Dispersant Use Plan for Alaska

Revision 1
All previous versions superseded

January 27, 2016

Signature Page

Policy approved in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan [National Contingency Plan (40 CFR § 300.901(a))] by the following duly authorized agency representatives and included in the Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases (Unified Plan).

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1.0 BACKGROUND AND OVERVIEW[1]

1.1 Introduction

The purpose of the Alaska Regional Response Team (ARRT) Dispersant Use Plan for Alaska is to outline the process to be used following an oil discharge in Alaska when dispersant use is being considered in a Preauthorization Area or in an Undesignated Area. In addition, this plan streamlines and facilitates the dispersant use authorization process, establishes a Preauthorization Area for Alaska, and provides a framework to identify areas where dispersant use should be avoided. Moreover, this plan will result in an Alaska-based regulated dispersant response capability.

The previous statewide guidelines and guidelines specific to Cook Inlet were approved by the ARRT in April 1986. Specific guidelines for Prince William Sound were approved by the ARRT on March 6, 1989. This plan, which was approved by the ARRT on January 27, 2016, supersedes all previous statewide and area-specific dispersant guidelines/plans[2]. In effect for all marine waters in Alaska[3], this plan is subject to periodic review and update by the ARRT.

1.2 Background

The capability to respond to an oil discharge in Alaska can be hampered by great distances, underdeveloped transportation networks, limited labor force, finite mechanical spill cleanup technology, severe weather, and other conditions. The use of dispersants may provide a response tool in addition to mechanical recovery and *in-situ* burning. See Figure 1 for a conceptual marine spill response decision chart.

Dispersants are chemical agents consisting of surfactants, solvents, and other compounds specifically designed to enhance dispersion of oil into water by generating larger numbers of small droplets of oil that are entrained into the water column by wave or tidal action. These small submerged oil droplets are then subject to natural processes, such as dissolution, volatilization from the water surface, biodegradation, and sedimentation resulting from interactions with suspended particulate material. Oil spill dispersants do not actually reduce the total amount of oil in the environment. Rather, they may change the inherent characteristics of the dispersed oil, thereby changing the oil's transport, fate, and potential effects.

As noted by the National Academy of Sciences[4] review of ongoing research on the use of dispersants as an oil spill response technique and the impact of dispersed oil on marine and coastal

[1] Prior to the Alaska Regional Response Team approving this plan, Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service was completed. As a result, there were several avoidance areas created in the preauthorization area in accordance with Section 1.4 of this Dispersant Use Plan to account for the highest concentrations of the short-tailed albatross and North Pacific right whale critical habitat.

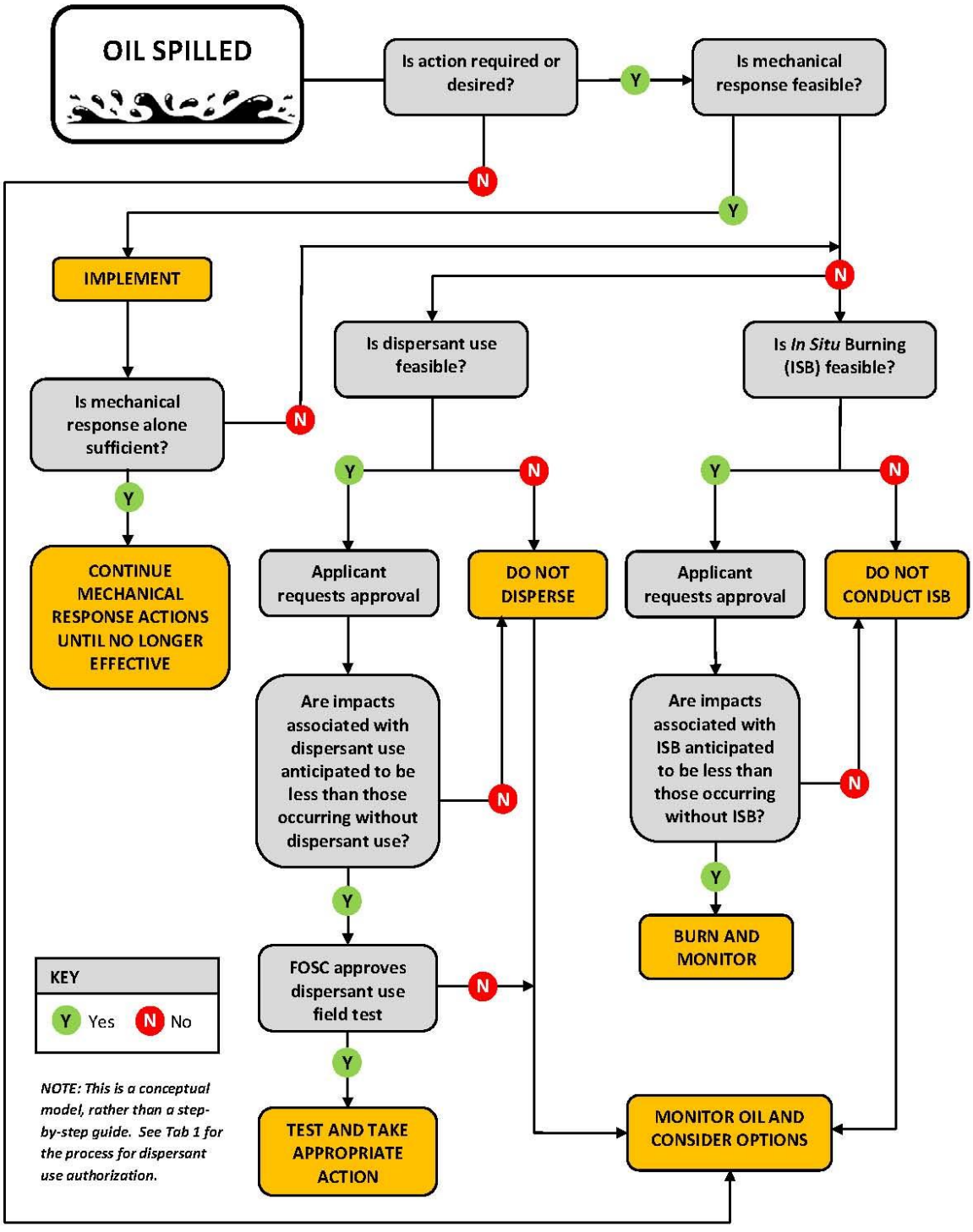
[2] This plan no longer includes Preauthorization Areas inside Prince William Sound or Cook Inlet.

[3] For the purposes of this document, "marine waters in Alaska" is defined to include all waters seaward of the mean low water line along the coast of Alaska outward to the 200 mile Exclusive Economic Zone.

[4] Oil Spill Dispersants Efficacy and Effects. 2005. National Academy of Sciences, available at: http://dels.nas.edu/resources/static-assets/materials-based-on-reports/special-products/oil_spill_dispersants_key_findings_final.pdf

ecosystems, there are many uncertainties regarding the effectiveness and toxicity of dispersant use. Decisions to use dispersants involve trade-offs between decreasing the potential risk to water

Figure 1. Conceptual Marine Spill Response Decision-Making



surface and shoreline habitats while increasing the potential risk to organisms in the water column. This trade-off reflects the complex interplay of many variables, including, but not limited to, the type of oil spilled; the volume of the spill; sea state and weather; water depth; water temperature; water salinity; degree of turbulence; presence, relative abundance, and life stages of potentially-affected wildlife and marine organisms; and the use of those resources. Prior to authorizing dispersant use in marine waters in Alaska, the Federal On-Scene Coordinator (FOSC) needs to consider factors including, but not limited to, valuable commercial, subsistence, and recreational fisheries, as well as large and important populations of birds and marine mammals, including threatened and endangered species.

Key questions to consider during the dispersant use decision-making process include:

- Will the selected dispersant work effectively on the oil discharged and in the given circumstances?
- Can the dispersant be effectively applied to the oil?
- What are the environmental trade-offs of dispersant use and do they support the use of the dispersant in a given circumstance?

As stated in a May 2012 Government Accountability Office report, "Every oil spill is different, and the conditions—such as weather, oil type and volume, currents, and location—surrounding any unanticipated release of oil into the ocean are highly variable. Given this variability, no one study can account for all the potential permutations."[5]

1.3 Dispersant Use Authorizations

This document constitutes a dispersant use preauthorization plan and a case-by-case dispersant use authorization process in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) - Subpart J (Section 300.910). This plan is included in Annex F of *The Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases (Unified Plan).*

Subpart J Section 300.910 of the NCP addresses the concurrence and consultation requirements for dispersant use authorizations. Specifically, it addresses dispersant use decision-making in the following circumstances:

- In accordance with the NCP - Subpart J (Section 300.910(a)), the [Federal] On-Scene Coordinator (OSC) may authorize the use of certain products without obtaining spill-specific concurrences under specified circumstances described in the preauthorization plan where the U.S. Environmental Protection Agency (EPA) Regional Response Team (RRT) representative, the state with jurisdiction over the waters of the area to which a preauthorization plan applies, and the U.S. Department of the Interior (DOI) and U.S. Department of Commerce (DOC) natural resource trustees approve the preauthorization plan in advance[6].

[5] Oil Dispersants: Additional Research Needed, Particularly on Subsurface and Arctic Applications. 2012. U.S. Government Accountability Office. A Report to Congressional Requestors. GAO-12-585.

[6] In Alaska, the natural resource trustee authorities are vested in the DOI and DOC ARRT representatives; state authorities for oil spill response are vested in the Alaska Department of Environmental Conservation ARRT

- In accordance with the NCP - Subpart J (Section 300.910(b)), for spill situations that are not addressed by the preauthorization plan, the [Federal] OSC, with concurrence of the EPA representative to the RRT and, as appropriate, the concurrence of the RRT representative from the state with jurisdiction over the navigable waters threatened by the release or discharge, and in consultation with the DOI and DOC natural resource trustees, when practicable, may authorize the use of dispersants on oil discharges provided that the products are listed on the NCP Product Schedule[7].

