
Regional Response Team (RRT) 6

Surface Washing Agents (SWAs)
Policy

Appendix 23

April 2020

RRT-6 Surface Washing Agents (SWAs) Policy

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RRT-6 Approval Signatures

For the Preauthorized Use of Surface Washing Agents

Regional Response Team (RRT-6), in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP, 40 CFR Part 300, Section 300.910), grants preauthorization to all coastal FOSCs for using surface washing agents (SWAs) pre-identified in Area Contingency Plans (ACPs), as defined in this policy.

For a product to be used, it must be listed on the National Contingency Plan (NCP) Product Schedule. Only pre-identified locations listed in the local ACP are to be considered for preauthorization. SWAs may be considered when mechanical recovery and conventional flushing techniques are inadequate in removing oil residues to the required cleanup standard or when cleanup time can be reduced such that a significant positive impact on overall cleanup goal is achieved. Efforts must be made to minimize the use of chemical agents and to collect, contain, and recover all flushed oil.

The provisions in this policy must be fully complied with.

Note: The below DOI and DOC signatures represent their role as primary RRT representative. These signatures are not associated with any federally mandated environmental consultation requirement.



Mr. Craig Carroll
Chief, Response and Prevention Branch
U.S. Environmental Protection Agency
RRT-6 Co-Chair



Mr. Michael Sams
Incident Management and Preparedness
Advisor
U.S. Coast Guard District 8
RRT-6 Co-Chair



Mr. Sam Jones
Oil Spill Coordinator
Louisiana Oil Spill Coordinator's Office



Mr. Jimmy Martinez
Deputy Director
Texas General Land Office



Ms. Susan King
Regional Environmental Officer
U.S. Department of the Interior



Mr. Charlie Henry
U.S. Department of Commerce
National Oceanic and Atmospheric
Administration

RRT-6 Surface Washing Agents (SWAs) Policy

1. Introduction

This policy supersedes the 2003 *RRT-6 Emergency Response Preapproved Guidelines To Decontaminate Vessels And Hard Structures In Port Areas Using SWAs*. The objective of this policy is to expand on lessons learned since 2003 and clarify the various components of the SWA process, including preauthorization.

2. Disclaimer

References to any specific surface washing product does not constitute an endorsement or recommendation. The NCP Product Schedule identifies many chemical agents suitable for the decontamination and cleaning of hard surfaces. The FOSC is ultimately responsible for ensuring that selected products meet the requirements of this policy and are consistent with established cleanup goals.

3. Background

A. Surface Washing Agents

SWAs are chemicals that are used to enhance oil removal from beach substrates and hard surfaces. Most chemicals that are classified for this application contain a mixture of a non-polar solvent and a surfactant. The solvent dissolves into the highly viscous or weathered oil to create a less viscous and somewhat uniform liquid oil or oily mixture. The surfactant reduces the interfacial tension between the liquid oil and the surface the oil has adhered too. Depending on environmental conditions and the selection and combination of solvents and surfactants, the removed oil will either **float** or **disperse**. The latter may have a negative environmental impact for most shallow water coastal environments; therefore, products which **"lift and float"** are preferable. An exception would be in high-energy environments where the surface oil cannot be recovered. Under such conditions, it may be preferable to let the oil disperse rather than re-oil adjacent areas. **Note: preauthorization does not extend to lift and disperse products, but this document should serve to expedite their appropriate use, when the situation requires such agents.**

B. History

Three response operations in 2001 tested the use of SWAs (specifically PES-51¹ and Corexit 9580) on oiled piers and vessels. Using SWAs and flushing techniques greatly reduced the time of the demobilization process, improved the degree of cleanliness, and facilitated the resumption of maritime commerce. From these events, it was clear that some form of RRT preauthorization guidance was needed to both expedite approval and provide specific RRT-6 concerns and restrictions on the use of SWAs for such emergency actions. In 2003, RRT-6 promulgated the *RRT-6 Emergency Response Preapproved*

¹ PES-51 is listed as "Miscellaneous Oil Spill Control Agent" on the NCP Product Schedule.

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Guidelines to Decontaminate Vessels and Hard Structures in Port Areas Using SWAs in response to this need.

Since June 2012, there have been 13 incident-specific RRT activations in the coastal zone for the use of SWAs:

	FOSC	Date	Incident Name	Unit
1	USCG	7-Aug-12	M/V OCEAN CRESCENT	Sector Houston-Galveston
2	USCG	12-Oct-12	M/V SEABOARD PACIFIC	Sector Houston-Galveston
3	USCG	14-Jan-13	M/T ELIA	Sector Houston-Galveston
4	USCG	21-May-13	M/T SICHEM EDINBURGH	Sector Houston-Galveston
5	USCG	23-Mar-14	Texas City Y Spill	Sector Houston-Galveston
6	USCG	16-May-14	Houston Fuel Oil Terminal Spill	Sector Houston-Galveston
7	USCG	8-Dec-15	Phillips 66 Mystery Sheen	Marine Safety Unit Port Arthur
8	USCG	18-May-16	Green Canyon 248 Incident	Marine Safety Unit Morgan City
9	USCG	30-May-16	Upper Neches River Spill	Marine Safety Unit Port Arthur
10	USCG	25-Oct-17	Barge B No. 255 Fire	Sector Corpus Christi
11	USCG	26-Apr-18	M/V IVER EXPORTER	Sector New Orleans
12	USCG	16-Aug-18	Dominus Energy Well #3	Marine Safety Unit Port Arthur
13	USCG	11-Feb-19	MC20	Sector New Orleans

Preauthorization for the use of Surface Washing Agents was pursued by and granted to Sector Houston-Galveston in 2014 and Sector Corpus Christi in 2018. Case studies regarding these preauthorizations are provided in [Enclosure \(11\)](#).

4. When to Consider a Surface Washing Agent

SWAs may be considered when ***conventional flushing techniques and mechanical removal are deemed inadequate by the FOSC*** in removing oil residues to the required cleanup standard or when cleanup times can be reduced such that a ***significant positive impact*** on overall cleanup goal is achieved. Often, it is difficult and time consuming to configure and use conventional high temperature and high-pressure systems to demobilize small bands of oil near the waterline of vessels that have been inadvertently oiled. By using SWAs and simple techniques such as hand wiping and lower pressure - ambient water flushing from small boats, effective cleaning and demobilization of vessels can be achieved quickly (often with enhanced results relative to conventional hot water, high pressure washing).

