PRINCE WILLIAM SOUND
OIL SURROGATES WORKGROUP
INITIAL MEETING SUMMARY

February 10, 2016 9:00am – 3:30pm

PWSRCAC Conference Room - Valdez

WORKGROUP GOALS

Prince William Sound RCAC has formed a workgroup to establish consensus among the local response community, regulators, and resource trustees on the following issues:

- Identification of surrogate materials that are appropriate for release in Prince William Sound waters, for the purpose of improving on-water training and exercises.
- Develop parameters for surrogate release in Prince William Sound (materials, volume, location, other conditions).

This project builds on recent, related efforts funded by PWSRCAC, OSRI, and BSEE.

MEETING PURPOSE

This workshop is the initial meeting of the workgroup. The purpose is to:

- Review current state-of-knowledge on oil surrogate use, focusing on training and exercises.
- Establish consensus on workgroup goals and process.
- Develop a work plan.

ATTENDEES

R. Bernhardt, ADEC*
J. Engles, ADEC
S. Russell, ADEC*
M. Day, Alyeska/SERVS
S. Hicks, Alyeska/SERVS
S. Miller, Alyeska/SERVS
V. Catalano, CIRCAC*
M. Combs, EPA*
**via teleconference*
C. Berg, NOAA SSC*
M. Morgan, Polar Tankers
R. Robertson, PWSRCAC
J. Robida, PWSRCAC
J. Lally, USCG
C. Wallen, USCG
W. Wofford, USCG
L. Verbrugge, USFWS*
E. DeCola, Nuka Research

SUMMARY OF DISCUSSION

The meeting was held as a combined webinar and in-person discussion. Due to other simultaneous meetings, some participants dropped in/out of both the physical meeting room and/or the webinar as their schedule dictated. Some discussion topics were covered more than once. They are summarized thematically here, rather than as a chronological narrative of discussion.

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Project Background

Jeremy Robida and Roy Robertson welcomed the group and presented an overview of Prince William Sound RCAC's interest in oil surrogate and simulant materials and a summary of related past efforts. These past efforts were funded by PWSRCAC and/or the federal government.

- 2008 Literature review to catalogue surrogate/simulant materials (funded by PWSRCAC)
- 2013 Workshop in Seattle to establish consensus among national experts and state/federal agencies regarding use of oil surrogates (funded by PWSRCAC, OSRI, Spill Control Association of America)
- 2014-2015 High-level workgroup to explore permitting considerations and develop tool to guide decision-making about oil surrogate releases (BSEE)

This group builds on previous work, but will focus specifically on the use of oil surrogate materials in Prince William Sound to enhance on-water training, drills, and exercises.

Goals

Prior to the meeting, a brief survey was distributed to query the participants about their past experience with oil surrogates, and to frame the discussion based on the priorities and concerns of participants. Eight anonymous responses were received. Elise DeCola presented a brief summary of the survey results.

- 56% of respondents had some firsthand experience releasing oil surrogate or simulants
- Materials that were mentioned included dyes, dog food, oranges, apples, wood chips, blocks, sawdust, cottonseed hulls, sunflower seeds, tracking buoys, peat moss, rice hulls, ping pong balls, and hula hoops
- Benefits:
    - Enhance exercises with visual feedback on effectiveness, a target for responders, more realistic practice environment
    - Visualize movement of oil and water, fate and effects
    - Reduced toxicity over oil
- Challenges and drawbacks:
    - Overcoming misconceptions or adverse public opinion about "dumping" substances in the water
    - Permitting process uncertain and inconsistent
    - Limitations of available materials – there is no perfect proxy for oil
    - Potential for adverse impacts if not well controlled
    - Potential for surrogate use to become a "requirement" rather than an enhancement, or to use surrogates to score exercises or penalize responders
- Participant goals:
    - Create a catalog of simulant materials that can be used in PWS exercises

- Dispel misconceptions
- Enhance responder proficiency and improve drills

State of Knowledge & Practice Presentation

Elise DeCola gave a presentation summarizing the state of knowledge and practice regarding surrogate use, the regulatory context, and a recently developed tool for surrogate release decision-making.