- In accordance with the NCP – Subpart J (Section 300.910(d), the [Federal] OSC may authorize the use of any dispersant without obtaining the concurrence of the EPA representative to the RRT and, as appropriate, the RRT representative from the state with jurisdiction over the navigable waters threatened by the release or discharge, when, in the judgment of the [Federal] OSC, the use of the product is necessary to prevent or substantially reduce a hazard to human life. In that case, the [Federal] OSC is to inform (as soon as possible) the EPA RRT representative and, as appropriate, the RRT representative from the affected state and, when practicable, the DOI and DOC natural resource trustees[8] of the use of a product, including products not on the NCP Product Schedule. Once the threat to human life has subsided, the continued use of dispersant must follow the approval process described in Section 300.910(a) or (b).

1.4 Dispersant Areas

Preauthorization Area

The Preauthorization Area for Alaska is shown on Figure 2 and is described as follows: commencing at Cape Suckling in position 59-59.35N 143-53.49W, thence proceeding south to the outermost extent of the Exclusive Economic Zone (EEZ) at position 56-18.00N 144-00.00W, thence proceeding westerly along the outermost extent of the EEZ until it intersects with the outermost extent of the maritime boundary line (MBL) at position 51-21.49N 167-40.44W, thence proceeding northeast along the outermost extent of the MBL to position 54-54.00N 171-58.50W, thence proceeding easterly remaining 100 nautical miles offshore to position 55-45.00N 167-00.00W, thence proceeding southeasterly to Cape Sarichef at position 54-35.90N 164-55.65W, thence proceeding northwesterly to the outermost extent of the Contiguous Zone at position 54-52.43N 165-26.00W, thence proceeding westerly along the outermost extent of the Contiguous Zone following along the entire Aleutian Islands chain rounding Attu Island counter clockwise and entering the North Pacific Ocean, thence proceeding easterly along the outermost extent of the Contiguous Zone along the southern coast of the Aleutian Islands and south of the Shumagin Islands into the Gulf of Alaska and along the eastern coast of the Kodiak Archipelago, thence proceeding south of the Kenai Peninsula and Prince William Sound until reaching position 59-29.00N 144-03.00W, and thence proceeding north connecting to Cape Suckling at position 59-59.35N 143-53.49W. It should be noted, the Preauthorization Area excludes any

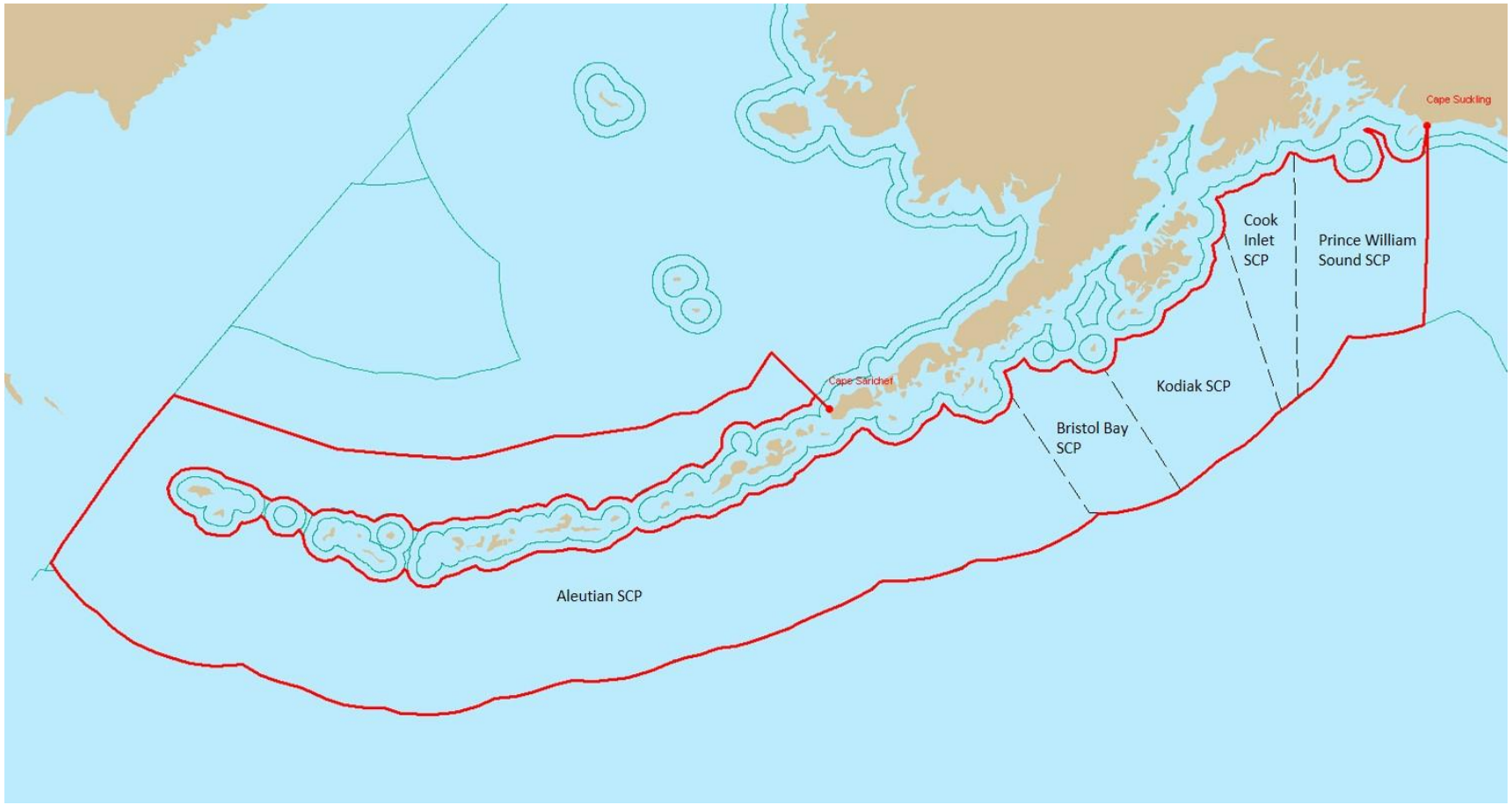
representative.

[7] In Alaska, the natural resource trustee authorities are vested in the DOI and DOC ARRT representatives; state authorities for oil spill response are vested in the State On-Scene Coordinator.

[8] In Alaska, the natural resource trustee authorities are vested in the DOI and DOC ARRT representatives

avoidance areas identified in certain Subarea Contingency Plans (SCPs), as noted below in this section.

Figure 2. Preauthorization Area



Note: The boundaries of the Preauthorization Area and of the Subarea Contingency Plans (SCPs) that overlap the Preauthorization Area are shown in this figure. As described in Section 1.4, the Preauthorization Area goes into effect 24 months after Alaska Regional Response Team approval of this plan. Until that time, requests for dispersant use shall be considered using the Process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B. As also described in Section 1.4, Federal On-Scene Coordinators shall use this figure in conjunction with Section I (Dispersant Use Avoidance Areas) of the appropriate SCPs identified in this figure. Section I of the SCPs identifies areas within the Preauthorization Area that have been reclassified as an avoidance area where requests for dispersant use shall be considered using the Process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B.

This Preauthorization Area ensures the USCG can require certain vessel and facility response plan holders in Alaska to maintain a minimum dispersant use capability in accordance with a USCG August 31, 2009 rulemaking, 33 CFR Parts 154 and 155 "Vessel and Facility Response Plans for Oil: 2003 Removal Equipment Requirements and Alternative Technology Revisions; Final Rule (Final Rule)." This includes tank vessels that carry crude oil and stop at one or more U.S. ports at some point during their transit. In accordance with the Final Rule, those vessel and facility response plan holders will have 24 months following ARRT approval of this plan to come into compliance with Final Rule requirements.

The boundaries of the Preauthorization Area were based on the location of common shipping routes followed by crude oil vessels regulated under the Final Rule. The 24 nautical mile boundary, which corresponds to the U.S. contiguous zone (a feature commonly depicted on nautical charts), excludes nearshore sensitive areas from the Preauthorization Area.

This Preauthorization Area overlaps offshore areas included in several SCPs; i.e., the Prince William Sound, Cook Inlet, Kodiak Island, Bristol Bay, and Aleutian Islands SCPs as shown on Figure 1. Following approval of this plan by the ARRT, the appropriate USCG FOSC, EPA FOSC, and Alaska Department of Environmental Conservation (ADEC) State On-Scene Coordinator (SOSC) shall engage federal and state natural resource trustees, federally-recognized tribes, and stakeholders in a process to identify locations where dispersant use should be avoided within the Preauthorization Area where the Preauthorization Area overlaps their respective SCP. Any identified locations shall be included in Section I (Dispersant Use Avoidance Areas) of each SCP and posted online (see http://alaskarrt.org/Documents.aspx?f=175). This process shall be completed within 24 months following ARRT approval of this plan. Any avoidance area identified in an SCP shall no longer be considered part of the Preauthorization Area for dispersant use. Rather the avoidance area shall be automatically reclassified as an Undesignated Area where requests for dispersant use shall follow the process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B. Any preauthorization area within an SCP, for which this process is not completed within 24 months following ARRT approval of this plan, shall be removed as a pre-authorized area until such time the process is completed. Future revisions to avoidance areas shall be conducted in conjunction with SCP updates.

The Preauthorization Area goes into effect 24 months after ARRT approval of this plan. Until that time, any requests for dispersant use in the Preauthorization Area shall follow the process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B.

