

Cleanup contaminations of past  
For a kinder, gentler tomorrow

### Features:

- Acts on oils and greases in bilge
- A Gallon of BilgeRemed treats about 100 gallons of oily bilge water
- Short remediation time
- Improves efficiency of OWS
- Less sludge and waste for disposal
- Reduces downtime for ships at port
- Easy to use
- Environment friendly
- Cost effective

Visit [www.sarvabioremed.com](http://www.sarvabioremed.com) for more information on products manufactured by us.

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### Advantages of BilgeRemed

- Compatible with ship's Oil-Water Separators (OWS).
- Pre-treatment of oily bilge before passing through OWS for over board discharge
- Environmentally safe
- No waste for disposal



### BilgeRemed

Disclaimer: SpillRemed (Marine)<sup>®</sup> is on the US EPA's NCP Product Schedule. This listing does not mean that EPA approves, recommends, licenses, certifies or authorizes the use of SpillRemed (Marine)<sup>®</sup> on an oil discharge. This listing means only that data have been submitted to the US EPA as required by subpart J of the National Contingency Plan 40 CFR Section 300.915

# BilgeRemed

Pretreatment of oily bilge  
water on boats and ships



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# BilgeRemed

## Oily Bilge Water:

Every boat, pleasure craft or ship produces waste oil during operation that needs to be discharged according to local environment laws. According to international maritime law, this bilge water can be discharged into open sea using an oil-water separator (OWS) to reduce the oil content of discharge water to less than 15 ppm. Boats not equipped with OWS, discharge bilge water in port receiving facilities. BilgeRemed offers a ship board solution that is easy-to-use and is compatible with existing pollution monitoring systems.

## Benefits of BilgeRemed

- Easy to use
- Treats oily bilge water in short times
- Pre-treatment of ship board oily bilge
- Improves efficiency of existing OWS
- No waste for disposal
- Reduces accumulation of oily sludge.

# BilgeRemed Success Stories

## 1. Oily bilge in fiberglass boat

Bilge water in a fiber glass boat undergoing refit at a marina in Florida was treated with BilgeRemed. The bilge in the boat was a mixture of diesel blow-by, lube oil and hydraulic oils. A one time addition of 1 gallon of BilgeRemed completely remediated the oil in the bilge water in 14 days and the water free from any residual oil was discharged. It did not show any sheen on discharge.

## 2. : Oily bilge in a ship at berth

Ship board trial were carried out on a ship of Reduced Operational Status (ROSS) of US Maritime Administration. These ships form the Ready Reserve Fleet., but cannot operate their OWS in the harbor as per the maritime law. BilgeRemed was evaluated on one such ship berthed in Baltimore, MD. The Total Petroleum Hydrocarbons (TPH) in the oily bilge water was reduced to 5.3 ppm at the end of 3 weeks. Details on this case study is available on our website.

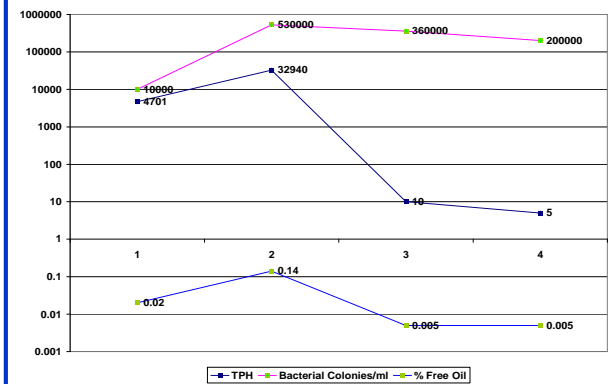
## 3. Shipboard trials on an active ship

Shipboard trials were carried out on a Canadian ship operating from Vancouver to a port in Japan. Although the ship was equipped with oil water separator and a sludge tank, discharge water was brown and did not meet the MARPOL requirement for release.

5 Gallons of BilgeRemed was added to the oily bilge tank (cap. 23,000 gal) every week after the ship sailed from Vancouver. The first sample of water showed the TPH of 7,900 ppm and the oil was very viscous. Oil became less viscous and dispersed in water at the end of 2nd week, when the TPH of water was also the highest and so also the bacterial population. The TPH of bilge water was finally reduced to 5.0 ppm at the end of 3 weeks as shown in the graph below. Free oil in the bilge water was also reduced from 1.4% to 0.05%.

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Figure 1: Values of TPH, Bacterial count and per cent free oil in the bilge water.



## Other Bioremediation Products

<b>VaporRemed</b>	For fuel oil fumes
<b>AgroRemed</b>	Restoration of petroleum contaminated soils
<b>SpillRemed (Marine)</b>	For spills in marinas and harbors
<b>SpillRemed (Industrial)</b>	For industrial waste oil cleanups
<b>HydroRemed</b>	For free product in ground waters