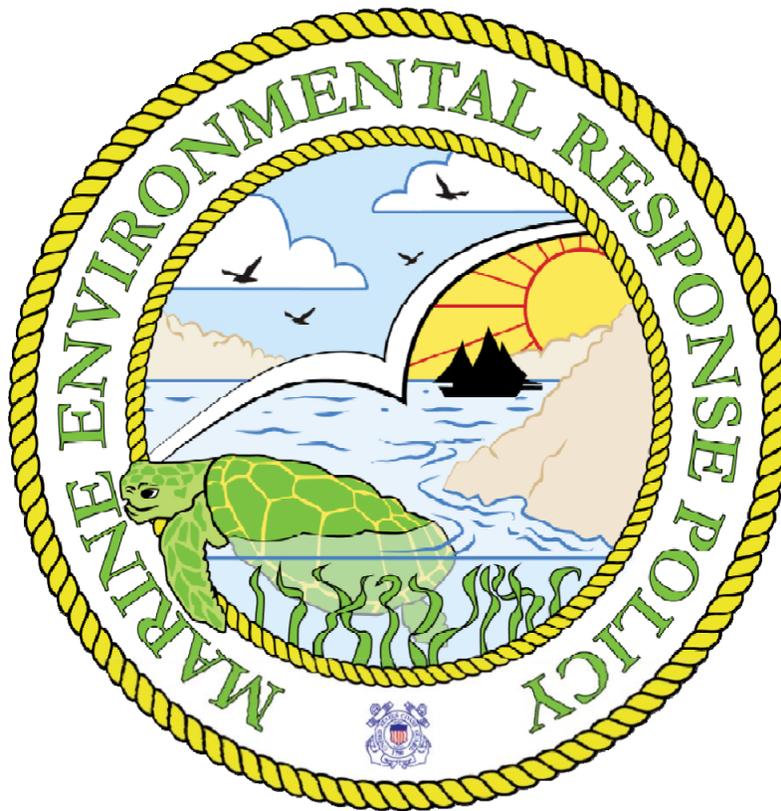


United States Department of
Homeland Security

United States
Coast Guard



Guidelines for the U.S. Coast Guard Oil Spill Removal Organization Classification Program



June 2019

Table of Contents

Executive Summary	4
CHAPTER 1. Classification Process and Requirements	5
A. OSRO Guidelines: A Brief History	5
B. Significant Revisions to the OSRO Guidelines	6
C. Application Process.....	6
D. Alternative Compliance	9
E. Alternate Classification Cities Program	10
F. OSRO Exercises	12
G. Personnel Training.....	13
H. Equipment Maintenance	13
I. Resource Requirements	14
J. Response Times	14
K. Status Changes in Equipment or Capabilities.....	16
L. OSRO Guidelines Biannual Review	16
CHAPTER 2. Preparedness Assessment Visits (PAV)	17
A. Introduction and Purpose	17
B. Roles and Responsibilities	17
C. Types and Frequency of Preparedness Assessment Visits	19
D. Preparedness Assessment Visit Process	19
E. Personnel Training.....	21
F. Examination of Equipment Systems and Maintenance Records	21
G. Preparedness Assessment Visit Equipment Criteria.....	21
H. Preparedness Assessment Visit Results	25
I. Other Reasons for Downgrading an OSRO’s Classification.....	25
CHAPTER 3. Mechanical Classification Requirements for OSROs.....	27
A. Overview.....	27
B. Resource Requirements	27
C. Protective Boom	27
D. Oil Recovery Device Operating Environment	27
E. EDRC and Containment Boom	27
F. Temporary Storage Capacity.....	28
G. Response Vessels	28
H. Response Aircraft.....	29
I. MMPD and WCD Tier 1 Classification.....	29

J.	WCD Tier 2 and WCD Tier 3 Classifications.....	29
K.	Dedicated vs. Non-dedicated Resources	30
L.	Response Times.....	31
CHAPTER 4. Mechanical Classification Standards by Operating Area		33
A.	Operating Areas.....	33
B.	Adverse Weather Considerations.....	33
C.	Shallow Water Requirements	34
D.	Rivers and Canals.....	34
E.	Great Lakes	35
F.	Inland.....	36
G.	Near Shore	37
H.	Offshore.....	38
I.	Open Ocean.....	40
J.	Prince William Sound Classification	41
CHAPTER 5. OSRO Classification Dispersant Program.....		42
A.	Introduction	42
B.	Response Plan Requirements	42
C.	Tier 1, 2, and 3 Worst Case Discharge (WCD) Classifications.	42
D.	Effective Daily Application Capacity	43
E.	Location and Documentation of Dispersant Resources	44
F.	Captain of the Port Zones	44
G.	Travel Time	44
H.	Process for Requesting Alternate Speeds for Dispersant Aircraft.....	45
I.	Dispersant Application Platform.....	45
J.	American Society for Testing and Materials Standards.....	45
K.	Aerial Oil Tracking and Application Capabilities for Dispersant Use.....	46
L.	Personnel.....	46
M.	Response Times and Dispersant Stockpiles.....	47
N.	Estimated Dispersant System Potential Calculations	48
CHAPTER 6. OSRO Classification Guidelines for Nonfloating Oils.....		49
A.	Overview.....	49
B.	Nonfloating Oils Classification Evaluation.....	50
C.	Application for Nonfloating Oils Classification.....	51
D.	Nonfloating Oil Procedures and Core Equipment Standards	52
E.	Resource Requirements	55
APPENDIX A. List of Acronyms.....		57
APPENDIX B. Glossary Terms.....		60

Executive Summary

The major revisions in the 2019 guidelines center on realigning the OSRO classification program with applicable regulation provisions. The optional acceptable classification program has been replaced by the alternative compliance program and will provide a mechanism for thoroughly reviewing any approved alternatives. The alternative compliance program directly aligns with the regulations and no longer allows waivers or alternatives not supported directly by the regulations. Any deviations from the regulations that plan holders or OSROs believe are acceptable, based on their specific situation, should be processed through the established alternative compliance program.

Real-world incidents have shown that this program directly contributes rapid and well-coordinated responses. The OSRO classification does not guarantee performance, nor does the use of a Coast Guard-classified OSRO relieve plan holders of their responsibility to ensure the adequacy of response resources. **Plan holders must ensure their contracted OSRO, regardless of classification, is able to meet their planning requirements.**

Although participation in the OSRO classification is voluntary, it is critical that participating OSROs ensure their resources are accurately reflected in the Response Resource Inventory (RRI) at all times. The success of the program relies on the real-time capture of OSRO capabilities at their specified OSRO sites, which determines the classifications that plan holders cite in their response plans.

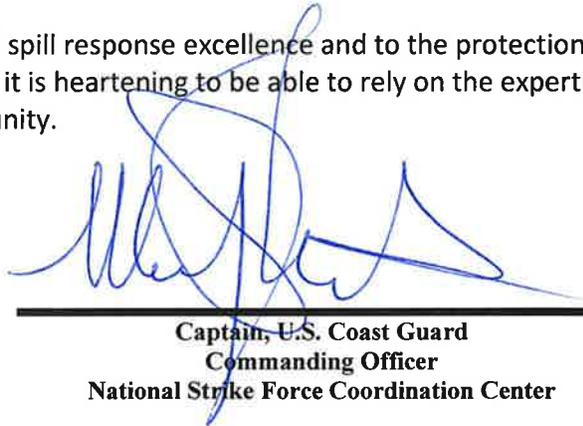
As we continue to refine the connectivity between response and preparedness, stay tuned for future efforts to better connect these guidelines with our Preparedness Assessment Visits, Government-Initiated Unannounced Exercises, Area Contingency Plans, exercises, real-world events and RRI status—all in an effort to support the highest level of preparedness.

Thank you for all your continued commitment to oil spill response excellence and to the protection of the environment. While no one desires an incident, it is heartening to be able to rely on the expertise and professionalism of the oil spill response community.

Semper Paratus! Always Ready!



