Section 9406

Dispersant Authorization Process and Decision Support Tools

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Part A Description of Dispersant Approval Zones in RRT Region 10 and Approval Process in Each Zone

There are 3 types of dispersant approval zones in RRT Region 10 (which include the Captain of the Port zone for Sector Puget Sound and for Sector Columbia River), please see Chapter 4000 Section 4610 for details on Dispersant Use Policy.
https://waecy.maps.arcgis.com/apps/webappviewer/index.html?id=ff1d0cd00e6641209e25b9ee56df46fc

Part B Typical/Recommended Timing and Work Flow for Dispersant Authorization Process

The typical dispersant use review and authorization process is anticipated to follow these general steps. Key members for this process may need to be involved remotely, depending upon the timing of the request and deployment schedules. (*Note:* these are not prescriptive steps, rather recommended "good practices".

Each spill response is unique and the exact steps used in this process and their timing may vary between responses).

- Unified Command (UC) establishes an Objective to consider the use of dispersants.
- Planning Section Chief (PSC) will inform (directly or by delegation) the Environmental Unit Leader (ENVL) of the need to start **(a)** evaluating the use of dispersants and **(b)** the development of the Dispersants Decision Support tools.
- If appropriate to consider use of dispersants, mobilize necessary resources.
- It is recommended that for spills within Pre-Approval use zones that these tools be developed as appropriate to capture key decision points and to maintain a clear record of decisions. The tools in this Section will be completed for each incident within Case-by-Case use zones.
- PSC should, in coordination with the ENVL, establish a timeline for completion of the Dispersant Decision Support tools which coordinates with a schedule for setting a time to **(a)** brief the FOSC/UC about the completed Dispersant Decision Support Tools, and **(b)** (for Case-by-Case zones) a meeting/conference call for the FOSC/UC to brief the RRT10

members on the Dispersant Decision Support Tools and for the UC to make their request to the appropriate RRT10 members for the use of dispersants.

- ENVL will then establish a group of technical experts (which will likely include the NOAA SSC or one or more of their team members, as well as resource trustees, agency reps, and industry/consultant technical experts, and other reps as appropriate) to evaluate whether the use of dispersants is feasible and appropriate for the specific incident, and to complete the Dispersant Decision Support Tools.
- ENVL will also ensure (either directly or through delegation) critical coordination with Operations Section Chief and Ops members, Safety Officer, Liaison Officer, information Officer and other key personnel as appropriate.
- Figure 4000-1 found in Chapter 4000 helps outline a typical flow process for Dispersant use review and Decision Support Tools development.
- It is anticipated that the ENVL and the team convened to complete the Dispersant Decision Support Tools will in most cases use the same Dispersant Use review process and develop the same Dispersant Decision Support Tools when evaluating dispersant use in Pre-Approved Areas as well as Case-by-Case Areas, with the caveat that the development of the Decision Support Tools and dispersant use review in Pre-Approved areas should not take so much time as to result in potentially lose the window of opportunity for effective application. The ENVL in coordination with the PSC, OSC and UC, will make a determination at the time of an incident in a Pre-Approved area as to exactly how much detail and effort will be used in developing any Dispersant Decision Support Tools, balancing expediency with the need to adequately document the dispersant use evaluation as well as ensuring necessary coordination and communication with key stakeholders, on an incident-specific basis.

Part C Decision Support Tools Summary for the Development of a Dispersant Use Recommendation

There are 5 key tools in this Section which are designed to be utilized as appropriate in Case-by-Case dispersant use zones, and where appropriate in Pre-Approved Zones, to help aid the authorization decision process (Table 9406.1). Other tools, documents and information may be used during a specific incident to support the dispersant decision and/or application process; however, these tools are requested to be used as appropriate and applicable when a dispersant use decision is under consideration in a Case-by Case zone, and may be completed for Pre-Approved zones.

