

Briefing for PWSRCAC Board of Directors – September 2025

INFORMATION ITEM

Sponsor: Danielle Verna and the Scientific Advisory Committee

Project number and name or topic: 9550 - Dispersants

1. **Description of agenda item:** This is an informational item to provide the Board an update on recent changes to dispersants regulations and stockpiles. The Council has contracted Dr. Merv Fingas of Spill Science, LLC, to draft a report summarizing recent regulatory changes, comparing the known toxicity and effectiveness of newly available dispersants to the outgoing dispersant, Corexit 9500A, and assessing how this information informs our understanding of dispersants use in the Exxon Valdez oil spill region. A summary of recent dispersants regulatory and stockpile changes by Drs. Fingas and Verna is provided with the attachments. Additional information has been provided at the Council's request by Marine Spill Response Corporation, an oil spill removal organization and the owner of the dispersants stockpile in Alaska that could be used by Trans Alaska Pipeline System (TAPS) shippers in the event of a spill. A brief presentation by Drs. Fingas and Verna will be provided at the meeting.

2. **Why is this item important to PWSRCAC:** Under the Oil Pollution Act of 1990 (OPA 90), PWSRCAC is authorized to participate in the development of plans and policy guidelines used in oil spill response. Chemical dispersant use has been a longstanding controversial topic, as they may impact the health of marine resources and little research has been done on toxicity to humans. The use of dispersants also may compete with mechanical response for time and resources. The Council has a long history of supporting dispersants-related projects and maintains an extensive database of dispersants literature. In addition, the Council remains diligent in tracking changes to policies and regulations that govern dispersants authorization of use and application in the Exxon Valdez oil spill region in order to provide sound advice in the event of a future spill.

3. **Previous actions taken by the Board on this item:**

<u>Meeting</u>	<u>Date</u>	<u>Action</u>
Board	9/16/2021	The Board accepted the report titled "A Summary of Dispersants Research: 2017-2021" by Dr. Merv Fingas, dated May 2021, as meeting the terms and conditions of Contract 955.21.01 and for distribution to the public.
Board	9/22/2022	Accepted report titled "Summary of Board of Directors Workshops and Draft Evidence-Based, Updated Position" by Nuka Research and Update to Council's Dispersants Use Position
Board	1/26/2023	The Board accepted the document titled "PWSRCAC Dispersant Use Position Supporting Materials" by Elise DeCola of Nuka Research and Planning Group, LLC, dated December 2022, as meeting the terms and conditions of Contract 9550.22.01, and for distribution to the public.
XCOM	2/21/2023	The Executive Committee the report titled "Review of Literature on Oil Spill Dispersants: 2021-2023", dated January 2023, by Dr. Merv Fingas of Spill Science,

XCOM	4/28/23	<p>LLC, as meeting the terms and conditions of contract number 9550.22.02, and for distribution to the public.</p> <p>The Executive Committee approved the report titled "Review of Literature on Oil Spill Dispersants: 2021-2023", dated January 2023, by Dr. Merv Fingas of Spill Science, LLC, as meeting the terms and conditions of contract number 9550.22.02, and for distribution to the public.</p>
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Contact staff for actions taken by the Board on this item prior to 2021.

4. **Summary of policy, issues, support, or opposition:** The PWSRCAC's position on the use of chemical dispersants was updated in 2022, and does not support the use of dispersants in our region. Supporting materials for the position statement were adopted in January 2023, to aid in the communication and dissemination of the position statement to industry, regulators, stakeholders, and partners prior to and during the event of an oil spill. The position statement and materials can be found on our website at (<https://www.pwsrcac.org/programs/environmental-monitoring/dispersants/position-on-dispersants/>) or by contacting staff.
5. **Committee Recommendation:** The Scientific Advisory Committee is aware of these dispersants updates and supports this informational update to the Board as the situation continues to develop, given the Board's longstanding interest in this topic.
6. **Relationship to LRP and Budget:** Work associated with this project is included in the approved FY2026 budget and is being completed under contract 9550.26.01 in an amount not to exceed \$12,125.
7. **Action Requested of the Board of Directors:** None. Item is for information only.
8. **Attachments:**
 - (a) Summary of Recent Dispersants Regulatory and Stockpile Changes by Merv Fingas and Danielle Verna dated August 2025.
 - (b) Dispersants Questions Asked by PWSRCAC to Marine Spill Response Corporation (MSRC) dated July 24, 2025.