Captain, U.S. Coast Guard
Office Chief
Office of Marine Environmental Response Policy



Captain, U.S. Coast Guard
Commanding Officer
National Strike Force Coordination Center

CHAPTER 1. Classification Process and Requirements

A. OSRO Guidelines: A Brief History

1. Section 311(j) of the Federal Water Pollution Control Act (FWPCA), amended by section 4202 of the Oil Pollution Act of 1990 (OPA 90), requires the preparation and submission of response plans by the owners or operators of certain oil-handling facilities and for all vessels defined as “tank and non-tank vessels” (hereafter referred to as plan holders). Plan holders, through their response plans, must address the extremely complex system for assembling, mobilizing, and controlling response resources to maintain statutory compliance as well as being prepared to respond to oil spills within their area of operation. Plan holders are required to submit a response plan to the Coast Guard that identifies and ensures, by contract or other approved means, the availability of response resources (personnel and equipment) necessary to remove, to the maximum extent practicable, a worst case discharge (WCD), including a discharge resulting from fire or explosion, and to mitigate or prevent a substantial threat of such a discharge.
2. To relieve the burden upon the plan holders to provide extensive detailed lists of response resources, the Coast Guard created the Oil Spill Removal Organization (OSRO) classification program, administered by the National Strike Force Coordination Center (NSFCC), so that plan holders would be required to identify the OSROs only by name in their response plans, **if the OSRO meets a plan holder’s planning requirements**. If the OSRO is classified by the Coast Guard, then its capacity has been determined to equal or exceed the response capability caps needed by a facility, tank vessel and non-tank vessel plan holders. In addition, OSROs voluntarily participating in the classification program must maintain detailed lists of response resources in the Response Resource Inventory (RRI), which is administered by the NSFCC.
3. The RRI is the backbone of the classification system and its capabilities are two-fold: an inventory element and a classification element. The inventory element provides Federal On-Scene Coordinators (FOSCs) and contingency planners the ability to query available spill response equipment and its proximity to Coast Guard Captain of the Port (COTP) zones. The classification element, largely considered an incentive for OSROs to enter their inventories into the RRI, complements Facility Response Plan (FRP) and Vessel Response Plan (VRP) development and review processes by systematically classifying OSRO response capability up to the response capability caps.
4. Historically, the Coast Guard based OSRO classification levels upon three categories: (1) feet of containment boom; (2) temporary storage capacity (TSC); and (3) skimmer capacity, which translated into an estimated daily recovery capacity (EDRC) measured in barrels per 24-hour period. In December 1995, the guidelines added classification based upon COTPs zones and specific operating environments.
5. In June 2002, the Coast Guard modified the guidelines to include classifying OSROs in six operating areas versus four, eliminating Average Most Probable Discharge (AMPD) classifications, and incorporating Maximum Most Probable Discharge (MMPD) through WCD Tier 3. In addition, the guidelines introduced Alternate Classification Cities (ACCs) within COTP

zones to stimulate increases in classified OSRO coverage. Further, the guidelines added time delivery parameters to calculate response times based on whether or not companies had personnel on-site 24 hours a day, capable of mobilizing and deploying equipment upon notification, and whether or not the equipment being used was owned, contracted, or obtained for company use by other approved means.

B. Significant Revisions to the OSRO Guidelines

1. The most significant revision in this update is the creation of the alternative compliance program. The former optional acceptable classification program has been replaced with the new alternative compliance program, which better aligns with 33 CFR §§ 154-155. The new program will require classified OSROs, who hold an approved alternative compliance, to have that alternative compliance reevaluated by the Coast Guard every three years. Classified OSROs who currently have approved optional acceptable classifications will be contacted by the NSFCC to begin the reevaluation process.
2. Historically, the optional acceptable compliance program has allowed for alternatives for EDRC, travel speed, boom, and TSC. The new alternative compliance program will only allow alternatives for EDRC, travel speed, and TSC. Alternatives to minimum boom height will no longer be accepted.
3. The 2016 OSRO Classification Guidelines allowed for a waiver for an OSRO who cannot commence dispersant operations within the seven hours of the decision by the FOSC, but was able to demonstrate the ability to apply 8,250 gallons (Gulf Coast region) or 4,125 gallons (all other U.S. regions) within 12 hours. This waiver is no longer accepted. OSROs with this waiver will be contacted by the NSFCC and asked to provide documentation to maintain their dispersant classification.

C. Application Process

1. Any OSRO may voluntarily apply for classification by contacting the NSFCC. Participation in the OSRO classification program is voluntary; however, once an OSRO chooses to participate in the classification program, full compliance is mandatory in order to maintain the classification.
2. The RRI website can be found at the following link:
<https://cgrrri.uscg.mil/logon.aspx?ReturnUrl=%2fdefault.aspx>.
3. OSROs should review the guidelines prior to applying as each classification program has specific requirements. Guidance regarding this program may be obtained from:

Commanding Officer
National Strike Force Coordination Center
ATTN: Response Resource Assessment Branch
1461 North Road Street, Elizabeth City, NC 27909-3241
Tel: (252) 331-6000 / Fax: (252) 331-6012
Email: DO5-SMB-NSFCC-RRI@uscg.mil
<http://www.uscg.mil/hq/nsfweb/nsf/nsfcc/ops/ResponseSupport/RRAB/rrab.asp>

4. NSFCC assigns classification based on the information supplied by each OSRO. Participation in the RRI is mandatory for an OSRO to receive classification. For an application to be accepted, an OSRO must complete all pertinent RRI data fields.
5. For a majority of the classification programs, the NSFCC utilizes the response times, discharge quantities, and equipment requirements specified in the FRP and VRP regulations and in these guidelines to determine the appropriate classification(s) for each COTP zone or ACC requested by an OSRO. For all classifications, OSROs requesting new classification should complete the initial registration and equipment entry into the RRI and provide the NSFCC with a complete response equipment inventory list. For the nonfloating oil classification, OSROs should complete the application outlined in Chapter 6 and, upon approval from the NSFCC, enter their nonfloating response equipment inventory list into RRI.
6. Following the classification assessment by the NSFCC, an initial Preparedness Assessment Visit (PAV) will be scheduled. The NSFCC will coordinate with the appropriate COTP and District Response Advisory Team (DRAT) to schedule the PAV.
7. An OSRO may withdraw from the participating in the classification program at any time with written notice to the NSFCC. However, in order to return to the program, the OSRO will be reevaluated through the full application process
8. The following figures depict the evaluation and review process for becoming a classified OSRO. The timelines depicted below do not begin until the NSFCC receives all necessary documentation.