Engagement with Tribes, Local government, public and others Robust engagement and coordination with potentially affected tribes and local governments, as well as members of the public and other key stakeholders, are a critical part of any Dispersant use consideration and decision. There are tools and guidelines for helping ensure this engagement and coordination takes place at the appropriate times during the evaluation and use of dispersants, some of which are

in the Liaison Manual and JIC Manuals as well as other areas of the NWACP. The Unified Command for each response, and the RRT10 are committed to ensuring this coordination occurs early in the process and that robust and thorough mechanisms are established to allow these critical communications to take place effectively.

Table 9406.1 Decision Support Tools Summary for the Development of a Dispersant Use Recommendation

Tools	Purpose	Who is Responsible
1: FOSC Dispersant Standard Conditions Checklist	The purpose of this checklist is to provide confirmation to the RRT from the FOSC/UC about standard/necessary conditions and other activities that will take place or be initiated before a dispersant spray operation would take place.	FOSC/UC
2: Environmental Unit Recommendation Memo to the FOSC/UC	The purpose of this tool is to provide incident specific information on whether dispersants are appropriate for use, tradeoffs in their use, recommended constraints on application, and to document concerns of trustee agencies. Audience is RRT and UC.	EU
3: RRT10 Record of Dispersant Decision	The purpose of this tool is to provide a formal record of the decision the RRT makes regarding authorizing the use of dispersants	PSC
4: Dispersant Operations Plan (to be completed in the Operations Section)	Written by Ops Section, must incorporate constraints from EU Memo, approved and delivered through Planning Cycle and IAP production. The Operations Dispersant Plan will be completed by members of the Operations Section, with input from the EU and other IMT members as appropriate.	Operations Section
5: Tribal and other Trustee Technical Coordination Master List	The purpose of this tool is to identify at the start of the Dispersant Recommendation process a comprehensive list of Tribes, Trustees and other key technical members who need to be engaged in the technical discussion.	EU
6: After Action Report Guidelines	FOSC and their staff are responsible for generating report. The target audience for this report is RRT10 and this report will be available to the public and other interested parties.	FOSC/UC

Tool 1 FOSC Dispersant Standard Conditions Checklist

This checklist is to be completed for Case-by-Case decision areas and Pre-Authorized areas.

Purpose

The purpose of this checklist is to provide confirmation to the RRT from the FOSC/UC about standard procedures and other activities that will take place or be initiated before a dispersant spray operation would take place. This information is to help inform the RRT, to provide information on conditions that must and will be met by the FOSC/UC before a spray operation would commence. Additional information may be added to this checklist as appropriate or applicable for the RRT.

Who Could Fill Out This Form

To be designated by the FOSC/UC. Could be an EU member; Ops member; UC member; other suitable member of the IMT identified by the FOSC.

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Authorization Zone Type: _____Pre-Authorized ___Case-By-Case

Form Completed (Date/Time/Name/Title):_____

FOSC Name/Signature:_____

Y	N	
		Dispersability: Available technical information or experience suggests that the spilled product is dispersible and will likely still be dispersible in the time frame of anticipated application of dispersants.
		National Contingency Plan (NCP) Listed Dispersant: Dispersant to be used is listed on current NCP Product Schedule; considered appropriate for oil type and conditions.
		Operational Considerations – Summary Statements: **A. Weather Conditions:** Weather and sea conditions are conducive to dispersant application by chosen system or platform. Forecast attached. **B. General Adequacy of Dispersant Spray System and Personnel Competency:** equipment is purpose-built, tested, and appropriate to spill conditions; personnel are trained and experienced. **C. Application Control:** Dispersant operation provides reasonable control over the spray zone able to effectively direct the dispersant platform in carrying out the dispersant operation, including the avoidance of wildlife that may be in the area. Droplet sizes meet ASTM guidelines.
		SMART (Special Monitoring of Applied Response Technologies)**:** Appropriately trained responders have been mobilized and will be deployed prior to dispersant application, minimum of Tier I.
		Wildlife Observation: An aerial wildlife surveillance specialist(s), designated by appropriate Trustee agency(s), is available to observe wildlife that should be avoided in the potential dispersant application area and will document any observed impacts.
		Endangered Species Act and Essential Fish Habitat Consultations: Have been initiated in accordance with applicable guidance. Guidelines/conservation measures/BMPs will be incorporated into operational plans as appropriate.
		Consultations with Tribes, local government and other key stakeholders: (**including National Historic Preservation Act Section 106** if applicable) Initiated in accordance with applicable guidance, been communicated to UC, incorporated into recommendations.
		Safety and Comms Plan: A thorough, specific Dispersant Ops Safety and Comms Plans have been/will be completed prior to any dispersant test or application.
		Dispersant Operations Plan: The Dispersant Operations Plan is under development by Ops with input from EU. Expected completion time and date.
		Other: Any additional specific information/condition requested by or relevant to RRT10 (strike out if not used)

