

# SEAPRO Standard Operating Procedure



SOP #	OPS-OSRV-1532038112 OSRV Fueling
Revision #	
Implementation Date	4/16/2021
SOP Owner	SEAPRO Operations
Approved By	
Diagram or Manual Reference	

## Purpose

The purpose of this SOP is to provide a detailed overview of OSRV fueling procedures

## Scope

This SOP is applicable to;

- All OSRV Captains
- All personnel assigned to work on SEAPRO's Oil Spill Response Vessels

## Prerequisites

Personnel shall have received training on;

- Fueling & Fuel Handling Procedures
- OSRV fuel system

## Responsibilities

Development and maintenance (updates) to this SOP are the responsibility of SEAPRO's Operations Manager. Contact via e-mail at; [ops@seapro.org](mailto:ops@seapro.org).

## Tools

- Level "D" Personal Protective Equipment

## Step-by-Step Procedure

- Secure/Eliminate any/all sources of ignition
- Install Plug (located inside the Coffer Dam) in Coffer Dam



- Open Fuel Tank by Removing Cap

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- Using Aluminum Fuel Gauge Stick -- Measure Fuel Level in Tank (the Fuel Gauge Sounding Stick is located on the port side of the OSRV near the skimmer trough. The stick is calibrated and marked so the user can determine the liquid level in each tank).
  - Each tank (port and starboard) holds 450 gallons of #2 Diesel



- The fuel gauge sounding stick will provide an estimate of how much fuel to put in each tank.



- Deploy/Use a Sorbent Pad Around Top of Fuel Nozzle to Prevent any Overflow or Spillage
- Fill Port and Starboard Tank(s) to a level of 450 gallons per side
- Secure/Replace Fuel Caps
- Remove Plug from Coffer Dam
- Enter Amount of Fuel Taken (in each tank) in the Ship's Log

## Controls

- Personnel shall wear proper Personal Protective Equipment (PPE) for the tasks they shall be performing

## Field Level Risk Assessment

Working on the deck of a boat can be dangerous. Sea State and weather must be taken into consideration before work begins. The Vessel Captain is responsible for the safety of everyone aboard his/her vessel. Safety of personnel shall always take precedence over response activities.

## Checklist

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## References to JSA Analysis

See (OSRVfuelingJSA1582213544.2)

# Job Hazard/Safety Analysis (JH/SA)

**Work Category: Spill Operations**

**Work Location: Vessel**

**Date: 2021-04-28**

**Task Description: OSRV Fueling**

**JSA No.: 1582213544-2**

	Sequence of Job Steps	Identified Hazards and Critical Behaviors	Recommended Procedures
1	Vessel boarding	Dock, pier, ramp slip/trip hazards	Be aware and use caution when navigating ramps, dock, float and vessel. Avoid stepping over lines, trip hazards, staged equipment and be mindful that walk surfaces/decks may be wet, icy or slimy from microbial growth. Use handrails wherever provided and always apply the three-point contact rule when boarding or exiting the vessel.
2	Wheelhouse entry/exit – ships log access	Low head clearance, watertight door elevated lower threshold trip hazard	Lower head when entering the wheelhouse and avoid tripping hazard by high stepping over the elevated lower threshold. Use handrail when ascending/descending steps.
3	Secure/eliminate ignition source(s)	Shore power not securely connected. Engines running. Electric tools and appliances in use.	Secure by unplugging and stopping use of all electrical tools and appliances prior to commencement of fueling operation. No smoking withing 50' of vessel or fuel dock.
4	Install containment area plug	Bending, kneeling, wrench use.	Use proper bending and kneeling technique to reduce strains and injury due to poor ergonomics. Use non-sparking tool to install and remove dam plug. Use of a kneeling pad or knee pads is recommended.
5	Remove fuel cap	Eye, skin and respiratory system irritation	Gloves and eye protection should be used when opening the fueling cap and during bunkering operations. Maintain 30 inches of distance from tank opening to reduce the inhalation of vapors and VOCs associated with diesel fuel.
6	Measure fuel level	See #5	

7	Dispense fuel	See #5	Maintain adequate space and distance from tank filler spout to reduce the likelihood of splash during dispensing operations. Avoid looking directly into the fuel tank. If a visual inspection is necessary, use a mirror and intrinsically safe flashlight.
8	Deck general	Rocking, moving, pitching	Be aware of wakes, sea condition and outside influences on the vessel's general stability during all phases of fueling operations. Passing vessel traffic, stormy sea conditions and float/dock motion can cause imbalance resulting in falls and bodily impact with equipment, deck, safety rails and gunwales.

## Vessel Fueling Safety Risk Map

ID	Element	Risk Level
1	Environment/People	3b
2	People	3b
3	People	1b
4	People	3a
5	People	3b
6	People/Technical	3a
7	People/Technical	3a
8	Environmental/People	2b

Impact	High (1)	1a	1b	1c
	Medium (2)	2a	2b	2c
	Low (3)	3a	3b	3c
		Remote (a)	Possible (b)	Probable (c)
Likelihood				

## Other Safety Factors

The following restrictions during lifting operations shall be observed:

- Only trained, qualified and approved personnel may perform start-up procedures unassisted.
- Capture and dispose of drained fluids properly using suitable containers to avoid introduction into the environment.
- Report any hazardous materials release to the water to your supervisor immediately after control of source and safety of personnel has been ensured.
- PFD must be worn when on-deck or within three (3) meters of the water.

Personal Protective Equipment Required for this Task:

Level D	Hard Hat, Gloves, Safety Glasses, Steel Toe/Shank Boots, Coveralls
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### Safety Equipment Required to do this Job:

- |   |  |  |                                     |
|---|--|--|-------------------------------------|
| <input checked="" type="checkbox"/> Fire Extinguisher | <input checked="" type="checkbox"/> PFD  | <input type="checkbox"/> Chemical Protective Clothing  | <input type="checkbox"/> Cork Boots |
| <input type="checkbox"/> Confined Space Permit        | <input type="checkbox"/> Hot Work Permit | <input checked="" type="checkbox"/> Hearing Protection |                                     |

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## Process Flow Diagram