The application of SWAs can be an appropriate response tool when cleaning collaterally oiled vessels to facilitate their return to service, or at a minimum, removing them from the cleanup zone. As with all alternative cleanup techniques, there should be a determination that the use of SWAs during a specific spill response provides an ***overall positive benefit*** to the response objectives.

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Note: This RRT recognizes that other cleaners, such as Simple Green, household cleansers, and other degreasers are used routinely aboard vessels and other maritime assets to conduct cleaning and maintenance, e.g., inside the coaming of a vessel, with the scuppers in. However, in **any** situation that there is a **reasonable** possibility that these cleaners will contact the waters of the US, in conjunction with federal or state managed cleanup actions, this SWA policy applies.

5. Incident-Specific RRT Process

When preauthorization of SWAs is not in place, an Incident-Specific RRT (ISRRT) decision is required per 40 CFR 300.910(b). Depending on specific circumstances, an ISRRT can be convened within 1-3 hours; SWA-related calls normally take ~30-mins.

1. The USCG FOSC or representative will contact USCG D8 RRT rep [Co-Chair](#), [Coordinator](#) or [D8 CC](#).
2. USCG D8 RRT Co-Chair or RRT Coordinator notifies key RRT-6 members.
3. FOSC or designated representative provides read ahead material if at all possible, otherwise the FOSC can request the RRT convene an ISRRT and present information verbally (see [Enclosure \(9\)](#) - Sample RRT-6 ISRRT Activation).
4. During ISRRT call, FOSC conducts informal consultations with the Services: DOI/USFWS and DOC.
5. During ISRRT call, FOSC obtains concurrence from state(s) and EPA.
6. Following use, FOSC provides Post Use Report Form**
7. After incident, USCG D8 RRT rep produces an ISRRT summary.

*** Note: Although RRT-6 has historically only provided consultation/concurrence to use SWAs in the coastal zone, there is nothing that precludes EPA from seeking approval to use SWAs in the inland zone. If an EPA FOSC chooses to pursue an ISRRT for SWAs within the inland zone, the above listed references to USCG would change to reflect applicable EPA representatives.**

** The FOSC or designated representative shall document monitoring observations and gather information to improve future spill responses. A completed Post Use Report Form shall be submitted to RRT-6 via USCG D8 RRT rep after completion of any SWA activities -- see [Enclosure \(4\)](#).

For more examples, case studies, and a history of incident-specific SWA use since June 2012, visit the Incident-Specific RRT Activation Summaries page at [RRT-6 Website](#) under “Documents” then “Activation Summary.”

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6. SWA Preauthorization and its use

A. Preauthorization

1. Requests for the establishment of a preauthorization area is granted by RRT-6 only after required consultations are complete, and in accordance with the procedures provided in [Enclosure \(1\)](#) of this document.
2. Under a preauthorization, it is the FOSC that deems when SWAs are necessary (see Section 4). Once an FOSC deems that SWAs are to be used in accordance with the preauthorization, incident-specific notification to the RRT is required as described in Section 6.E of this document. Please see [Enclosure \(10\)](#) for a sample preauthorization use reporting requirements email.
3. Preauthorization for SWAs are valid only for:
 - The use of NCP Product Schedule listed SWAs that demonstrate a “**lift and float**” action when used in accordance with the manufacturer’s recommended practices.
 - Use of those cleaning agents within pre-identified and authorized locations listed in ACPs.
4. Any time SWAs are used, effort must be made to minimize the use of chemical agents and to collect, contain, and recover all flushed oil.
5. Use of a SWA under a preauthorization requires USCG monitoring during the application and post-use reporting to the RRT. See [Enclosures \(3\)](#) and [\(4\)](#) for gathering and reporting guidance.
6. Changes in environmental conditions, such as the presence of new species, from the time of preauthorization, may require additional consultation with the Services. Additionally, there may be a need for the U.S. Coast Guard to consult with the Services on additional **response actions** employed during recovery operations.

B. Implementation of the Preauthorization Process

An example of a scenario where the existing preauthorization process would expedite the spill response would be a spill of a heavy material, such as 6 oil, from a barge that impacts the side of a vessel in the Corpus Christi Inner Harbor. In this situation, the considerable experience of State and Federal oil spill responders would lead to selection of the most appropriate cleanup methods. It is well known that 6 oil does not respond to conventional cleanup methods (flushing techniques are simply inadequate). The ability to avoid cleanup methodologies that are known to be ineffective (use of a graduated flushing regimen) in favor of proceeding directly to use of preauthorized SWAs would greatly reduce response time and costs by allowing the vessel to return to service and reopening the waterway to commerce with no negative environmental impact. Use of the expedited preauthorized process and forgoing

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ineffective high-pressure washing may eliminate the possibility of dispersing 6 oil into the water column.

Note: An incident-specific RRT is required for all potential SWA use not covered by an existing preauthorization plan.

C. Authorized "Lift and Float" Agents

For a product to be used, it must be listed on the NCP Product Schedule. The Product Schedule may not specifically identify SWAs as to their mode of action. The manufacturer's product information, prior experience using a particular product, or laboratory test should provide the information necessary to classify a SWAs as "**lift and float**" or "**lift and disperse**."

Technical specialists such as the NOAA and State Scientific Support Coordinators and other qualified technical experts should be consulted if there is any doubt as to the applicability of NCP listed products for specific applications. In addition, the National Spill Control School, Texas A&M University Corpus Christi, Job Aid for Surface Washing Agent Selection, is a valuable resource to guide response decisions. Additionally, scientific and technical publications such as those published in the [International Oil Spill Conference Proceedings](#) may be consulted for technical overview and case studies ([Michel et al](#) is one such publication).

D. Preauthorized Areas

Preauthorized use of SWAs may only occur in the coastal zone in the locations specified in Area Contingency Plans (ACPs) that have been authorized as detailed in [Enclosure \(1\)](#).

E. Preauthorization Reporting and Follow-up Documentation

When SWAs are being used as defined in the preauthorization, notification to the RRT is required. As soon as practicable, the FOSC, or designated representative, must notify the USCG RRT Co-Chair (D8 IMPA), RRT Coordinator, or DRAT member that SWAs are being used. Ideally, this notification should be made before actual SWAs are applied, such as while resources are being mobilized. The initial notification should include the date, time, location, product being used, and a short justification. Notification may be made via text, call, or email. The USCG RRT Co-Chair will make notification to other key RRT-6 members.