Tool 2 Environmental Unit Recommendation Memo to the FOSC/UC

This memo package is completed for Case-by-Case decision areas, and may be completed for Pre-approval zones (on an incident-specific determination).

Section 1 UC Signature Page for Dispersant Recommendation Memo

Incident Name and Location:	
Forwarded to RRT10 (Date/Time):	

The FOSC and Unified Command have determined that the use of dispersants (**IS/IS NOT**) a recommended response measure for the _____ Incident.

The affected area is within a _____Pre-Approved Zone _____Case-by-Case Zone

	DATE/TIME
Federal On-Scene Coordinator Name (Print): Signature:	
State On-Scene Coordinator Name (Print): Signature:	
Responsible Party Incident Commander Name (Print): Signature:	
Local On-Scene Coordinator (as present/appropriate) Name (Print): Signature:	
Tribal On-Scene Coordinator(s) (as present/appropriate) Name(Print): Signature:	

Section 2 Environmental Unit Dispersant Use Recommendation Memo

This memo has been developed by the EU in accordance with NCP and Northwest Area Contingency Plan dispersant use policy, in coordination with other IMT members and key members. The memo provides the FOSC and Unified Command with a recommendation on appropriate action regarding dispersant application for this incident.

The Environmental Unit____**Does__Does Not** recommend authorizing the use of Dispersants at this time. (Differing opinions are captured on attached memo as applicable).

This document provides information that went into the tradeoff discussions and other input that lead to the EU's recommendation on the use/no use of dispersants for this incident.

As appropriate, this document may also include recommendations on whether to start with a trial use before deciding on a thorough application.

Section 2 Overview of the Incident (relevant to proposed dispersant use)
Please see attached forms and incident status information (which *may* include copies of the ICS forms 201, 202, 209, Trajectory Maps, weather forecast, and/or any other applicable status and incident information)

Section 3 Spill-Specific Information Highlights for the RRT10 Decision Process

Spilled Product Type(s) (details such as properties, (M)SDS, ADIOS run, and/or other information *may* be attached:
Product(s) is/are Considered Dispersible: **(*source of information: Expert Opinion? Etc.)***
Approximate Time Window for Dispersibility: (*source of information: ADIOS? Expert Opinion? Etc.)*
Summary of Proposed Dispersant Action: *(As applicable, attach a map, highlight targeted slick area proposed for spraying and provide any other information to help describe proposed application specifics and action area_. Describe key information (as available) such as:* ▪ *Distance from shore, water depth(s) of spray area, setback area from shore or other sensitive habitats as appropriate, etc.* ▪ *Predicted oil movement and how dispersant use will help mitigate that.* ▪ *Trial application description (if applicable) and which level of SMART monitoring will be used to determine its efficacy and the rationale/decision points to continue application after the trial.* ▪ *Describe which SMART monitoring tier will be used to determine efficacy during full dispersant application and decision points for completion of dispersant application to make adjustments.*

Dispersant proposed for use:

Rationale for Recommendation:
The following information is provided for consideration by the UC and RRT and as rationale for the EU recommendation.

