

Alaska Oil and Gas Association



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Commander James Nunez
United States Coast Guard
17th Coast Guard District
P.O Box 25517
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February 14, 2014

Via E-mail to James.D.Nunez@USCG.mil and First Class Mail

Re: Comments on the Alaska Regional Response Team (ARRT) Oil Dispersant Authorization Plan of the Alaska Federal/State Preparedness Plan

Dear Commander Nunez:

The Alaska Oil and Gas Association (AOGA) appreciates the opportunity to comment on the Alaska Regional Response Team's (ARRT) proposed "Oil Dispersant Authorization Plan" ("Authorization Plan"). Safety and environmental protection are of paramount importance to AOGA's members and AOGA supports the efforts to date of the ARRT to advance the state of oil spill response in Alaska. However, a review of the draft plan reveals that there is substantial work that must be done before the Authorization Plan is finalized. It is critical that the final plan prepared by the ARRT is scientifically and technically valid, as well as operationally feasible.

As drafted, the Authorization Plan places unwarranted and imprudent restrictions on the use of dispersants, both as a matter of policy and process. The draft plan fails to acknowledge dispersants as a primary response tool and fails to provide a mechanism for timely and efficient decision-making regarding dispersant use in the event of an emergency response. In the unlikely event of a serious incident, the proposed Authorization Plan would impede deployment of dispersants in a timely and judicious manner. As a result, the Authorization Plan may inadvertently compound any potential negative environmental impacts associated with an oil spill response. The use of dispersants has historically been an important and effective response measure that mitigates the harms associated with the release of oil and hazardous substances. It is critical that Alaska have a plan in place that provides for an efficient preauthorization process and that provides for preauthorization in all areas where there is anticipated to be offshore activities. A robust

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Authorization Plan is critical in order to ensure that, in the event of an emergency response, environmental impacts can be mitigated to the maximum extent possible.

I. Background

The Authorization Plan is intended as an updated annex to the Alaska Federal/State Preparedness Plan for Response to oil and Hazardous Substance Discharges/Releases (“Unified Plan”). If approved by designated agency representatives to the ARRT, the Unified Plan will govern all use of dispersants in Alaska waters under the National Contingency Plan (NCP).

The Clean Water Act (CWA) and the NCP directly mandate procedures and techniques, including preauthorization plans, for use of dispersants. Subpart (J) of the NCP regulations at 40 CFR 300.910(a) requires the ARRT to address “preauthorization plans” for dispersant use.¹ On a fundamental level, the CWA requires that the NCP “shall provide for efficient, coordinated and effective action to minimize damage from oil . . . discharges, including . . . dispersal . . . of oil . . .”² This “shall include . . . procedures and techniques to be employed in . . . dispersing . . . oil . . .”

II. The Final Plan Should Approach Dispersants as a Primary Response Tool

One of the fundamental problems with the draft Authorization Plan is that it takes an outdated approach to dispersants, treating them as a secondary or “alternative” response tool to be used only “when conditions prevent using mechanical and/or in situ burning.” The draft plan places unwarranted and arbitrary restrictions on the use of dispersants³ and requires that the use of dispersants “not displace or interfere with mechanical or other response operations.” These restrictions perpetuate discredited arguments about dispersant toxicity and the efficacy of dispersants in cold water. Further, taken together, these restrictions create a binding presumption *against* the use of dispersants during an emergency response. There is ample science to support the status of dispersants as a primary response tool. This presumption appears counter to the United States Coast Guard (USCG) regulation requiring plan holders to secure the availability of dispersant response resources (e.g. aircraft, etc.) in areas where dispersant use is pre-authorized; this regulation clearly elevates dispersants to status as a primary response tool. The final

¹ 40 CRR 300.910(a), provides, in relevant part, as follows:

RRTs and Area Committees shall address, as part of their planning activities, the desirability of using appropriate dispersants, surface washing agents, surface collecting agents, bioremediation agents, or miscellaneous oil spill control agents listed on the NCP Product Schedule, and the desirability of using appropriate burning agents. RCPs and ACPs shall, as appropriate, include applicable preauthorization plans and address the specific contexts in which such products should and should not be used. In meeting the provisions of this paragraph, preauthorization plans may address factors such as the potential sources and types of oil that might be spilled, the existence and location of environmentally sensitive resources that might be impacted by spilled oil, available product and storage locations, available equipment and adequately trained operators, and the available means to monitor product application and effectiveness.

² 33 USC 1321(d)(2)

³ Section 2.1 provides that “the following policies shall be followed whenever dispersant use is considered and/or authorized.”

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Authorization Plan should incorporate current studies regarding dispersant use and treat dispersants as a primary response tool, along with mechanical recovery and in situ burning.