Undesignated Areas

Undesignated Areas include all marine waters in Alaska outside of the Preauthorization Area. These Undesignated Areas overlap offshore areas included in several SCPs as noted above. Following approval of this plan by the ARRT, the appropriate USCG FOSC, EPA FOSC, and ADEC SOSC shall engage federal and state natural resource trustees, federally-recognized tribes, and stakeholders in a process to identify locations where dispersant use should be avoided within the Undesignated Areas where the Undesignated Areas overlap their respective SCP. The timeframe for this process in Undesignated Areas shall be determined by the appropriate USCG FOSC, EPA FOSC, and ADEC SOSC and federal and state natural resources trustees, federally-

recognized tribes, and stakeholders. Future revisions to avoidance areas shall be conducted in conjunction with SCP updates. Any identified locations shall be included in Section I (Dispersant Use Avoidance Areas) of each SCP and posted online (see http://alaskarrt.org/Documents.aspx?f=175).

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2.0 DISPERSANT USE POLICIES, CONSIDERATIONS, AND CONDITIONS/STIPULATIONS

2.1 Policies

The following policies shall be followed whenever dispersant use is considered and/or authorized:

- The primary method for cleaning up oil will be mechanical removal.
- The use of dispersants may provide an alternative response tool when mechanical recovery and/or *in-situ* burning, alone or in combination, are infeasible, ineffective, or insufficient.
- Dispersant delivery in a mechanical recovery area will not displace or interfere with mechanical or other response operations.
- All requests for dispersant use will follow the appropriate process in Tab 1.
- Input related to dispersant use authorization(s) will be provided to the FOSC within the timeframe requested by the FOSC. The FOSC will provide sufficient time for that input.
- The preauthorization of dispersant use (inside the Preauthorization Area) only applies to crude oil. Requests for dispersant use for any other type of oil (e.g., diesel fuel, jet fuel, intermediate fuel oils, bunker oils) will be considered using the Process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B.
- The evaluation of trade-offs will at a minimum, take into account the considerations identified below in Section 2.2. The basis for these decisions will be documented.
- One or more dispersant application field tests to determine the effectiveness of oil dispersion under existing site-specific environmental conditions will be conducted. SMART monitoring, as detailed below, will be conducted during the field test(s) and information collected will be used to determine whether full-scale dispersant application(s) will begin. A dispersant application field test is defined as one aircraft sortie or one vessel-based application swath.
- Any atypical use of dispersants[9] or any use of dispersant subsea (i.e., below the surface) in a Preauthorization Area or in an Undesignated Area will only be considered using the Process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B.
- All dispersant applications (including field tests) will include effectiveness monitoring as outlined in the Special Monitoring of Applied Response Technologies (SMART) Tier 1, Tier 2, and Tier 3 protocols (see Tab 3, Part 1). In the event it is not possible (e.g., due to logistical, weather, and/or sea conditions as confirmed or determined by the FOSC) to conduct SMART Tier 2 and Tier 3 monitoring in the Preauthorization Area, the request for dispersant use or continued use will be considered via the Process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B.

[9] Atypical use of dispersants is defined to include: (1) full scale dispersant application ongoing for, or expected to exceed or exceeding 96 hours following the dispersant application field test, and/or (2) the use of dispersants subsea; i.e., below the water surface.

- The only exception will be incidents where vessels serving as SMART Tier 2 and 3 monitoring platforms are unable to travel within seven hours to a spill site. In those cases, an initial field test will be conducted using SMART Tier 1 monitoring. Prior to the FOSC authorizing any full-scale dispersant application, a second field test will be conducted within 24 hours following the FOSC's decision to use dispersants or as soon as possible thereafter. The second field test will include SMART Tier 1, 2, and 3 monitoring.
- Monitoring for effectiveness of dispersant use and any other factors (or "key indicators") established by the FOSC in consultation with the EPA, DOI, and DOC ARRT representatives and, when appropriate, the State On-Scene Coordinator (SOSC), will be conducted by a qualified third party (who is acceptable to the Unified Command and the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC) or by the USCG Strike Team/SMART Team. All SMART Tier 1, 2, and 3 monitoring will be performed in accordance with procedures in the most current SMART protocols (see Tab 3, Part 1).

- For every dispersant application, the FOSC will ensure that all required monitoring is conducted. The resulting information will be analyzed and used on a daily basis to determine whether dispersant application(s) will continue, be postponed, or cease and whether any modification(s) need to be made.
- Environmental monitoring for atypical use of dispersants will be guided by the NRT "Environmental Monitoring for Atypical Dispersant Operations" (see Tab 4, Part 2).
- All monitoring that includes sampling will be conducted in accordance with a Quality Assurance Project Plan that addresses sample collection methodology, handling, chain of custody, and decontamination procedures (see Tab 4, Part 2, Section 4).
- For every dispersant application, FOSCs shall comply with the Reasonable and Prudent Measures (RPM) (with implementing Terms and Conditions) for dispersant use from the May 15, 2015 NMFS ESA Biological Opinion and, to the maximum extent practicable, follow the Conservation Recommendations for dispersant use from the May15, 2015 NMFS ESA Biological Opinion and the February 27, 2015 USFWS ESA Biological Opinion.

2.2 Considerations

As noted in Section 1.2, decisions to use dispersants in Alaska's marine waters involve trade-offs that reflect the complex interplay of many variables. The evaluation of incident-specific trade-offs in the dispersant use decision-making process will at a minimum, take into account the following considerations:

- Bathymetry - it is generally recognized that adequate mixing and dilution of dispersants should occur if applied in waters deeper than 10 fathoms (or 60 feet) depth provided there is sufficient energy for mixing. The 10 fathom contour is a standard depth contour line included on National Oceanic and Atmospheric Administration marine charts.

- Distance from shore - an adequate buffer needs to be established to reduce the chances of applying dispersants to sensitive shorelines/nearshore areas and to ensure that drifting dispersant and/or dispersed oil mixtures do not adversely affect intertidal and benthic biota.
- Mixing energy - areas where there is generally little movement of water (e.g., calm sea state or areas with low water exchange rates) would not provide sufficient mixing energy for effective dispersant use. In contrast, with higher wind speeds (beginning at 12-14 meters per second (26.8 to 31.3 miles per hour)), the benefits of dispersant application start to diminish compared to natural dispersion.
- Salinity - most dispersants are made for use in saltwater and are not effective in fresh water or waters with a salinity of less than 15 parts per thousand.
- Temperature - dispersant effectiveness will be affected by ambient water temperatures, with more complete dispersion in warmer waters. It is important to consider the oil's pour point (temperature at which a substance becomes semi-solid and loses its flow characteristics) in relation to the water temperature which may impact the dispersibility of the oil (e.g., Alaska North Slope crude oil has a pour point of -19° Celsius or -2.2° Fahrenheit).
- Response equipment - the availability and time to mobilize response equipment may affect whether dispersants can be used.
- Weather and sea conditions - dispersant application systems and platforms can be limited by weather and sea conditions. Generally, aerial applications require winds ≤25 knots (28.77 miles/hour), visibility ≥3 nautical miles (3.45 miles), and ceilings ≥1,000 feet. Generally for boat application, a sea state that will allow the vessel to conduct an effective and safe spray operation is required.
- Shoreline types - certain shoreline types (e.g., gravel, mixed sand and gravel, coarse-grained sand beaches, and marshes) may trap oil for long periods. The amount of wave energy (e.g., protected inlets vs. high-energy exposed beaches) will also affect oil retention and persistence.
- Sensitive habitats - certain habitats where biota breed, rear young, feed, or congregate (e.g., eelgrass beds, kelp beds, saltwater marshes, and designated critical habitats for threatened or endangered species) may be adversely affected by oil and/or dispersed oil. The potential effects to these habitats may vary by season.
- Sensitive species (i.e. MMPA covered and threatened or endangered species) – these species may be adversely affected by oil and/or dispersed oil. The potential effects to these species may vary by season.
- Other areas designated for special use or protection - these areas (e.g., national and state parks, national wildlife refuges, and wildness areas) may be adversely affected by oil and/or dispersed oil.
- Historic properties - these resources (e.g. archeological and historic resources) may be adversely affected by oil and/or dispersed oil.
- Subsistence use activities – these activities may be adversely affected by oil and/or dispersed oil. The potential effects to these activities may vary by season.

- Other human use activities - these activities (e.g., fishing and boating) may be adversely affected by oil and/or dispersed oil. The potential effects to these activities may vary by season.
- Public and private facilities – these facilities (e.g., fish hatcheries, aquaculture and mariculture facilities, public water intakes, and docks) may be adversely affected by oil and/or dispersed oil).

2.3 Conditions/Stipulations

The following conditions and stipulations shall be included in any dispersant application field test and in any subsequent authorization of full-scale dispersant application(s):

- All dispersant application field tests will be conducted on a representative portion of the oil slick.
- All dispersant applications will be conducted in accordance with the conditions and procedures identified in Tab 1. Dispersant application effectiveness and potential trade-offs associated with its use will be evaluated on a daily basis, informing the FOSC's decision to continue, postpone, modify, or cease dispersant application based on that day's monitoring information.
- Dispersant applications will only be carried out in daylight conditions.
- Dispersants will only be applied in areas where the water depth is ≥ 10 fathoms (60 feet) and at sufficient distances from shore to ensure that sensitive near-shore and benthic habitats are not affected by dispersants and/or dispersed oil.
- Dispersants applications will maintain a minimum 500 meters (1,640 feet) horizontal separation from swarming fish[10], rafting flocks of birds, marine mammals in the water, and/or marine mammal haul-outs.
- To avoid disturbances at walrus haul-outs, any dispersant-related aircraft will comply with any Federal Aviation Administration Temporary Flight Restriction(s) and Notice to Airmen and/or aviation restrictions issued by the U.S. Fish and Wildlife Service (FWS). In addition, any dispersant-related vessel(s) will comply with any USCG Notice to Mariners and/or FWS restrictions for walrus haul-outs.
- Any monitoring required by FWS and/or National Marine Fisheries Service for Endangered Species Act Section 7 compliance will be conducted.
- DOI and/or DOC will provide a specialist in aerial surveying of marine mammals and pelagic birds to accompany a SMART Tier 1 monitoring team to help ensure compliance with the above requirements. If DOI and/or DOC cannot provide the appropriate specialist(s), a third party acceptable to the DOI and/or DOC will be identified to accompany the monitoring team.
- Any atypical use of dispersants will be guided by the NRT "Environmental Monitoring for Atypical Dispersant Operations" (see Tab 3, Part 2).
- Information on the location of all dispersant application(s) will be provided to the public, including posting on the ARRT web site.
- Other incident-specific conditions/stipulations: _____
  _____
  _____
  _____

[10] Swarming fish include schools of fish that are active and visible at the surface of the water.