Environmental Considerations, Adequacy of Mechanical Recover and Other Measures:
This section summarizes the evaluation of available information by technical specialists within the EU and other contributors as applicable regarding the potential use of dispersants as a response tool for this incident in the proposed action area, as well as the environmental tradeoffs between dispersing oil versus relying on mechanical recovery and protection strategies. Considerations may include:

A: Resources at Risk
(Description of the potentially impacted resources at risk for this incident (attach ICS-232 and/or other information as appropriate)

B: Adequacy of Mechanical Recovery
(Consideration points about adequacy of mechanical response equipment alone: including magnitude of the spill, availability, weather conditions, and timelines of equipment to protect potential resources at risk.

C: Environmental Tradeoffs
(Description of the potential environmental trade-offs of dispersant use, e.g., whether some species or their habitat will benefit from dispersant use while others will be negatively impacted.)

D: Other Issues as Applicable:

Tribal Coordination Input (as applicable):

Describe which tribes and specifically which members of each tribe (and their title) were coordinated with on a technical level during the development of these Dispersant Decision Support Tools. Describe specific concerns and requested/recommended actions to take to ensure tribal concerns are appropriately addressed. (Continue on additional sheets as needed). Describe how tribal priorities and concerns identified will be addressed in the recommendation decision and/or Dispersant Operations Plan, as appropriate.

Endangered Species Act and Essential Fish Habitat Consultations:
Endangered Species Act (ESA) Section 7 consultations have been initiated with the US Fish and Wildlife Service and NOAA's National Marine Fisheries Service at the following date/time:

A Summary of ESA and EFH recommendations/conservation measures/BMPs and/or guidelines for this operation are listed below (or attached other applicable documentation). (The NWACP Emergency Consultation form may also be attached).

This memo was developed and reviewed by:		
ICS Role	**Signature**	**Name (Print)**
Environmental Unit Leader (Developed)		
Planning Section Chief (Reviewed)		
Operations Section Chief (Contributor, Reviewed)		
Safety Officer (Contributor, Reviewed)		
Information Officer (Informed)		
Liaison Officer (Informed)		

List of Attachments (list is not mandatory)	
▪ SDS of Spilled Oil	Attached Y/N
▪ Trajectory forecast maps	Attached Y/N
▪ Weather forecast	Attached Y/N
▪ SDS of Dispersant Product	Attached Y/N
▪ Current ICS-232	Attached Y/N
▪ Map, including overflight information and potential trial application site	Attached Y/N
▪ Other	

Signature Page for Technical Specialists and Other Contributors:

The following is a list of technical specialists and other members that contributed to the EU recommendation. In order that all views can be considered by the US/RRT, each technical specialist may provide a statement in support of his/her opinion to be included in the recommendation package.

Name and Agency/Organization (Print)	Signature	Recommendation

Tool 3 Region 10 Response Team Record of Dispersant Decision

Incident Name and Location

Date and time of RRT 10 Consultation:

In accordance with Subpart J of the National Contingency Plan (NCP), RRT 10 has addressed the desirability of using appropriate dispersants through the area planning process and has established Pre-Approval Zones, Case-by-Case Approval Zones, and No Use Zones for the use of dispersants. It is RRT 10 policy that any dispersant use within a Case-by-Case Approval Zone requires concurrence from the EPA and state representatives to the RRT with jurisdiction over the waters threatened by the release or discharge. The decision to use dispersants in a Case-by-Case Approval Zone must be made in consultation with the United States Department of Commerce and United States Department of the Interior representatives to the RRT and tribal governments with off-reservation treaty rights in the navigable waters threatened by a release or discharge of oil.

For purposes of this record of decision, the designated FOSC has completed a Dispersant Decision Memo (attached), formally recommends the use/recommends against the use of dispersants and requests a dispersant use decision from the appropriate members of RRT 10.

RRT 10 was convened on this date with these agencies in attendance:

1. *List all agencies and state whether decision makers or monitoring role.*

The following decision(s) was made (Note the RRT should add any pertinent rationale for the decision).

- ☐ RRT 10 does not concur with the use of dispersants for this incident.
- ☐ RRT 10 concurs with the use of dispersants as outlined in the attached plan.
- ☐ RRT 10 concurs with the use of dispersants with the following modifications to the dispersant plan.

Regional Response Team 10 Signature Page

Signatures will be obtained once the decision is made. This document will be retained to record the decision.

