DISPERSANT USE AUTHORIZATION, APPLICATION, AND FOSC CHECKLIST

FOR OIL DISCHARGE AND HAZARDOUS SUBSTANCE RELEASE RESPONSES IN ALASKA August 2019

Please note that this information has been extracted for ease of use by responders from the The ARRT Dispersant Use Plan for Alaska, Revision 1.

These pages are a component of the Alaska Regional Contingency Plan, subject to ARRT authorization for consistency with the NCP.

Additional information and the guidelines, in its entirety, are available online at https://alaskarrt.org/PublicFiles/AK_Dispersant_Use_Guidelines.pdf

TAB 1. PROCESS FOR DISPERSANT USE AUTHORIZATION

Part 1A: Process for Dispersant Use in the Preauthorization Area¹

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 Area²:

- 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.
- 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))
- 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.
- 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*).
- The FOSC initiates, as appropriate, spill-specific Essential Fish Habitat consultation with a NMFS representative.
- 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

Administrative Update: March 2018

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. ARRT Dispersant Use Plan for Alaska - Final

Tab 1, Part 1A: Process for Dispersant Use in Preauthorization Area, Cont.

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.

- 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.
- 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.
- 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.

Administrative Update: March 2018

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. ARRT Dispersant Use Plan for Alaska – Final

Tab 1, Part 1A: Process for Dispersant Use in Preauthorization Area, Cont.

- 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 dispersants⁵, 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.

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 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 plan²:

- 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 dispersants⁴, 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: | | |
| | | | |
| | | | |
| | Disasses | | |
| | Phone: | | |
| T :1 (D) | Cell Phone: | | |
| Incident Date: | Fax: | | |
| Incident Time: | Email: | | |
| Areas dispersants to be applied in: Preauthorization | | | |
| Undesignated A | rea | | |
| BASIC DATA | | | |
| Type of incident (check one): | Did source burn? Yes No | | |
| Grounding | Is source still burning? Yes No | | |
| Transfer operations | Is oil easily emulsified? Yes No | | |
| Explosion | PEGPONGE GONGINER ATTONG | | |
| Collision | RESPONSE CONSIDERATIONS | | |
| Allision | Are mechanical recovery and/or in situ burning (alone or in combination) infeasible, ineffective, and/or inadequate? | | |
| ☐ Blowout | If so, why? | | |
| Other | il so, why: | | |
| | | | |
| Oil discharged: API: | | | |
| North Slope Crude | | | |
| Cook Inlet Crude | Will <i>in-situ</i> burning (ISB) also be used? | | |
| Residuals | Will mechanical recovery also be used? Yes No | | |
| | Will dispersant use impede mechanical Yes No | | |
| | recovery and/or in situ burning? | | |
| Other: | If yes, explain how this will be resolved: | | |
| | | | |
| Estimated volume of oil discharged/discharge rate: | | | |
| gallons; gallons per | | | |
| | | | |
| Potential oil discharge volume estimate: | ADIOS MODEL | | |
| gallons | Has ADIOS been run by a qualified person? Yes No | | |
| | Identify individual and affiliation: | | |
| Oil discharge status (check one): | If yes, please fill out the following ADIOS input parameters: | | |
| Continuous | Wind speed Water temp | | |
| ☐ Intermittent | ADIOS output parameters to be specified: | | |
| One time only, now stopped | Percentage evaporation | | |
| Current estimate of water surface covered by oil as of: | Viscosity change | | |
| Date/Time: sq. mil. | Water percentage or emulsification over a 5-day period | | |