TAB 1. PROCESS FOR DISPERSANT USE AUTHORIZATION

Part 1A: Process for Dispersant Use in the Preauthorization Area[1]

The following information outlines the procedure that shall be followed when the Federal On-Scene Coordinator (FOSC) has made a decision to authorize the use of dispersants on a crude oil discharge within the dispersant Preauthorization Area[2]:

1. The FOSC directs the Responsible Party (RP) to mobilize resources for dispersant use, while the RP and the Environmental Unit (EU) of the Incident Command immediately begin to complete the checklists contained in Parts 2-3. This checklist information will be used to inform the decision to authorize dispersant use and establish the parameters of the incident-specific use, as appropriate. If there is no RP identified, the FOSC, serving as the "Requestor," may direct mobilization of resources for dispersant use as noted above.
2. The FOSC immediately notifies the following entities of the decision to authorize the use dispersants:
   - U.S. Environmental Protection Agency (EPA) Alaska Regional Response Team (ARRT) representative
   - U.S. Department of the Interior (DOI) ARRT representative
   - U.S. Department of the Commerce (DOC) ARRT representative
   - State On-Scene Coordinator (SOSC)
   - Representative for each appropriate federally-recognized tribe
   - Representative for each appropriate stakeholder group (e.g., local government(s), Native corporation(s), regional citizens' advisory council(s))
3. The FOSC directs appropriate entities (i.e., previously-agreed upon third party (or parties) and/or USCG Strike Team/Special Monitoring of Applied Response Technologies [SMART] Team) to mobilize Tier 1, 2, and 3 monitoring capabilities.
4. The FOSC initiates, as appropriate, spill-specific Endangered Species Act (ESA) Section 7 consultation(s) with U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (NMFS) representatives in accordance with the ESA Memorandum of Agreement (see Annex K of the *Unified Plan*).
5. The FOSC initiates, as appropriate, spill-specific Essential Fish Habitat consultation with a NMFS representative.
6. The National Oceanic and Atmospheric Administration (NOAA) Scientific Support Coordinator (SSC) and EU, in coordination with the Operations Section, provide any necessary supporting information (e.g., ADIOS model runs, currents, water temperature, salinity, and fish and wildlife observations) required in Parts 2-3. The completed Parts 2-3

[1] The Preauthorization Area goes into effect 24 months after ARRT approval of this plan. Until that time, any requests for dispersant use in the Preauthorization Area shall follow the process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B.

[2] These steps assume that the FOSC will be working within a Unified Command structure and that all input related to dispersant use authorization(s) will be provided to the FOSC within the timeframe required by the FOSC.

are submitted by the EU Leader to the FOSC. The FOSC completes Questions 1-17 in Part 4. The completed Parts 2-4 are provided to other members of the Unified Command (UC) and representatives identified in Step 2 above.

7. An individual representing the FOSC holds a teleconference (at a time determined by the FOSC) with individuals identified in Step 2 above, appropriate members of the EU, and the UC for the purpose of informing the FOSC's decision to use dispersants.

8. The FOSC completes Questions 18-20 in Part 4, documents any changes to Parts 2-4, and completes Part 5 prior to proceeding with a dispersant application field test (following Steps 9-15 below, as appropriate) or postponing or cancelling the field test.

9. The Dispersant Field Task Force (DFTF)[3] advises the FOSC that dispersant application and monitoring personnel, equipment, and supplies are staged and ready to deploy for a dispersant application field test.

   If vessels serving as SMART Tier 2 and 3 monitoring platforms are unable to travel within seven hours to a spill site, as stated in Section 2.1 (Policies)[4], an initial field test will be conducted using only SMART Tier 1 monitoring.

10. The DFTF, under the supervision of the FOSC, conducts a dispersant application field test and all required monitoring.

11. The NOAA SSC, using the results of the SMART Tier 1, 2, and 3 monitoring, determines whether the dispersant is effectively dispersing the oil, documents the basis for that determination, and provides the information to the EU.

    In cases where only SMART Tier 1 monitoring has been conducted, the NOAA SSC will make an initial determination based on the results of SMART Tier 1 monitoring, whether the dispersant appears to be effectively dispersing the oil, documents the basis for that determination, and provides the information to the EU.

12. The EU provides to the FOSC, other members of the UC, and individuals identified in Step 2 above, a recommendation on whether full-scale dispersant application(s) should commence with any modification(s) and/or any additional monitoring requirements.

    In cases where only SMART Tier 1 monitoring has been conducted, the EU will provide to the FOSC, other members of the UC, and individuals identified in Step 2 above, a recommendation on whether to proceed with a second field test using SMART Tier 1, 2, and 3 monitoring and return to Step 10, as appropriate.

[3] The DFTF includes all dispersant application and dispersant monitoring teams.

[4] All dispersant applications (including field tests) will include SMART Tier 1, Tier 2, and Tier 3 monitoring. In cases where vessels serving as Tier 2 and 3 monitoring platforms are unable to travel within seven hours to a spill site, an initial field test will be conducted using Tier 1 monitoring. Prior to the FOSC authorizing any full-scale dispersant application, a second field test will be conducted within 24 hours following the FOSC's decision to use dispersants or as soon as possible thereafter. The second field test will include Tier 1, 2, and 3 monitoring.

13. An individual representing the FOSC holds a teleconference (at a time determined by the FOSC) with individuals identified in Step 2 above, appropriate members of the EU, and the UC for the purpose of informing the FOSC's decision to authorize any full-scale dispersant application(s) or to postpone or cancel authorization of dispersant application(s). [The frequency of teleconferences following any first full-scale dispersant application will be determined on an incident-specific basis by the FOSC, the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC. Those teleconferences will inform the FOSC's decision to continue, postpone, modify, or cease authorization of full-scale dispersant application(s).]
14. The FOSC determines whether to authorize full-scale dispersant application(s) with any modification(s) and/or any additional monitoring requirements will begin, be postponed, or cancelled; documents any revisions to Parts 2-5; and provides the information to the rest of the UC and individuals identified in Step 2 above. For any atypical use of dispersants[5], any additional dispersant use will be considered via the Process for Case-by-Case Dispersant Use Authorization in Tab 1, Part 1B.
15. After the response for this incident has been completed, the FOSC will complete a Dispersant Use After-Action Report (as required in Tab 2) for submittal to all signatories in Part 5, all members of the UC, ARRT, and National Response Team, and other individuals identified in Step 2 above. The report will also be posted on the ARRT public website.

[5] Atypical use of dispersants is defined to include: (1) full scale dispersant application ongoing for, or expected to exceed or exceeding 96 hours following the dispersant application field test, and/or (2) the use of dispersants subsea; i.e., below the water surface.

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Tab 1, Part 1B: Process for Case-by-Case Dispersant Use Authorization

The following information outlines the procedure that shall be followed when the application of dispersants into marine waters in Alaska is being proposed as a response option (1) for discharges of any type of oil in an Undesignated Area; (2) for discharges of any type of oil other than crude oil, in a Preauthorization Area; (3) in the event it is not possible (e.g., due to logistical, weather, and/or sea conditions as confirmed or determined by the FOSC) to conduct SMART Tier 2 and 3 monitoring in the Preauthorization Area; (4) any atypical use of dispersants[1] or any use of dispersant subsea (i.e., below the surface) in a Preauthorization Area or in an Undesignated Area; and/or (5) for discharges of crude oil in a Preauthorization Area within 24 months following Alaska Regional Response Team (ARRT) approval of this plan[2]:

1. The Responsible Party (RP), serving as the Requestor, notifies the Federal On-Scene Coordinator (FOSC) of their intention to prepare and submit a Dispersant Use Request (see Part 2). Depending on the timing and need to move quickly, the FOSC may direct the RP to begin mobilizing equipment, materials, and personnel in preparation to implement the dispersant use plan to be proposed. [If there is no RP identified, the FOSC may serve as the Requestor.]
2. The FOSC immediately notifies the following entities of the RP's intent to submit a Dispersant Use Request:
   - U.S. Environmental Protection Agency (EPA) ARRT representative
   - U.S. Department of the Interior (DOI) ARRT representative
   - U.S. Department of Commerce (DOC) ARRT representative
   - State On-Scene Coordinator (SOSC)
   - Representative for each appropriate federally-recognized tribe
   - Representative for each appropriate stakeholder group (e.g., local government(s), Native corporation(s), regional citizens' advisory council(s))
3. Depending on the timing and need to move quickly, the FOSC directs appropriate entities (i.e., previously-agreed upon third party (or parties) and/or USCG Strike Team/Special Monitoring of Applied Response Technologies [SMART] Team) to mobilize Tier 1, 2, and 3 monitoring capabilities.
4. The FOSC initiates, as appropriate, spill-specific Endangered Species Act (ESA) Section 7 consultation(s) with U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (NMFS) representatives in accordance with the ESA Memorandum of Agreement (see Annex K of the *Unified Plan*).
5. The FOSC initiates, as appropriate, spill-specific Essential Fish Habitat consultation with a NMFS representative.

[1] Atypical use of dispersants is defined to include: (1) full scale dispersant application ongoing for, or expected to exceed or exceeding 96 hours following the dispersant application field test, and/or (2) the use of dispersants subsea; i.e., below the water surface.

[2] These steps assume that the FOSC will be working within a Unified Command structure and that all input related to dispersant use authorization(s) will be provided to the FOSC within the timeframe requested by the FOSC.