	Signature	Name and Title (Print)
EPA Co-Chair (Concurrence)		
State Representative to the RRT (Concurrence)		
Department of the Interior (Consultation)		
Department of Commerce (Consultation)		

Tool 4 Dispersant Operational Plan

Name of the Incident: _____

Date: _____

Introduction

This plan should be submitted as an addendum to the Environmental Unit Dispersant Memo Package. The plan outlines the operations to apply dispersants to (describe the scenario, volume spilled, product type, and geographic area).

The plan contains:

- Details of the dispersant product (see attached SDS for the dispersant),
- The operational application process (vessel application or aerial application),
- Equipment and personnel needed to implement the plan,
- Safety considerations of the dispersant application
- A description of the intended area for dispersant application,
- Best Management Practices to minimize impacts to threatened or endangered species
- A description of the dispersant monitoring process.

Objectives of the Dispersant Operational Plan

The plan has the following objectives:

- Apply dispersants within the Dispersant Use Area as approved by Unified Command.
- Describe the Daily Application Methodology.
- Monitor the effectiveness of surface dispersant applications using the SMART protocols.

Safety

Operations staff must coordinate early in the response with Safety to ensure Site Safety Plans covers all aspects of the response including the Dispersant operations. See site safety plan, and applicable 204s for dispersant operations safety messages.

Dispersant Application Equipment and Personnel

As a classified dispersant response contractor (MSRC/NRC) has submitted their dispersant plans to meet the regulatory requirements of 33 CFR 154 and demonstrate compliance with equipment training/exercising and that the spray systems comply with ASTM standards for droplet size, droplet distribution, swath width, and dosage.

Actual dosage will be recorded by a SATLOC system. The SATLOC system records spray on and off, position information (latitude and longitude) of each spray pass, and the associated flow controllers permit recording the dosage and mount of dispersant sprayed for each pass.

Spray tracking/frequency, photos, videos and observation logs will be recorded with each flight, and submitted daily.

Proposed Dispersant Application Area

The attached map (developed by the Environmental Unit) shows the approved dispersant application area.

Map (developed by the EU), should include a legend, north arrows, incident location and indicate the limits of potential application of dispersant.

Best Management Practices to Protect and Minimize Response Impacts to Threatened and Endangered Species

- Watch for and report all distressed or dead marine mammals to the Wildlife Unit
- No flights below 500 feet over sighted marine mammals
- No flights below 500 feet over wildlife refuges/management areas
- Vessels restricted from getting closer than 200 yards to whales (by regulation)
- Vessels restricted from getting closer than 100 yards to pinnipeds (seals, sea lions) (recommendation)
- No application of dispersants within 3 nautical miles of observed whales
- No application of dispersants within 3 nautical miles of observed pinnipeds
- Aerial survey by a NOAA NMFS wildlife observer for whales and other marine mammals required prior to and during any dispersant application.

Dispersant Monitoring Plan Purpose

The purpose of the plan is to outline the surface dispersant monitoring process.

Objectives

The objective of the plan is to monitor the effectiveness of surface dispersant applications using SMART Protocols. For this response SMART tiers 1 and Tier 2 monitoring protocols are being activated.

Tier 1: A trained observer, flying over the oil slick and using photographic job aids to visually assess the effectiveness of the dispersant application.

Tier 2: A sampling team on a vessel uses a fluorometer towed at a 1 meter depth under the oil slick before and after dispersant is applied to determine if there is an increase in hydrocarbons in the water column sufficient to show the dispersant is effective. Additionally, measurements are taken where there has been no oil as a background reading and water samples are obtained from both locations.

Schedule and Duration

Tier 1: On DATE at TIME an Aircraft TYPE (tail number) will be operating out of XXX airfield and will have a trained SMART OBSERVER NAME. SMART

observer flights will be coordinated with the Air Operations Branch and the scheduled detailed on the ICS Form 220.

Tier 2: (if activated): On DATE the vessel (NAME, WRRL ID#) will be available at available for smart team members to board and commence TIER 2 fluorometry analysis. SMART Tier 2 operations will be coordinated with the Dispersant Group to arrange sampling and to ensure the SMART team is in the area where the dispersant application is taking place.

