Dispersants

January 2007

FACT SHEET

Position Statement
After years of observing dispersant trials, dispersant effectiveness monitoring, advising and sponsoring independent research regarding chemical dispersant use, it is the position of the Prince William Sound Regional Citizens' Advisory Council (the Council) that dispersants should not be used on Alaska North Slope crude oil spills in the waters of our region. Until such time as chemical dispersant effectiveness is demonstrated in our region and shown to minimize adverse effects on the environment, the Council does not support dispersant use as an oil spill response option. Mechanical recovery and containment of crude oil spilled at sea should remain the primary methodology employed in our region.

What Are Dispersants?

Chemical dispersants are substances with an active ingredient called surfactants. Surfactants are composed of both hydrophilic (water-liking) and oleophilic (oil-liking) compounds.

In theory, chemical dispersants do as their name implies: they disperse surface oil into the water column, thereby diluting it, preventing it from fouling shorelines, and speeding up the process by which bacterial action renders it harmless.

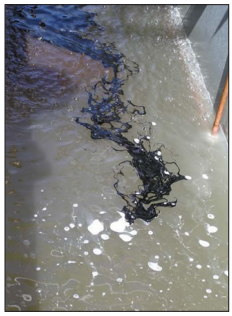
But years of research have failed to bear out the claims of dispersant proponents. Unlike dispersant use, mechanical recovery with booms and skimmers removes oil from the water. Current state and federal laws and regulations hold that dispersants should be used only if it is clear that mechanical cleanup methods such as booming and skimming won't work.

Helicopter dropping simulated dispersants during a drill.

Council Concerns

Reliable scientific data about the efficiency, toxicity, and persistence of dispersants and dispersed oil in Prince William Sound/Gulf of Alaska conditions is scarce. There has not been a conclusive demonstration that chemical dispersants work in the extremely cold waters of the Exxon Valdez oil spill region. Although effort has been put into evaluating chemical dispersant use over the last 30 years, much of this research was conducted by the formulators of dispersants and not by independently funded surfactant scientists.

An Airborne Dispersant Delivery System (ADDS) unit is loaded into a cargo plane during a drill.



Testing the behavior of oil in water at a wave tank in Halifax.

see also:
www.pwsrcac.org/projects/EnvMonitor/dispers.html