Figure 1-1: OSRO Classification Review Process

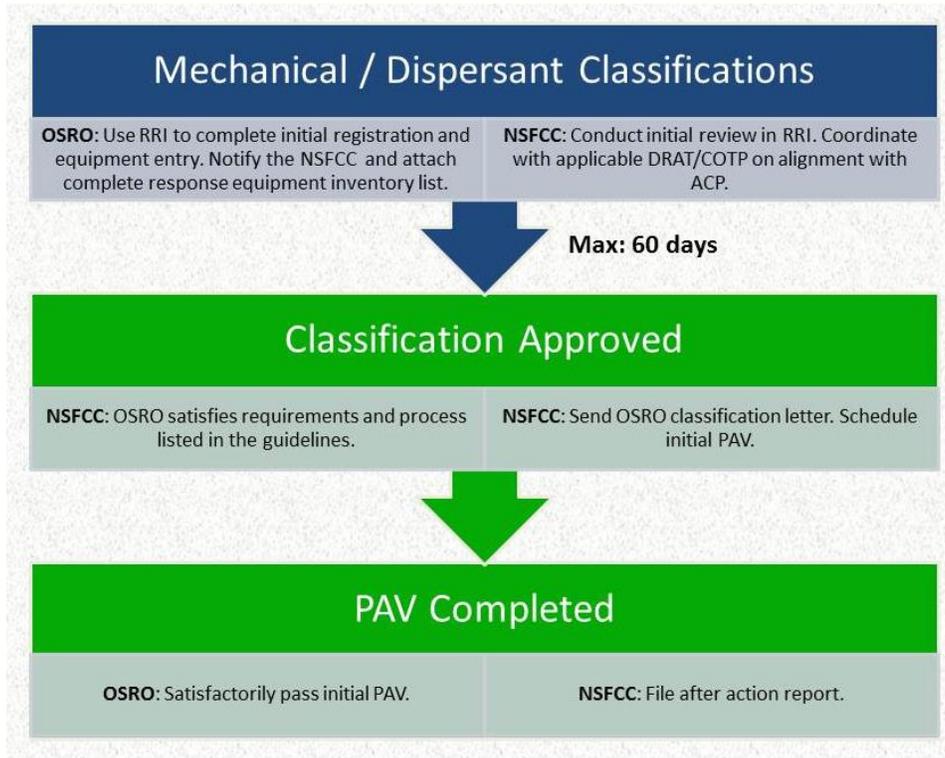
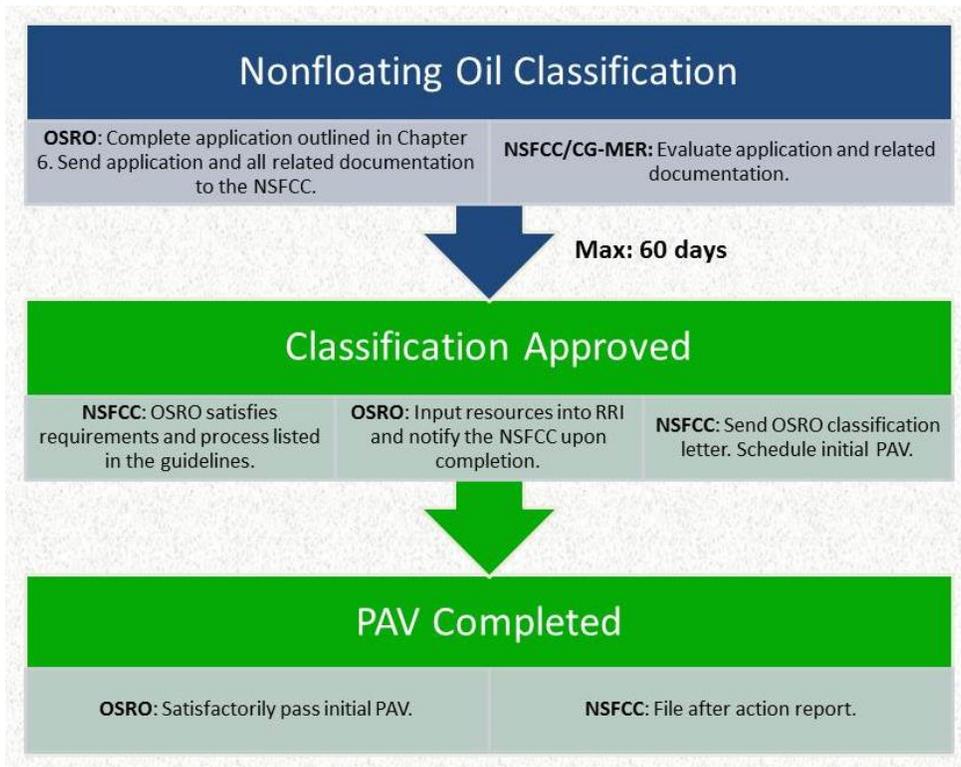


Figure 1-2: OSRO Nonfloating Oil Classification Review Process



D. Alternative Compliance

1. **Alternative Compliance Background:** Previously, an OSRO was able to submit for an optional acceptable classification for EDRC, travel speed, TSC, and boom. However based on a regulatory review, the optional acceptable classification program ended. In its place, OSROs may apply for an alternative compliance if an OSRO feels that one or more of the exceptions allowed by regulations are applicable and necessary. OSROs shall also document if their alternative compliance request relates to an approved or pending alternative planning criteria. OSROs shall submit requests electronically or in writing to the NSFCC. OSROs or plan holders seeking alternatives for categories other than what is in Table 1-1 should use the Alternative Planning Criteria process.

Table 1-1: Acceptable Alternative Compliance and Regulatory Citations

Category	Response Plan Regulations	
	Facility	Vessels
	33 CFR § 154	33 CFR § 155
EDRC	Appendix C, Section 6.3	Appendix B, Section 6.3
Travel Speed	Appendix C, Section 2.6	Appendix B, Section 2.6
TSC	Appendix C, Section 9.2	Appendix B, Section 9.2

2. **Alternative Compliance Procedures:**
 - a. Any approved alternative compliance will be valid for a maximum of three years. Six months prior to expiring, the NSFCC will notify the OSRO either to reapply for the alternative compliance or to update their resources in RRI to reflect that the alternative compliance is no longer necessary.
 - b. After the OSRO has sent the alternative compliance request to the NSFCC either by mail or electronically, the NSFCC will solicit input from the applicable COTP, District, Area, and Coast Guard Office of Marine Environmental Response Policy (CG-MER) prior to making an approval decision within 60 days of receiving all required documentation.
3. **Estimated Daily Recovery Capacity (EDRC):**
 - a. 33 CFR § 154 Appendix C and 33 CFR § 155 Appendix B allow OSROs to submit an alternative compliance for EDRC on behalf of plan holders via the instructions in the regulations cited in Table 1-1 of these guidelines.
4. **Vessel Speeds:** For classification purposes, the regulation calculates vessel speeds using the planning speed criteria of 5 knots (kts). The speed of five kts is a conservative planning criterion which is specified in 33 CFR § 154 and § 155 and takes into account mobilization time and environmental factors. However, OSROs that demonstrate that a vessel can consistently and safely perform at speeds greater than five kts may request their classification(s) be determined

using an alternative transit speed. Alternative speeds are most likely to apply to large vessels such as Oil Spill Response Vessels (OSRVs), tugboats, and barges.

- a. OSROs who wish to use alternative transit speeds for water transit shall submit their alternative compliance requests electronically or in writing to the NSFCC. The requests should specify the individual vessel(s) the alternative speeds will apply to and must, at a minimum, include the following documentation:
 - (1) Logs and records indicating vessel speed over various routes;
 - (2) Charts indicating routes and distance transited; and
 - (3) Mobilization plan (including personnel recall numbers).
 - b. Upon concurrence, the NSFCC will factor in the alternative speeds when determining the OSRO's classification for the applicable vessels. If the OSRO has already received a classification, the information will be used to revise that classification.
5. **Vehicle Speed:** No request for alternative over-the-road speeds will be accepted. The set planning standard for over-the-road vehicles is 35 mph. The NSFCC sets this speed based on external factors such as average speed limits and traffic, so actual mechanical ability does not increase the planning standard.
6. **Aircraft Speed:** For classification purposes, the regulation calculates aircraft using the planning speed of 100 kts. If OSROs demonstrate an aircraft can perform at speeds greater than 100 kts safely, they can request an alternative compliance for transit speed.
- a. OSROs that wish to use alternative transit speeds for air transit shall submit their requests electronically or in writing to the NSFCC. The requests should specify:
 - (1) Logs and records indicating aircraft speed over various routes;
 - (2) Confirmation that they have reviewed and are abiding by all applicable Federal Aviation Administration (FAA), state and local regulations and policies; and
 - (3) Charts indicating routes and distance transited.
 - b. Upon concurrence, the NSFCC will factor in the alternative speeds when determining the OSRO's classification for the applicable aircraft and COTP zones. If the OSRO has already received a classification, NSFCC will use the information to revise the classification.
7. **Temporary Storage Capacity:** 33 CFR § 154 Appendix C and 33 CFR § 155 Appendix B allow OSROs to submit an alternative compliance for TSC on behalf of plan holders via the instructions in the regulations cited in Table 1-1 of these guidelines.

E. Alternate Classification Cities Program

1. Traditionally, OSRO capability has been measured from COTP zones identified in 33 CFR § 3.05-10 through 33 CFR § 3.85-15. Recognizing that commercial operation often occurs in ports other than the COTP zones, the Coast Guard has identified ACCs. ACCs are Coast Guard designated locations used in addition to the zone in which the COTP is located for classifying OSROs. ACCs help to alleviate the concern that, in larger COTP zones, a spill could occur at a greater distance from the COTP zone to which an OSRO could not respond within the

regulatory timeframes. However, regulation requires the plan holder to calculate response times using the location the vessel operates farthest from the storage location of the OSROs response equipment. This may not be the COTP city or the ACC. It may be an area offshore.