USCG RRT-6 Co-Chair contact information:

Email: Michael.K.Sams@uscg.mil

Cell: 281-881-6193

24/7: 504-589-6225 via CGD 8 command center

Notification in this context is not a request for permission to use SWAs. If use of SWAs is requested outside of a preauthorization area, or a "**lift and disperse**" agent is requested, an Incident-Specific RRT must be requested as per Section 5 of this document.

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F. Documentation

The FOSC or designated representative shall document monitoring observations and gather information to improve future spill responses. A completed Post Use Report Form shall be submitted to RRT-6 via USCG D8 RRT rep after completion of any SWA activities -- see [Enclosure \(4\)](#).

7. Application Guidelines

Each product will have recommended instructions for use provided by the manufacturer. During spill responses, these methods may require some modification to achieve the desired cleanup goals. The RRT does not wish to define too narrow an approval guideline. The environmentally friendly and cost practical approach is to minimize the amount of chemical used and maximize containment and recovery of the treated oil. Several approaches which have been recommended and used in the past are outlined in [Enclosure \(2\)](#) and within Incident-Specific RRT summaries located on the [RRT-6 website](#). Each has positive and negative trade-offs that must be balanced with the overall response goals including removing the oil to an acceptable standard with minimal additional environmental impact. The two most common approaches are the "**Spray and Wipe**" and the "**Spray and Flush**" techniques, detailed in [Enclosure \(2\)](#).

8. Monitoring and Reporting

A. Monitoring Requirements and Guidelines

Visual monitoring: At a minimum, the FOSC is required to provide visual monitoring to ensure that the SWAs are being applied as recommended, evaluate effectiveness, document any observed negative effects (include photos if possible), and to make recommendations which may enhance future use of such cleanup technologies. The requirement for visual monitoring does not imply continuous monitoring during the entire cleanup process. Observations of the initial trials and spot observations during the response will normally meet this guideline.

Worker health and safety monitoring must be established and consistent with concerns identified by individual Safety Data Sheets (SDSs).

Data Collection: During an oil spill response, there is a requirement to collect information about the use and effectiveness of various response technologies in a real-time, scientifically-based manner to support decision-making during the current response and add to lessons learned for future responses. This is especially true for products where there is little or no actual field information available. [Enclosure \(3\)](#) shall be used to document visual monitoring.

B. When Is Water Sampling and Laboratory Analysis Required?

From an operational perspective and to meet the minimum RRT guidelines, water sampling and laboratory analyses are not normally required. Should there be observations of ineffective oil removal, failure of oil containment, or observed

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dispersion-like affects (dispersed oil plumes escaping containment) during the cleaning process, operations should be halted as they are outside of RRT-6 guidelines.

For unique situations, the FOSC and the Unified Command, with guidance from the Environmental Unit, may choose to collect samples to guide response decision making. In addition, the FOSC should coordinate with the State On-Scene Coordinator (SOSC) as to any state agency requirements beyond RRT-6 guidance – state agencies may require or may choose to require sampling exceeding RRT-6 guidelines for state regulatory requirements. The FOSC and the Unified Command should ensure that the Natural Resource Damage Assessment (NRDA) liaison is aware of surface washing actions that were observed to have had dispersed oil plumes escaping containment and recovery. NRDA water sampling and analyses are outside of Unified Command directed response operations. The NRDA process will define requirements as to sample collection and required laboratory procedures and standards.

9. References

- a. Michel, Jacqueline & Walker, Ann & Scholz, Debra & Boyd, John. (2001). Surface-washing agents: Product evaluations, Case histories, and guidelines for use in marine and freshwater habitats. International Oil Spill Conference Proceedings. 2001. pp 805-813. 10.7901/2169-3358-2001-2-805
- b. [“Selection Guide for Oil Spill Response Countermeasures”](#) 2009
- c. “Surface Washing Agents (Draft).” National Response Team, 2019
- d. National Spill Control School, Texas A&M University Corpus Christi, Job Aid for Surface Washing Agent Selection, 2020

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Enclosure 1 - Checklist For SWA Preauthorization

1. Once USCG and Area Committee (AC) have determined a desire to seek preauthorization based on this RRT-6 policy, the AC must identify suitable area(s); e.g., Bayport Ship Channel. A key factor in determining location suitability is the potential presence of federally listed threatened or endangered (T&E) species, or critical habitat. Acceptable port areas would lack potential impact to T&E species, or critical habitat. The RRT recommends environmental assessments extend 0.5 nautical miles from the port entrance.
2. Once the Area Committee, including state response and trustee agencies, have agreed that potential adverse environmental impact is nonexistent (or negligible), the USCG Captain of the Port, as the predesignated Federal On-Scene Coordinator within the coastal zone and Chair of the respective Area Committee, shall request consultation from the Services (ESA, EFH, NHPA). Please see example letter in [Enclosure \(5\)](#).
3. The Area Committee, led by the USCG, drafts (or amends existing) SWA appendix within their respective ACP. CGD 8 DRAT and IMPA are available to support this effort. Units are strongly encouraged to work with CGD 8 staff to ensure consistency and lessons learned from previous activity is incorporated.
4. The consultation process will take place over the course of several weeks; final concurrence letter will be sent from the Services to the USCG COTP when complete. Please see example letters in [Enclosure \(6\)](#).
5. The COTP/FOSC staff prepares the SWA preauthorization request package (including the request for preauthorization memo) and sends draft to CGD 8 IMPA for review before obtaining the COTP signature.
6. Once signed, the COTP/FOSC, or designated representative, forwards the signed SWA preauthorization request memo and complete package to the CGD 8 IMPA (USCG RRT-6 Co-Chair) for processing. Please see example letter in [Enclosure \(7\)](#).
7. The CGD 8 IMPA distributes the entire SWA preauthorization package to key RRT-6 members for review and approval.
8. The RRT-6 Coordinator prepares the SWA preauthorization memo and routes to the Co-Chairs for review and signature.
9. The CGD 8 IMPA sends the RRT-6 SWA preauthorization memo to the COTP/FOSC and staff for inclusion in their coastal ACP. Please see example letter in [Enclosure \(8\)](#).

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Enclosure 2 - Application Techniques

Technique 1: Spray and Wipe. There are two ways to use this technique, spraying agent on a sorbent pad then wiping the oiled surface or spraying agent directly on the oiled surface and then wiping with sorbent pad. This technique is most useful on small accessible thin bands of oil and "bathtub rings" above the waterline of vessels and other hard surfaces.

