Discussion Points for Public Meetings

The Alaska Regional Response Team (ARRT) recently published revised guidelines for how the use of dispersants during oil spill response will be authorized by federal and state authorities in Alaska. Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) has prepared this document to highlight issues and questions that our member organizations and other interested stakeholders may consider raising during upcoming public meetings in Kodiak, Valdez, and Anchorage during November, 2013.

Improvements to the 1989 Version

There are a number of ways that the 2013 Plan improves upon the 1989 Guidelines. These include:

- In the 2013 draft, there are no-preauthorization areas inside of 24 nautical miles (27 miles) from the coastline.
- The incident-specific requirements to consult with resources trustees (federal and sometimes state natural resource agencies) are more robust.
- The draft plan recognizes that seasonably variable conditions such as salinity, temperature, and mixing energy (waves and wind) can impact dispersant effectiveness, and they factor these into decision-making tools.
- The draft plan gives more consideration to potential impacts to maritime species and habitat, including endangered species.
- The draft plan contains more direct and explicit requirements for monitoring the effectiveness of dispersant applications using the federally-endorsed monitoring protocols - Special Monitoring of Applied Response Technologies (see page F-37 of the draft Plan for more about SMART: www.bit.ly/DraftDispersantsPlanARRT).
- A detailed after-action report is required any time dispersants are used.
- Dispersant activities are only allowed during daylight.

Issues for Consideration by Regional Stakeholders

The following issues were identified by PWSRCAC as potential concerns regarding the draft Plan contents.

1. Size and Extent of Preauthorization Area.

The pre-authorized dispersants use area is expansive and encompasses large areas of commercially important fish species.

- Are there examples from other parts of the U.S. of preauthorization areas this large?
- Have fishery management agencies considered the potential impacts?

Some of the areas included in the preauthorization zone may not have sufficient mixing depth (60 feet) for dispersant use.

- Has the ARRT ensured that there is at least 60 feet of depth throughout the preauthorization area?

There is a process in place under the draft Plan to allow resource trustees, tribes and stakeholders within each region (Subarea) to change the designation from Preauthorized to case-by-case approval. But the process identified in the Plan does not make it clear who will initiate or lead this process. A 2-year timeline is established for

this process to occur, but it is not clear what will happen if this process is not completed.

- Who will lead this process and ensure that each region has an opportunity to examine and change their Preauthorization areas based on local priorities?
- If change of designation is not completed within 24 months, does the pre-authorization remain?

The process proposed in the draft Plan allows amendments to the preauthorization area for 24 months following the adoption of the plan.

- Why not try to do this while the guidelines are still in draft form?
- If a spill occurs before the re-designations have been completed, is preauthorization allowed?

Even though the guidelines describe Dispersant Use Avoidance Areas, it appears that dispersants could still be approved for use in these areas on a case-by-case basis.

- Will there be any areas where dispersant use is banned? What is the mechanism to make such designations?

The concept of preauthorization suggests that dispersant use is acceptable under some circumstances. Dispersants do not remove oil from the environment.

- Does your organization or community have a position on dispersant use in your location? Is dispersants use acceptable?

The title of the document is "Oil Dispersant Authorization Plan." This suggests across-the-board authorization is not consistent with statements in the draft Plan. The draft Plan affirms that dispersants are an alternative response technology that should only be used when mechanical recovery is not feasible or not effective.

- Should the document be retitled to "Dispersant Use Guidelines?"

2. Limits to Preauthorization

Preauthorization is no longer automatic when dispersant operations have been ongoing more than 96 hours, subsea dispersants are proposed, or Tier 2 and 3 SMART monitoring is not operationally feasible (see previous link for more information on SMART).

- Is the 96-hour time period from the spill occurrence or the time that the first dispersant operations are carried out?
- Does the ARRT envision using subsea dispersants in Alaska?
- How is "operational feasibility" defined?
- Are the SMART monitoring protocols finalized?

3. Establishment of Dispersant Use Policies and Decision-Making Criteria

There is a mix of quantitative and qualitative limits placed on dispersant applications, and they are scattered throughout the document. It would be useful to have a consolidated reference for these limits, and wherever possible, to provide more specificity. For limits that are tied to geographic location (such as water depth), it would be logical to change those areas to Dispersant Use Avoidance Areas.

- How will dispersant use decisions factor in issues such as sensitive species, historical properties, human use, etc.?

- Why are shoreline impacts discussed, when dispersants are not recommended for use near shore?
- Where does the recommendation for 500 meters from swarming fish come from? How would this be ensured, given the fact that swarming fish are constantly moving? What is the scientific basis? How are swarming fish identified?
- How is "adequate buffer" defined?
- Why are quantitative limits given for some factors but not others?
- How would wind speeds be measured, where, and by whom?
- How and where would salinity be established? To what depth?
- Why aren't temperature cutoffs provided?

4. New Stakeholder Input Process

There is a "seat at the table" for stakeholder groups, but it is not entirely clear which stakeholder groups would be provided with an opportunity to participate, and it is not clear how stakeholder input will be addressed in decision-making.

- How will stakeholder groups be identified for inclusion in this process?
- How much input will stakeholders be able to provide?

5. Federal On-Scene Coordinator (FOSC) Autonomy

The FOSC (U.S. Coast Guard, lead federal agency for marine oil spills) has sole decision-making authority in preauthorization areas. There are notification requirements after-the-fact, but no requirements that the Coast Guard consult with other federal, state, or local agencies in making the decision to use dispersants in Preauthorization areas.

- Will the Coast Guard attempt to consult with other agencies if time or circumstances allow?

Tribal entities are not explicitly recognized as co-trustees of species used for subsistence or covered under the Marine Mammal Protection Act.