2. The following ACCs are geographic locations within the United States that have been designated to fill coverage gaps between COTP zones:
 - a. Cape Fear River, NC; COTP North Carolina
 - b. Huntington, WV; COTP Ohio Valley
 - c. Paducah, KY; COTP Ohio Valley
 - d. Panama City, FL; COTP Mobile
 - e. Port Canaveral, FL; COTP Jacksonville
 - f. Toledo, OH; COTP Detroit
 - g. Cleveland, OH; COTP Buffalo
 - h. Oswego, NY; COTP Buffalo
 - i. Marquette, MI; COTP Sault Ste. Marie
 - j. Traverse City, MI; COTP Sault Ste. Marie
 - k. Alpena, MI; COTP; Sault Ste. Marie
 - l. Chicago, IL; COTP Lake Michigan
 - m. Eureka, CA; COTP San Francisco
 - n. Morro Bay, CA; COTP Los Angeles/Long Beach
 - o. Cape Flattery, WA; COTP Puget Sound
 - p. Coos Bay, OR; COTP Columbia River
 - q. Portland, OR; COTP Columbia River
 - r. American Samoa; COTP Honolulu
 - s. Adak, AK; COTP Western Alaska
 - t. Kodiak, AK; COTP Western Alaska
 - u. Prudhoe Bay, AK; COTP Western Alaska
 - v. Nome, AK; COTP Western Alaska
 - w. Unalaska, AK; COTP Western Alaska
 - x. Ketchikan, AK; COTP Southeast Alaska
 - y. Sitka, AK; COTP Southeast Alaska
 - z. Yakutat, AK; COTP Southeast Alaska
 - aa. Aberdeen, SD; Inland ACC

- bb. Denver, CO; Inland ACC
 - cc. Gallup, NM; Inland ACC
 - dd. Lincoln, NE; Inland ACC
 - ee. Lubbock, TX; Inland ACC
 - ff. Miles City, MT; Inland ACC
 - gg. Missoula, MT; Inland ACC
 - hh. Oklahoma City, OK; Inland ACC
 - ii. Salt Lake City, UT; Inland ACC
 - jj. Saipan; COTP Guam
 - kk. Lewes – Lower Delaware Bay; COTP Delaware Bay
 - ll. Akutan; COTP Western Alaska
 - mm. Sand Point; COTP Western Alaska
 - nn. Atka-Nazan Bay; COTP Western Alaska
 - oo. Shemya Island – Alcan Harbor; COTP Western Alaska
 - pp. Buldir Pass; COTP Western Alaska
 - qq. Amchitka Pass; COTP Western Alaska
 - rr. Sanak Island; COTP Western Alaska
 - ss. Attu Transit Zone; COTP Western Alaska
 - tt. Amukta Pass; COTP Western Alaska
 - uu. King Cove; COTP Western Alaska
 - vv. Attu Island; COTP Western Alaska
 - ww. St. Thomas; COTP San Juan
 - xx. St. Croix; COTP San Juan
3. OSROs wishing to provide services for plan holders in areas where it may be appropriate to determine classification using an ACC should send all requests for ACC designations to the NSFCC. The NSFCC consults with the applicable COTP and CG-MER as they review requests and establish new ACCs.

F. OSRO Exercises

1. Both the FRP and VRP regulations require plan holders to conduct annual equipment deployment exercises involving the OSROs listed in their response plans pursuant to 33 CFR § 154.1055 and 33 CFR § 155.1060. An OSRO who is listed as the primary response organization in a response plan and wishes to obtain and maintain a classification shall participate in, record, and maintain documentation of these completed exercises.

2. For OSROs using a combination of owned and contracted resources to meet the requirements for classification, exercises should include both categories of resources working together and integrating separate system components provided by multiple OSROs.
3. In addition to equipment deployment, exercises should include mobilization, transportation and logistics support aspects, especially as they relate to WCD Tier 1 resources.
4. While implementing plan holder exercise requirements per 33 CFR § 154.1055 and/or 33 CFR § 155.1060, 40 CFR § 300.212, or while implementing NPREP exercises, to the maximum extent practicable, OSROs are encouraged to work with plan holders, COTPs, and Area Committees to hold equipment deployment exercises in conjunction with annual spill management team and area exercises. Additionally, OSROs are encouraged to use these exercises as an opportunity to validate response strategies contained in response and contingency plans.

G. Personnel Training

1. The FRP and VRP regulations require plan holders to ensure response personnel are trained to perform their jobs in alignment with 33 CFR § 154.1050, § 155.1055, and § 155.5055. The OSRO classification program requires an OSRO to provide similar assurances. OSROs must conduct periodic training to reinforce required knowledge.
2. An OSRO should provide confirmation that it has identified the skills necessary to demonstrate in a response and show that personnel have received the proper training to perform in those areas. Training records and descriptions of the methods in which training is delivered to personnel shall be available for review. An effective response training program should include, but is not limited to, the following:
 - a. Actions to take in accordance with designated job responsibilities;
 - b. Occupational Safety and Health Administration (OSHA) requirements outlined in 29 CFR § 1910.120;
 - c. A clear, streamlined communication program; and
 - d. Training on specific response equipment identified in the OSRO application for all classification programs.
3. OSROs shall maintain training records for three years following completion of the training. All records must be available for review during a PAV.

H. Equipment Maintenance

1. An OSRO must ensure that response resources listed in its application are inspected periodically and maintained in good operating condition in accordance with the manufacturer's recommendations, best commercial practices, and as per 33 CFR § 154.1057, § 155.1062, and § 155.5062. This includes ancillary equipment, such as hoses, secondary pumps and trailers. OSROs should have a clear, preventative and corrective maintenance system in place. Furthermore, OSROs must document all inspections and maintenance and maintain the records for three years. All maintenance records must be available for review during the PAV.

I. Resource Requirements

1. The number of personnel needed to support a response depends on numerous factors. For the OSRO classification program, the number of personnel required for a classification for each COTP zone or ACC is based on the location of resources and certain environmental and geographic factors. During the application process, through the RRI, an OSRO will identify, per the guidance contained herein, the number of personnel required to mobilize and operate the resources at each of its resource sites.
2. Each site that meets the time requirements for a classification should have its personnel requirements totaled for that classification. If the OSRO has identified sufficient personnel that meet the response time requirements and concurrently deploys and operates all equipment necessary for that level of classification, then an OSRO qualifies for the resource requirement of that specific classification.
3. Resources counted for OSRO classification can be owned or contracted and dedicated or non-dedicated. Since non-dedicated resources may not be available to respond immediately, extended notification and mobilization times are assigned to these resources. FRP and VRP regulations require plan holders to ensure the availability of response resources by contract or other approved means. OSROs must meet these same requirements for all response resources (dedicated, non-dedicated, owned and non-owned equipment and personnel) that they claim for classification purposes. The resource owner should list all contracted equipment in the RRI prior to an OSRO listing a resource as contracted.
4. OSROs shall ensure the resource information in the RRI is accurate to maintain classification and service plan holders.
5. A full and up-to-date inventory in the RRI will help COTPs and Area Committees know what response resources are available in their zones. Though not a requirement, Coast Guard requests that OSROs enter their full equipment inventory into the RRI, and not just the minimum needed for classification.

J. Response Times

1. OSROs are required to meet certain response times as per 33 CFR § 154.1045, § 154.1047, § 155.1050, § 155.1052, § 155.5050 and § 155.5052. The regulations set the response times for classification; the RRI standardizes the classification through a series of calculations. To receive a classification for a specific COTP zone or ACC, an OSRO must ensure its resources and trained personnel are able to meet the specified response times in that area.
2. Plan holders are required to use OSROs that are able to respond with resources from where they are stored to the incident location in accordance with various regulations in 33 CFR 154 and 155. The Coast Guard uses criteria in regulation to determine response times to the COTP city and ACCs when determining classification. A plan holder is then required to determine the response time to the facility location or vessel location farthest from the response equipment storage site when different from the COTP city or ACC.

3. The RRI computes response times for the Mechanical and Dispersant classification programs by combining the notification times, mobilization times, and travel times of the resource sites used for a specific classification. Response plan regulations require the plan holder to include the time for notification, mobilization, and travel when computing response times (33 CFR § 154 Appendix C, paragraph 2.6 and 33 CFR § 155 Appendix B, paragraph 2.6). Therefore, the time needed for a resource to move from its primary staging site to a classification point is the sum of the notification, mobilization, and travel times.
4. Mobilization is the time it takes to get the resources assembled and prepared at the staging site. Mobilization begins once notifications are complete and ends when the resources are ready to move off-site. The time to notify and mobilize resources at a site is largely based on how much control the OSRO has over those resources (i.e., dedicated, non-dedicated, owned and contracted). For this reason, different mobilization times are used for calculating OSRO classifications based on resource status (see Table 1-2 below). Using this table, an OSRO determines the notification/mobilization time for each response resource included in its application, and provides that information on the status of each response resource during the application process. *Note: Full-time personnel are a dedicated resource; part-time personnel are a non-dedicated resource. On-site indicates a 24-hour staffed resource site, as opposed to personnel who have to be recalled. Also, add one half hour to response time to account for the time between the discovery of discharge and the notification to the OSRO.*

