

OSE II tested and used by the Navy in Key West Florida

In Key West, Florida, Oil Spill Eater II (OSE II) was utilized by the U.S. Navy primarily through extensive testing, evaluation, and operational implementation at the **Naval Research Laboratory (NRL) facility**. [1, 2]

The Navy deployed and evaluated OSE II in **Key West** to address immediate environmental hazards and routine facility maintenance through specific methods: [1] see link https://www.nrl.navy.mil/chemistry/

1. Multi-Purpose Deck Cleaning and Maintenance
Naval personnel used OSE II as an active, industrial-strength deck cleaner on vessels and docks. Because naval vessels frequently accumulate surface layers of fuel residue, lubricants, and greasy bilge water during standard operations, standard chemical cleaners present a runoff risk to fragile marine sanctuaries. OSE II safely broke down these slick surface films, allowing the wash water to drain safely into the local aquatic environment without threatening wildlife. [1, 2]

2. In-Situ Bioremediation of Hydrocarbons
The Naval Research Lab verified that OSE II successfully **converted localized fuel and oil pollutants directly into carbon dioxide (CO_2) and water**. Instead of using mechanical recovery methods that are easily disrupted by wave action or require heavy storage tanks, the Navy applied OSE II directly to surface spills around the Key West base. The solution permanently neutralized the petroleum compounds in place, bypassing the expensive logistical requirement of transporting hazardous liquid effluent off-site. [1, 2]

3. Protection of Vulnerable Marine Ecologies
Key West is surrounded by some of the most sensitive coral reefs and marine habitats in North America. The Navy's testing confirmed that OSE II could be used on surface water spills in close proximity to native marine mammals—such as **whales and dolphins**—without inflicting any adverse toxic effects. It stripped the natural stickiness of the oil upon contact, preventing the petroleum from latching onto local shorelines, docks, or seafloor habitats. [1, 2]

4. Integration into the Navy DENIX System
The successful field testing and verification conducted by the Navy in Key West directly contributed to OSE II being officially indexed in the **Navy's Defense Environmental Network and Information eXchange (DENIX) system**. This centralized database allowed other naval facilities worldwide (such as the Point Loma fuel farm and the Norfolk Naval Environmental Health Center) to securely adopt the product for military-wide spill response protocol. [1, 2, 3]