Technique 2. Spray and Flush. The basic form of this technique is simply applying the surface washing agent using a low-pressure garden type hand-held sprayer followed by flushing the mobilized oil from the hard surface with water hoses. Removed oil is flushed into a containment boom system and collected using either sorbents or a skimming system. This technique has been demonstrated as useful on porous structures such as concrete pilings and large oiled surfaces. The pressure and temperature of the water flushing system can be highly variable, but low pressure and ambient water temperatures are preferred since they are more easily available and reduce the potential for physical oil dispersion into the water column.

		Technique 1		Technique 2
		<i>Spray Agent on Sorbent Pad then Wipe</i>	<i>Spraying Agent on Oiled Surface then Wiping</i>	<i>Spray and Flush</i>
Pros	<ul style="list-style-type: none"> uses less chemical agent minimal or no oil and chemical transported to the water no need for on-water recovery no additional equipment needed other than sorbent pads, sprayer, and a platform to work from good during periods of high wind (over spray minimized) 	<ul style="list-style-type: none"> generally, less time consuming than spray pad and wipe technique no additional equipment needed other than sorbent pads, sprayer, and platform to work from 	<ul style="list-style-type: none"> can remove oil from large areas effectively less labor required (more efficient for larger areas) fewer workers come in direct contact with chemical agent soak time less of an issue due to time it takes to cover a large area with the agent prior to flushing. 	
Cons	<ul style="list-style-type: none"> individual workers come in close contact with chemical may take longer than high pressure flushing techniques labor intensive less effective if the product requires contact or soak time 	<ul style="list-style-type: none"> may require on-water recovery as some of the oil will rapidly run down vertical surfaces and come in contact with the water (sorbent boom and/ or pads at the contact point between the structure's surface and the water may serve this function). workers come in close contact with agent and may pose an inhalation hazard time consuming (but generally faster than cleaning without chemicals) labor intensive may require contact or "soak" time based on manufacturer's recommendations 	<ul style="list-style-type: none"> requires more equipment to include containment boom must recover oil flushed onto the water's surface higher pressures increase physical dispersion of both oil and chemical agent into the water column and will require sample collection. concerns for over spray to include collateral public and occupational worker exposure during windy conditions 	

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There are several variations on the Spray and Flush technique that may be considered: Tiered responses.

- a) Apply agent then use low pressure (<10 psi) ambient water to wash.
- b) Apply agent then use low pressure hot water (between 90 and 171°F) to wash.
- c) Apply agent then use high pressure (>100 psi) ambient water to wash
- d) Apply agent then use high pressure (>100 psi) hot water (between 90 and 171°F) to wash
- e) Apply agent then use steam cleaning (water temperatures > 171°F). Note, steam cleaning is generally used in conjunction with very high-pressure systems (often >2000 psi), Potential results: Steam cleaning generates less runoff water relative to water flushing systems but may cause thermal mortality to encrusting organisms.
- f) High pressure ambient or hot water wash the surface to remove the bulk of the oil, apply surface washing agent, then low pressure wash to remove residual stain.

Ideally, the use of chemical agents should enhance the use of lower water pressures and cooler water temperatures to achieve the same degree of oil removal relative to high pressure steam cleaning. **High pressure systems should only be used if lower pressure systems fail to achieve the cleanup goals.** The same is true with water temperature: a good practice is to start with ambient water and increase temperature **only** if required. For some applications, high pressure flushing of the bulk oil from the surface followed by product treatment and low-pressure flushing have been highly successful and minimize the amount of chemical agent required.

Note 1: Hot water and steam cleaning systems will increase worker inhalation exposure.

Note 2: High pressure systems are known to increase oil dispersion into the water column.



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Enclosure 3 - Observations and Monitoring Form

Observations and Monitoring Form – Surface Washing Agents

This form should be used by USCG field personnel during any SWA application and supports required post use reporting requirements. The requirement for visual monitoring does not imply continuous monitoring during the entire cleanup process. Observations of the initial operations and spot observations as cleanup continues will normally meet this guideline. Photographic documentation is important and required. If subsurface plumes are observed to escape containment, operations should be suspended.

Prior to Application

- The product to be used is on the NCP Product Schedule and is a “**lift and float**” agent.
- Name of product used:
- Confirm the product is being used consistent with the manufacturer’s recommendations, Safety Data Sheet (SDS), and within the incident-specific site safety plan.
- Ensure SWAs are being applied using recommended techniques:
 - Technique 1: Spray and Wipe
 - Technique 2: Spray and Flush

Effectiveness/Effects Observations

- Does the use of the product and technique identified above achieve the required incident-specific cleanup standard or endpoint?
- What fraction of the treated (removed) oil is being recovered?
- Was the treated oil observed to disperse into the water column creating a plume that escaped containment and recovery?
- If plumes were observed escaping containment, were operations suspended and who was notified?
- Were there any observations of negative impact to animals/species in the adjacent waters?

Reminders

- Photographic documentation is required for the post use report to be submitted to RRT-6. At a minimum, before and after photos shall be submitted; one application photo, capturing the equipment and technique, is also highly encouraged.
- If subsurface plumes are observed, operations should be suspended.
- High pressure flushing techniques combined with a surface washing agent has a high probability to create a dispersed plume and increased hazards to the adjacent aquatic environment.
- Observations of dispersed oil plumes escaping containment must be reported to the State OSC and to the Natural Resources Damage Assessment (NRDA) liaison or other NRDA representative.

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Enclosure 4 - Post Use Report Form

Post Use Report Form – Surface Washing Agents
Date/time and location of the SWA application (include vessel's name or names if appropriate): <i>(Character limit: 250)</i>
Method of application including amount and specific name of SWA used: <i>(Character limit: 250)</i>
Overall effectiveness of SWA use as observed, and describe any follow-on actions required: <i>(Character limit: 500)</i>
Any significant operational departures from the SWA plan approved by the FOSC: <i>(Character limit: 500)</i>
Any lessons learned, best practices, or recommended process improvements for future response events: <i>(Character limit: 500)</i>

A fillable PDF of this template can be found at: [Link](#)

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Enclosure 5 - Sample Memo to the Services

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Sector Houston-Galveston

9640 Clinton Drive
Houston, TX 77029
Staff Symbol: s
Phone: (713) 671-5199

16451
June 4, 2013

Ms. Edith Erling
Field Office Supervisor
U.S. Fish and Wildlife Service
17629 El Camino Real, Suite 211
Houston, TX 77058

NMFS SE Regional Office
Attn: Kyle Baker and David Dale
263 13th Ave South
St. Petersburg, FL 33701

Dear Ms. Erling, Mr. Baker, and Mr. Dale:

In accordance with the development of the Central Texas Coastal Area Contingency Plan under the Clean Water Act and the procedures recommended in the Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and Endangered Species Act, I am seeking your support in the Coast Guard's development of the Central Texas Coastal Area Contingency Plan (CTCACP). In order to complete the CTCACP, the Coast Guard needs to identify the listed species and designated critical habitat that may be affected in the event of an oil spill and potential limited use of a surface washing agent (PES-51).