Table 1-2: Resource Notification/Mobilization Response Times in Hours

Resource Status	Response Personnel Availability	
	On-Site (OS)	Recall (R)
Owned/Dedicated (O/D)	1	2
Contract or Dedicated (C/D)	1.5	2.5
Owned/Non-dedicated (O/ND)	2.5	3.5
Contract /Non-dedicated (C/ND)	3	4

5. Travel times are computed using standard speeds and the highway or water distance between an OSRO site and a COTP office address or coordinates of the ACC. The distance is calculated in a direct line, but it is the responsibility of the plan holder, in coordination with the OSRO, to ensure the response resources can arrive within the timelines specified in applicable regulations.
6. As previously mentioned, the regulation uses travel speeds of 35 miles per hour (mph) for land, 5 kts for water, and 100 kts for aircraft for OSRO classification calculations. The regulation divides the distance by the speed to determine the travel time using the equation below. The total response time assigned to each site is the sum of the notification time, mobilization time, and travel time to the geographic point.

$$\text{Travel Time} = (\text{Distance between OSRO Site and COTP Zone or ACC}) / \text{Travel Speed}$$

$$\text{Total Response Time} = \text{Notification Time} + \text{Mobilization Time} + \text{Travel Time}$$

K. Status Changes in Equipment or Capabilities

1. Once classified, an OSRO shall report any significant changes made to its response resources to the NSFCC and COTP within 72 hours.
 - a. The regulation defines “significant changes” as a reduction in the OSRO’s classified capacity by a factor of 10% or greater, for a period of 48 hours or longer.
 - b. Additional changes should also be updated in the RRI within 72 hours in the case of moving equipment from one site location to another site or deleting equipment that is no longer functioning that could impact classification.
2. Reductions in OSRO capabilities caused by surging of equipment into another COTP zone during a response may result in a loss of OSRO classification if it drops their capabilities below their classification threshold. However, requests of such resource movements shall be immediately to the NSFCC and the applicable COTP zones.
3. For changes in coverage due to planned maintenance that will exceed 48 hours, the OSRO should provide NSFCC, the appropriate COTP(s) and its plan holders using their resources, with as much advance prior notice as possible along with a description of the reduction in capability and any proposed mitigating measures.
4. The NSFCC reviews any mitigating measures submitted by an OSRO and either approves, proposes, or requests more information from the OSRO. The NSFCC, in consultation with the applicable COTP and CG-MER, determines if the OSRO needs to provide additional mitigating measures based on the amount of time the equipment is to be out of service, the expected decrease in coverage, and the areas impacted. If mitigating measures are approved, the NSFCC will coordinate notifications to affected COTPs. Any mitigating measures implemented by an OSRO should commence prior to the start of the planned gap. If the mitigating measures do not meet the requirements for classification, then the OSRO will lose its classification until it restores full coverage.
5. The RRI has a feature that notes when an OSRO site has been verified last by a user from the OSRO. **This new mechanism will notify the NSFCC when an OSRO site’s inventory has not been updated or verified in the last six months.** If this occurs, the NSFCC will contact the OSRO and prompt them to verify the site’s inventory.

L. OSRO Guidelines Biannual Review

1. The NSFCC and CG-MER shall conduct a biannual review and update process of the *Guidelines for the U.S. Coast Guard Oil Spill Removal Organization Classification Program*.

CHAPTER 2. Preparedness Assessment Visits (PAV)

A. Introduction and Purpose

1. PAVs are a critical component of the oil spill response preparedness system, providing on-site verification of resources and their condition.
2. NSFCC, DRAT, and COTP personnel shall collaborate with industry representatives on PAVs to ensure thorough oversight and awareness of the OSROs (and their capabilities) within their area of responsibility.
3. The PAV program encompasses various stages geared towards classifying OSROs for specific response thresholds, ensuring OSRO resources are consistent with classifications, examining equipment systems, and reviewing maintenance and training programs.
4. The Coast Guard may visit each location listed in the OSRO's application to account for and verify all listed resources, including both owned and contracted equipment and locations.
5. The following guidance within this chapter provides OSROs with an overview of the PAV process and a basic framework of what to expect during a PAV.

B. Roles and Responsibilities

1. CG-MER serves as the program office for the OSRO classification program. CG-MER shall:
 - a. Provide the NSFCC with requested VRP information to include, but not limited to, which OSROs serve as resource providers for vessel plan holders, which COTP zones the vessels operate in, and any other related information;
 - b. Assist the NSFCC with coordinating or conducting PAVs when requested by the NSFCC, and shall attend two PAVs annually; and
 - c. At the beginning of every fiscal year, facilitate a PAV scheduling conference call between CG-MER, the NSFCC, and DRAT Supervisors.
2. The Commanding Officer of the NSFCC serves as the Administrator of the OSRO classification program, including all components of the PAV process. The NSFCC leads or coordinates all PAVs. In addition, the NSFCC shall:
 - a. Maintain a list of OSROs, their classification status (if applicable), and when they last received a PAV;
 - b. Annually schedule PAVs. Ensure DRATs and COTP personnel have access to the PAV schedule;
 - c. Schedule and coordinate spot check PAVs when requested by DRAT or COTP;
 - d. Notify applicable DRATs and COTP personnel to assist with application process outlined in Figures 1-1 and 1-2 of these guidelines;
 - e. Ensure DRATs and COTP personnel have access to RRI and other applicable PAV documentation in advance of a scheduled PAV;

- f. Notify OSROs of a scheduled PAV, or spot check PAV, and designate one point of contact for OSROs to communicate questions beforehand;
 - g. Complete an After Action Report (AAR) for each COTP zone or ACC, and archive and send it to CG-MER, the applicable DRAT, and COTP;
 - h. Brief the COTP upon completion of a PAV and assist with the identification of OSRO equipment shortfalls or issues;
 - i. Lead or facilitate coordination of PAV spot checks within COTP zones or ACCs; and
 - j. Notify CG-MER of changes to classifications based on new input and determinations from PAVs
3. The DRAT Supervisor, or their representative, shall serve as the District representative for PAVs and shall work with the FOSC, COTP personnel, National Strike Force (NSF) representatives, and other federal, state, local, and tribal stakeholders to optimize District pollution response preparedness. DRAT Supervisors (or their representative) shall:
- a. Maintain a comprehensive knowledge of OSRO inventories located throughout the District;
 - b. Provide the District Commander and COTPs information on pollution response equipment capabilities, strategies, and operations;
 - c. Assist the NSFCC with PAV coordination and when operationally available, assist with the PAV;
 - d. Assist the NSFCC with the COTP brief upon completion of a PAV;
 - e. Identify District response equipment shortfalls, including the identification of any challenges associated with cascading equipment into or within the District;
 - f. Coordinate with the NSFCC to schedule a spot check PAV when the DRAT/COTP determines a spot check PAV is needed; and
 - g. Brief results of PAV spot checks, upon completion, to the NSFCC and COTP.
4. COTPs should provide, when operationally available, representatives to assist with a PAV. Also, COTPs shall:
- a. Upon request from the NSFCC or DRAT, provide the NSFCC or DRAT with required FRP information to include, but not limited to, which OSROs serve as resource providers for facility plan holders, and any other related information;
 - b. Notify the DRAT when a PAV spot check is deemed appropriate;
 - c. Provide feedback to the NSFCC and DRATs if they observe discrepancies during an actual response or exercise.
5. The NSFCC and CG-MER shall coordinate on all decisions that affect the OSRO classification program and the PAV process.

