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Commentary

Oil spills and its disposal

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BRIEF NOTE

Despite the technological control and the persistently improved preventive measures, oil spills that contaminate numerous elements of the environment are still occurring today. Almost 14,000 oil spills are accounted for every year in the U.S. alone. Oil spill control measures plan to diminish and restrict oil spill, as well as limit their spreading in the environment. This could be possible in several ways, including the controlled burning of spilled oil, which is like controlled forest burning to dispose of dry wood that might represent a hazard whenever if left in place.

Controlled burning is quite possibly the best methods of disposing of the spilled oil. The strategy is normally appropriate on calm seas before long the oil film forms so the oil does not get blended in with water. This technique is proficient for around 90% of the captured oil. Notwithstanding, residuals from burning and the resulted fumes might in any case influence air quality and the land close to the spill region. Utilization of barriers and adsorbent materials to mechanically recuperate the spilled oil is a usually used technique when the oil spill occurs in an aquatic environment, inferring the utilization of physical barriers for the mechanical prevention of oil spreading. Some of the barriers may likewise chemically interact with the spilled oil and in this way giving both mechanical and chemical control means. The principle types of barriers used are:

1. Booms-Fire resistant booms are utilized in order to restrict the burning area, particularly when controlled burning is applied.

2. Skimmers-Skimmers are typically propylene mop-like pads that are set on the ocean surface to adsorb the spilled oil film.

3. Natural and synthetic absorbing materials-These have a sponge-like behavior, used to control a huge variety of spills by eliminating a portion of the spilled oil and serving in as a physical barrier that limits oil migration.

Utilization of monomolecular surface films around the oil spilled on water to compress it into a thick layer that can be recuperated all the more effectively and diminish the harm to the environment, fishing and properties. This strategy showed up in the mid 1970's and was consolidated by the Navy into the control projects of bays and harbors.

Utilization of chemical and biological methods for the cleaning up of oil spills increases the oil's natural chemical or biological degradation processes. These strategies are utilized along with mechanical control methods and are particularly important when the spill has reached a sensitive ecosystem.

Spraying dispersants make the oil more compact and ease the cleanup process, despite the fact that they might affect wildlife and coral reefs. Dispersants can be sprayed:

1. From airplanes into the slicks—a conventional strategy normally comprising of a surfactants and solvents mixture which act like a soap. The result is the fine scattering of oil and its mixing with water, followed by an increased efficiency of the natural microbial degradation processes.

2. Under water—a strategy as of late experimented by BP experts to expand the natural attenuation of spilled oil and prevent it from reaching water surface

Other techniques might be utilized for specific situations. Physical methods are utilized to clean up the shorelines and include mechanical removal strategies, for example, wiping with sorbents, raking and bulldozing, or pressure washing. Scare tactics involve the prevention of wild animals and birds pollution. Examples are devices such as helium-filled balloons, floating dummies, or scare-cans.

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