

EXHIBIT B

September 28, 2015

Exponent Authored DWH Publications (Proposed)

Fate and Transport

1) Title: The evolution of oil from the DWHOS – Fate and Transport

Authors: Boehm et al

Paper will analyze and summarize relevant data flows pertaining to the behavior and fate of oil released from the Macondo well during the Deepwater Horizon incident. It will provide a technically based narrative on what happened to the oil and its components after release. It will describe the weathering processes, changes in chemistry, and partitioning of oil components that occurred. It will describe the movement of oil in the water, on the surface, and to the shoreline that created various “footprints” over time. Paper is related to one that will flow out of GOMRI

2) Title: Weathering of surface oil from the DWHOS – Release point to shoreline

Authors: Brown, Cook, Boehm

Paper will specifically present data and follow the chemical changes in surface oil and oil after landfall. Paper will present a weathering index that quantitatively defines weathering states (approx 10)

Water

3) Title: Distribution and Attenuation of Polycyclic Aromatic Hydrocarbons in Gulf of Mexico Seawater from the *Deepwater Horizon* Oil Accident

Authors: Boehm, Murray, Cook

Paper will describe the distribution of PAHs in the water. It does not cover any tox or TU discussion. Paper previously accepted to ES&T and withdrawn. Currently ready to submit

4) Title: Spatial and Temporal Extent of Potential Exposure Associated with Surface Oil Distributions (Anomalies).

Authors: Morrison, Cook, Boehm

Paper will document the relationship of surface oiling to PAHs in the surface waters; document maximum depth that surface oil entrainment is evident from field samples; demonstrate that remote sensing aerial estimates of daily anomalies can be used in conjunction with field chemistry samples to

September 28, 2015

empirically characterize potential exposure associated with floating oil and the physical and chemical changes in the oil over time and distance

5) Title: Development of an Empirical Approach to assessing Injury to Aquatic Organisms following Oil Spill: Application to the DWHOS

Authors: Morrison et al

Key strategic paper that will present an empirical model and results as applied to DWHOS as an alternative to SIMAP (though this will be an affirmative paper rather than any “rebuttal”)

6) Title: Partitioning of PAHs in Seawater: Development of a computational method based on laboratory measurements of MC252 oil

Authors: Murray, O’Reilly, Boehm , Shea (?)

This paper reports the results of our laboratory experiments and other computational methods to examine the distribution of PAH between the dissolved and particulate phases in a simulated oil-seawater system. We will report on the results from physical fractionation methods and compare those results with a measured WAF, equilibrium calculations and our computational method.

Sediments

7) Title: Chemical Measurements define the deepwater footprint of oil from the DWHOS and recovery over 4 years

Authors: Murray, Boehm, others

Paper will present the publically available 2010/2011 and 2014 chemical data, the PAH footprints; the importance of sampling and using representative sample data; the recovery over time; the chemical compositions of residue; and the contouring methods; the importance of fingerprinting (see #15)

8) Title: Quantification of the offshore sediment injury footprint for the Deepwater Horizon accident in the Gulf of Mexico.

All of the data and information needed for this assessment is available in the current DARP. The effort involved would be to refine/reduce/recast the information in a presentation suitable for a journal article.

September 28, 2015

Shoreline Chemistry

9) Title: Chemistry and weathering of oil in marshes after the DWHOS

Authors: Murray, Brown, Cook, Atlas (?), Boehm

Paper will cover time series of weathering of oil after landfall and changes in chemical composition; chemistry results and findings of Long-term Monitoring Study and/or Shoreline Biodegradation Study not already covered in Atlas papers

Toxicology (HEWAF)

10) Title: Environmental context of mixing energy and HEWAF in toxicology studies

Authors: Whittlesey and Morrison

Paper will present the mixing/blender studies that compare HEWAF energies to those of breaking waves and deepwater/blowout injection.

11) Title: The influence of mixing energy on the concentration and toxicity of oil to aquatic organisms

Authors: Kane Driscoll et al

This paper will evaluate the concentration and composition of oil in various standard and non-standard laboratory tests, including low- and high-energy water accommodated fractions (LEWAFs and HEWAFs). The paper will describe the distinct chemical signature of HEWAFs that persists even after dilution and contributes to the toxic potency of the HEWAFs. It will present evidence that inference of dissolved PAHs without measurement overstate the dose. Companion to #10.

Toxicology

12) Title: Comparative sensitivity of aquatic organisms to Macondo Oil

Authors: Kane Driscoll et al (TBD)

Summary: This "Uber Tox" paper will use laboratory data from BP (and potentially from Trustees and SINTEF) to describe the sensitivity of standard and non-standard test species to a range of oil types, including fresh, weathered and dispersed. Paper will demonstrate the reduced toxicity of weathered oil and compare the LC50s (on a TU basis) to the range of concentrations measured in the field after the DWH accident.

September 28, 2015

13) Title: Critical review of current literature on cardiotoxicity of oil to early life stages of fish and use in damage assessment

Authors: Kulacki, Kane Driscoll et al

This key strategic paper would provide an in depth review of the current literature on the cardiotoxicity of oil to early life stages of fish, with a focus on use in damage assessment. The paper would review issues and data gaps, including 1) differences in potency among individual test compounds and oil types; 2) lack of useful concentration-response data; 3) lack of reporting of relevant chemical concentrations (e.g., concentrations of cardiotoxic tricyclic PAHs; 4) lack of data at environmentally relevant concentrations; 5) lack of information on recovery and 6) lack of information on impacts to adult life stages and functional endpoints.

Sea Turtles

14) Title: The Impact of Multiple Stressors on Sea Turtle Population Variability/Viability in the Northern Gulf of Mexico

Authors: Wickwire, Whaley, Savery, (Fairbrother)

This paper will illustrate, through a review of the key sea turtle stressors, that at any given time and place multiple stressors are influencing sea turtles in the Gulf. The goal is to provide a more detailed summary of stressors that extends beyond what is currently available in the literature to population impacts and temporal/spatial variability.

Fingerprinting

15) Title: Fingerprinting of Oil Residues from the DWHOS in offshore sediments: The importance of multiple lines of investigation

Authors: Murray, Cook, Brown, Boehm

Paper will present the methodology that was used to identify the origin of oil spill residues in sediments after the DWHOS

Causal Analysis

16) Title: The importance of examining alternative causes to observed environmental effects after oil spills: Application of the Causal Analysis approach

Authors: Morrison, Menzie, et al

September 28, 2015

Paper will present the causal analysis methodology in the context of DWHOS and will describe several examples of its application for the DWHOS resources