C. Types and Frequency of Preparedness Assessment Visits

1. To clarify roles and responsibilities, the following is a list and broad overview of the types of PAVs and expected participants:
 - a. **Routine PAV** – Participants: NSFCC (lead), DRAT, servicing NSF team and COTP personnel. Designed as a verification of response equipment listed within RRI and the OSRO’s application for classification at the time of the visit. The Coast Guard will assess the complete process outlined in Sections D through G of this chapter for OSROs within the scheduled COTP zone or ACC.
 - (1) **Frequency** – An OSRO should expect one routine PAV every four years. The Coast Guard schedules these PAVs based on higher volume port areas (HVPAs), National Preparedness for Response Exercise Program (PREP) exercise schedule, high-risk geographic locations, COTP zones, Government-Initiated Unannounced Exercise (GIUE) performance, ACCs and upon specific requests from a District Commander or COTP. The COTP reserves the right to increase the frequency of PAVs or conduct PAV spot checks within their respective zone and shall coordinate directly with the NSFCC.
 - (2) **Other Government Agency (OGA) Equipment Verifications (EVs)** - Other agencies have initiated the development of their own equipment verification programs. To strengthen interagency collaboration while reducing a duplicative burden on the OSROs, the Coast Guard should coordinate with its interagency partners prior to conducting PAVs. The Bureau for Safety and Environmental Enforcement (BSEE), the U.S. Environmental Protection Agency (EPA), and the Pipeline and Hazardous Materials Safety Administration (PHMSA) have all initiated their own equipment verification programs.
 - b. **PAV Spot Checks** – Participants: NSFCC (coordinator), DRAT, servicing NSF team and COTP personnel. PAV spot checks are conducted on OSROs that participate in the program. PAV spot checks verify requirements outlined in Sections D through G of this chapter and that the equipment listed within RRI is up to date. PAV spot checks may be utilized to verify corrective action when prior OSRO system or documentation discrepancies are recorded during a past PAV, exercise, or response, or at the discretion of the COTP. PAV spots check may occur announced or unannounced.
 - (1) **Frequency** – Contact NSFCC in order to conduct a PAV spot check. At the beginning of every fiscal year, the NSFCC, CG-MER, and DRATs will meet to coordinate PAV spot checks. Once the dates for the aforementioned PAVs, verifications for alternatives, and interagency equipment verifications are finalized, the PAV spot checks will be individually scheduled between each DRAT and their COTPs when operationally feasible. PAV spot checks are mutually (COTP/DRAT) determined based on risk, personnel availability, and feedback from COTPs concerning the requested quantity of PAV spot checks and how many OSRO sites can be assessed.

D. Preparedness Assessment Visit Process

1. Once the NSFCC or PAV team schedules the PAV for an owned and/or contracted OSRO site, the PAV team lead will print the OSRO’s RRI data for that particular location. OSROs shall notify the

PAV team lead or the NSFCC as soon as possible if unscheduled operations or other challenges may limit the scope or timing of the PAV.

2. Prior to visiting the OSRO site, the PAV team should review the classification(s) that particular OSRO holds and the associated guidance contained within these guidelines. At the minimum, the PAV team shall complete the following process:
 - a. Complete a visual survey of all listed resources and operate at least 10% of listed equipment systems to ensure satisfactory condition and function to include (when applicable):
 - (1) Boom;
 - (2) Vessels;
 - (3) Skimmers;
 - (4) Vacuum systems;
 - (5) Product transfer pumps;
 - (6) Temporary storage;
 - (7) Dispersants;
 - (8) Dispersant delivery systems;
 - (9) Aerial oil tracking aircraft (manned or unmanned);
 - (10) Nonfloating oil resources (detection, recovery);
 - (11) Shoreline cleanup resources; and
 - (12) Miscellaneous OSRO equipment (e.g., salvage and marine firefighting equipment, hazardous material response equipment, oil-water separators).
 - b. Ensure response resources are properly maintained. Verify that a preventative and corrective maintenance system is in place. Validate maintenance-related documentation.
 - c. Verify the OSRO personnel listed as available and trained to mobilize, deploy, and operate the equipment.
 - d. Verify compliance with all Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements listed in 29 CFR § 1910.120 and ensure documentation accurately reflects all listed personnel who have satisfactorily completed HAZWOPER.
 - e. Verify the response inventory's operability and logistic support capability. Where applicable, review the site's logistic narrative and determine the status of the support services listed in the narrative (e.g., equipment rentals, commercial drivers, personnel services) plus their ability to mobilize and sustain the resources.
 - f. Verify records of exercise participation, including AARs or lessons learned, to ensure the OSRO continues to improve operations and is rectifying previous areas of concern.
3. While the aforementioned process is the primary framework, it is not all-inclusive. The Coast Guard PAV team lead may determine a more in-depth look is required to verify a specific component in the OSRO's operation.

E. Personnel Training

1. The Coast Guard verifies that response personnel at the resource site are trained in accordance with HAZWOPER regulations (29 CFR § 1910.120) and other job-specific requirements (e.g., commercial driver's license (CDL), diver certifications or merchant mariner credential) by conducting a review of personnel training records located at the OSRO site.
2. Prior to the Coast Guard's visit, the OSRO should review personnel records and subcontracting or consulting agreements to verify the number and availability of trained personnel listed within the RRI. The OSRO should provide these records to the Coast Guard upon request.

F. Examination of Equipment Systems and Maintenance Records

1. The PAV conducts a review of the OSRO's listed resources as required by the appropriate classification program and level. When completing the visual equipment survey, the Coast Guard will examine equipment systems from each classification category. All systems that count toward classification should be in working order and able to be deployed into the marine environment. While PAVs are not an operational equipment deployment exercise, the verification of the equipment's ability to function properly is key. During the PAV, if an OSRO cannot account for the equipment's proper operation (recent spill or exercise), they may be required to operate one or more systems for the PAV team. PAV team leads are encouraged to operate equipment as "systems" rather than as individual components of a system (i.e., testing compatible pumps and skimmers)
2. In addition to a physical examination of equipment systems, the PAV team will conduct a review of all applicable equipment maintenance record as required by 33 CFR § 154.1057, 33 CFR § 155.1062, and 33 CFR § 155.5062. Records should be maintained on-site at manned locations, and include the equipment maintenance history and proof of ownership, lease, or subcontract. At unmanned sites with staged equipment, the OSRO should have equipment maintenance records readily available.

G. Preparedness Assessment Visit Equipment Criteria

1. The PAV team should consider, when applicable, the following criteria (not all-inclusive):
 - (1) Boom:
 - (a) Overall condition;
 - (b) Evidence of ownership, lease, or subcontract;
 - (c) Manufacturer, type, and quantity;
 - (d) Compatibility of connectors;
 - (e) Number and adequacy of anchors;
 - (f) Transportability;
 - (g) Planned operating area(s); and
 - (h) Condition of shoreline cleanup boom.
 - (2) Recovery Devices (Skimmers and Vacuum Trucks):

- (a) Evidence of ownership, lease, or subcontract;
 - (b) Manufacturer, type, model, and throughput capacity;
 - (c) Compatibility of components (e.g., hoses, suction and skimmer head, couplings and connectors);
 - (d) Operability and maintenance;
 - (e) Condition of the prime mover and other supporting equipment;
 - (f) Holding capacity;
 - (g) Planned operating area(s); and
 - (h) Condition of shoreline cleanup boom.
- (3) Oil Spill Response Vessels (Skimmers, Barges, and Support Craft):
- (a) Evidence of ownership, lease or subcontract;
 - (b) Operability and maintenance;
 - (c) Storage capacity;
 - (d) Inspection/certification;
 - (e) Planned operating areas;
 - (f) Grade of oil carried;
 - (g) Offload capability; and
 - (h) Length, beam, draft, range, transit speed and crew size.
- (4) Temporary Storage Devices:
- (a) Evidence of ownership, lease or subcontract;
 - (b) Manufacturer, type and model (as applicable);
 - (c) Capacity (twice the daily capacity of recovery devices);
 - (d) Inspected and maintained in accordance with manufacturer's recommendations;
 - (e) Contracted barges with current certificates;
 - (f) Planned operating area(s);
 - (g) Grade of oil carried; and
 - (h) Location of fixed storage.
- (5) Boats:
- (a) Sufficient numbers of trailers, outboard motors and Coast Guard-required safety equipment (life jackets, lights, etc.);
 - (b) Types and number of boats appropriate to the area of classification;
 - (c) Operability and maintenance;

- (d) Length, beam, draft, range, transit speed and crew size;
 - (e) Adequate working platform for oil spill response; and
 - (f) Certification/registration.
- (6) Dispersants:
- (a) Manufacturer, type and quantity;
 - (b) Volumes of dispersant(s) to support WCD tiers;
 - (c) Stowage;
 - (d) Identification of dispersant product resource provider;
 - (e) Primary staging site location;
 - (f) Distance between product's home base and primary staging site;
 - (g) Amount of each stockpile required to support required effective daily application capacity (EDAC) of each dispersant application platform;
 - (h) Capability of commencing dispersant application operations at site of discharge within seven hours of decision by FOSC; and
 - (i) EDAC determination using Estimated Dispersant System Potential (EDSP) calculator.
- (7) Application Platforms:
- (a) Type;
 - (b) Providing resource organization;
 - (c) Distance between platform's home base and identified primary dispersant staging site; and
 - (d) Dispersant payload for each dispersant application platform.
- (8) Aerial Oil Tracking and Application Capabilities:
- (a) Identification of resource provider;
 - (b) Type and location of aerial surveillance aircraft available, through contract or other approved means;
 - (c) At least 50% of each EDAC tier requirement must be achieved through the use of fixed-wing aircraft-based application platforms;
 - (d) Capability of arriving at the site of a discharge in advance of the arrival of response resources identified in the plan for WCD Tiers 1, 2 and 3 response times, and for a distance up to 50 nautical miles (NM) from shore (excluding inland areas);
 - (e) Capability of supporting oil spill removal operations continuously for three 10-hour operational periods during the initial 72 hours of the discharge; and
 - (f) Numbers of aircraft, pilots, and trained observation personnel.