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

| WEATHER AND SEA CONDITIONS | DISPERSANT USE PLAN |
|---|---|
| Check boxes and enter wind values in the following table: | Proposed date and time for application of dispersants: |
| Present 12-hour 24-hour | Date: Time: |
| Condition Forecast Forecast Clear | Distance to pearest staging area (simport/facility) |
| Partly cloudy | Distance to nearest staging area (airport/facility): mi |
| Overcast | nn |
| Rain | What is the dispersant proposed for use? |
| Snow | what is the dispersant proposed for use: |
| Fog | |
| Wind speed (knots/mph) | Safety Data Sheet (SDS) attached? Yes No |
| Wind direction (from) | Surety Data Sheet (SDS) attached. [105] 110 |
| Visibility (miles): | What is the proposed dispersant to oil ratio?: |
| Tidal state at | 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 Dispersant Capacity Per Sortie Boat Boat |
| Depth of water at slick: feet | C-130 |
| Water temperature: degrees C and F | CASA |
| Water salinity: parts/thousand | Helicopter |
| If ice is present, describe: | Other: |
| | Distance from source: miles |
| | Distance from nearest shoreline: miles |
| Next sunrise:Next sunset: | A440 showson 4 20 Duraida a short with a distance and a Chart |
| 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 | ✓ 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 |
| (Include in the chart being submitted as Attachment 2 the proximity of the above observed fish and wildlife) | ✓ Attachment 3 : Relevant portion of health and safety plan, including MSDS. |

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

| DISPERSANT SYSTEM APPLICATION | DISPERSANT MONITORING |
|--|--|
| Application system design: | Indicate the SMART monitoring to be used: |
| • Designed specifically for this purpose? | Tier 1: ☐ Yes ☐ No |
| • Used previously for this purpose? | Tier 2: ☐ Yes ☐ No |
| • Tested to be effective and safe? | • Tier 3: Yes No |
| • Meet manufacturer's recommendations? Yes No | Describe other monitoring to be used: |
| 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? | Describe monitoring platform(s) that will be used: |
| ASTM F1413-07(2013) Standard Guide for Use of Oil | |
| Spill Dispersant Application Equipment During Spill Response: Boom and Nozzle Systems? Yes No | Identify name, title, affiliation, and qualification of each monitoring team member: |
| ASTM 1460-07(2013) Standard Practice for Calibrating | monitoring cam memoer. |
| 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? | CICNIA DIDEC |
| ASTM F2465/F2465M-05(2011)e1 Standard Guide for Oil | SIGNATURES |
| Spill Dispersant Application Equipment: Single-point | Requestor: |
| Spray Systems? Yes No | |
| Application personnel are trained and/or experienced in the use of dispersants and this application system? | Requester's Printed Name and Signature |
| A soist south of south on | Democratic contest call about |
| Aerial application system: | Requester contact cell phone: |
| 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? | Date and time submitted to FOSC and, when appropriate, the SOSC: |
| Boat application system: | |
| A qualified Dispersant Controller will oversee operations? | Date Time |
| Yes No | |
| | Received by: |
| ✓ Attachment 4 : Description of dispersant application system | |
| and application team personnel name(s), title(s), affiliation(s), and qualifications. | |
| COMMUNICATIONS PLAN | FOSC Printed Name and Signature Date/Time |
| Describe the communications plan to be used for | |
| communications between and among the Unified Command, | |
| Dispersant Controller, SMART Team, and dispersant applications platform(s): | |
| applications platform(s). | SOSC Printed Name and Signature Date/Time |
| | - - |
| | |
| | <u> </u> |