Specifically, I request an updated list of threatened and endangered species and designated critical habitats that might be found within the predetermined locations identified in Enclosure (1).

My staff has been working closely with the Texas General Land Office and Texas Parks and Wildlife to identify locations within the Central Texas coastal area where the use of surface washing agents would be a suitable response technique in limited circumstances. An informal resources at risk assessment was conducted which addresses a preliminary assessment of the environmental sensitivity index and resources at risk in the proposed predetermined locations (Enclosure (2)). Additionally, any such use of a surface washing agent on vessels and hard structures for oil spill recovery would be conducted in accordance with existing Regional Response Team VI policies (Enclosure 3).

Your support in offering consultation to our initiative in proposing preapproved areas for the use of surface washing agents for oil spill recovery of vessels and hard structures will ensure that we appropriately consider all risks to environmental and wildlife habitats in these predetermined locations.

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16451
June 4, 2013

Thank you for your support and partnership in this matter. If you require additional information, please contact LCDR Kevin Boyd at 713-671-5111 or via email at Kevin.C.Boyd@uscg.mil.

Sincerely,

J. H. WHITEHEAD
Captain, U.S. Coast Guard
Commander, Sector Houston-Galveston

Enclosures: (1) Central Texas Coastal Area Committee Approved Surface Washing Agent Locations
(2) Resources at Risk
(3) RRT-6 Emergency Response Pre-Approval SWA Guidelines

Copy: NOAA Scientific Support Coordinator
Commander, CG District Eight (drm)
Department of the Interior representative to RRT-6
Department of Commerce representative to RRT-6

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Enclosure 6 - Sample Memos from the Services

DOI / U.S. Fish and Wildlife Service - Endangered Species Act (ESA)



In Reply Refer To:
FWS/R2/CESFO/

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Coastal Ecological Services Field Office
17629 El Camino Real, Suite 211
Houston, Texas 77058
281/286-8282 / (FAX) 281/488-5882



March 10, 2014

Brian Penoyer
Captain, U.S. Coast Guard
Commander, Sector Houston-Galveston
9640 Clinton Drive
Houston, TX 77029

Dear Captain Penoyer:

Thank you for the U.S. Coast Guard's (USCG) recent letter acknowledging the U.S Fish and Wildlife Service's (Service) review and response to a request for Endangered Species Act (Act) informal consultation regarding resources at risk in proposed pre-approved areas for use of surface washing agents. The Service welcomes the opportunity to provide updated information that benefits Service trust resources, such as federally listed threatened or endangered species under the Act and critical habitat designations. Your sharing of provided information with the other state and federal trustee agencies for use in updating the Central Texas Coastal Area Contingency Plan (CTCACP) is also greatly appreciated.

Regarding your letter dated January 23, 2014, and our review of the attached Surface Washing Agent Plan (Section 3253), the Service concurs with the USCG's finding that the specified use of Environmental Protection Agency approved "lift and float" surface washing agents within port locations, identified as pre-approved areas, is not likely to adversely affect federally listed species or critical habitats that are the responsibility of the Service.

Please note that this concurrence does not cover any consideration for use of a surface washing agent outside of the pre-approved areas within port locations in the Central Texas Coastal Area. Use of such agents outside the pre-approved areas will require emergency consultation by the Regional Response Team VI. In addition to this concurrence, the Service is in agreement with inclusion of Section 3253 into the CTCACP.

In the event changes to Section 3253 occur or additional information on the distribution of listed or proposed species or designated critical habitat becomes available, the informal consultation process should be reinitiated for effects not previously considered. If you have any questions or need any additional information, please contact Ron Brinkley at 281/286-8282 ext.245.

Sincerely,



Edith Erling
Field Supervisor

Attachment

RRT-6 Surface Washing Agents (SWAs) Policy

DOC / NOAA – National Marine Fisheries Service (NMFS) / ESA



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
<http://sero.nmfs.noaa.gov>

JUN 5 2014

F/SER31:KPB
SER-2014-13339

Captain B. Penoyer
United States Coast Guard
Commander, Sector Houston-Galveston
13411 Hillard Street
Houston, Texas 77034

Ref.: Surface Washing Agent Pre-Approval Plan, Central Texas Coastal Area Contingency Plan;
Chambers, Houston, Galveston, and Brazoria Counties, Texas

Dear Captain Penoyer:

This letter responds to your January 23, 2014, request to the National Marine Fisheries Service (NMFS) for concurrence with your project-effects determination under Section 7 of the Endangered Species Act (ESA). You determined the projects may affect, but are not likely to adversely affect, leatherback, loggerhead, hawksbill, green, and Kemp's ridley sea turtles. Prior to this request for concurrence, we received a June 4, 2013, request for a species list and comments on the development of the Surface Washing Agent (SWA) Plan for the Central Texas Coastal Area from Lieutenant Commander Kevin Boyd of the U.S. Coast Guard (USCG), Sector Houston-Galveston. We provided comments and a species list on August 2, 2013. Thank you for including our comments in the SWA Plan. Our findings on the plan's potential effects are based on the description in this response. Changes to the proposed action for any of these projects may negate our findings and may require the reinitiation of consultation.

The USCG is proposing areas for the in situ use of "lift and float" surface washing agents (SWAs) as an emergency oil spill response technique, to clean oiled vessel hulls and other hard manmade structures that are impacted by oil spills that occur within the designated port areas along Texas waterways. The SWAs have been tested and approved by EPA, as required for inclusion in the National Contingency Plan (NCP) Product Schedule. The NCP requires that the approval of any regional plan to use any chemical countermeasure must first be evaluated for the potential to affect the environment, including ESA-listed species, which is the focus of this consultation on the potential effects to sea turtles. This consultation is for pre-approval of use of SWAs, as described below, to streamline spill response actions by evaluating the potential effects prior to a spill occurring that warrants the use of SWAs.