- (9) Nonfloating Oil Response Resources:
- (a) Evidence of ownership, lease, or subcontract;
 - (b) Identification of resource provider;
 - (c) Industry and professional certifications;
 - (d) Condition of detection and recovery equipment;
 - (e) Information management of software systems related to the detection and recovery equipment;
 - (f) Manufacturer, type, and model (as applicable);
 - (g) Operability and maintenance;
 - (h) Length, beam, draft, range, transit speed, and crew size;
 - (i) Capacity;
 - (j) Transportability;
 - (k) Primary staging site location;
 - (l) Inspected and maintained in accordance with manufacturer's recommendations;
 - (m) Contracted barges with current certificates;
 - (n) Planned operating area(s); and
 - (o) Location of temporary/fixed storage.
- (10) Groups II-IV (within inland, near shore, or offshore where preauthorization exists):
- (a) Capability of commencing dispersant application operations at site of discharge within seven hours of decision by FOSC; and
 - (b) Capability to meet Tier 1, 2, and 3 response times for completed applications listed in Table 33 CFR § 155.1050(k).
- (11) Records and Labeling:
- (a) Equipment must be clearly marked for identification;
 - (b) Records must be available that support claims of ownership, lease, or subcontract;
 - (c) Complete maintenance records reflecting condition of equipment;
 - (d) Dispersant plans on site and updated (if applicable);
 - (e) Past three years of personnel training records must be made available; and
 - (f) Past three years of exercise records must be made available.
- (12) Logistics Narrative. An OSRO shall provide a written narrative outlining the logistics requirements for each resource site listed in the RRI. Narratives need to provide enough information to document that an OSRO has the myriad and complex logistics support requirements for the mobilization and delivery of the response equipment and

personnel from each resource site to each COTP zone or ACC requested. Narratives might contain, but are not limited to:

- (a) Methods of personnel recall (if applicable);
- (b) Methods of loading resources for mobilization;
- (c) Methods of resource transport off-site to incident or staging;
- (d) Methods of mobilizing, deploying, and supporting resources;
- (e) Special response resources staging (e.g., prepackaging, palletizing, preloading); and
- (f) Necessary site support services (e.g., tractors, trailers, drivers, cranes).

H. Preparedness Assessment Visit Results

1. During the PAV, the team may identify deficiencies within the OSRO's inventory or documentation. The PAV team will identify the specific deficiencies for the OSRO and notify the NSFCC. The OSROs will have sufficient opportunity (normally 30 days) to correct the deficiencies. This process will not affect classification as long as the deficiency does not significantly reduce the OSRO's overall response readiness.
2. The NSFCC will inform the OSRO's representative of the timeline to correct the deficiencies. The OSRO will provide the NSFCC with appropriate documentation of the corrections. However, if the severity of the deficiencies sufficiently indicate that an OSRO is not capable of meeting its classification requirements, the Coast Guard may immediately reduce or revoke the OSRO's classification until the deficiencies are corrected. OSROs unable to meet the NSFCC's predetermined deadline will have to be reevaluated through the full application process.
3. Once the OSRO has submitted proof of corrective action, the COTP/DRAT, in coordination with the NSFCC, shall conduct a PAV spot check on the recorded deficiencies within 60 days to ensure compliance. If the OSRO fails the PAV spot check, its classification will be removed.
4. For minor discrepancies, an in-person spot check may not be required. Some discrepancies may be able to be addressed via proper documentation and transmittal from the OSRO to the NSFCC.
5. If an OSRO disagrees with the results of a PAV, the OSRO may submit an appeal in writing to the Commanding Officer of the NSFCC within 30 days of the PAV. If the OSRO remains unsatisfied with the determination after the appeal, the OSRO may submit a second appeal to CG-MER.
6. An After Action Report (AAR) will be completed by the NSFCC after all PAVs or spot-checks and will be filed in the RRI and shared with internal Coast Guard stakeholders.

I. Other Reasons for Revoking an OSRO's Classification

1. Other reasons for downgrading a classification can include, but are not limited to:
 - a. The PAV team could not verify resources listed by the OSRO in the RRI and/or could not match the resources to the classification level requirements.

- b. Response resources are unable to meet response times or do not function properly during drills, exercises, responses, and PAVs.
- c. The OSRO fails to meet the training, maintenance, and exercise provisions of these guidelines.

CHAPTER 3. Mechanical Classification Requirements for OSROs

A. Overview

1. The Coast Guard classifies OSROs based on the location of their response resources and an assessment of their ability to mobilize those resources to the COTP zone or ACC. There are equipment standards and response times specific to each operating area within a COTP zone. Additional requirements are outlined for the Prince William Sound, Alaska COTP zone and shallow water environments. This chapter also discusses exercises, personnel training, and equipment maintenance specific to the OSRO classification program for Mechanical OSROs.
2. If an OSRO uses aircraft transport response resources, the resource must be linked to the appropriate aircraft in the RRI.

B. Resource Requirements

1. The Coast Guard separates core resources into five categories: protective boom, EDRC containment boom, TSC, response vessels, and personnel. Both protective and containment boom are measured in feet, EDRC is measured in barrels per day (bbls/day), and TSC is measured in barrels (bbls).

C. Protective Boom

1. VRP regulations require a plan holder to have a specific amount, size, and type of boom available for shoreline protection purposes for MMPDs and WCDs per 33 CFR § 155, Appendix B, Table 1. For classification purposes, it is assumed the OSRO has both vessel and facility clients. Since the protective boom requirements for VRP holders are more restrictive and specific, these requirements are used for OSRO classification per 33 CFR § 155 Appendix B, paragraph 5.6.
2. If an OSRO certifies that it only serves facility customers, it can submit, in writing to the NSFCC, a request to base its protective boom requirements on the amount specified in the ACP and FRP for the relevant COTP zone in accordance with 33 CFR § 154 Appendix C, paragraph 5.6.

D. Oil Recovery Device Operating Environment

1. Per 33 CFR § 155 Appendix B, Table 1, oil recovery devices must be at least capable of operating in wave heights up to and including the values listed in Table 1 of the regulation.
2. OSROs must ensure the skimmers they enter in the RRI are capable of operating within the environments for which they are seeking classifications, based on the manufacturer's listing.

E. EDRC and Containment Boom

1. EDRC, containment boom, and response vessels are interrelated for OSRO classifications. For planning purposes, the Coast Guard counts EDRC credit only toward an OSRO's classification if there is, at a minimum, 300 feet of containment boom available to be deployed in the applicable operating area to complete each skimming system.
2. Per 33 CFR § 154.1045, an OSRO must have 1,000 feet of containment boom or two times the length of the largest vessel that regularly conducts petroleum oil transfers to or from the facility, whichever is greater, in addition to the 300 feet per skimming system required to

complete a skimming system. OSROs must identify response vessels to support the recovery devices that also meet the specific FRP and VRP time requirements outlined in these guidelines.

