

Oil Spill Clean-up with an Underwater Device Fuelled by a Ship Fire-Extinguishing System

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Keywords: Arctic; device; liquidation; oil spill; sorbent; ship installation; vessel.

Abstract: The oil and gas industry is rapidly expanding towards the Arctic region. In this regard, the risk of oil spills increases, which, in turn, requires finding ways to quickly respond and clean up spills in ice conditions. An experimental model of an underwater device for sorbent spraying, capable of operating in the spill zone in freezing waters, is proposed. The uniqueness of the proposed method lies in the possibility of operational use and compact dimensions of the device itself, which allows any vessel to be equipped with this device. It is noted that the proposed underwater device is the only one of its kind, capable of operating in the water column. A basic diagram is presented in the complex with a ship power plant.