Summary of Recent Dispersant Regulatory and Stockpile Changes

Merv Fingas & Danielle Verna

August 2025

This informational update is being provided to the Prince William Sound Regional Citizens' Advisory Council's Board of Directors to raise awareness about the current regulations on dispersants and changes underway to dispersants stockpiles that may be applied to an oil spill in our region. The Council has been very engaged in this topic for many years and will continue to remain engaged through staff and committees. Further information or proposed action will be provided to the Board at future meetings as needed.

Below is a summary of information gathered by Dr. Merv Fingas, Spill Science, LLC, on dispersants stockpiles, data availability, composition, toxicity, and storage. Following this summary is a list of Council questions about dispersants with answers provided by Marine Spill Response Corporation (MSRC), an oil spill removal organization and the owner of the dispersants stockpile in Alaska that could be used by Trans Alaska Pipeline System (TAPS) shippers in the event of a spill. MSRC provided answers to the Council's questions in writing following a meeting between Council staff, Dr. Fingas, MSRC, Marine Preservation Association, Alyeska/SERVS, and Polar Tankers in July 2025.

Dispersants stockpile

Beginning in December of 2025, Corexit 9500A will no longer be an acceptable dispersant in the United States. This change has occurred because the manufacturer of Corexit has discontinued production, sale, and support of the regulatory framework for the product, following amendments to the listing and authorization of use requirements under 40 CFR Part 300 Subpart J of the National Contingency Plan (NCP) by the Environmental Protection Agency (EPA). As such, existing stockpiles of Corexit 9500A in the United States, including the stockpile in Alaska available for use by TAPS shippers, must be replaced with a new dispersant authorized for use by the EPA.

The existing stockpile of Corexit 9500A in Alaska will be replaced by Dasic EcoSafe OSD, manufactured by Dasic USA, LLC, in Baytown, Texas. This replacement is expected to be fully implemented in August 2025. The fate of the existing Corexit 9500A stock is currently unknown. Options for disposal are currently being considered and will be implemented by 2026. One potential issue is that if the Corexit 9500A stock were to be transferred to the international stocks, the Corexit could then return to be used at a large U.S. spill when the international stocks are requested and if authorized.

Data availability

There are sparse data on Dasic EcoSafe at this time, including in the peer-reviewed academic literature. The only data available are from the Safety Data Sheet (SDS) submitted to EPA for listing in the NCP Product Schedule. Further independent studies are needed to produce the data needed for environmental trade-off evaluations for oil spill response.

Composition and toxicity

The composition of Dasic EcoSafe consists of four surfactants and two solvents, which are also found in Corexit 9500A. The differences in composition between Corexit 9500A and Dasic EcoSafe cannot be determined from publicly available information and need further clarification.

The environmental toxicity of Dasic EcoSafe is hard to compare to previously listed chemical dispersants at this time because of the changes in toxicity testing protocols (e.g., test species, water conditions); however, the aquatic toxicity appears to be similar to that of Corexit 9500A and less than the aquatic toxicity of the two other dispersants on the current NCP Product Schedule (these are Accell Clean DWD 2.0 and Finasol OSR 52 IBC). Similarly, the protocols for effectiveness testing have changed.

Testing using the Baffled Flask test shows that the effectiveness on Bryan Mound oil, from the Strategic Petroleum Reserve in Texas, is about the same as the other two newly listed dispersants. No data on the effectiveness or toxicity of Dasic EcoSafe is available for Alaska North Slope crude oil, species that are present in Alaska marine environments, or water conditions (temperature, salinity) relevant to Prince William Sound and the Exxon Valdez oil spill region. There are no data on human health risks from exposure to Dasic EcoSafe. This is a serious gap with all dispersants.

Storage

Dasic EcoSafe is said to have a shelf life of at least 20 years. MSRC plans to test the stored product after 10 years and every 5 years thereafter. Testing will be done using the Baffled Flask test. The product will be stored in intermediate bulk containers made of high density polyethylene under a cushion of nitrogen to minimize oxidation. The storage of the dispersant will be in a controlled climate warehouse in Anchorage. At this time, there are no recognized standards or protocols for evaluating storage stability or interim tests to evaluate the product.

