



NRC Environmental Services Inc.

Preferred Response Contractor Application

March 16, 2026

Attachment G – Maintenance Manual

Purpose:

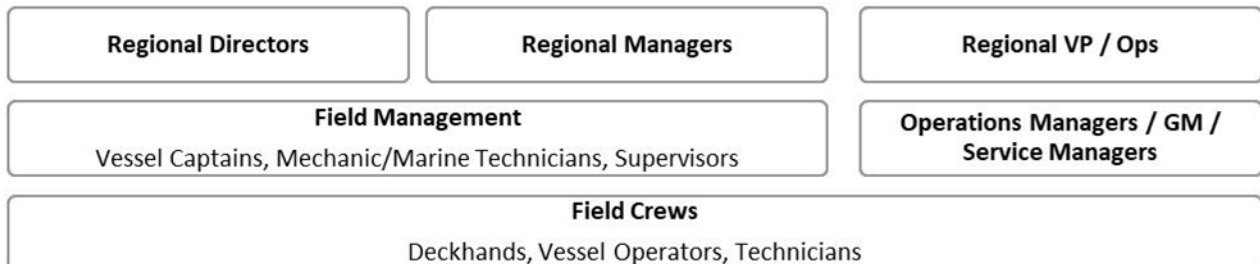
The purpose of this Standard Operating Guidance (SOG) is to explain what the PNW Marine Maintenance Program is and what its objectives are. This guide should be used to direct mechanics and other field personnel in the performance of routine maintenance. Associated repair and maintenance documentation forms fall under this SOG and can be obtained from the regional/local management team.

NRC Environmental Services Inc. (NRC) encourages all team members to provide input on ways to improve maintenance and operation of equipment. In no way is this SOG meant to "limit" a qualified technician from indicating or carrying out corrective maintenance items which need to be performed. NRC requests individuals to provide input on how to make its response equipment last longer and work better.

This guidance is not intended to conflict with or supersede recommendations made by local, state, or federal regulations or client standard operating procedures. These procedures may not be reproduced without written permission from NRC.

Marine Maintenance Team:

General maintenance and upkeep of all NRC equipment is the responsibility of all team members in the field and must be supported by local, regional, and senior leadership. This SOG will define specific maintenance tasks that fall under direct supervision and responsibility of the various levels of the Maintenance Team below. Within their defined corporate budget approvals all staff noted can commit funds for repairs and replacement as appropriate.



NRC PNW currently maintains three full-time mechanics, two in Seattle and one in Portland. One is a dedicated / qualified marine mechanic. Trained and qualified field crew assists in basic preventive maintenance and repair with direction given by the mechanics and/or the local manager.



PNW Administrative Contacts:

Washington – Crescent Moegling – 206-457-7862

Oregon – Jeff Miltenberger – 971-490-7098

Pasco – Alicia Baker – 509-378-2628

General Program Overview:

NRC has developed internal methods using Excel-based spreadsheets and integrated with Microsoft Teams, to track equipment, maintenance activities, and operational events such as spills and drills. All marine vessels, engines, skimmers, power packs, pumps, trailers, and boom are maintained in this tracking system by the marine team. The regional and/or local manager, or their designee(s), is responsible for ensuring the list remains current and is physically verified at least annually.

Equipment manuals, along with company policies and practices, geographic considerations, regulatory requirements, and professional experience with specific equipment, are reviewed to determine the preventative maintenance (PM) requirements tracked on these maintenance forms. Emergency repair needs and red-tag action items are also documented and monitored within these forms.

When a repair or PM action is completed, the mechanic or designated technician enters the notes into the system stating what was completed and if there is follow up maintenance required. These notes are then reviewed either by the local manager, regional manager or vessel manager who has responsibility for that asset. A history is available for each piece of equipment listing all the repairs that have been completed.

NRC conducts routine internal audits and inspections of all assets. USCG documented vessels conduct a minimum of two audits per year, as well as monthly/quarterly/annual inspections within the tracking forms. Every three to five years, quality assurance inspections are conducted from a corporate level. The inspection may involve an unannounced drill, and the results of the inspection are briefed to the local, regional, senior management, and senior response personnel.

Types of Maintenance:

The PNW Marine Maintenance Program can be broken into a few basic categories:

- Preventative – Planned or scheduled maintenance or analysis
- Reactive – Emergency Repairs
- Event Maintenance – Spills and projects that may limit scheduled PM

The maintenance team makes every attempt to adhere as closely as possible to the described PM services while equipment is active in the field. While equipment is actively deployed, maintenance may be dictated by the specific event and is therefore scheduled as time permits.



