

## Marina Technologies Designs Floating Oil Containment System

Marina Technologies (MTI) has worked in conjunction with Cutcher & Associates Coastal Engineers and Florida Power & Light Corp. to develop a permanent floating oil containment system for all thirteen of their Florida Power Plants. New EPA regulations require the Plants to have a spill containment system in place (or able to be deployed in 10-minutes) in their cooling water discharge canals. Standard cabled floating oil booms are too slow and troublesome to deploy, prone to leaks due to over-topping and high-currents, and require significant maintenance. The catenary in the cable system also creates huge loads as debris and seagrasses collect, requiring frequent cleaning.

So Cutcher and Associates Coastal Engineers reached out to Marina Technologies for assistance in designing a better system. “After numerous meetings, discussions, and design reviews, we concluded with a strong floating aluminum framed dock system with composite decking, polyethylene floats, and an oil-resistant polymer board with nitrile seals (containment wall) secured to the up-current side of the dock”, reports Bob Berry - MTI’s Project Development Manager. “The containment wall extends 12” deep and 15” above the water level – insuring complete containment. Each end of the system seals against a concrete and steel sheet-pile wall on each canal bank”.



*MTI's Floating Oil Containment System under fabrication.*

“The 8-ft wide floating dock/oil containment system runs in a straight line, perpendicular to the high discharge current, but at a slight angle to the current which will cause any oil or floating debris to collect at one end, where it will be easier to remove. Another huge advantage of this system is that it acts as a floating bridge and allows people, work vehicles and equipment to access the site and work on removing any spills without the need for a boat”, says Mr. Berry. The systems will be anchored with 12” steel pipe piles – designed for extreme high and low water levels. Our Floating Oil Containment System is designed for decades of useful life with minimal maintenance, is environmentally friendly and is non-impactive to marine life and mammals.

Marina Technologies is thrilled to be selected for this exciting project and hopes that this unique solution to an age-old problem will also be useful to other industrial or marine locations which need containment or “debris protection”, reports Berry.