**Dispersants Questions Asked by PWSRCAC
to Marine Spill Response Corporation (MSRC)**

July 24, 2025

1. *Is Dasic EcoSafe a new product or will the existing Corexit 9500A be relabeled or remanufactured as Dasic EcoSafe?*

MSRC Response: The Dasic EcoSafe OSD dispersant MSRC purchased is derived from a new formula and blended with new feedstock. No Corexit 9500 was used in the process.

2. *If Dasic EcoSafe is manufactured, where will it be manufactured and where do the components come from?*

MSRC Response: The Dasic EcoSafe OSD dispersant MSRC purchased is being manufactured in Baytown, TX with the 6 components coming from numerous sources located throughout the United States.

3. *Since we understand that the composition of Corexit 9500A and Dasic EcoSafe are identical, is the data on Corexit 9500A still pertinent to your understanding of effectiveness and application?*

MSRC Response: The statement Corexit 9500A and Dasic EcoSafe OSD dispersant are identical is not a correct statement. The Dasic EcoSafe OSD dispersant and Corexit 9500A are 2 different products manufactured by 2 different companies. The toxicity and efficacy are listed on the NCP Product Schedule.

4. *What is the disposal plan for Corexit 9500A?*

MSRC Response: These plans are under development for implementation in 2026.

5. *The sole distributor of Dasic EcoSafe is Dasic USA, LLC, and the contact according to the U.S. EPA is Dr. Tim Nedwed. Have you been in contact with Dasic USA, LLC, regarding manufacturing, testing, inventory, etc.?*

MSRC Response: MSRC has been in regular communications with DASIC USA, LLC discussing every aspect of the manufacturing, packaging and shipping of the product to MSRC.

6. *Does Dasic EcoSafe have an expiration date?*

MSRC Response: In accordance with the EPA listing for Dasic EcoSafe OSD, this dispersant has an anticipated shelf life of at least 20 years.

7. *How much dispersant is stockpiled in Anchorage?*

MSRC Response: MSRC will be replacing the current inventory of approximately 60,000 gallons that is maintained in Alaska.

8. *Is this dispersants stockpile in Anchorage exclusive for Trans Alaska Pipeline System (TAPS) tankers, or can MSRC use it for other vessels and spills?*

MSRC Response: The dispersant stockpile in Anchorage is owned by MSRC and is available to MSRC customers. MSRC has stockpiles for other events, but should any Alaska inventory be needed, MSRC will provide the necessary information for the appropriate plan administrator to request approval from ADEC [Alaska Department of Environmental Conservation] for the transfer.

9. *How often is the dispersants stockpile tested, and what is the testing method?*

MSRC Response: The Dasic EcoSafe OSD dispersant has a shelf life of at least 20 years if stored properly so will not require retesting prior to that 20-year period. MSRC will retest after 10 years from the manufacture date and then every five years thereafter.

The sample size for the retesting will be 10% of the IBCs [intermediate bulk containers] from each distinct production batch that have been stored at the same locations and under the same conditions.

The procedure for dispersant testing in accordance with EPA regulations is the Baffled Flask test using SPR [Strategic Petroleum Reserve] Bryan Mound crude oil. MSRC will arrange for the testing independently or in coordination with Dasic USA, LLC.

10. *What is the anticipated deposition rate of Dasic EcoSafe from the 737 dispersants aircraft spray system?*

MSRC Response: As per the Estimated Dispersant System Potential (EDSP) calculator, the published delivery rate is 5 gallons of dispersant per acre. The dispersant to oil (DOR) is 1 to 20; 1 gallon of dispersant to 20 gallons of oil.

11. *What type of container will the new dispersant be stored in and is there a plan to replace the containers over time?*

MSRC Response: The Dasic EcoSafe OSD product is stored in 275 gallon, High Density Polyethylene (HDPE) totes with an Ethylene Vinyl Alcohol CoPolymer (EVOH) liner between the HDPE layers. The totes will be topped off with a nitrogen blanket once the dispersant is loaded. As part of MSRC's dispersant monitoring plan, totes will be inspected at regular intervals and replaced as needed.