Tab 1, Part 1B: Process for Case-by-Case Dispersant Use Authorization, Cont.

6. The National Oceanic and Atmospheric Administration (NOAA) Scientific Support Coordinator (SSC) and Environmental Unit (EU), in coordination with the Operations Section, provide any necessary supporting information (e.g., ADIOS model runs, currents, water temperature, salinity, and fish and wildlife observations) required in Parts 2-3. The completed Parts 2-3 are submitted by the EU Leader to the FOSC. The FOSC completes Questions 1-17 in Part 4.

7. An individual representing the FOSC holds a teleconference (see procedure listed below) with individuals identified in Step 2 above, the Unified Command (UC), and appropriate members of the EU for the purpose of the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, to take action on the Dispersant Use Request.

Teleconference Procedure for Dispersant Application Field Test

Individual representing the FOSC:

- Confirms when the FOSC requires input from all parties identified in Step 2 above.
- Provides to all parties identified in Step 2 above, information on the teleconference time and call-in number, and copies of Parts 2-4.
- Chairs the teleconference and: (1) conducts roll call, recording name, title, and affiliation of teleconference participants; (2) requests (from the Requestor) a brief summary/overview of the plan for the proposed dispersant application field test (field test); (3) directs questions to the appropriate UC or EU representative(s); (4) requests input from the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC; (5) requests input from federally-recognized tribes and stakeholders; (6) facilitates development of a consensus recommendation (if possible) by the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, on the proposed field test, including any special considerations, constraints, permit requirements, and/or special authorizations; (7) queries the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, for their summary input on the proposed field test; and (8) verbally summarizes input received.
- Prepares and provides as soon as possible to the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, a draft written summary of the teleconference results along with the names, titles, and affiliations of teleconference participants. Incorporates as soon as possible any corrections to the summary provided by the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, and immediately provides the final summary to the UC with a copy to each teleconference participant.

8. The FOSC completes Questions 18-20 in Part 4 and documents any changes to Parts 2-4; the FOSC, the EPA, DOI and DOC ARRT representatives and, when appropriate, the SOSC, complete Part 5, prior to proceeding with a dispersant application field test (following Steps 9-15 below, as appropriate) or postponing or cancelling the field test as determined in the above procedure.

Tab 1, Part 1B: Process for Case-by-Case Dispersant Use Authorization, Cont.

9. The Dispersant Field Task Force (DFTF)[3] advises the FOSC that dispersant application and monitoring personnel, equipment, and supplies are staged and ready to deploy for a dispersant application field test.
10. The DFTFs, under the supervision of the FOSC, conducts a dispersant application field test and all required monitoring.
11. The NOAA SSC, using the results of the SMART Tier 1, 2, and 3 monitoring, determines whether the dispersant is effectively dispersing the oil, documents the basis for that determination, and provides the information to the EU.
12. The EU provides to the FOSC, other members of the UC, and individuals identified in Step 2 above, a recommendation on whether full-scale dispersant application(s) should commence with any modification(s) and/or any additional monitoring requirements.
13. An individual representing the FOSC holds a teleconference (see procedure listed below) with individuals identified in Step 2 above, the UC, and appropriate members of the EU for the purpose of the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, to take action on a request for full-scale dispersant application(s). [The frequency of teleconferences following any first full-scale dispersant application will be determined on an incident-specific basis by the FOSC, the EPA, DOI, DOC ARRT representatives and, when appropriate, the SOSC. Those teleconferences will reconsider the decision to continue, postpone, or cease full-scale dispersant application(s). For any atypical use of dispersants[4] , a teleconference will be held to reconsider the decision to continue dispersant application(s).]

Teleconference Procedure for Full-Scale Dispersant Application

Individual representing the FOSC:

- Confirms when the FOSC requires input from all parties identified in Step 2 above.
- Provides to all parties identified in Step 2 above, information on the teleconference time and call-in number and any revisions to Parts 2-4 made following any dispersant application field test(s) and/or the EU's recommendation regarding whether full-scale dispersant application(s) should commence with any modification(s) and/or any additional monitoring requirements.
- Chairs the teleconference and: (1) conducts roll call, recording name, title, and affiliation of teleconference participants; (2) requests (from the Requestor) a brief summary/overview of the plan for the proposed full-scale dispersant application (full-scale application); (3) directs questions to the appropriate UC or EU

[3] The DFTF includes all dispersant application and dispersant monitoring teams.

[4] Atypical use of dispersants is defined to include: (1) full scale dispersant application ongoing for, or expected to exceed or exceeding 96 hours following the dispersant application field test, and/or (2) the use of dispersants subsea; i.e., below the water surface.

representative(s); (4) requests input from the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC; (5) requests input from appropriate federally-recognized tribes

Tab 1, Part 1B: Process for Case-by-Case Dispersant Use Authorization, Cont.

and stakeholders; (6) facilitates development of a consensus recommendation (if possible) by the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, on the proposed full scale application, including any special considerations, constraints, permit requirements, and/or special authorizations; (7) queries the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, for their summary input on the proposed full-scale application; and (8) verbally summarizes input received.

- Prepares and provides as soon as possible to the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, a draft written summary of the teleconference results along with the names, titles, and affiliations of teleconference participants. Incorporates as soon as possible any corrections to the summary provided by the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC, and immediately provides the final summary to the UC with a copy to each teleconference participant.

14. The FOSC documents any changes to Parts 2-4. In addition, the FOSC, the EPA, DOI and DOC ARRT representatives and, when appropriate, the SOSC complete Part 5 prior to commencing, postponing, or cancelling full-scale dispersant application(s) as determined through the above procedure. Any revisions to Parts 2-5 will be provided to the rest of the UC and individuals identified in Step 2 above.
15. After the response for this incident has been completed, the FOSC will complete a Dispersant Use After-Action Report (as required in Tab 3) for submittal to all signatories in Part 5, all members of the UC, ARRT, and National Response Team, and other individuals identified in Step 2 above. The report will also be posted on the ARRT public website.

Tab 1, Part 2: Dispersant Use Request

INCIDENT NAME		Date Prepared:	
		Time Prepared:	
INCIDENT LOCATION		**REQUESTOR INFORMATION**	
Latitude:		Name:	
Longitude:		Affiliation:	
Description:		Address:	
		Phone:	
		Cell Phone:	
Incident Date:		Fax:	
Incident Time:		Email:	

Areas dispersants to be applied in: ☐ Preauthorization Area ☐ Undesignated Area

BASIC DATA

Type of incident (check one):
- ☐ Grounding
- ☐ Transfer operations
- ☐ Explosion
- ☐ Collision
- ☐ Allision
- ☐ Blowout
- ☐ Other _____

Oil discharged: API:
- ☐ North Slope Crude _____
- ☐ Cook Inlet Crude _____
- ☐ Residuals _____
- ☐ Diesel #2 _____
- ☐ JP4 _____
- ☐ Other: _____

Estimated volume of oil discharged/discharge rate:
_____ gallons; _____ gallons per _____

Potential oil discharge volume estimate:
_____ gallons

Oil discharge status (check one):
- ☐ Continuous
- ☐ Intermittent
- ☐ One time only, now stopped

Current estimate of water surface covered by oil as of:
Date/Time: _____ Area: _____ sq. mil.

Did source burn? ☐ Yes ☐ No
Is source still burning? ☐ Yes ☐ No
Is oil easily emulsified? ☐ Yes ☐ No

RESPONSE CONSIDERATIONS

Are mechanical recovery and/or in situ burning (alone or in combination) infeasible, ineffective, and/or inadequate?
If so, why?
_____
_____
_____
_____

Will *in-situ* burning (ISB) also be used? ☐ Yes ☐ No
Will mechanical recovery also be used? ☐ Yes ☐ No
Will dispersant use impede mechanical recovery and/or in situ burning? ☐ Yes ☐ No
If yes, explain how this will be resolved:
_____
_____
_____

ADIOS MODEL

Has ADIOS been run by a qualified person? ☐ Yes ☐ No
Identify individual and affiliation: _____
If yes, please fill out the following ADIOS input parameters:
Wind speed _____ Water temp. _____
ADIOS output parameters to be specified:
- Percentage evaporation
- Viscosity change
- Water percentage or emulsification over a 5-day period

Tab 1, Part 2: Dispersant Use Request, Cont.

WEATHER AND SEA CONDITIONS

Check boxes and enter wind values in the following table:

	Present Condition	12-hour Forecast	24-hour Forecast
Clear			
Partly cloudy			
Overcast			
Rain			
Snow			
Fog			
Wind speed (knots/mph)			
Wind direction (from)			

Visibility (miles): _____

Tidal state at _____ o'clock (check one):

☐ Slack tide ☐ Incoming (flood) ☐ Outgoing (ebb)

✓ **Attachment 1:** Graph with tidal information for 3 tidal cycles.

Dominant current (net drift):

Speed (knots): _____ Direction (to): _____

Sea state: present condition (check one)

☐ Calm ☐ Choppy ☐ Swell

Sea state: 24-hour forecast (check one)

☐ Calm ☐ Choppy ☐ Swell

Waves (height estimate), present condition: _____ feet

Waves (height estimate), 24-hr forecast: _____ feet

Depth of water at slick: _____ feet

Water temperature: _____ degrees C and F

Water salinity: _____ parts/thousand

If ice is present, describe: _____

_____

_____

Next sunrise: _____ Next sunset: _____

WILDLIFE INFORMATION

Have fish swarms, birds, and/or marine mammals been observed near the oil slick?

☐ Yes ☐ No If yes, please answer the following:

Type observed (e.g., birds, sea otters, seals, whales, fish)	Estimated Number

*(Include in the chart being submitted as **Attachment 2** the proximity of the above observed fish and wildlife)*

DISPERSANT USE PLAN

Proposed date and time for application of dispersants:

Date: _____ Time: _____

Distance to nearest staging area (airport/facility):

_____ mi

What is the dispersant proposed for use?

