Oil Simulants

FACT SHEET

Overview

Because evaluating the effectiveness of oil recovery efforts during trainings and drills can be difficult, the council has been working to find, and permit, an appropriate oil simulant.

A simulant would mimic oil on water and provide responders with a practice target, create realism during exercises, and help to increase proficiency with response gear and tactics, without the potential environmental risks associated with releasing oil into the water.

In March 2013, the council, along with the Oil Spill Recovery Institute and the Spill Control Association of America, hosted a high-level workshop of national experts to address key questions regarding the potential permitting and use of oil simulants in U.S. waters. Participants at the workshop discussed the need for suitable oil spill simulants, criteria for selecting appropriate simulants, applicable regulations, and permitting procedures and options.

Results of the workshop:

The group came to a consensus on the following items:

- There is a need to improve on-water oil spill response technologies and tactics in the US, and simulants provide an avenue to increase response proficiency.
- There is a need for clearly defined process to allow for simulants (including experimental oil spills) to further oil spill response capabilities and preparedness.
- Oil spill simulants, should be built into the framework of national spill response policy. The process of increasing the use of simulants needs to be addressed through a broad, inclusive process that includes industry, stakeholders, and regulators.
    - ◊ The National Response Team (NRT) should address this issue.
    - ◊ The rationale and need for simulant use needs to be clearly communicated to stakeholders and the public.
    - ◊ The process should be inclusive of all stakeholders.
    - ◊ There should be incentives to use simulants rather than petroleum or vegetable oils to improve response capacity.
    - ◊ Once a national policy is in place, states or regions should have the opportunity to build on or refine their own local requirements.
- There may be tradeoffs involved in using simulants.
    - ◊ Potential for toxicity and wildlife impacts.
    - ◊ A systematized approach such as net environmental benefit analysis or ecological risk assessment could be used to assess potential impacts and benefits.
    - ◊ Thresholds should be established.
    - ◊ Opportunities for improving response preparedness, both in terms of responder experience and cost-effectiveness, are lost when simulants are not incorporated into drills, exercises, and equipment trials.
- The potential liability exposure for using simulants must be established before the use of simulants is acceptable to response organizations.
- Liquid and particle-based simulants differ in purpose and will likely require different permitting efforts. Before simulants can be incorporated into oil spill training and exercises, there must be a clear path for permitting approval.
- The type of simulant used should be linked to the exercise/ training/research objectives, the operating environment, the equipment and tactics being tested, and the environmental sensitivities. The principle of causing the least harm commensurate with meeting the objectives of simulant use should guide the selection of the correct simulant for each application.
- There are major knowledge gaps regarding past and present use of oil simulants in field exercises. There is a need for a state-of-knowledge review and lessons learned or knowledge-management system.

More information on the workshop: A full report on the results of this workshop is available on our web-site. The council hopes that this report can be presented at an upcoming oil spill response conference. Though this project addressed simulant use on a national policy level, the council's goal is to permit a particle based simulant for use in Prince William Sound area waters.

Download the full report: http://www.pwsrcac.org/programs/oil-spill-response/oil-simulants/