The approach to dispersants taken in the Authorization Plan may be due in part to some outdated studies relied on in the draft plan. Indeed, there is a significant amount of research showing that dispersants are effective in the cold waters found offshore of Alaska.⁴ Further, many studies have shown that the oil produced in Alaska is amenable to enhanced dispersion by dispersants.⁵ The goal of dispersants is not to merely move oil off the water surface and into the water column, but to also enhance the natural ability of petroleum-degrading microorganisms to remove oil from the environment. All environments that have been diligently searched contain petroleum-degrading microorganisms.⁶ Dispersants enhance this process by breaking down the oil into tiny droplets that rapidly dilute in the water column. Dilution in the open sea is so rapid that dispersed oil concentrations dilute below acute toxicity thresholds of most water-column organisms in a matter of minutes to a few hours.⁷ This dilution allows aerobic biodegradation to proceed without exhausting nutrients or available oxygen. Further, the droplets of dispersed oil increase the surface area for microbial attack by several orders of magnitude compared to a surface slick, thereby speeding the natural biodegradation process. Biodegradation of dispersed oil has been observed even under Arctic conditions using microbial communities collected from the Alaskan Beaufort Sea.⁸

In any major spill event, all primary response tools should be evaluated to assess which will be most effective under the circumstances. A major spill response may rely on all spill response tools, as was the case with the Macondo incident. As noted in the 2011 Northwest Arctic Alaska Ecological Risk Assessments (ERA), some groups agreed that dispersant use would result in a net

⁴ See Brown, H.M. and Goodman, R.H. 1988. *Dispersant Testing in a wave basin – four years of experience*, Proceedings of the Eleventh Arctic and Marine Oilspill Program Technical Seminar, Environment Canada, Ottawa, ON; Brown H.M., and R.H. Goodman, 1996. *The Use of Dispersants in Broken Ice. Proceedings 19th Arctic and Marine Oil Spill Program Technical Seminar*, Calgary, Alberta, Canada; and Owens, C.K. and R S Belore, 2004. *Dispersant Effectiveness Testing in Cold Water and Brash Ice*, Proceedings of the 27th AMOP Technical Seminar, Environment Canada.

⁵ See Belore, R., 2003. *Large Wave Tank Dispersant Effectiveness Testing in Cold Water*, Proceedings of the 2003 International Oil Spill Conference, American Petroleum Institute, Washington D.C.; SL Ross, 2003, *Dispersant Effectiveness Testing on Alaskan oils in Cold Water*, Report for U.S. Department of Interior; Mullin, J., D. DeVitis, A. Guarino, P. Meyer, and J. –E. Delgado, 2008, *Recent testing, training and research conducted at Ohmsett*, The national oil spill response test facility, Proceedings of the thirty-first AMOP Technical Seminar on Environmental Contamination and Response, Environment Canada, Calgary.

⁶ R. Margesin and F. Schinner, 2001, *Bioremediation (Natural Attenuation and Biostimulation) of Diesel-Oil-Contaminated Soil in an Alpine Glacier Skiing Area*, Institute of Microbiology, University of Innsbruck, A-6020 Innsbruck, Austria;

⁷ Lee K, Nedwed T, Prince RC, Palandro D, 2013, *Lab tests on the biodegradation of chemically dispersed oil should consider the rapid dilution that occurs at sea*, <http://dx.doi.org/10.1016/j.marpolbul.2013.06.005>

⁸ K. M. McFarlin, et. al., *Biodegradation of Dispersed Oil in Arctic Seawater at -1°C*, 2013.

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environmental benefit. For key areas in Alaska, the ARRT should conduct site-specific Net Environmental Benefit Analysis (NEBA) to show whether or not dispersants should be relied on as a key tool. The NEBA can serve as an important educational document for government agencies and the public.

III. The Preauthorization Areas in the Final Plan Should be Expanded to Include all Areas of Actual or Potential Exploration or Extraction of Oil and Gas, including those Areas in Federal Waters

Another limitation in the Authorization Plan is the extremely limited scope of preauthorization areas included in the plan. The final plan should be revised to substantially expand the geographic and functional scope of preauthorization areas. These areas should not be limited to shipping activity, but should include oil and gas exploration and extraction activities. Further, the preauthorization areas in the final plan should include areas of existing exploration and development, as well as areas slated for future exploration and development.

As drafted, the only areas in Alaska preauthorized in the Authorization Plan for dispersant use are shipping lanes from Southcentral Alaska to the Aleutians. These areas are further limited by (1) the exclusion of Cook Inlet and Prince William Sound; (2) the exclusion of all areas in the contiguous zone within 24 miles of shore; and (3) the future exclusion by local interest groups of "avoidance areas" within sub-contingency plans and other areas throughout Alaska. Whatever criteria were relied on by the ARRT to select current preauthorization areas, it is not plausible that these criteria would not also support preauthorization for other areas in Alaska. Shipping lanes for oil and fuel run throughout offshore Alaska waters, including through the Gulf of Alaska and southeast to the contiguous United States. As a result, preauthorization zones should be established for all such routes as well.