☐ _____

Safety Data Sheet (SDS) attached? ☐ Yes ☐ No

What is the proposed dispersant to oil ratio? _____:_____

How much total dispersant per acre is proposed?

_____ gallons

What is the estimated percentage of spill slick area to be treated? _____ percent

Who will apply the dispersants?

Individual/Affiliation: _____

Application Method	Estimated Dispersant Capacity Per Sortie	Estimated Number of Sorties
☐ Boat		
☐ C-130		
☐ CASA		
☐ Helicopter		
☐ Other:		

Distance from source: _____ miles

Distance from nearest shoreline: _____ miles

✓ **Attachment 2:** Provide a chart with a distance scale. Chart must include: 1) estimated spill trajectory and landfalls with time; 2) location and distance of proposed dispersant application relative to zone boundaries, proposed dispersant application field test location, and other response activities including ISB; 3) dispersant tactic summary and how it will augment the mechanical response, if used; and 4) fish and wildlife locations relative to the oil slick.

DISPERSANT USE HEALTH AND SAFETY PLAN

Does the site-specific health and safety plan cover the dispersant use plan? ☐ Yes ☐ No

✓ **Attachment 3**: Relevant portion of health and safety plan, including MSDS.

Tab 1, Part 2: Dispersant Use Request, Cont.

DISPERSANT SYSTEM APPLICATION

Application system design:

- Designed specifically for this purpose? ☐ Yes ☐ No
- Used previously for this purpose? ☐ Yes ☐ No
- Tested to be effective and safe? ☐ Yes ☐ No
- Meet manufacturer's recommendations? ☐ Yes ☐ No
- System components meet the most current ASTM standards:

  ASTM F1737/1737M-10 *Standard Guide for Use of Oil Spill Dispersant Application Equipment During Spill Response: Boom and Nozzle Systems*? ☐ Yes ☐ No

  ASTM F1413-07(2013) *Standard Guide for Use of Oil Spill Dispersant Application Equipment During Spill Response: Boom and Nozzle Systems?* ☐ Yes ☐ No

  ASTM 1460-07(2013) *Standard Practice for Calibrating Oil Spill Dispersant Application Equipment: Boom and Nozzle Systems*? ☐ Yes ☐ No

  ASTM 1738-10 *Standard Test Method for Determination of Deposition of Aerially Applied Oil Spill Dispersants?* ☐ Yes ☐ No

  ASTM F2465/F2465M-05(2011)e1 *Standard Guide for Oil Spill Dispersant Application Equipment: Single-point Spray Systems*? ☐ Yes ☐ No

Application personnel are trained and/or experienced in the use of dispersants and this application system? ☐ Yes ☐ No

Aerial application system:

- A qualified Dispersant Controller will be in a separate aircraft over the spray area(s)? ☐ Yes ☐ No
- Dispersant Controller will be able to direct operations and avoidance of fish and wildlife? ☐ Yes ☐ No

Boat application system:

- A qualified Dispersant Controller will oversee operations? ☐ Yes ☐ No

✓ **Attachment 4**: Description of dispersant application system and application team personnel name(s), title(s), affiliation(s), and qualifications.

COMMUNICATIONS PLAN

Describe the communications plan to be used for communications between and among the Unified Command, Dispersant Controller, SMART Team, and dispersant applications platform(s):

DISPERSANT MONITORING

Indicate the SMART monitoring to be used:

- Tier 1: ☐ Yes ☐ No
- Tier 2: ☐ Yes ☐ No
- Tier 3: ☐ Yes ☐ No

Describe other monitoring to be used:

Describe monitoring platform(s) that will be used:

Identify name, title, affiliation, and qualification of each monitoring team member:

SIGNATURES

Requestor:

_____
Requester's Printed Name and Signature

Requester contact cell phone: _____

Date and time submitted to FOSC and, when appropriate, the SOSC:

_____ _____
Date Time

Received by:

_____ _____
FOSC Printed Name and Signature Date/Time

_____ _____
SOSC Printed Name and Signature Date/Time

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Tab 1, Part 3: Incident-Specific Resources and Resource Use at Risk

A. Information Considered

- ☐ Sensitive Areas information in the subarea contingency plan(s) (SCPs) for this incident, including any locations where dispersant use should be avoided
- ☐ Relevant Geographic Response Strategies in appropriate SCPs for this incident
- ☐ Incident-specific on-scene observations (e.g., by responders, local agency representatives, and local residents); identify name/affiliation: _____
- ☐ Others: _____

B. Biological Species (may not be a complete list of species present)

	Present/Absent/ or Unknown	Other Relevant Information	Used for Subsistence?
Endangered/Threatened/Candidate Species:			
Migratory birds (specify)			
Sea otters (southwest Distinct Population Segment)			
Polar bears			
Seals (specify)			
Toothed whales (specify)			
Baleen whales (specify)			
Sea Lions			
Other Species:			
Seabirds			
Diving birds (unlisted populations)			
Waterfowl (unlisted populations)			
Shorebirds			
Raptors (unlisted populations)			
Sea Otters (unlisted populations)			
Walruses			
Fur seals			
Other seals (unlisted populations)			
Toothed whales (unlisted populations)			
Baleen whales (unlisted populations)			
Ungulates			
Bears (brown and/or black)			
Furbearers			
Fish:			
Pelagic and larval			
Bottomfish			
Intertidal mollusks			
Crustacea			
Plankton (including larval species)			

Tab 1, Part 3: Incident-Specific Resources and Resource Use at Risk, Cont.

C. Habitat Types

	Present/Absent/Unknown	Other Relevant Information
Salt/brackish-water marshes		
Eelgrass beds/kelp beds		
Tidal mudflats		
Sheltered rocky shores/shallow reefs		
Gravel beaches		
Mixed sand and gravel beaches		
Coarse-grained sand beaches		
Peat shorelines		
Inundated low-lying tundra		
Ice (seasonal, multi-year)		
Marine mammal haul-outs/rookeries		
Migratory bird nesting colonies		
Fish spawning grounds		
Others:		

D. Special Designations

	Present/Absent/Unknown	Other Relevant Information
ESA designated critical habitats		
Essential Fish Habitat		
Legislatively-designated areas		
Native allotments		
Others:		

E. Historic Properties

	Present/Absent/Unknown	Other Relevant Information
Historic Resources		
Archaeological Resources		
Others:		

F. Other Considerations

	Present/Absent/Unknown	Other Relevant Information
Commercial harvest areas		
Subsistence harvest areas		
Recreational use areas		
Mariculture facilities		
Commercial facilities/activities		
Public infrastructure		
Others:		

Tab 1, Part 4: FOSC Dispersant Authorization Checklist*

	YES	NO	CONSIDERATIONS
1.	☐	☐	***Dispersant Use Request Received:*** The Requestor has submitted a completed Dispersant Use Request (Part 2).
			Notifications: The following entities have been notified of the potential dispersant use for this incident:
2a.	☐	☐	a) State On-Scene Coordinator (SOSC)
2b.	☐	☐	b) U.S. Environmental Protection Agency (EPA) Alaska Regional Response Team (ARRT) representative
2c.	☐	☐	c) U.S. Department of the Interior (DOI) ARRT representative
2d.	☐	☐	d) U.S. Department of Commerce (DOC) ARRT representative
2e.	☐	☐	e) Appropriate federally-recognized tribes (identify representative(s)): _____
2f.	☐	☐	f) Appropriate stakeholders (e.g., local governments, Native corporations, regional citizens' advisory councils) (identify representative(s)): _____
2g.	☐	☐	g) Agreed-upon monitoring team(s) and/or USCG Strike Team/Special Monitoring of Applied Response Technologies (SMART) Team.
3.	☐	☐	***Endangered Species Act (ESA) Consultations:*** The U.S. Fish and Wildlife Service (FWS) and/or National Marine Fisheries Service (NMFS) Incidental Take Statement *Reasonable and Prudent Measures* have been complied with and/or arrangements to comply have been made. ESA contact(s) have been notified and, if appropriate, ESA Section 7 consultation(s) have begun in accordance with the ESA MOA
4.	☐	☐	***Essential Fish Habitat (EFH) Consultations:*** NMFS EFH contact has been notified and, if appropriate, EFH consultations have begun.
5.	☐	☐	***Dispersibility:*** Available technical and scientific information, including results from the ADIOS model, suggests that the discharged oil is dispersible. The analysis delineates the conditions and timeframe in which the oil is no longer dispersible. Identify source(s) relied upon: _____
6.	☐	☐	***NCP Listed Dispersant:*** The dispersant to be used is listed on the current NCP Product Schedule, is considered appropriate for the existing environmental and physical conditions, and its use is consistent with the recommended application information provided in the NCP Product Schedule Technical Notebook. Identify source(s) relied upon: _____
			Response Considerations:
7a.	☐	☐	a) Has mechanical response been deemed to be ineffective and/or inadequate? If yes, specify reason(s) (e.g., availability, effectiveness, timeliness, sea state, spatial coverage, weather conditions): _____
7b.	☐	☐	b) Is dispersant application being used to supplement mechanical recovery?
7c.	☐	☐	c) Is *in-situ* burning being considered in conjunction with mechanical recovery and dispersant use?
7d.	☐	☐	d) Is a map illustrating timing, tactics, and proximity of each response option to each other attached?
			Dispersant Availability and Timeliness: Sufficient dispersant application and monitoring equipment has been confirmed to be available:
8a.	☐	☐	a) to meet the conditions of use in the Dispersant Use Plan (see Part 2), and
8b.	☐	☐	b) to be deployable within the conditions and time frame the oil will be dispersible.
			Weather and Sea Conditions:
9a.	☐	☐	a) Are predicted weather and sea conditions are conducive to dispersant application by the chosen system or platform. (Generally, for aerial application, wind ≤ 25 knots (28.77 miles/hour), visibility ≥ 3 nautical miles (3.45 miles), and ceilings ≥1,000 feet. Generally for boat application, a sea state that will allow the vessel to be used to conduct an effective and safe spray operation is required.) Identify any updated conditions: _____
9b.	☐	☐	b) Does the water have a salinity greater than 15 parts per thousand?
9c.	☐	☐	c) Is there sufficient mixing energy for effective dispersant use?