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

| • | 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). | |
| 2a. 2b. 2c. 2d. | 00 00 | | Notifications: The following entities have been notified of the potential dispersant use for this incident: a) State On-Scene Coordinator (SOSC) b) U.S. Environmental Protection Agency (EPA) Alaska Regional Response Team (ARRT) representative c) U.S. Department of the Interior (DOI) ARRT representative d) U.S. Department of Commerce (DOC) ARRT representative | |
| 2e. 2f. | | | e) Appropriate federally-recognized tribes (identify representative(s)): 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: | |
| 7a. 7b. 7c. 7d. | | | Response Considerations: 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): b) Is dispersant application being used to supplement mechanical recovery? c) Is in-situ burning being considered in conjunction with mechanical recovery and dispersant use? d) Is a map illustrating timing, tactics, and proximity of each response option to each other attached? | |
| 8a. 8b. | | | Dispersant Availability and Timeliness: Sufficient dispersant application and monitoring equipment has been confirmed to be available: a) to meet the conditions of use in the Dispersant Use Plan (see Part 2), and b) to be deployable within the conditions and time frame the oil will be dispersible. | |
| 9a. | | | Weather and Sea Conditions: 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. 9c. | | | b) Does the water have a salinity greater than 15 parts per thousand?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, <u>or</u> | |
| 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. | П | П | 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. | | Ш | 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, | |
| 126. | | Ш | 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. | | Ш | c) ASTM 1460-07(2013) <u>Standard Practice for Calibrating Oil Spill Dispersant Application</u> | |
| 12.1 | | П | Equipment: Boom and Nozzle Systems? d) ASTM 1738-10 Standard Test Method for Determination of Deposition of Aerially Applied Oil | |
| 13d. | | Ш | Spill Dispersants? | |
| 13e. | П | П | e) ASTM F2465/F2465M-05(2011)e1 Standard Guide for Oil Spill Dispersant Application | |
| 130. | | ш | 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. | Ш | Ш | 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? | |
| 1.5 | | | | |
| 15. | | Ш | Boat Application Operational Technical Issues: Is there a qualified Dispersant Controller who will oversee the dispersant operations? | |
| | | | oversee the dispersant operations? Monitoring Protocols/Deployment: | |
| 16a. | | | a) Have the agreed-upon monitoring team(s) and/ or USCG Strike Team SMART Team been | |
| Toa. | | | 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 |
| 19a. 19b. | | | dispersant application? a) All dispersant application field tests will be conducted on a representative portion of the slick. b) Dispersant application will be in accordance with the approved dispersant application plan. |
| 19c. | lΠl | Ħ | 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. | | | <i>SOSC, EPA, DOI, and DOC Input:</i> Has the FOSC received input from the EPA, DOI, and DOC ARRT representatives and, when appropriate, the SOSC on the dispersant request? |
| 21. | | | <i>Federally-Recognized Tribe Input:</i> 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."

