



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF RESEARCH AND DEVELOPMENT

March 25, 2011

MEMORANDUM

SUBJECT: Request for review of the *Draft Oil Spill Research Strategy*

FROM: Cynthia Sonich-Mullin, ORD Coordinator for the BP Spill,
Deputy Director for Management /**Signed**/
National Homeland Security Research Center

TO: Thomas Carpenter, Designated Federal Officer
EPA Science Advisory Board Staff (1400R)

This memorandum requests that the Science Advisory Board (SAB) review and comment on the EPA Office of Research and Development's (ORD) *Draft Oil Spill Research Strategy* dated January 12, 2011. The purpose of the draft strategy is to describe a comprehensive research program that would enable EPA to continually improve in meeting its mission to prepare for and respond to oil spills.

Background

EPA has authority and regulatory responsibility for multiple aspects of preparing for, preventing, and responding to spills of petroleum and other oils under several laws and regulations. One major EPA responsibility is stipulated in the Oil Pollution Prevention regulations (40 CFR part 112), requiring onshore and offshore non-transportation related facilities to have spill prevention, control, and countermeasure (SPCC) plans and facility response plans, where applicable. Another major regulation, the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR part 300), covers responses to oil releases and assigns primary response roles to EPA (generally for inland zone discharges) and the Coast Guard (generally for coastal zone discharges). The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE, formerly Minerals Management Service) is generally responsible for operations on the outer continental shelf.

The Oil Pollution Act of 1990 (OPA 1990; 33USC2701-2761) was passed in the wake of the Exxon Valdez spill to establish, among other things, liability for releases and a fund for responding to oil releases as well as restoring natural resources. Section 2761 of OPA 1990 authorizes research and development (R&D) in multiple federal agencies, establishes the Interagency Coordinating Committee on Oil Pollution Research (ICOPR; www.icopr.uscg.gov), and authorizes up to \$22 million per year among the federal agencies subject to appropriation. ICOPR published multi-agency research and technology plans in 1992 and 1997 and is presently developing a third update. The research focus of each agency in the 1997 plan generally aligns with its legal and regulatory authorities, although in some cases, OPA 1990 assigns particular R&D roles to specific agencies.

Prompted by the Deepwater Horizon spill in the Gulf of Mexico and its aftermath, ORD

assembled a team to develop a draft research strategy that would comprehensively address the scientific and technical questions that could enhance EPA's ability to carry out its mission with respect to oil spills both in the short- and longer-term. The draft strategy is framed to identify (1) anticipated decisions that spill responders and policy developers will be required to make; (2) science questions within those identified decisions; (3) research that would address the science questions; and (4) research outcomes that can be used to inform future decisions. The draft strategy is structured to address four themes: dispersants; ecological effects; innovative processes and technologies; and human health effects. Research priorities that are principally the responsibility of other agencies are not included in this draft strategy, but will be fully considered in ICCOPR planning (see Figure 1-2 in the draft strategy).

The draft strategy is deliberately not constrained by resource levels. Our intent was to develop a strategy that would address the scientific and technical questions that are central to EPA's mission, recognizing that the research could be conducted by various members of the ICCOPR, researchers funded by BP, and others. Implementation of the strategy would entail coordination with those entities to ensure appropriate collaboration and leveraging.

Specific Request

ORD requests that the SAB comment on the scope, proposed science questions, research activities, and research outcomes outlined in the *Draft Oil Spill Research Strategy*. Comments from the SAB will be considered during the development of the final strategy document.

We appreciate the efforts of the SAB to prepare for the upcoming review of the *Draft Oil Spill Research Strategy*, and we look forward to discussing the plan in detail on April 11-12, 2011. Questions regarding the enclosed materials should be directed to Patricia Erickson at erickson.patricia@epa.gov or 513-569-7406.

Charge Questions

1. Does the draft Oil Spill Research Strategy encompass the most important research needed to enable EPA to better carry out its mission to prepare for and respond to oil spills, including future challenges such as biofuels discharges? Does the draft strategy appropriately address greener alternatives and innovation?
2. Is the research strategy organized appropriately to frame the questions in a comprehensible manner and to foster collaboration with outside entities as appropriate? If not, how can it be better organized?
3. Within each of the research themes:
 - a. Do the science questions address key issues that can improve future oil spill prevention and response activities? Please identify additional high priority issues or science questions that should be addressed.
 - b. Should any of the science questions be deleted based on sufficient existing knowledge, low impact on decision-making, or for other reasons?

- c. Are the proposed project areas described adequately to design research projects to achieve the anticipated outcomes? Please identify any project areas that should be refined or important project areas that should be added.

Attachment: Draft Oil Spill Research Strategy