The final Authorization Plan should also include preauthorization for oil and gas activities in the state and federal waters of the Beaufort and Chukchi Seas. Given the existing leases in the area and the future lease sales planned for the region, it is critical that the ARRT contemplate preauthorization in this region. The absence of preauthorization in the plan for these areas will undermine the ability of an oil and gas operator to lodge an effective response in the unlikely event of an oil spill. Additionally, the final plan should address subsea dispersant use and dispersant use in ice and include a discussion of relevant modeling and sampling. The ARRT should review the American Petroleum Institute (API) report on recommended practices for modeling and sampling subsea dispersant use and reference this report in its final plan.

IV. The Final Plan Should Include a Streamlined Approval Process

The Authorization Plan provides a series of mandates regarding the Federal On-Scene Coordinator (FOSC) approval for use of dispersants following an actual incident, even where dispersants have been "preapproved." This process is extremely similar to the process articulated for case-by-case approval of dispersants. Under both scenarios, the process outlined in the Authorization Plan is extremely time-consuming and complex. Given these processes, dispersant deployment will be difficult or nearly impossible as approvals must be obtained *on a daily basis* through the following steps (abbreviated):

- Conduct notifications, gather relevant information, prepare dispersants use plan;

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- Submit application for a mandatory field test;
- Federal On-Scene Coordinator (FOSC) to conduct call with the regulatory stakeholders to obtain concurrence for the field test;
- Conduct test with mandatory Specific Monitoring of Applied Response Technology (SMART) Tier 1, 2, and 3 monitoring;
- SMART data analysis by National Ocean and Atmospheric Agency Scientific Support Coordinator (SSC) and through the Environmental Unit (EU) provided to FOSC.
- FOSC to hold another call with regulatory stakeholders to discuss field application (approval form lists “concurrence” from the Environmental Protection Agency (EPA) and the State On-Scene Commander and “consultation” by the Department of Commerce and the Department of Interior);
- Spray dispersants, accompanied with mandatory Tiers 1, 2 and 3 SMART protocol monitoring;
- Repeat the process the next day; and
- For application exceeding 96 hours, the monitoring protocol changes from SMART to new National Response Team (NRT) requirements.

The steps involved in this extremely lengthy process raise the following concerns for AOGA:

- The Authorization Plan assumes that “all input related to dispersant use authorization(s) will be provided to the FOSC within the timeframe required by the FOSC.” This assumption ignores the reality that it will, in practice, be virtually impossible to provide this input in a reasonable timeframe given the volume and complexity of the requisite consultations and input.
- This process requires an Endangered Species Act (ESA) Section 7 and National Marine Fisheries Association (NMFS) Essential Fish Habitat consultation. Typically, an ESA Section 7 process will take weeks, if not months, to complete. The FOSC is also required to notify and repeatedly consult numerous agencies and stakeholders, including the EPA, U.S. Department of Interior, U.S. Department of Commerce, the State of Alaska, representatives of each federally recognized tribe, and representatives of stakeholders, including: local governments and Native Corporations. Each of these consultations comes with regional specific procedures and copious paperwork - a time consuming and cumbersome process. A timely FOSC decision on deployment of dispersants should not be deferred or delayed for completion of such outreach efforts.

While consultation with all interested parties may be admirable in the abstract, such efforts in any ordinary agency context might normally take days, weeks, or months. This is why the Incident Command structure typically favors input through designated liaisons and representatives. The Authorization Plan fails to explain how any input received should be

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weighted or evaluated, which will lead to even further delays. The Authorization Plan should make clear that the responsibility of the FOSC under the NCP is to make the best technical decision on the merits to effectively respond to a spill, with timeliness remaining a key factor. Moreover, the reality of a situation will dictate that FOSC decisions will often need to be made in a matter of hours, rather than the days, weeks, or months that may be necessary to satisfy the protocol contemplated in the proposed Authorization Plan. While AOGA believes that agency representatives can and should provide their best input directly to the FOSC, it should not serve to undermine the essential and fundamental endeavor of efficient and effective mitigation measures necessary during an incident. As a result, AOGA would request that any ARRT Authorization Plan mandate that these consultations and considerations occur now, rather than during an emergency incident response.