RRT-6 Surface Washing Agents (SWAs) Policy

DOC / NOAA – (NMFS) / Essential Fish Habitat (EFH)



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-6505
<http://sero.nmfs.noaa.gov>

April 30, 2014

F/SER4:DD

Captain Brian Penoyer
Commander U.S. Coast Guard Sector Houston-Galveston
13411 Hillard Street
Houston, Texas 77034

Dear Captain Penoyer:

The U.S. Coast Guard provided the National Marine Fisheries Service Southeast Regional Office the Surface Washing Agent Plan (Section 3253) of the Central Texas Coastal Area Contingency Plan for review. This section of the plan outlines procedures for use of surface washing agents in pre-approved locations in the Central Texas Coastal area and would allow the Federal On-Scene Commander, in consultation with the Texas General Land Office, Texas Parks and Wildlife Department, and the NOAA Scientific Support Coordinator, to authorize the use of Environmental Protection Agency approved "lift and float" surface washing agents if conventional methods are not sufficient in the cleanup of oil from contaminated vessel hulls and hard structure surfaces in certain locations identified in the plan. These locations are generally industrial port areas of the Upper Houston Ship Channel, Bayport Ship Channel, Texas City Ship Channel, Galveston Channel, and Freeport Ship Channel.

As specified in the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), essential fish habitat (EFH) consultation is required for federal actions which may adversely affect EFH. As the federal action agency in this matter, the U.S. Coast Guard has determined the proposed actions would not adversely affect the environment in the pre-approved areas. The Habitat Conservation Division has reviewed the proposed actions and determined any adverse impact to EFH resulting from the proposed response activities would be minimal. Due to the context and nature of the proposed activities, we have no EFH conservation recommendations to provide pursuant to Section 305(b)(2) of the MSFCMA.

We appreciate the opportunity to provide these comments. Please direct related correspondence to the attention of Mr. David Dale at the letterhead address. He may be reached at (727) 824-5317 or by e-mail at david.dale@noaa.gov.

Sincerely,

A handwritten signature in cursive script that reads "Virginia M. Fay".

Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division



RRT-6 Surface Washing Agents (SWAs) Policy

Enclosure 7 - Sample Memo to RRT-6

U.S. Department of
Homeland Security
United States
Coast Guard

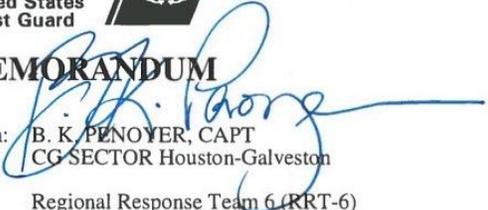


Commander
United States Coast Guard
Sector Houston-Galveston

13411 Hillard Street
Houston, TX 77034
Phone: (281) 464-4861

16474
SEP 15 2014

MEMORANDUM

From:  B. K. PENOYER, CAPT
CG SECTOR Houston-Galveston

To: Regional Response Team 6 (RRT-6)

Subj: PREAPPROVED LOCATIONS FOR THE USE OF SURFACE WASHING AGENTS

Ref: (a) RRT-6 Emergency Response Preapproved Guidelines to Decontaminate Vessels and Hard Structures in Port Areas Using Surface Washing Agents dated 2003

1. Per reference (a), as Chair of the Central Texas Coastal Area Committee (CTAC), I request RRT-6 preapproval for use of surface washing agents (SWA) within the following five specified port locations:

- A. Upper Houston Ship Channel (including Barbour's Cut)
- B. Bayport Ship Channel
- C. Freeport
- D. Texas City Ship Channel
- E. Galveston Channel

2. The Central Texas Coastal Area Contingency Plan Section 3253 is provided for your review and comment (enclosure 1). I have requested and received concurrence from the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service for required consultations (enclosures 2, 3, and 4).

3. Thank you for your timely consideration of this request. Please direct any questions to my primary POC: LTJG Denys Rivas at (281) 464-4866 or Denys.Rivas@uscg.mil.

#

Enclosures: (1) Central Texas Coastal Area Contingency Plan Section 3253
(2) USFWS Concurrence
(3) NMFS EFH Concurrence
(4) NMFS ESA Section 7 Concurrence

Copy: NOAA Scientific Support Coordinator
Department of the Interior representative to RRT-6
Department of Commerce representative to RRT-6

RRT-6 Surface Washing Agents (SWAs) Policy

Enclosure 8 - Sample Memo from RRT-6



Regional Response Team

WWW.RRT6.ORG

RRT
Environmental Protection Agency
United States Coast Guard
Department of Commerce
Department of the Interior
Department of Agriculture
Department of State
Department of Justice
Department of Transportation
Department of Health and Human Services
Federal Emergency Management Agency
General Services Administration
Department of Energy
Department of Labor
Department of Defense
Nuclear Regulatory Commission
States of Arkansas, Louisiana, New Mexico, Oklahoma, Texas

From: Regional Response Team (RRT) 6

To: B. K. PENOYER, CAPT
CG SECTOR Houston-Galveston

Date: October 10, 2014

Subj: SURFACE WASHING AGENT PREAUTHORIZATION

Ref: (a) RRT-6 Emergency Response Preauthorization Guidelines to Decontaminate Vessels and Hard Structures in Port Areas Using Surface Washing Agents, dated 2003
(b) Your memo 16474 dated 15 Sep 2014

1. Per reference (a), RRT6 grants you, as the Chair of the Central Texas Coastal Area Committee (CTCAC) and predesignated Federal On-Scene Coordinator, surface washing agent preauthorization. As such, you will implement this preauthorization through the Central Texas Coastal Area Contingency Plan (CTCACP) Section 3253 which can be accessed at the following website: <http://www.homeport.uscg.mil/>. Per 40 CFR 300.5, a surface washing agent is any product that removes oil from solid surfaces through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column. This preauthorization is granted for the following five port locations as specified within reference (b) and the CTCACP Section 3253:
 - a. Upper Houston Ship Channel (including Barbour's Cut)
 - b. Bayport Ship Channel
 - c. Freeport
 - d. Texas City Ship Channel
 - e. Galveston Channel
2. This preauthorization has no expiration date; however, we encourage the CTCAC to conduct periodic review of locations and response protocols, updating as necessary. Any requests for surface washing agents beyond these five identified port locations must be directed to the RRT6 for consideration.
3. Thank you for your commitment to improved preparedness. Please direct any questions to Mr. Michael Sams, USCG RRT6 Co-Chair at 504-671-2234 or Michael.K.Sams@uscg.mil.