Key points included:

- Introduction of standard terminology developed by BSEE project, with general agreement among the PWS workgroup that this terminology would work.
- Review of the 19 substances identified as potential simulants/surrogates during the BSEE project, and review of the "fact sheets" developed to summarize known facts about the physical and chemical properties of surrogate materials, practical considerations, and their history of use in the U.S.
- Review of the 4-step decision-making process outlined in the BSEE decision-making tool, focusing on surrogate releases for the purpose of exercises and training. There was general agreement that the questions and considerations laid out in the BSEE decision-making tool would be appropriate for use in PWS, with some possible modifications.

Group Discussion: State of Knowledge and Technology

After the initial presentation, the remainder of the meeting was discussion-based. Major discussion points, consensus items, and action items are summarized.

Major Discussion Topics

- Types of surrogates and their appropriateness or not for use in Alaska/PWS based on participant experience.
- Logistics of a release – collection, decontamination of equipment, fate of surrogate materials.
- Potential for adverse impacts to wildlife or environment, and how to mitigate those or address them during the planning process
- "Chicken and egg" conundrum – how to get started given unclear legal/regulatory context.

Consensus Items

- There is merit to attempting to incorporate a surrogate release into a PWS on-water response exercise or training.
- This group seeks to develop a plan to incorporate a surrogate release into an upcoming (2016 if possible) on-water exercise in Valdez, with full agency concurrence (state and federal).
- In order for this group to be successfully, we need to include industry, OSROs, and

agencies – no one group can tackle this alone.

- The BSEE decision-making tool is a reasonable starting point, but will need some customization, particularly for wildlife/environmental considerations based on input from trustee agencies.
- A reasonable approach is to start with a clearly defined, small-scale "pilot" release to determine the feasibility. If we are successful in developing an exercise plan that includes a surrogate release in Port Valdez, this may provide a model that could be used for larger scale exercise and/or in other parts of PWS and Alaska.
- There are state regulations for scientific discharges of oil (18 AAC 75.800). Federal policy on this topic is under internal agency review.
- There is value in centralizing the collection of knowledge/information about surrogate releases.
- There is probably not a single "best" option/choice of surrogate material, as there are many variables to each situation.
- A few "guiding principles" were suggested:
    - Do not cause any environmental harm
    - Do not violate the law (this was a particular concern to the regulated community)
    - Ensure that permission to release surrogates does not morph into requirement to do so with all training, drills, and exercises.

Unresolved Items

- Is there a need to consult with or notify potentially affected landowners?

Action Items

- Follow up with University of Utah researchers regarding the "environmentally benign oil simulant" that they have developed and its potential for release.
- Each participating agency will work internally to better delineate regulatory and permitting context for a small-scale surrogate release in PWS as conceived by the work group.
- Incorporate outreach and education into surrogate release so that public, stakeholders, and media understand the benefits and potential trade-offs.
- Poll industry about interest in utilizing surrogates, ask for them to consider outcomes and benefits.

Next Steps

- Establish a steering committee (subgroup of this workgroup) to develop a scenario and exercise plan for a small-scale surrogate release as part of an on-water exercise in Port

Valdez, preferably for the fall of 2016.

- PWSRCAC and Nuka will query the group for interested members & set up a call in late February/early March.
- Adapt the "Use Plan" in the BSEE decision-making tool for initial proof-of-concept review.
- Propose a few different substances to use as surrogates.
- Steering committee brings plan back to larger workgroup for feedback.
- Submit exercise plan, once vetted through this workgroup, through the typical exercise plan review process (USCG/ADEC and trustees).

- Identify appropriate opportunity to incorporate surrogates into an exercise or training.
  - Consider smaller OSROs or operators
  - Possibly include fishing vessels
  - Potential for PWSRCAC to contribute funding
- Develop surrogate use plan for review/evaluation by trustees and regulatory agencies.
  - Each agency determines whether permission needed, under what authorities
  - Test the process of gaining approval/permission as appropriate

MEETING MATERIALS

Project website: http://www.nukaprojects.com/#!pws-surrogates/aoc2r

(password protected, password to be distributed to participants via e-mail)

Participant survey:

http://goo.gl/forms/RrBbK1KGsu

Suggested background reading:

Final Report BSEE Permitting Oil Simulants Project (2015)

Decision-making tool for Oil Surrogate or Simulants Use (2015)

PWSRCAC/OSRI/SCAA Oil Simulants workshop final report (2013)