- The Authorization Plan requires the FOSC to complete voluminous paperwork at multiple stages prior to the authorization of dispersant use. Although documentation may well be important, mandating that it be developed by the FOSC prior to taking essential action in an emergency incident response will be counterproductive.
- The Authorization Plan requires that “[a]ll dispersant applications (including field tests) will include effectiveness monitoring as outlined in the Special Monitoring of Applied Resources Technologies (SMART) Tier I, Tier II, and Tier III protocols.” Requiring use of Tier II and Tier III monitoring for field tests would be a severe and unwarranted limitation. Of all factors, promptness of response is the most crucial to the ultimate success of mitigation efforts. As established in the ARRT 2013 table top dispersant drill, Tier II testing equipment could not be deployed until six days after the simulated spill occurred.⁹ Requiring a Tier III SMART would necessitate transporting a vessel to the spill location with the appropriately-trained SMART team and monitoring equipment.

It should also be noted that the SMART Monitoring Protocol provides that “[w]hile every effort should be made to implement SMART or parts of it in a timely manner, ***in situ burning or dispersant application should not be delayed*** to allow the deployment of the SMART teams.”¹⁰ Additionally, as AART acknowledged in its July 16, 2013 “Alaska Regional Response Team Internal Dispersant Exercise After Action report,” a requirement to go beyond SMART Tier I conflicts not only with SMART protocols themselves but also with existing Alaskan agency response planning approvals. For example, “BSEE planning standards incorporate the SMART protocols which allow for the approval of a dispersant application and monitoring plan based on a positive Tier I test result.”¹¹ A more sensible option would be to

⁹ See ARRT Internal Dispersant Exercise After-Action Report dated July 16, 2013.

¹⁰ SMART Monitoring Protocols, page 2; tab 3. (Emphasis added).

¹¹ This report also states the following:

If the AART does not support the use of Tier I SMART Protocol as valid monitoring standard for dispersants, they may want to recommend that the SMART program agencies amend the protocols to identify Tier II monitoring as the minimum standard for dispersant application (i.e., SMART protocols were developed jointly by the U.S. Coast Guard, NOAA, U.S. Environmental Protection Agency, Centers for Disease Control and Prevention and Bureau of Safety and Environmental Enforcement).

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permit Tier I SMART to be the initial basis for dispersant operational approval followed by other Tiers of SMART as they can be deployed.

As drafted, the Authorization Plan approval processes are not the “efficient, coordinated and effective action to minimize damage from oil . . . discharges” required by the Clean Water Act. Nor do they comprise a meaningful “preauthorization plan” as required by Subpart (J) of the NCP regulations.¹² Any ARRT Authorization Plan should endeavor to address the majority of issues relating to the circumstances in which dispersants could be used in advance of an incident, rather than the proposed “preauthorized” and case-by-case process, which places all relevant decision making into a protracted and prescriptive effort which must be undertaken during an incident response notwithstanding emergency circumstances.

The approval processes outlined in the Authorization Plan must be streamlined in the final plan. As drafted, these requirements will delay and impair tactical and effective use of dispersants. Obtaining a dispersant permit as outlined above may not be possible in the time available. Including this onerous process for approval may effectively remove dispersants from the “response toolbox” even when dispersant use is supported by NEBA. Given the limited window of time for effective application of dispersants, the decision whether to apply dispersants should be made as soon as practicable following a spill. This expedited decision-making process can be facilitated if most of the preliminary work (NEBA, oil dispersability analysis, etc.) is completed prior to the spill. Providing that NEBA has demonstrated that dispersant use in a region will be beneficial to the environment, if released oil is judged to be dispersible under spill conditions, dispersant use should be allowed. In such a scenario, the dispersant use should be subjected to Tier 1 SMART monitoring to ensure its efficacy. Tier 2 and 3 monitoring may be conducted as practical, but they may not be able to produce the information required for decision-making in the time provided.

V. Miscellaneous Comments

In addition to the comments outlined above, AOGA has identified a number of other issues that should be addressed in the final comment.

- The Authorization Plan does not reference the NEBA approach.
- The Authorization Plan uses 60 feet depth limit instead of the traditional 30 feet depth limit for other areas in U.S. There is no justification identified for this variance.

The AART may want to develop recommendations to BSEE to amend their planning standards for off-shore Oil Spill Response Plans (OSRPs) to state that Tier I is not considered a valid monitoring technique in Alaska. In addition, BSEE would need to require that Tier II monitoring capability be pre-staged on-site for immediate deployment in the event of a spill (i.e., whenever OSRPs list dispersant as a response option during drilling and production activities).

¹² 40 CFR 300.910(a).

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- The Authorization Plan limits dispersant application to daylight operations, but with the latest technology, vessel dispersant operations could be safely conducted at night (especially in ice).

Thank you again for the opportunity to comment and engage in further discourse in an attempt to address our concerns. AOGA's members have a long history of partnership with state and federal agencies to help ensure that oil and gas operations do not adversely impact the environment in which we live and work, and we look forward to continuing this productive relationship into the future.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Kindred', with a large, sweeping flourish at the end.

Joshua M. Kindred
Regulatory and Legal Affairs Manager