

PyroBoom shines in Gulf spill response

The Deepwater Horizon spill in the Gulf of Mexico brought to light many new, innovative spill response techniques that were previously unheard of or not frequently used in common day spill response.

One of these was Controlled or In-Situ Burning. Prior to the Deepwater incident, there were stockpiles of 'fireproof' boom that had never been used in response to a spill.

Several types of fireboom have been available since the mid-1980s, including PyroBoom, but In-Situ Burning has only been used sparingly and only in very specific conditions. However, the weather, water, logistics and operating conditions in the Gulf of Mexico proved to be ideal for burning.

From a technical standpoint, the type of oil that was spilling into the Gulf was appropriate for burning. Light crude oil with light components ignites readily, even when it is one to two days old. Despite the fact that some emulsification may have taken place, it was still easy to burn. Several tests were conducted with a variety of booms and fireproof barriers, and the results were so favourable to clean-up efforts that a call was made to scour the world for readily available stocks of fireboom.

Characteristics

Of the many varieties tested, results showed that PyroBoom had the excellent performance characteristics required for long-term response efforts, ease of use, desired durability and repeat burns. There were also some stocks of PyroBoom around the world that were available to be shipped to the spill site. The cause of the spill, the duration of the blow out and the length of clean-up time created vast amounts of uncertainty around response efforts, and the result was a full scale response operation. This utilized many teams consisting of two boats, support vessels and logistical support. At one point, there were more than 20 vessels and 10 teams working.

Applied Fabric Technologies Inc (AFTI) / DESMI Ro-Clean (DRC)



■ Many burns continued for several hours at a time, and the longest continual burn lasted about 12 hours.

responded immediately when requested to help search for equipment and provide technical support to response teams. From the initial PyroBoom trial, AFTI /DRC had trained personnel on site to assist the response teams, working to ensure clean-up crews were knowledgeable about the use and the proper operation of PyroBoom to provide the most efficient and longest possible burn life.

Great praise

Based on performance evaluations and reviews from clean-up crews, PyroBoom was shown to be the easiest boom to handle and operate, by far. The crews gave great praise to the ease of handling and operation throughout the response. Fireboom, by its nature, is fairly heavy and can be unwieldy. However PyroBoom does not require any external accessories or cooling water pumps to operate, and crews can simply tow into the water, pick it up by the tow boats and manoeuvre it into a U configuration to collect oil.

Once adequate oil was present in the apex of the boom for ignition, generally more than 3mm, the oil was ignited with a simple flare and diesel gel igniter device. As the oil burned, the boats continued to tow the arrangement through the patches of oil, collecting additional oil as it burned off. Many burns continued for several hours at a time, and the longest continual burn lasted about 12 hours.

Since the spill, AFTI has been

working double shifts to provide additional and replacement equipment for those affected by the spill. Older inventories have been replaced with current production of PyroBoom, which is superior technically and

operationally. Significant investments have been made in inventory and personnel to meet the demand so that customers could replace their stockpiles and stay in compliance with the regulations for response equipment in their facilities.