

Science & Technology Committee

Report for the ARRT Meeting
28 Sept 2016

Topics

- Status of “State of the Science for Dispersant Use in Arctic Waters”
- Surrogate Exercise by PWSRCAC
- Realistic Wildlife Response in Remote Alaska
- In-Situ Burn Overview for OSCs
- NRDA workshop for the OSCs

State-of-Science for Dispersants and Dispersed Oil (DDO) Use in Arctic Waters

September, 2016



Coastal Response Research Center

Project Objectives

- Phase 1: Identify primary research / reference documents
 - Focusing on Arctic
- Phase 2: Determine what is known definitely about state of science of DDO in Arctic
 - Determine uncertainties remaining
- Phase 3: Provide recommendations on outreach / education materials based on state of science
 - Review existing outreach materials
 - Collaborate with ongoing efforts in Alaska



Approach

- Topics reviewed / discussed by 5 panels
 - Efficacy and Effectiveness
 - Physical Transport and Chemical Behavior
 - Degradation and Fate
 - Ecotoxicity and Sublethal Impacts
 - Public Health and Food Security
- Operations not considered



Project Management

- Project Lead: Coastal Response Research Center
- Federal Team: NOAA ORR and USEPA
- Committee of Alaska Centric Partners
 - U.S. Dept. of the Interior - Alaska
 - USGS
 - USCG
 - ADEC
 - Cook Inlet RCAC/OSRI
 - PWSRCAC



Status Phase 1: Document Compilation

- Assembled database of relevant DDO literature
 - Prior to June 2008 - LUMCON database
 - June 2008 - December 31, 2015 CRRC
 - Will be made available to public
 - By Topic
- Peer review as defined by federal agencies
 - Particularly NOAA
- Used by panels for their documents
- Documents continue to be published (post-December 2015)



Status Phase 2: State-of-Science Documents

- Started with January 2015 workshop for each panel
- Each panel has been having conference calls since then
- Once panel completes document, it is released for public input (~2,500 emails sent)
- Public input must include peer-reviewed literature to support comments
- Panel reviews input and makes final changes to document
- Documents released as completed, along with database on that topic



State of Science of DDO in Arctic

- Efficacy & Effectiveness
 - Document completed by panel
 - Public input period held on 1/22 - 2/22, 2016
 - 12 individual responses received via submission process (mass public announcement for invitation to input, website for public access)
 - Public input collated into document
 - Panel currently meeting to address public input
 - Final document expected October 2016



State of Science of DDO in Arctic

- Physical Transport & Chemical Behavior
 - Document completed by panel
 - Public input period held on 2/29 - 3/29, 2016
 - 10 individual responses received via submission process
 - Public input collated into document
 - Panel currently meeting to address public input
 - Final document expected November 2016



State of Science of DDO in Arctic

- Degradation & Fate
 - Document completed by panel
 - Public input period held on 4/4 - 5/4, 2016
 - 7 individual responses received via submission process
 - Public input collated into document
 - Panel currently meeting to address public input
 - Final document expected December 2016



State of Science of DDO in Arctic

- Eco-toxicity & Sublethal Impacts
 - Largest of topics and panels
 - Draft of document completed
 - Panel comments, upon their final review, incorporated
 - CRRC editing comments into final version
 - Then, back to panel for final review & approval
 - Public input release expected late October 2016



State of Science of DDO in Arctic

- Public Health & Food Security
 - Original panel completed work, but wanted human toxicology experts' input
 - Sub-group of human toxicology experts convened to offer expertise & review toxicology manuscripts
 - Sub-group met numerous times
 - Entire panel is now considering human toxicity recommendations & finishing document
 - Public input review expected in Winter 2016/2017



State-of-Science of DDO in Arctic

- Part 3 Workshop - communicating the state-of-science to the public & others
- Small workshop with scientists and communication experts
- Recommend types of material that would be most effective for communications
- Communication to broader scientific/response community important
 - How to achieve this??
- How long to keep DDO database updates going?



PWS RCAC Surrogate Exercise

- Objectives
 - Conduct a deployment in PWS that includes one or more oil surrogates to practice tracking and targeting oil slick for collection.
 - Evaluate whether surrogate use enhances deployment.

PWS RCAC Surrogate Exercise

- Surrogate choice
 - Positive feedback from ARRT members on our exercise plan; the only major concern was in regard to using dog food as it is a potential attractant and may possibly lead to unintended wildlife impacts.
 - Exercise will limit surrogate options to just peat moss and wood chips.
 - The biggest goal of the project was to simply explore and document how permission for surrogate activity might be accomplished and that goal was met.

PWS RCAC Surrogate Exercise

- Insurance glitch
 - PWSRCAC does not typically contract with OSROs and does not have the required insurance to indemnify Chadux for this exercise.
 - Neither PWSRCAC or Chaduz is willing to assume the potential liability; liability for this activity seems relatively small, but remains undefined to some degree.
 - Group unable to address potential responder immunity concerns (IE; more formal written permission to proceed from the agencies), and/or find some other creative way to contract the required personnel and resources.
 - Unable to conduct the exercise as planned on September 21st.

PWS RCAC Surrogate Exercise

- Pursue an opportunity to include surrogates in a future deployment after more discussion on these issues.
 - Work Group to convene via teleconference on September 21st to discuss the situation and brainstorm potential alternatives.
 - Discuss some of the responder immunity issues that have confounded the contracting process, as these are potentially relevant to the broader questions about incorporating surrogates into on-water exercises and training.



Realistic Wildlife Response in Remote Alaska

In-Situ Burn Overview for the OSCs

- Exxon Mobil hosted and ISB workshop; training in preparation for upcoming drill; some of us had the opportunity to attend and present.
- Offer a similar opportunity to the OSCs. STC would like to present an “Overview of Agency Support for In-Situ Burns”.
- Venues: OSC workgroup meeting; future RRT meeting; also appropriate for an AC meeting; AFE or other regional conferences.

NRDA workshop for the OSCs

- Oil spill natural resource damage assessment-- an awareness training for spill responders and a chance to discuss how Spill Response and NRDAR can better coordinate during a spill.
- Participants to include OSCs, federal and state responders, NRDA Trustee agency representatives.
- Potential agenda items:
 - NRDAR: process; activities; within the ICS.
 - How Spill Response & NRDAR can work together to more efficiently achieve their goals.
 - Communications