Michael K. Sams

Michael K. Sams
Region 6 RRT Co-Chair, USCG District 8

October 10, 2014
Date

Ronald D. Crossland

Ronnie Crossland
Region 6 RRT Co-Chair, EPA Region 6

October 10, 2014
Date

RRT-6 Surface Washing Agents (SWAs) Policy

Enclosure 9 - Sample RRT-6 ISRRT Activation

Incident-Specific RRT Activation

Below is an example of an Incident-Specific RRT Activation (Microsoft Outlook calendar invite) meeting invite that will be developed by the USCG RRT coordinator or co-chair and will be sent to key RRT members.

From: RRT-6 Coordinator or Co-Chair
To: Key members of the RRT-6

Subject: RRT-6 (Key mbrs) Incident-Specific RRT (ISRRT) Activation Notification – Incident Name -- Surface Washing Agent (SWA), Date/Time

This serves as your “Activation Notification” for a scheduled RRT-6 Incident-Specific RRT (ISRRT) telcon to provide consultation/concurrence for the use of Surface Washing Agents (SWAs) to facilitate the cleaning of _____. The _____ is located _____.

Telcon Details:

- Date: _____
- Time: _____
- Call-in number: _____
- Facilitator: Mike Sams, CGD 8

Key members of RRT-6 (those receiving this invite) are requested to be available to participate on this call. If anyone believes that we have missed a key person, or you want to forward this invite to others for awareness, please notify Michael.K.Sams@uscg.mil & Todd.M.Peterson@uscg.mil.

Please see attached SWA proposal read-ahead documents:

Situation Brief	Safety Data Sheet (SDS)	Pictures & Location
		

Following is draft agenda we intend to use for telcon. Please let us know if we can answer any questions.

Agenda:

1. Welcome & roll call (Sams)
2. Purpose (Sams)
3. Situation brief (USCG rep)
4. Consultation with natural resource trustee reps (DOC-NOAA & DOI-USFWS)
5. State / Federal concerns (State & EPA)
6. Concurrence to use SWA (State & EPA)
7. Identify issues/concerns – action items (RRT-6 participants & USCG rep)
8. Adjourn (Sams)

RRT-6 Surface Washing Agents (SWAs) Policy

Enclosure 10 - Sample Preauthorization Use / Reporting Requirements

From: COTP/FOSC
To: CGD 8 IMPA; DRAT

Subject: RRT-6 Notification -- SWA Use – Unit Name – Incident Name

RRT-6,

On 10 February 2020, (unit) approved the use of Surface Washing Agents (SWAs), in accordance with the RRT-6 SWA preauthorization, to expedite the hull cleaning of several vessels. These vessels are located in an area that has been designated as a preauthorized area in our ACP.

Incident Summary: *Please provide a "brief" overview.*

SWA:

- a. Product name
- b. Lift and Float?

//s//

RRT-6 Surface Washing Agents (SWAs) Policy

Enclosure 11 - Preauthorization Case Studies

1. Preauthorization of Surface Washing Agents, Central Texas Coastal Area Contingency Plan Case Studies

Since October 2014, there have been over 1,000 oil spills within TGLO Region II (Houston/Galveston/Freeport). In many cases, reported spills are small and dissipate naturally and rapidly, with minimal impact to the environment or commerce. In some cases, conventional oil spill response cleanup techniques must be utilized to efficiently and effectively clean-up these oil spills. However, in other cases, these conventional cleanup techniques are inadequate. To help address these incidents, the CTCAC, through RRT-6, developed, adopted, and implemented a preauthorized surface washing agent (SWA) plan for 5 distinct industrialized port locations throughout Region II. The preauthorized SWA plan provides Unified Command with an expedited approval process and promotes the effective use of surface washing agents, ultimately helping to minimize both environmental and economic impacts.

The following are three examples of the application of the CTCAC preauthorized surface washing plan in Region II and associated lessons learned.

A. Spill 2019-4126

- **Spill Summary**

In November 2019 a tank barge discharged approximately 100 gallons of IFO 380 while loading at a facility in Houston. The discharge resulted from overfilling a cargo tank on the barge. As a result, IFO 380 spilled onto the deck of the barge, down the side, and into the surrounding water. Upon arrival on-scene, around 1700 hrs., TGLO Senior Response Officer (SRO) observed the response contractor unsuccessfully attempting to wipe oil off the side of the barge with a sorbent pad. Based on SRO's previous experiences with IFO 380, and the obvious ineffectiveness of on-going barge clean-up efforts, TGLO SRO consulted with the USCG FOSCR and recommended that surface washing agents be utilized to remove the oil from the deck and side of the barge. The FOSCR agreed and the existing preauthorization of surface washing agent plan outlined in the CTCAC ACP was implemented. Once equipment arrived on-scene (~1800 hrs.), PES-51 was applied to the side of the tank barge utilizing the "spray and wipe" method. No oil or SWA was observed entering the water during the cleanup. By 2100 hrs., oil on the side of the vessel had been cleaned and significant progress on the deck of the barge had been made. The following morning, the vessel was clean and departed.

RRT-6 Surface Washing Agents (SWAs) Policy

- **Lesson's Learned**

This event represents a successful application of the preauthorized SWA plan. Within 3 hours of the incident occurring, the situation was evaluated, the decision to use PES-51 was made, and the spill contractor was effectively cleaning the barge. These actions ensured the spill was cleaned efficiently, minimizing risks to response personnel and the surrounding environment and wildlife, as well as preventing the spread of oil throughout the area. Additionally, the quick decision made on-scene, promoted commerce, ensuring the vessel could depart on time and that the dock space was available for transfer operations scheduled later in the day.

