



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

APR 11 2012

THE ADMINISTRATOR

Deborah L. Swackhamer, Ph.D.  
Chairwoman  
Science Advisory Board  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Dear Dr. Swackhamer:

Thank you very much for the considerable time and effort you devoted to reviewing the U.S. Environmental Protection Agency's draft *Oil Spill Research Strategy* and preparing the final report. The Science Advisory Board and the Oil Spill Research Strategy Review Panel play valuable roles in the development of this strategy, and your recommendations will be very helpful as we conduct a substantive revision.

We appreciate the panel's recognition that many agencies have roles in addressing oil pollution. Communication among these agencies and with other collaborators and decision makers is critical to our mutual success in preventing and managing releases. The EPA is an active member of the Interagency Coordinating Committee on Oil Pollution Research. We have shared the draft strategy with them, will share the panel's report and will encourage incorporation of the panel's recommendations into the coordinating committee's next research and technology plan, now being prepared. The EPA's revised strategy will clarify roles, responsibilities and current research activities among the key agencies. The EPA's Sustainable and Healthy Communities Research Program will implement the research. The relationship between the strategy and the Sustainable and Healthy Communities Research Program will be explained in the revised strategy.

As noted by the panel, the four research themes in the strategy are complex and inter-related. The four themes are dispersants, ecosystem impacts, innovative processes and technologies, and human health impacts. We intend to revise the strategy to more explicitly identify and demonstrate cross-theme integration. Further, each of the four themes will be revised to address the panel's specific comments and recommendations.

The panel noted that both the types of oil and biofuels and the environmental settings of future releases are changing and will complicate an already complex set of questions on prevention, preparation and response to oil spills. Issues related to biofuels, deep water and cold-water releases are included in the draft strategy. Additional consideration will be given to changing practices and the scientific questions or issues they pose. These considerations will be incorporated into the research strategy as appropriate.

The attached table provides more detail on our intended responses and actions to the recommendations outlined in the SAB report. I am confident that the revised strategy will be more explicit, with greater focus on key science questions.

In the meantime, please know that we at the EPA are grateful for your constructive comments and suggestions for improving and strengthening the *Oil Spill Research Strategy*.

Sincerely,

A handwritten signature in blue ink, appearing to read 'L. Jackson', with a stylized flourish extending to the right.

Lisa P. Jackson

Attachment



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

APR 11 2012

THE ADMINISTRATOR

David T. Allen, Ph.D.  
Chairman  
Oil Spill Research Strategy Review Panel  
Science Advisory Board  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Dear Dr. Allen:

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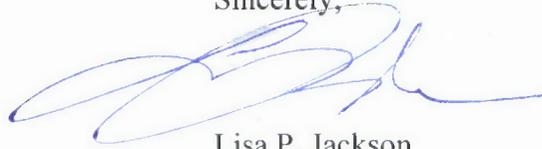
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Lisa P. Jackson

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Synopsis of recommendations/comments and intended responses

Recommendation/Comment	Intended Response
<b>Executive Summary – Charge Questions 1 &amp; 2</b>	
Clarify roles among agencies and others and indicate how the strategy relates to ORD’s new ITR approach	The explanation of agency roles will be expanded and clarified, and will reference the most current documentation of research activities which have increased substantially since the strategy was drafted during the DWH spill and response
Develop an approach to integrate across themes and make integration a distinct element of the strategy	The revised strategy will address the inter-relationship between themes in each main section and will raise the importance of integration in the introduction
Consider greener alternatives more broadly	The discussion of greener alternatives will be extended in appropriate sections of the strategy
Explicitly consider environmental justice	Environmental justice will be addressed more explicitly in the human health section and any overarching discussion that has EJ implications
Be adaptive to changing science needs due to changing practices (deep drilling, biofuels, etc.)	The draft strategy already considers changing practices; emphasis will be added to any new text or sections where fuel type and spill setting are important
<b>Executive Summary – Charge Question 3 – Dispersants</b>	
Define efficacy and endpoints for various environments and oil types	The strategy already addresses dispersion in various settings, including Arctic conditions and deep water releases. Biofuels and biodiesel are addressed in the introduction and innovative technologies sections. Biofuel can be added explicitly to the dispersant section
Address toxicology for sub-chronic and chronic exposures; key population-level effects; include fresh and weathered oil and dispersant alone and chemically dispersed oil in the studies	Toxicity testing was described in general terms (range of endpoints, multiple species), but included weathered oil and dispersants alone. The description will be expanded to call out the need for data on sub-chronic and chronic exposures and population effects
Evaluate fate and transport for likely oil-dispersant combinations in likely settings (cold, under ice, in deep water)	Fate and transport in multiple setting, including deep water, is explicitly covered in the draft strategy. The text will be reviewed to see if clarification or expansion is needed.
Evaluate the utility of dispersants for alcohol-hydrocarbon fuel mixtures; consider other response options for high-alcohol fuels	Biofuels and biodiesel are addressed in the introduction and innovative technologies sections. Biofuel can be added explicitly to the dispersant section
<b>Executive Summary – Charge Question 3 – Shoreline, Coastal, and Inland Effects</b>	
Include baseline data with a broad suite of indicators	Baseline environmental monitoring is largely the purview of resource trustee agencies. The strategy will be revised to clarify roles and how research

	and baseline monitoring need to be linked
Develop linkages between exposure conditions and ecological effects, accounting for baseline and background conditions and stresses	This research need will be described more fully in the revised strategy
Include population and community impacts and recovery capacity using a decision management framework	The ecological research includes population level studies and modeling. We will consider the application of a decision management framework to structure the research. The decision management approach or the net environmental benefit analysis approach may be more appropriate in
Executive Summary – Charge Question 3 – Innovative Processes and Technologies	
Focus on EPA’s role of certifying or approving new approaches	This section will be re-evaluated in light of these two comments and potentially revised substantially or replaced by a different section on technology evaluation or selection. The net environmental benefit analysis approach is interesting. We need to consider if this is better addressed in the research strategy or as part of the Office of Emergency Management’s planning activities.
Restructure this section according to a net environmental benefit analysis approach	
Address prevention, the primary pollution management strategy per the Pollution Prevention Act of 1990	Prevention will be highlighted in the introduction to the revised strategy and research, largely in other federal agencies, will be referenced
Executive Summary – Charge Question 3 – Human Health Impacts	
Explain EPA’s role versus roles of other federal agencies in conducting human health research related to oil spills	EPA has conducted little research specifically related to human health impacts of oil spills, although research and risk assessments address PAHs. The relative roles of different agencies will be clarified throughout the strategy with particular attention to the human health section
Address multiple human health exposures and impacts, such as dermal absorption, water and beach exposure, seafood consumption, and impairment of drinking water sources	A number of exposure pathways are present in the strategy, including dermal; the revised strategy will add missing exposure pathways
Expand discussion of risk communication to include related research as a priority area	Risk communication research will be added to the strategy