Tab 1, Part 4: FOSC Dispersant Authorization Checklist, Cont.

	YES	NO	CONSIDERATIONS
10.	☐	☐	***Distance from Shore:*** Has an adequate buffer been established to reduce the chances of applying dispersants to sensitive shorelines/nearshore areas and to ensure that drifting dispersant and/or dispersed oil mixtures do not adversely affect intertidal and benthic biota?
11.	☐	☐	***Personal Protective Equipment (PPE):*** PPE for all personnel involved in, or affected by, dispersant application conforms to the site-specific health and safety plan and has been confirmed to be available.
			General Adequacy of Dispersant Spray System and Personnel Competency: Note: The general criteria for evaluating the suitability for use of any dispersant system is the ability of the Requestor to demonstrate to the satisfaction of the FOSC, the following: Has the application system been:
12a.	☐	☐	a) Specifically designed for its intended purpose, or
12b.	☐	☐	b) If not specifically designed for dispersant use, used previously and deemed to be effective and appropriate, and will be used again in a similar manner, or
12c.	☐	☐	c) If not specifically designed and not previously used for dispersant application, deemed to be effective and appropriate by some other specific means; if so, identify specific means: _____
12d.	☐	☐	d) Is the design and operation of the application system such that it can reasonably be expected to apply the chemical dispersant in a manner consistent with the dispersant manufacturer's recommendation, especially with regards to dosage rates, and concentrations?
12e.	☐	☐	e) Will the dispersant application be supervised by personnel that have experience, knowledge, specific training, and/or recognized competence with chemical dispersants and the type of system to be used?
			ASTM Standards for Aerial and/or Boat Dispersant Applications: Do the system components meet the most current ASTM Standards (identified below or updated when new standards are issued):
13a.	☐	☐	a) ASTM F1737/1737M-10 *Standard Guide for Use of Oil Spill Dispersant Application Equipment During Spill Response: Boom and Nozzle Systems*?
13b.	☐	☐	b) ASTM F1413-07(2013) *Standard Guide Use of for Oil Spill Dispersant Application Equipment During Spill Response: Boom and Nozzle Systems?*
13c.	☐	☐	c) ASTM 1460-07(2013) *Standard Practice for Calibrating Oil Spill Dispersant Application Equipment: Boom and Nozzle Systems?*
13d.	☐	☐	d) ASTM 1738-10 *Standard Test Method for Determination of Deposition of Aerially Applied Oil Spill Dispersants?*
13e.	☐	☐	e) ASTM F2465/F2465M-05(2011)e1 *Standard Guide for Oil Spill Dispersant Application Equipment: Single-point Spray Systems*?
			Aerial Application Operational and Technical Issues: In the case of aerial application of dispersants:
14a.	☐	☐	a) Is there a Dispersant Controller who will be over the spray area(s) in a separate aircraft from the dispersant aircraft while dispersants are being applied?
14b.	☐	☐	b) Is the Dispersant Controller qualified and able to direct the dispersant aircraft to maintain a 500 meter (1,640 feet) horizontal separation between the dispersant application and swarming fish, rafting flocks of birds, marine mammals in the water, and marine mammal haul-outs?
14c.	☐	☐	c) Is the aircraft spray system capable of producing dispersant droplet sizes that provide for optimal dispersant effectiveness (generally 250-500 µm), by following manufacturer and ASTM guidance?
15.	☐	☐	***Boat Application Operational Technical Issues:*** Is there a qualified Dispersant Controller who will oversee the dispersant operations?
			Monitoring Protocols/Deployment:
16a.	☐	☐	a) Have the agreed-upon monitoring team(s) and/ or USCG Strike Team SMART Team been activated?
16b.	☐	☐	b) Are they prepared to fly over the response area to conduct Tier 1 visual monitoring during every dispersant application?

Tab 1, Part 4: FOSC Dispersant Authorization Checklist, Cont.

	YES	NO	CONSIDERATIONS
16c.	☐	☐	c) Are they prepared to implement the Tier 2 and Tier 3 water column monitoring component of the SMART monitoring protocols for every dispersant application?
16d.	☐	☐	d) Are wildlife observers prepared to accompany Tier 1 monitors to watch for swarming fish, rafting flocks of birds, marine mammals in the water, and marine mammal haul-outs?
16e.	☐	☐	e) Are there additional monitoring requirements? If so, identify: _____ and indicate if appropriate entities are prepared to implement any additional requirement?
17.	☐	☐	***Communications:*** Has a communications plan been developed that will allow communications between and among the Unified Command, Dispersant Controller, all monitoring team(s), and dispersant applications platform(s)?
18.	☐	☐	***Natural Resource Trustee Input:*** Has the FOSC received input from natural resource trustees on incident-specific resources and resource use at risk (see Part 3)?
			Conditions/Stipulations: Will the following application conditions and stipulations be included in any dispersant application?
19a.	☐	☐	a) All dispersant application field tests will be conducted on a representative portion of the slick.
19b.	☐	☐	b) Dispersant application will be in accordance with the approved dispersant application plan.
19c.	☐	☐	c) Dispersants will only be applied in areas where the water depth is ≥ 10 fathoms (60 feet).
19d.	☐	☐	d) Dispersant applications will maintain a minimum 500 meters (1,640 feet) horizontal separation from swarming fish, rafting flocks of birds, marine mammals in the water, and marine mammal haul-outs.
19e.	☐	☐	e) Federal Aviation Administration Temporary Flight Restrictions and Notice to Airmen and/or FWS flight and vessel restrictions to avoid disturbing walrus on haul-outs will be followed.
19f.	☐	☐	f) Dispersant applications will only be carried out in daylight conditions.
19g.	☐	☐	g) DOI and/or DOC (or a third party observer acceptable to DOI and/or DOC) will provide a specialist in aerial surveying of marine mammals and/or pelagic birds to accompany the SMART observer.
19h.	☐	☐	h) Monitoring protocols required by EPA, State, and/or DOI and DOC natural resource trustees (e.g., ESA compliance) will occur.
19i.	☐	☐	i) Prolonged dispersant application will be guided by the NRT "Environmental Monitoring for Atypical Dispersant Operations."
19j.	☐	☐	j) SMART Tier 1, 2, and 3 monitoring will occur during any dispersant application.
19k.	☐	☐	k) Information on the location of all dispersant application(s) will be provided to the public within 48 hours, including posting on the ARRT web site.
20.	☐	☐	***SOSC, EPA, DOI, and DOC Input:*** Has the FOSC received input from the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC on the dispersant request?
21.	☐	☐	***Federally-Recognized Tribe Input:*** Has the FOSC received input from appropriate federally-recognized tribes?
22.	☐	☐	***Stakeholder Input:*** Has the FOSC received input from appropriate stakeholders on the dispersant request?

***** If "no" is checked for any of the above questions, the FOSC will document in Tab 1, Part 4, reasons for making that determination and what, if anything, may be done to change the response to "yes."

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Tab 1, Part 5: Dispersant Use Authorization Document[1]

Incident: _____

U.S. Department of the Interior Consultation by DOI ARRT Representative (for case-by case authorization only):

- o _____Does not support the use of dispersants (reasons attached)
- o _____Agrees with dispersant use in the selected areas under attached conditions
- o _____Agrees with dispersant use as requested in the application form

_____ _____ _____
Signature Printed Name Time/Date

U.S. Department of Commerce Consultation by DOC ARRT Representative (for case-by-case authorization only):

- o _____Does not support the use of dispersants (reasons attached)
- o _____Agrees with dispersant use in the selected areas under attached conditions
- o _____Agrees with dispersant use as requested in the application form

_____ _____ _____
Signature Printed Name Time/Date

U.S. Environmental Protection Agency Concurrence by EPA ARRT Representative (for case-by-case authorization only):

- o _____No dispersants may be applied (reasons attached)
- o _____Dispersants may be used in the selected areas under attached conditions
- o _____Dispersants may be applied as requested in the application form

_____ _____ _____
Signature Printed Name Time/Date

State of Alaska Concurrence by State On-Scene Coordinator (for case-by-case authorization only):

- o _____No dispersants may be applied (reasons attached)
- o _____Dispersants may be used in the selected areas under attached conditions
- o _____Dispersants may be applied as requested in the application form

_____ _____ _____
Signature Printed Name Time/Date

Federal On-Scene Coordinator Decision

- o _____No dispersants may be applied (reasons attached)
- o _____Dispersant use is postponed (reasons attached)
- o _____Dispersants may be used in the selected areas under attached conditions
- o _____Dispersants may be applied as requested in the application form (reasons attached for the basis of determining that dispersant use would minimize overall environmental impacts)

_____ _____ _____
Signature Printed Name Time/Date

[1] This document shall be completed, as appropriate, for both a dispersant application field test and any subsequent request for full-scale application. Where signatures cannot be immediately obtained in person or via email or fax, verbal input will suffice until signatures can be obtained.

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TAB 2. DISPERSANT USE AFTER-ACTION REPORT

A draft dispersant use after-action report shall be prepared within 30 days of completion of the dispersant operation(s) or a timeframe agreed upon by the ARRT. The draft shall be to all signatories in Tab 1, Part 5, for a two-week review and comment period or a timeframe agreed upon by the ARRT. The final report, which shall address all comments received by the signatories, shall be submitted to all signatories in addition to UC, ARRT, and National Response Team members and all individuals identified in Step 2 of Tab 1, Part 1A and/or Part 1B. The report shall also be posted to the ARRT web site.