- To what degree will tribal entities be treated as co-trustees?

The FOSC has considerable discretion to bypass consultation requirements if "safety of human health" is at risk.

- Under what circumstances would dispersants reduce the risk to human health?
- What are the human health impacts of dispersants?
- Is the FOSC qualified to make these determinations?
- Does the local government have some authority related to protecting life and health during emergencies that should be considered?

There are a number of places when consultation requirements are described as "when feasible" or "as appropriate."

- Clarify the factors that are meant to be considered in determining feasibility or appropriateness. Is this the FOSC's discretion?

6. After-Action Reporting

The after-action report requirements provide an opportunity for public dissemination of the final report, but no clear process for public review or input.

- Will local or stakeholder groups have an opportunity to review or contribute to after action reports before they are finalized?

7. ***Additional information***

- Below, please find "Why PWSRCAC Does not Support the use of Chemical Dispersants." This short summary provides the council viewpoint and scientific basis for our concerns regarding dispersants use and their effects.
- Also please find in the following link draft comments by Pegasus Environmental Solutions on the draft Plan: www.bit.ly/PegasusEnvironmentalSolutionsDraftComments. These comments focus on the potential effects of dispersant use on marine wildlife.
- Full Draft Plan proposed by ARRT: www.bit.ly/DraftDispersantsPlanARRT
- Current guidelines: www.bit.ly/AnnexFofCurrentGuidelines

WHY PWSRCAC DOES NOT SUPPORT THE USE OF CHEMICAL DISPERSANTS

OVERVIEW - In theory, chemical dispersants are supposed to do as their name implies: disperse surface oil into the water column, diluting it, preventing it from fouling shorelines, and speeding up the process by which bacterial action might, over time, render it harmless.

The Prince William Sound Regional Citizens' Advisory Council has concluded that its many years of research have failed to bear out the claims of dispersant proponents regarding dispersants effectiveness in our cold and seasonally low salinity waters. New research also reveals increasing concerns about low-level chronic toxic effects from oil and dispersed oil. For instance, toxic effects on pink salmon and herring embryos from low level hydrocarbon exposure include heart abnormalities that lead to permanent changes in heart anatomy and physiological performance.

Because of these concerns about whether dispersants actually work, as well as the toxic effect they have on sea life and interference with mechanical removal options, the council does not support the use of dispersants.

THE IMPORTANCE OF INDEPENDENT RESEARCH - Many of the council's concerns are based on the findings in *Oil Spill Dispersants – Efficacy and Effects (2005)*. This summary report was put together by the National Research Council (NRC). The NRC organized a broad group of researchers and experts called the "Committee on Understanding Oil Spill Dispersants: Efficacy and Effects" to write this report which can be found at: http://www.nap.edu/catalog.php?record_id=11283.

More recent government research on dispersants was conducted by the Government Accountability Office in 2012. Information from this report (*Oil Dispersants: Additional Research Needed, Particularly on Subsurface and Arctic Applications (*GAO-12-585 , May 30, 2012) can be found at: http://www.gao.gov/products/GAO-12-585.

The council thinks it is important that the study of dispersants and their effects are conducted independently. Many of the studies done to date have been sponsored by the oil industry and manufacturers of dispersants. This type of market-driven research adds the appearance of bias and advocacy for dispersant use. A neutral scientific investigation like the GAO report avoids these concerns.

ADDITIONAL INFORMATION
The following table lists common misconceptions about dispersants and provides scientific counter observations. These counter observations arise from our decades of research and may be helpful in understanding why the PWSRCAC does not support dispersants use in our region.

Arguments For Dispersants Use	Scientific Counter Observation
Dispersants drive oil into the water column permanently	*Oil spill dispersions can coalesce back into surface slicks over time so that much of the oil will resurface in 3 to 8 hours in situations with little or no mixing energy.*
Dispersants can assist in oil biodegradation	*Most studies show that dispersants suppress oil biodegradation.*
Chemically dispersed oil is no more toxic than naturally dispersed oil	*The use of chemical dispersants results in oil concentrations in the water that are at least 10 to 100 times greater than the concentration one would get without the use of chemical dispersants. This mixture is much more toxic to aquatic organisms.*
Dispersing oil slicks can save birds or mammals	*Studies haven't shown this, considerations include the fact that the oil is never 100% dispersed and the oil is spreading over a much greater surface area - increasing contact potential.*
Dispersants will prevent the formation of water-in-oil emulsions	*This hasn't been shown by peer-reviewed research.*
Dispersants can break water-in-oil emulsions	*Tests, as well as actual applications on the Exxon Valdez spill, have shown that this does not occur.*
Dispersants can be used in calm seas	*The effectiveness of dispersants in calm seas is very poor, waves or some source of mixing energy is needed for reasonable effectiveness. In calm seas, the dispersant will not stay with the oil, but will be washed away, so dispersants cannot be applied in hopes the seas will come up. Mechanical mixing energy can be applied, but may not be practical on a large scale.*
Dispersants mix dispersed oil throughout the water column	*Fresh water layering that is common in Prince William Sound region waters can halt dispersed oil at the salinity boundary which can be 1 to 2 meters in depth.*
Dispersants work in cold waters such as those in Prince William Sound and the Gulf of Alaska	*Most research on dispersant use in cold water shows that it does not work well. Some tests of dispersant effectiveness in cold marine waters that are often cited as successful are from closed volume tank tests. The PWSRCAC has expressed concerns about the validity of those tests. For example, initially dispersed oil that re-aggregated and resurfaced was not properly considered.*

INFORMATION ON THE WEB

More information on dispersants can be found on the council's webpage: www.bit.ly/OilSpillDispersants.