. Dispose of all cleaning materials and generated debris in accordance with all applicable Federal, state, and local regulations.

3.5.4 Reassemble exhaust piping; renew all disturbed flange connection gaskets with suitable high temperature, non-asbestos-containing gasket materials; and renew all disturbed fasteners.

3.6 Inspection and report. The Contractor must perform a visual inspection of the following components; submit a CFR:

- Exhaust stack access hatches, including all associated studs and nuts.
- All cleaned exhaust stack surfaces.
- All exhaust expansion joints, including associated bolts.

3.6.1 Following cleaning of the interior of each exhaust pipe system, the Contractor must demonstrate completeness of the cleaning process to the Coast Guard Inspector, showing that the entire length of exhaust piping cleaned according to the work plan.

3.7 Touch-up preservation. The Contractor must prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs.)

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.8 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR

4. NOTES

This section is not applicable to this work item.

WORK ITEM 6: Ship Service Diesel Generator, SSDG, Exhaust Piping, Commercial Clean

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean the exhaust piping system for the following ship service diesel generators (SSDG): #1 SSDG and #2 SSDG of the Ship Service Diesel Generator (SSDG) piping, including the associated stack uptakes.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 160 WLIC 1107-1, Rev L, Dk House Eng Casing & Stacks

Coast Guard Drawing 160 WLIC 4105-3, Rev H, Arrgt Eng & Boiler Exhaust

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

Surface Forces Logistics Center Standard Specification 8636 (SFLC Std Spec 8636), 2022, Temporary Hull Accesses

OTHER REFERENCES

Code of Federal Regulations (CFR) Title 29, Part 1915, 2022, Occupational Safety and Health Standards for Shipyard Employment

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences). Known interferences include, but are not limited to the following:

- Access covers
- Exhaust stack
- SSDG
- Vent ducting
- Wiring
- Exhaust pipe expansion joints
- Exhaust insulation blankets
- Ladder.
- Bulkhead heat shielding.

3.2 Staging or scaffolding. The Contractor must erect suitable staging or scaffolding in accordance with 29 CFR 1915, Subpart E (Scaffolds, Ladders and Other Working Surfaces) to facilitate work, as required.

3.3 Safety precaution. The Contractor must rig suitable safety netting, to protect workers during possible falls, and to protect the Engine Room and machinery from falling tools.

3.3.1 Temporary safety railing. To promote safety, the Contractor must limit existing safety railing removals to an area where new safety railing can be installed during the same workday. During periods when not actively working on new safety railing, secure any gaps between existing safety railing with a substantial temporary lifeline arrangement similar to that currently installed on the vessel. Remove and dispose of all temporary lifelines upon completion of work.

3.4 Work plan. The Contractor must develop and submit to the COR, a plan for collecting and disposing of waste extracted during cleaning process. Ensure that the proposed plan must detail how and where exhaust piping will be disconnected, how entire length of exhaust piping will be divided/sectioned for cleaning, and precautions to protect the SSDG. The Contractor must perform this work upon receiving Coast Guard approval of the plan.

3.4.1 Temporary access openings. With express permission of the KO via submission of a CFR and in accordance with SFLC Std Spec 8636, the Contractor may perform all work required to cut open and close temporary access openings to facilitate accomplishment of the work specified herein.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.5 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.6 Cleaning. The Contractor must clean the interior surfaces of the exhaust piping and stack uptakes to the SSDG, shown on Coast Guard Drawing(s) 160 WLIC 1107-1 and 160 WLIC 4105-3, to a condition free from soot, tar, and any other foreign matter as follows:

3.6.1 Disconnect the exhaust piping as necessary to facilitate cleaning.

3.6.2 Thoroughly sweep, mechanically clean, and vacuum the interior of each exhaust pipe system, including the mufflers, from the exhaust outlet to the topmost location outside the vessel. Clean all adjacent stack uptake surfaces. Ensure that all tar deposits, soot deposits, and all other surface contaminants are removed.

3.6.3 Remove all debris from the pipe surfaces, stack deck, and Engine Room areas by vacuuming. Dispose of all cleaning materials and generated debris in accordance with all applicable Federal, state, and local regulations.

3.6.4 Reassemble exhaust piping; renew all disturbed flange connection gaskets with suitable high temperature, non-asbestos-containing gasket materials; and renew all disturbed fasteners.

3.7 Inspection and report. The Contractor must perform a visual inspection of the following components; submit a CFR:

- Exhaust stack access hatches, including all associated studs and nuts.
- All cleaned exhaust stack surfaces.
- All exhaust expansion joints, including associated bolts.

3.7.1 Following cleaning of the interior of each exhaust pipe system, the Contractor must demonstrate completeness of the cleaning process to the Coast Guard Inspector, showing that the entire length of exhaust piping has been cleaned according to the work plan.

3.8 Touch-up preservation. The Contractor must prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs.)

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.9 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR

4. NOTES

This section is not applicable to this work item.

WORK ITEM 18: Ventilation Screens, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to replace corroded and rusted out ventilation screens for natural supply and return fans.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 160-WLIC-3801-3, Rev F, Vent Arrgt Machy Spaces

Coast Guard Drawing 160-WLIC-3801-4, Rev F, Vent & A/C Mn Upper & Hold Deck A&D (HUDSON) (801)

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the inspections listed in the following paragraph(s):

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor shall handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences).

3.2 Renew vent screens. The Contractor shall fabricate new vent screen assemblies for vents identified by the Coast Guard Inspector in accordance with Coast Guard Drawing 160-WLIC-3801-4 General Notes and Std Spec 0740. Provide all new hardware and install new screens on vents.

3.3 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

3.4 Touch-up preservation. The Contractor must prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs.)

4. NOTES

This section is not applicable to this work item.