

# PWSRCAC DISPERSANT USE POSITION UPDATE

#### **DRAFT POSITION STATEMENT**

**PRESENTATION TO BOARD OF DIRECTORS** 

September 23, 2022



# Why Update the Position?

- 25 years of dispersant literature reviews
- 16 years since last Board position update
- 12 years of science since Deepwater Horizon
- 9 years since last SAC review of supporting materials
- 6 years since new guidance and checklists were developed

### **Board of Directors Workshop Series**

- March 10: Considering Options
- Follow-up mini-workshops
  - May 25: Decision-making
  - June 2: Trade-offs
  - June 10: Science

# **Draft Position**

- Consistent with existing position
- Provides more detail
- Evidence-based
- Acknowledges uncertainties and unknowns
- SAC endorsed

### **Draft Position**

- Opening statement on dispersant use overall
- Four areas of supporting evidence:
  - Mechanical recovery preference
  - Effectiveness
  - Toxicity
  - Decision-making
- Closing statement emphasizing importance of prevention

Photo: J. Robida

It is the position of the Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) that chemical dispersants should not be used on Alaska North Slope crude oil spills in the waters of the Exxon Valdez oil spill (EVOS) region for the following reasons:

- 1) Mechanical recovery is the preferred response method in Alaska and PWSRCAC supports mechanical recovery in the EVOS region for several reasons:
  - a. Mechanical recovery is the only response option that removes oil from the marine environment. Chemical dispersants alter the fate and transport of spilled oil, but the oil remains in the environment.
  - b. A Response Gap Analysis for Prince William Sound found that operating conditions would limit the feasibility of dispersant application much more frequently than mechanical response, meaning that there is a higher probability of mounting a response using mechanical systems than dispersants.
  - c. Chemical dispersants reduce the opportunity for mechanical recovery to remove oil from the environment.
    - i. Slicks that are treated with dispersants may still impact shoreline areas.
    - ii. Physical and chemical changes to chemically dispersed oil may reduce the effectiveness of skimmers.
  - d. Mechanical recovery capabilities in the EVOS region are significantly advanced compared to other areas in the U.S.

- 2) Dispersants have not been demonstrated, in field or laboratory conditions, to be effective in treating oil slicks in marine environments with similar temperature and salinity profiles found in the EVOS region.
  - a. There has never been a successful application of chemical dispersants to an ANS crude oil spill in cold water regions.
  - b. Dispersant application was unsuccessful during the Exxon Valdez oil spill.
  - c. Tank trials to evaluate chemical dispersants on ANS crude oil have not demonstrated effectiveness in conditions found in the EVOS region.

- 3) The potential benefits of chemically dispersing spilled oil do not outweigh the known harms and potential risks. In the absence of definitive proof of safety and holistic benefits to the environment and people, dispersants should not be applied in the EVOS region.
  - a. Dispersant application introduces additional chemicals into the environment and may increase exposure of marine organisms to toxic components of oil.
  - b. Dispersant application may cause adverse human health impacts.
  - c. Dispersant application does not necessarily increase biodegradation of oil.
  - d. Dispersant application increases the amount of oil that settles on the seafloor through sedimentation and marine snow formation.
  - e. Long-term effects of dispersant application on ecosystems and organisms are not well understood, making it difficult to accurately weigh potential adverse impacts.

- 4) The dispersant use approval process outlined in the Federal On-scene Coordinator (FOSC) Dispersant Authorization Checklist (Alaska Dispersant Use Plan) will preclude dispersant application in Prince William Sound (PWS) and the EVOS region.
  - a. Water salinity is below 15 ppt in areas of PWS during certain seasons.
  - b. Mixing energy is not sufficient for dispersant application in areas of PWS during certain seasons and times.
  - c. There is no marine area in PWS that is 1,640 feet or more away from swimming fish, rafting seabirds, swimming marine mammals, or marine mammal haul outs (#19d).
  - d. There may not be adequate time or access to key stakeholders to incorporate their informed consent into dispersant use decision-making (#20 & #21).
    - i. Tribes, Alaska Native, and rural communities in the EVOS region rely on a healthy marine ecosystem for subsistence foods and bear disproportionate risk of toxic exposure if dispersants are applied in the vicinity of harvest areas.
    - ii. Fish and wildlife in the water and on the seafloor are an important food source. Dispersant application can injure those resources and impact food safety and security.
    - iii."Appropriate" stakeholders incorporate broader interests than identified in the checklist.

Oil spill prevention remains PWSRCAC's top priority because once oil is spilled there will be adverse impacts to people and the environment. In the event of an oil spill in our region, mechanical recovery and containment of crude oil spilled at sea should remain the primary response method. PWSRCAC recommends that oil spill response research and development should focus on enhancing and improving mechanical recovery technologies and methods.



## Questions and Discussion

