The Joint Maritime Test Facility (JMTF) – an organizational element of the Coast Guard Research and Development Center (RDC) – provides an instrumented, real-world maritime test environment for the evaluation and demonstration of spill response technologies that includes in situ burns (ISB) in a newly refurbished JMTF test tank.

The JMTF is the only test facility in the U.S. that holds an environmental permission for conducting full-scale, maritime petroleum fire tests, carried out on nearby Little Sand Island. With the refurbished and operational test tank, the JMTF is capable of conducting calm-water spill response tests to include large-scale oil fire scenarios. The JMTF has upgraded the tank with a wave maker to test spill response technologies under a broader range of environmental conditions and in accordance with various ASTM standards.

Specifically to improve operational ISB performance, the RDC is working with the Bureau of Safety and Environmental Enforcement to study novel technologies and methods for conducting ISBs.

The facilities provide relevant maritime test environments that have a wide range of applications and meet (or have appropriate waivers for) all federal, state and local environmental standards.

- Research market trends in technology development to identify and test emerging improvements to current oil spill response capabilities
- Research ISB’s applicability and limitations under varying environmental conditions
- Improve ISB efficiencies to lower emissions and burn residues
- Improve ISB ignition technologies to increase safety and reliability
- Improve herding agents to gather spilled oil for in situ burning in offshore environments
- Test nonlethal weapons munitions to build upon the capability to enforce maritime law