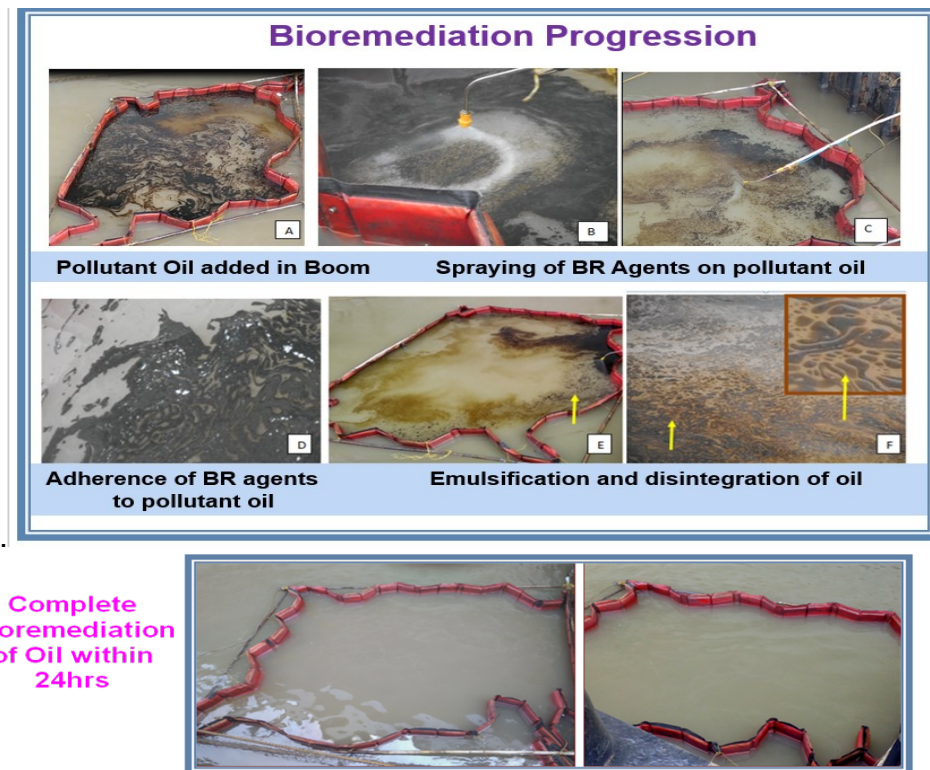


'Besafe' Technology for Accelerated Bioremediation of marine oil spill

The remediation of pollution caused by petroleum hydrocarbons in marine environment requires several months for natural dispersion and degradation due to its low volatility and is a cause of concern for naval authorities and maritime countries. An eco-friendly method for rapid & effective remediation of pollutant oil in seawater has been developed. Bioremediation is a preferred means of clean up for petroleum hydrocarbon pollutants because it uses biological organisms and provides a permanent solution through biodegradation of oil contaminants to benign byproducts. Marine Biotechnology Dept. of NMRL, Ambernath has developed an innovative approach to combat the menace of oil pollution. Two bioremediation agents namely: 1. Biodegraders, comprising of highly efficient three Oil degrading bacteria (ODB) and 2. Bioenhancer, a nontoxic, oleophilic nutrient formulation as growth stimulant for ODB have been developed for rapid degradation of pollutant oil. Application method is odourless, user friendly & one step spray. Complete bioremediation of pollutant oil takes place within 24 – 72 hrs. The effectiveness of the technology has been established for field applications.



SALIENT FEATURES

- Biomix comprises of oil degrading bacteria of marine origin.
- Nutrimix contents non toxic, environment friendly, stable under normal environmental conditions, ready to mix powders.
- Easy to scale up and cost effective bioremediation agents.
- Suitable for weathered oil, HSD, Crude oil spills in marine waters.
- User friendly one step spray application method of bioremediation agents.
- Emulsification, dispersion & degradation of pollutant oil results in bioremediation.

Application Areas

- ✓ Naval dockyards, Coast Guard, Oil refineries, Commercial ports and Central / State Pollution control boards