B. Spill 2015-4106

- **Spill Summary**

In November 2015, a facility discharged 42 gallons of crude oil while unloading a crude oil tanker. The discharge resulted from a gasket failure on a dock loading arm. The oil spilled onto the deck of the vessel, down its side, and into the water. TGLO, Sector Houston-Galveston, and OSRO personnel responded to the incident and observed a relatively heavy and very persistent oil adhering to the deck and side of the tanker. Based on the initial assessment, the physical characteristics of the oil, experience responding to similar oils, and in consideration of the existing preauthorized surface washing agent plan found in the CTCAC Area Contingency Plan, OSRO requested permission to use PES-51 to facilitate the removal of oil from the side of the vessel. TGLO Advanced Response Officer concurred and noted that similar incidents in the past required the use of a surface washing agent to effectively and efficiently remove this type of oil from the side of vessels. USCG personnel on-scene indicated that they would need to get approval from their chain of command and requested that OSRO utilize a hot water pressure washer until approval could be granted. For three days, OSRO unsuccessfully worked to clean the side of the tanker with a pressure washer and sorbents. At the end of day three the USCG gave OSRO permission to utilize PES-51. Utilizing the “spray and wipe” method, OSRO worked through the night and by the next morning the vessel was cleaned. No oil or SWA was observed entering the water during the cleanup.

- **Lessons Learned**

Ultimately, surface washing agents were successfully used to remove a heavy, persistent oil from the side of the ship. However, the approval process was time-consuming and difficult. Due to the delay in receiving necessary approval, response personnel were on-scene longer, oil was exposed to environmental elements longer, the vessel missed its scheduled departure date, and vessels slated to use the facility's dock had to be

RRT-6 Surface Washing Agents (SWAs) Policy

rescheduled. A response that should have been completed in one day took four days to complete. The timely approval of the use of surface washing agents in a preauthorized area is critical for an efficient and effective response that facilitates the protection of response personnel and the environment, as well as expedites the resumption of commerce.

C. Spill 2018-3729

- **Spill Summary**

In October 2018, a facility discharged 818 gallons of heavy crude oil after overfilling a shore-based relief tank. Approximately 630 gallons of the oil flowed out of a storm water outfall, along approximately 1,000 feet shoreline, and into the Houston Ship Channel. TGLO, USCG, and OSRO all responded to the incident. For 3 days response personnel worked to remove oil from the concrete matting (erosion barrier) along the shoreline. Multiple techniques were unsuccessfully used to remove oil from the shoreline. These included manual application of sorbent materials, a low pressure/ambient temperature water flush, high pressure/ambient temperature water wash, and high pressure/hot water wash. (Note: high pressure/hot water wash systems were not available until day 3 of the response). On day 4, approval from Unified Command to utilize a surface washing agent (PES-51) was requested to help remove oil from the concrete along the shoreline. Based on the ineffectiveness of ongoing operations, and his personal experience with heavy crude oil spills in the past, TGLO SRO concurred. USCG personnel on-scene stated that response personnel should continue high pressure/hot water washing to confirm it would not work before they would give approval. After 2 days of this ineffective treatment, the USCG gave approval to use PES-51 in combination with the high pressure/hot water flush to remove oil from the shoreline. Within 3 days, surface contamination of the concrete mat along the shoreline had been removed. Over the next several weeks, oil continued to remobilize from void spaces in the mat and re-oil the surface. OSRO personnel were able to respond quickly and utilizing PES-51 and the high pressure/hot water wash system, effectively remove the contamination.

- **Lessons Learned**

Ultimately, surface washing agents were successfully used to remove a heavy, persistent oil from the concrete mat along the shoreline of the facility in the Houston Ship Channel. However, the approval process was time consuming, difficult, and burdensome. Specifically, an excessive amount of time was utilized “testing” conventional cleanup techniques. When asked, TGLO SRO stated that it was obvious at the end of day 3, after all conventional techniques had been attempted, that none were going to work. The additional delay of 2 days further “testing” the high pressure/hot water

RRT-6 Surface Washing Agents (SWAs) Policy

wash technique contributed to response personnel being on-scene longer, oil remaining on the surface of the shoreline longer, and effectively closing a portion of the facility. A response that should have been normally completed in 3 days, took 8 days. Again, the timely approval of the use of surface washing agents in a preauthorized area is critical for an efficient and effective response that facilitates the protection of response personnel and the environment, as well as expedites the resumption of commerce.

- **Additional considerations**

In response to two recent spill events, the CTCAC is currently developing plans which will address the unique vessel decontamination challenges and economic impacts that resulted from these incidents. These plans will address the logistical challenges of large-scale vessel decontamination operations and cleanup of hard structure shorelines in industrial areas. The intent is to ensure better preparedness and minimize the economic impact to the area, while ensuring responder safety and protection of the environment. The use of timely applications of surface washing agents during decontamination and cleanup activities is expected to be an important component of the overall success of the plan.

2. Preauthorization of Surface Washing Agents, South Texas Coastal Zone Area Contingency Plan Case Study

Since October 2018, there have been over 150 oil spills within TGLO Region III (Corpus Christi). In many cases, reported spills are small and dissipate naturally and rapidly, with minimal impact to the environment or commerce. In some cases, conventional oil spill response cleanup techniques must be utilized to efficiently and effectively clean-up these oil spills. However, in other cases, these conventional cleanup techniques are inadequate. To help address these incidents, the South Texas Coastal Zone (STCZ), through RRT-6, developed, adopted, and implemented a preauthorized surface washing agent (SWA) plan for the Corpus Christi Inner Harbor (with 3 additional locations pending). The creation of preauthorized SWA plans provides Unified Command with an expedited process promoting the effective use of surface washing agents, ultimately helping to minimize both environmental and economic impacts.

Since the inception of the STCZ SWA preauthorization plan, there has been only one spill where the STCZ preauthorized surface washing agent plan was implemented in Region III.

RRT-6 Surface Washing Agents (SWAs) Policy

A. Spill 2018-4724

- **Spill Summary**

In December 2018, a tank barge discharged 1,994.81 gallons (47.49 bbl.) of Vacuum Gas Oil (VGO) into the Corpus Christi Inner Harbor. This event was not an ideal example of the preauthorized SWA plan for a couple of reasons. The agent used (PES-51) was not particularly effective at removing the oil from the barge due to ambient environmental conditions occurring at the time of the spill. Both the air and water temperatures were quite low which resulted in the oil solidifying into a somewhat waxy state that was difficult to remove using surface washing agents. Cutting the material with diesel proved to be more effective. Additionally, no surface washing agents were used to clean the sides of the vessel. This decision was informed by the performance of the PES-51 when used within spill containment. If this spill had occurred in the summer, it is quite possible that the SWA would have been more effective and may have been used to clean the sides of the vessel as well.