Tab 1, Part 5: Dispersant Use Authorization Document¹

| U.S. Denarimeni | of the Interior Consultation by DOI ARRT Representat | ive (for case-by case |
|--------------------|--|---|
| authorization only | | ive (for ease-by ease |
| 0 | Does not support the use of dispersants (reasons attached)Agrees with dispersant use in the selected areas under attached conditionsAgrees with dispersant use as requested in the application form | |
| 0 | | |
| 0 | | |
| | | |
| Signature | Printed Name | Time/Date |
| | of Commerce Consultation by DOC ARRT Representat | tive (for case-by-case |
| authorization only | y) : | |
| 0 | Does not support the use of dispersants (reasons attack | hed) |
| 0 | Agrees with dispersant use in the selected areas under attached condi | |
| 0 | Agrees with dispersant use as requested in the applica | tion form |
| Signature | Printed Name | Time/Date |
| II C Environment | al Protection Agency Concurrence by EPA ARRT Rep | nacantativa (fan aaca hy |
| case authorization | | resentative (for case-by- |
| | No dispersants may be applied (reasons attached) | |
| | No dispersants may be applied (reasons attached)Dispersants may be used in the selected areas under attached conditions | |
| | Dispersants may be used in the selected areas under attached conditionsDispersants may be applied as requested in the application form | |
| 0 | Dispersants may be applied as requested in the applied | ation form |
| | Printed Name | |
| Signature | Timed Name | Time/Date |
| • | | |
| • | oncurrence by State On-Scene Coordinator (for case-by | |
| State of Alaska C | oncurrence by State On-Scene Coordinator (for case-byNo dispersants may be applied (reasons attached) | -case authorization only): |
| State of Alaska Co | oncurrence by State On-Scene Coordinator (for case-by | r-case authorization only): |
| State of Alaska C | ncurrence by State On-Scene Coordinator (for case-by No dispersants may be applied (reasons attached) Dispersants may be used in the selected areas under at Dispersants may be applied as requested in the application | ttached conditions |
| State of Alaska Co | No dispersants may be applied (reasons attached) Dispersants may be used in the selected areas under at Dispersants may be applied as requested in the application. Printed Name | r-case authorization only): |
| State of Alaska Co | No dispersants may be applied (reasons attached) Dispersants may be used in the selected areas under at Dispersants may be applied as requested in the applica Printed Name **Coordinator Decision** | ttached conditions |
| State of Alaska Co | No dispersants may be applied (reasons attached) Dispersants may be used in the selected areas under at Dispersants may be applied as requested in the applica Printed Name Coordinator Decision No dispersants may be applied (reasons attached) | ttached conditions |
| State of Alaska Co | No dispersants may be applied (reasons attached) Dispersants may be used in the selected areas under at Dispersants may be applied as requested in the applica Printed Name Coordinator Decision No dispersants may be applied (reasons attached) Dispersant use is postponed (reasons attached) | ttached conditions ation form Time/Date |
| State of Alaska Co | Dispersants may be applied (reasons attached) Dispersants may be applied as requested in the application Printed Name Coordinator Decision No dispersants may be applied (reasons attached) Dispersants may be applied (reasons attached) Dispersant use is postponed (reasons attached) Dispersants may be used in the selected areas under attached a | r-case authorization only): ttached conditions ation form Time/Date |
| State of Alaska Co | Printed Name Coordinator Decision No dispersants may be applied (reasons attached) Dispersants may be applied as requested in the application of the applied as requested in the application of the applied (reasons attached) Dispersants may be applied (reasons attached) Dispersant use is postponed (reasons attached) Dispersants may be used in the selected areas under attached of the applied as requested in the application of the applied as requested in the application. | ttached conditions ation form Time/Date |
| State of Alaska Co | Dispersants may be applied (reasons attached) Dispersants may be applied as requested in the application Printed Name Coordinator Decision No dispersants may be applied (reasons attached) Dispersants may be applied (reasons attached) Dispersant use is postponed (reasons attached) Dispersants may be used in the selected areas under attached a | ttached conditions ation form 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.

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 overspray) (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

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

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.

TAB 3. MONITORING PROTOCOLS¹

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

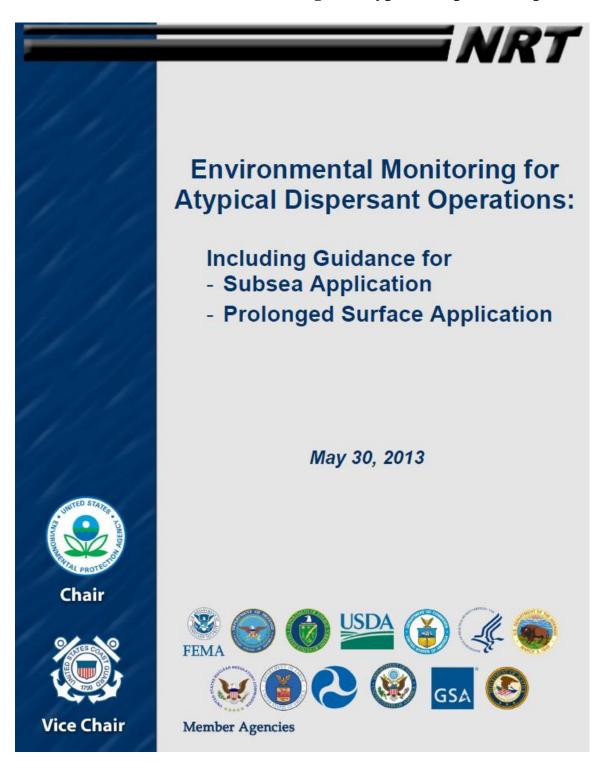


Smoke rising from the New Carissa, February 1999. Photo by USCG

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.

TAB 3. MONITORING PROTOCOLS¹

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.