

Offshore dispersant data and decisions

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Dispersants are often used in oil spill responses because they may mitigate the environmental impacts of the spill by moving the oil from the water surface into the water column enhancing its biodegradation. While this process helps reduce the likelihood of oil exposure to marine wildlife such as seabirds and marine mammals, aquatic toxicity on marine communities from the dispersant and the chemically dispersed oil needs to be considered more carefully.

Scientists at Research Planning, Inc. and HDR Ecosystem Management evaluated the standard toxicity testing data used to inform dispersant decisions and published a critical review of their findings in the scientific journal *Environmental Toxicology and Chemistry* in March 2014. The authors found issues with the current practices, and lead author Adriana Bejarano notes, "Despite concerted efforts by the spill response community to propose and promote discussions on better laboratory practices, studies are still performed without consideration of such recommendations." Laboratory tests frequently used by decision makers do not adequately replicate the conditions in the field, such as sea state and weather, nor do they necessarily consider exposure durations (short-term vs. standard exposure) and concentrations (steady concentrations vs. spiked concentrations).

Bejarano's goal was to bring to light some of the common misconceptions and challenges in existing data, and to encourage decision makers to consider data quality when making decisions on the use of dispersants. "Data comparability is difficult because of the mixed messages coming from the scientific literature. Many believe that

dispersants make [oil](#) more toxic, when in reality existing data generally do not support these claims. Being critical would be beneficial to the entire decision-making process."

More information: [onlinelibrary.wiley.com/doi/10 ...
02/etc.2501/abstract](https://onlinelibrary.wiley.com/doi/10.1002/etc.2501/abstract)

Provided by Society of Environmental Toxicology and Chemistry

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