The Dispersant Application After-Action Report shall focus on the following elements of the dispersant application and shall include the elements identified in the Report Outline below:

- An overview of the incident (prepared by the FOSC)
- A description of how the dispersant application(s) were conducted (prepared by the Requestor)
- A description of how Tier 1 monitoring was conducted and the results (prepared by the SMART Tier 1 Monitoring Team)
- A description of how Tier 2 and Tier 3 monitoring was conducted and the results (prepared by the SMART Tier 2 and 3 Monitoring Team)
- Description of how other dispersant monitoring was conducted and the results, if applicable (prepared by the individuals/team conducting the monitoring)
- Description of any adverse environmental effects associated with the dispersant application, such as impacts to fish and/or wildlife (e.g. disturbance, unintentional over-spray) (prepared by Department of the Interior (DOI) and/or Department of Commerce (DOC), or a third party acceptable to DOI and/or DOC).
- A list of individuals and their affiliations identified in Step 2 of Tab 1, Parts 1A and/or 1B (prepared by the FOSC).
- Other elements requested by the FOSC or the ARRT

Report Outline

I. Incident Overview
   A. Background information
      1. Cause or potential cause of spill, if known
      2. Type and amount of oil spilled
      3. Location of spill
      4. Movement of oil slick, including any trajectories
      5. Weathering and behavior of oil
      6. Other pertinent information
   B. Response actions taken/effectiveness (e.g., mechanical recovery, protective booming, *in-situ* burning, dispersant use)

TAB 2. DISPERSANT USE AFTER-ACTION REPORT, Cont.

Report Outline, Cont.

C. Summary of decision-making process resulting in the authorization of a request for the use of dispersants, including (but not limited to) the evaluation of whether the selected dispersant would work effectively on the oil discharged; if the dispersant could be effectively applied to the oil; trade-offs associated with the potential impacts of dispersants, dispersed oil, and non-dispersed oil on resources and resource uses identified in Tab 1, Part 3, including when compared to other response options; and how considerations identified in Section 2.2 were taken into account.

II. Description and the Dispersant Application
   A. Description of dispersant application (including all dispersant application field test(s))
      1. Type and amount of dispersant applied
      2. Type(s) of aircraft and/or vessel(s) used and dispersant system(s) used
      3. Personnel directly involved in dispersant application (e.g., Dispersant Controller) and summary of their qualifications and experience
      4. Location (shown on a map of appropriate scale), date, time, ratio of dispersant to oil, and total amount of dispersant applied for each dispersant application
      5. Weather conditions at time(s) of each application, including sea state, water temperature, water salinity
      6. Staging area, distance to region of application, and specifics regarding logistics (including time) involved in supporting the dispersant application
      7. Communications used
      8. Interaction between UC and field units carrying out guidance received
      9. Spotter aerial observations
      10. Description of any adverse environmental effects associated with the dispersant application, such as impacts to fish and wildlife (e.g., disturbance, unintentional over-spray)
      11. Health and Safety Plan requirements (including Personal Protective Equipment)
   B. Lessons learned
      1. What worked well
      2. What needed improvement
      3. Recommendations

III. Description and Results of Tier 1 (Visual) Monitoring
   A. How the monitoring was carried out (e.g., method, vehicle, monitors, etc.)
      1. Specifics regarding equipment and suitability of vessel(s) used
      2. Description of observations regarding the dispersal of oil
      3. Communications used and any associated problems
      4. Operational support from the staging area, etc.
      5. Interaction between the Incident Management Team (IMT) and the field units carrying out guidance received from the IMT
   B. Results of Tier 1 monitoring, including a copy of the National Oceanic and Atmospheric Administration (NOAA) Scientific Support Coordinator's (SSC) documentation on monitoring results and the Environmental Unit's (EU) recommendation to the FOSC

Report Outline, Cont.

C. Lessons learned
   1. What worked well
   2. What needed improvement
   3. Recommendations

IV. Description and Evaluation of Tier 2 and Tier 3 (Water Column) Monitoring
   A. How the monitoring was carried out (e.g. method, vehicle, monitors, etc.)
      1. Specifics regarding equipment and suitability of the vessel(s) used
      2. Description of observations regarding the dispersal of oil
      3. Communications used and any associated problems
      4. Operational support from the staging area, etc.
      5. Interaction between the IMT and the field units carrying out guidance received from the IMT
   B. Results of Tier 2 and Tier 3 monitoring, including a copy of the NOAA SSC's documentation on monitoring results and the EU's recommendation to the FOSC
   C. Lessons learned
      1. What worked well
      2. What needed improvement
      3. Recommendations

V. Description and Evaluation of Additional Monitoring, if conducted
   A. How the monitoring was carried out (e.g. method, vehicle, monitors, etc.)
      1. Specifics regarding equipment and suitability of the aircraft/vessel(s) used
      2. Description of observations
      3. Communications used and any associated problems
      4. Operational support from the staging area, etc.
      5. Interaction between the IMT and the field units carrying out guidance received from the IMT
   B. Results of monitoring
   C. Lessons learned
      1. What worked well
      2. What needed improvement
      3. Recommendations

VI. Additional Elements (as requested by the FOSC or ARRT)

Appendices
- Summaries of all teleconferences held regarding dispersant application field tests and full-scale dispersant applications.
- Completed copies of Tab 1, Parts 2, 3, 4, and 5.
- List of individuals and their affiliations identified in Step 2 of Tab 1, Parts 1A and/or 1B.

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TAB 3. MONITORING PROTOCOLS[1]

Part 1: Special Monitoring of Applied Response Technologies (SMART)

SPECIAL
MONITORING of
APPLIED
RESPONSE
TECHNOLOGIES

Developed by:

U.S. Coast Guard
National Oceanic and Atmospheric Administration
U.S. Environmental Protection Agency
Centers for Disease Control and Prevention
Minerals Management Service

Smoke rising from the *New Carissa*, February 1999. Photo by USCG

[1] Any revision of these protocols will immediately be in effect for use in this plan, and will be inserted into Part 1 of Tab 3 of this document.

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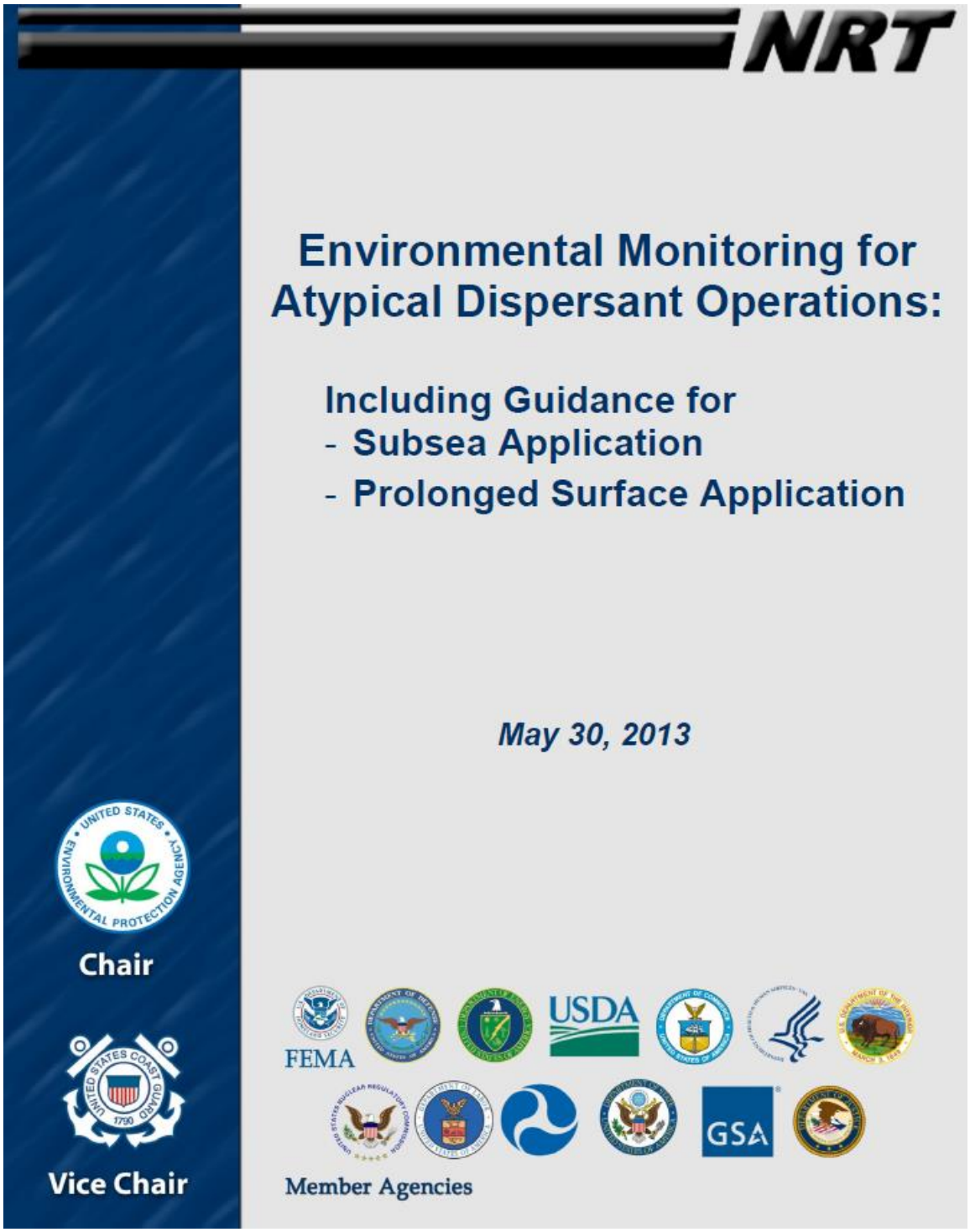
TAB 3. MONITORING PROTOCOLS[1]

Part 2: Environmental Monitoring for Atypical Dispersant Operations



[1] Any revision of these protocols will immediately be in effect for use in this plan, and will be inserted into Part 2 of Tab 3 of this document.

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