This SOG will not cover event maintenance separately since it utilizes the same forms and parameters as preventative and/or reactive maintenance.

Preventative Maintenance:

Preventative maintenance actions can be either meter (mileage / hours) or calendar driven, (daily, monthly, quarterly, semiannual, annual etc.). NRC also regards inventories, licensing and permits as part of its PM program. Depending upon the type and kind of equipment, NRC will use the following parameters to track and schedule PM work orders:



| Marine Equipment Parameters *** | | | |
|---------------------------------|--------------|-------------------------------|---|
| Equipment Type | Who | Meter/Calendar | PM Overview |
| FRV/Workboat Class | Mechanic | 100 HR / Annual | Lube, oil, filters (LOF) |
| | Mechanic | 500 HR / 3-5 Year | LOF + water pumps, spark plugs, timing belts, etc. |
| | Field Crews | Monthly / Pre-Op | Safety, Nav EQ, Supply Inspections, Steering, Hatches, Batteries, Documentation |
| | Field Crews* | Annual / Biennial | Haul/Scrape/Paint |
| Marine Diesel Engines | Mechanic | 250 HR / Annual | Lube, oil, filters |
| | Mechanic | 3 Year | LOF + coolant or CAT additive** |
| | Mechanic | 500 HR / 5 Year | LOF + water pumps, spark plugs, timing belts, etc. |
| | Mechanic | 6 Year | LOF + coolant change |
| | Field Crews | Monthly / Pre-Op | Safety, Nav EQ, Supply Inspections, Steering, Hatches, Batteries, Documentation |
| | Field Crews* | Annual / Biennial / Triennial | Haul/Scrape/Paint |
| Shallow Water Barges / Tanks | Mechanic | 3-5 Year | Hull Inspection - Thickness, Etc. |
| | Field Crews | Monthly | Tarps, Trailer, Tank Integrity |
| | Field Crews | Quarterly | Check Hatches – Pump Water |
| | Field Crews | Annual / Biennial / Triennial | Full Inventory + Haul/ Scrape/Paint |
| Trailers | Mechanic | Annual | DOT Inspections / Brakes |
| | Field Crews | Monthly / Pre-Op | DVIRs, Tarps, Lights, Tires, Supplies, Safety Gear, Batteries, Break Away Cable, Jack Stand, Etc. |
| | Field Crews | Quarterly / Annual | Full Inventory & PM on small equipment in ER trailers, Documentation |
| Skimmers / Power Packs / Pumps | Mechanic | Annual | LOF + Full System Assembly |
| | Mechanic | 5 Year | LOF + Fuel Change |
| | Mechanic | 10 Year | 5 year + Hydraulic Oil Change |
| | Field Crews | Quarterly | Check Fuel/Oil/Hoses |
| | Field Crews | Annual | Certify Hoses if Required |
| Boom | Field Crews | Annual / Biennial | Full Inspection |

* With assistance / direction from Field Managers

**Fresh Water-Cooled Engines

***Large OSRV Class Vessels and Barges that are regulated by the USCG are not included in this SOG – Guidance can be provided separately upon request. Oil analysis on equipment is conducted on a regular basis to derive a comprehensive evaluation on the overall health an engine. For trucks and other DOT rolling stock that are not detailed in this SOG, additional information can be requested from the corporate DOT Manager.



Emergency Repairs (Reactive Maintenance):

Similar processes and documentation occur for emergency repairs, so many of the same principles can be applied.

Follow local guidance on proper documentation and notification procedures for emergency repairs. Certain regulatory notifications may be required in the case of marine response equipment being out of service. Please contact the local and/or regional Marine Operations Manager immediately if equipment is out of service.

Forms – Field Tracking & Documentation Submittal:

For all PM and repairs, work orders and checklists can be printed from the tracking spreadsheets to provide to the field crews to document PM and repair actions. All generated documentation is to be submitted to the local manager, mechanic, or designated POC for review and input into the tracking system. If the field crew has access to the TEAMS files, they should input the work order actions directly into the system.

Reference Materials and Checklists – Available on Company Intranet Site or by Request

- Inventory Sheets – Standardized supply and equipment lists
- Field Crew Inspection Checklists – Standardized daily/monthly/quarterly for all EQ types
- Tracking Spreadsheet(s)
- Corporate Equipment Maintenance Policy
- Safety Audit Forms – Marine