Water sampling: If water samples are taken, they will be collected, retained, and analyzed according to standard sampling procedures and in accordance with the approved sampling plan. Samples should be obtained from a depth of 1 meter before and after dispersant application along a transect of the fluorometry measurements.

Aerial and Wildlife Operations

The Aircraft TYPE (tail number) operating from XXX airfield will commence operations on DATE with NAME NOAA as the wildlife observer.

The wildlife observers performing aerial observations will be personnel from NOAA. The observers will notify the dispersant team should they observe wildlife that must be avoided. Wildlife observers and wildlife aircraft pilots will attend operational briefings.

Dispersant Response Information

Daily Aerial/Vessel Dispersant Application Plan (DADAP)			
Date:	Time	Staging Airport	Airport ID
Dispersant Staging Airport Supervisor (Name and Phone #)			
Spill Site Information:			
Spill Location:	**Latitude**	**Longitude**	**Spill Size (bbls)**
Water Body:			

Spill Site Weather				
Wind (knts)	**Direction**	**Visibility**	**Sunset**	**Seas (ft)**
Attach Weather Report				

Communications			
Primary (VHF)		**Sat Phone #:**	
Secondary (VHF)		**Marine Radio**	
Emergency (VFH)			

Aircraft Information					
Type	**Tail #**	**Call Sign**	**Airport ETA**	**PIC/Crew**	**Passengers**

Vessel Information				
Name	**Port**	**Purpose**	**Captain**	**Other**

Activity Schedule, Staging Base Briefing, and Staging Base Information

Daily Activity Schedule at Staging Base	
Date:	
Dispersant Group Staging Base Supervisor:	
Time	**Activity**
Daily Operational Briefing Agenda	
Safety	Per safety plan (new info?)
Weather	Review weather report
Communications	See DADAP
Dosage	5 gpa?
Approach Info	
Oil Spill Location and Description	Oil is moving (direction/approach)
Operations Procedure Changes CALL	
Review Flight Schedule	
Reporting Requirements and Procedures	
Spray Tracking Frequency	Every flight
Photographic and Videos	Every flight
Observation Logs	Every flight
Attachments Safety Data Sheet for the Dispersant Product ICS Form 232 Resources at Risk FOSC Dispersant Authorization Checklist	

Tool 5 Tribal and other Trustee Technical Coordination Master List

The purpose of this tool is to gather a comprehensive list of all the Tribal, agency resource trustee and other key representatives who should be coordinated with and engaged on a technical level for input into the overall tradeoff discussion which is part of the Environmental Unit Recommendation process. This list is designed to be completed at the time of an incident, and will most likely be different during each incident. This form should be completed by the EU.

Organization Name (e.g. Tribe, Federal/State/County agency, etc.)	POC Name and Contact Info	Comments

Tool 6 After Action Report Guidelines

A Dispersant Use After Action Report is completed at the direction of the FOSC within a timeframe designated by the Unified Command to document how dispersants were used during the response and to communicate lessons learned for future dispersant use to pertinent stakeholders. Each Dispersant Use After Action Report should characterize the site, dispersant effectiveness, oil behavior, and any other relevant information specific to the incident and the dispersant operation including known or observed environmental impacts. The Dispersant Application After-Action Report shall focus on the following elements of the Environmental Unit Recommendation Memo and shall include the elements identified in the Report Outline below:

1. An overview of the incident and current operating period.
2. A description of how the dispersant application(s) were conducted including the volume of dispersant used, estimate of oil treated, estimated dispersant to oil ratio, dispersant platforms, etc.
3. A description of how SMART Tier 1, Tier 2 and Tier 3 monitoring was conducted and a summary of monitoring results (as appropriate).
4. Description of how other dispersant monitoring was conducted and the results, if applicable.
5. Description of any known or observed adverse environmental effects associated with the dispersant application, such as impacts to fish and/or wildlife (e.g. disturbance, unintentional overspray).