F. Temporary Storage Capacity

1. An OSRO must identify TSC equaling twice the EDRC included in a classification application as required by 33 CFR § 154 Appendix C, paragraph 9.2 and 33 CFR § 155 Appendix B, paragraph 9.2. TSC and EDRC are interrelated. The regulation limits an OSRO's classification by the lowest-rated component of the recovery system. For example, if an OSRO has 10,000 bbls/day EDRC, but only has available 14,000 bbls TSC, then its recovery capacity is limited to 7,000 bbls/day (one half of the available TSC capability).
2. Non-dedicated TSC, for the purposes of this classification program, includes any TSC supplied by tank barge and mobile storage. Tank barges and mobile storage are assumed to be engaged in transporting oil between various locations and full of oil half of the time. Therefore, tank barges and mobile storage are only fully capable of supplying the total amount of TSC required half of the time. As a result, non-dedicated temporary storage would normally not qualify for the requirement specified by 33 CFR § 154.1045(g), which states that response equipment must mobilize within two hours for a MMPD and WCD1 classification. As an exception, the USCG's OSRO classification program allows non-dedicated tanker barges and mobile storage (i.e., vacuum trucks) to qualify for the MMPD and WCD1 mobilization if the non-dedicated TSC is provided at a 2:1 ratio.
3. OSROs can use dedicated mobilization offset times for non-dedicated TSC resources if the non-dedicated TSC resources are provided at two times the TSC requirement using mutually exclusive assets, also known as a 2:1 ratio. This exception is only available to tank barges and mobile storage and is not available to fixed storage. Mobile storage is limited to 45% of the total TSC and fixed storage is limited to 35% of the total TSC.
4. OSROs can identify fixed storage tanks ashore to meet the TSC requirements in limited circumstances. The NSFCC will accept them only for OSRO classifications covering the rivers/canals, Great Lakes, and inland operating areas. They are allowed for up to 35% of an OSRO's TSC, provided an OSRO certifies that it can transport recovered oil to the fixed tanks ashore and sustain the required EDRC. The Coast Guard does not allow shore-side fixed storage tanks in the near shore, offshore, or open ocean operating areas.
5. Vacuum trucks are limited to a maximum of 45% of the total TSC in the rivers/canals, Great Lakes, and inland operating areas. They are not permitted for EDRC and TSC credit in the near shore, offshore and open ocean operating areas. An OSRO may however provide proper documentation from the applicable COTP authorizing on-deck vehicle(s) transport of EDRC and TSC capability for all operating areas. All vacuum trucks receiving EDRC credit require 300 feet of containment boom as part of the system.

G. Response Vessels

1. Response vessels are integral to every response. OSROs should clearly identify the vessels intended for response services in the RRI. Although response vessels are not calculated programmatically into a classification, the NSFCC reviews available response vessels. If a

shortfall is perceived, further discussion with the OSRO is warranted before a classification is considered.

2. The Coast Guard will only consider response vessels that meet the response time requirements by tier as outlined in these guidelines. All response vessels identified must meet applicable Coast Guard regulations and policy guidelines (e.g., navigation lights, safety equipment, life vests).

H. Response Aircraft

1. Response aircraft, whether manned or unmanned, are essential for tracking oil spills and assessing the impact of the spill. Aircraft intended for response services should be clearly identified in the RRI. Plan holders must identify in their response plan, and ensure the availability through contract or other approved means, those response resources necessary to provide aerial oil tracking to support oil spill assessment and cleanup activities as per 33 CFR § 155.1050(l) and 33 CFR § 155.5050(k). Facilities operating exclusively on inland rivers are not required to comply with this paragraph.
2. OSROs should ensure response aircraft are capable of supporting oil spill removal operations continuously for three 10-hour operational periods during the initial 72 hours of the discharge.
3. OSROs should include appropriately located aircraft and personnel capable of meeting the response time requirement for oil tracking, and a sufficient number of aircraft, pilots, and trained observation personnel to support oil spill removal operations, commencing upon initial assessment, and capable of coordinating on-scene cleanup operations, specifically mechanical recovery operations in this case.
4. OSROs must train observation personnel in the protocols of oil spill reporting and assessment, including estimation of slick size, thickness, and quantity. These trained personnel must understand the use of assessment techniques in American Society for Testing and Materials (ASTM) Standard F1779, and be familiar with the use of other guides, such as the National Oceanic and Atmospheric Administration's (NOAA) *Open Water Oil Identification Job Aid for Aerial Observation* and *Characteristic Coastal Habitats* guides.
5. All response aircraft identified must meet applicable Coast Guard and FAA regulations and policy guidelines.

I. MMPD and WCD Tier 1 Classification

1. Only resources located at equipment sites capable of being mobilized and in route to the scene of a spill within two hours of notification are counted toward MMPD and WCD1 classifications. Because of the potential for non-dedicated resources to be committed to other functions, only dedicated resources are presumed to be able to mobilize within these time requirements.

J. WCD Tier 2 and WCD Tier 3 Classifications

1. Owned, contracted, dedicated, and non-dedicated equipment may be used for WCD2 and WCD3 classification.

K. Dedicated vs. Non-dedicated Resources

1. Since non-dedicated tank barges used for TSC credit may operate significant distances from their classification resource sites, an OSRO must further ensure the availability of non-dedicated barges by contract or other approved means in quantities equal to twice what the OSRO requires of the dedicated resources.
2. FRP and VRP regulations specify the quantity of resources required for specific planning volumes. The regulations categorize requirements as the MMPD and WCD (see below for planning volumes), and further divide WCD into Tiers 1, 2, and 3.
3. FRP and VRP regulations establish MMPD and WCD from a calculation using a facility's largest foreseeable oil discharge or a vessel's cargo volume, as shown in Table 3-1 below.

Table 3-1: Planning Volumes for Discharge Categories

Category	Facility	Vessel
MMPD*	1,200 bbls or 10% of WCD	2,500 bbls or 10% of WCD
WCD*	Largest foreseeable oil discharge in adverse weather conditions	A discharge in adverse weather conditions of a vessel's entire fuel or oil cargo, whichever is greater

**Defined in 33 CFR § 154.1020, § 155.1020, and § 155.5020*

4. Manufacturers design boom, oil recovery devices, and TSC equipment with certain operating areas in mind. In the response plan regulations, these operating areas are identified as rivers/canals, Great Lakes, inland, near shore, offshore, and open ocean. The OSRO classification program classifies OSROs based on these areas. The chapter on Specific Classification Standards by Operating Area (Chapter 4) lists specific requirements for boom, EDRC, and TSC for each of these areas. To receive an MMPD, WCD1, WCD2, or WCD3 classification, an OSRO must meet all boom, EDRC, and TSC requirements for the classification. Classification is determined independently for each operating area. See Tables 3-2, 3-3, and 3-4 on the following page for more details.

Table 3-2: Boom Amounts in Feet for OSRO Classifications

Area	Configuration	MMPD	WCD1	WCD2	WCD3
Persistent Oils (Groups II – IV)					
Rivers/Canals	Protective	4,000	25,000	25,000	25,000
Great Lakes	Protective	6,000	30,000	30,000	30,000
Inland	Protective	6,000	30,000	30,000	30,000
Near shore	Protective	8,000	30,000	30,000	30,000
Offshore	Protective	8,000	15,000	15,000	15,000
Open Ocean	Protective	-	-	-	-
Non-Persistent Oils (Group I)					
Rivers/Canals	Protective	-	15,000	15,000	15,000
Great Lakes	Protective	-	10,000	10,000	10,000
Inland	Protective	-	10,000	10,000	10,000
Near shore	Protective	-	10,000	10,000	10,000
Offshore	Protective	-	-	-	-
Open Ocean	Protective	-	-	-	-

Table 3-3: EDRC Amounts in Barrels per Day for OSRO Classifications

Area	MMPD	WCD1	WCD2	WCD3
Rivers/Canals	1,200	1,875	3,750	7,500
Great Lakes	1,200	6,350	12,500	25,000
Inland	1,200	12,500	25,000	50,000
Near shore	1,200	12,500	25,000	50,000
Offshore	1,200	12,500	25,000	50,000
Open Ocean	-	-	-	-

Table 3-4: TSC Amounts in Barrels for OSRO Classifications

Area	MMPD	WCD1	WCD2	WCD3
Rivers/Canals	2,400	3,750	7,500	15,000
Great Lakes	2,400	12,500	25,000	50,000
Inland	2,400	25,000	50,000	100,000
Near shore	2,400	25,000	50,000	100,000
Offshore	2,400	25,000	50,000	100,000
Open Ocean	2,400	25,000	50,000	100,000

L. Response Times

1. Due to the respective differences in FRP and VRP regulations, the Coast Guard’s OSRO classification program uses two major categories for response times: one for facilities and one for vessels. A summary of response times is listed in Table 3-5 on the next page.
2. If a COTP zone contains an HVPA, then response times for the Mechanical OSRO classification are more stringent. HVPA requirements are listed in 33 CFR § 154.1045, 33 CFR § 155.1050, and

33 CFR § 155.5050 include any area within 50 NM seaward of the port. The NSFCC does not typically authorize departure from mandated response times; however, if an OSRO cannot meet the reduced response times listed for HVPAs in Tables 3-5, 4-2, 4-6, and 4-7 of these guidelines, they must coordinate directly with the NSFCC.

Table 3-5: Response Times in Hours for Containment Boom, EDRC and TSC Resources

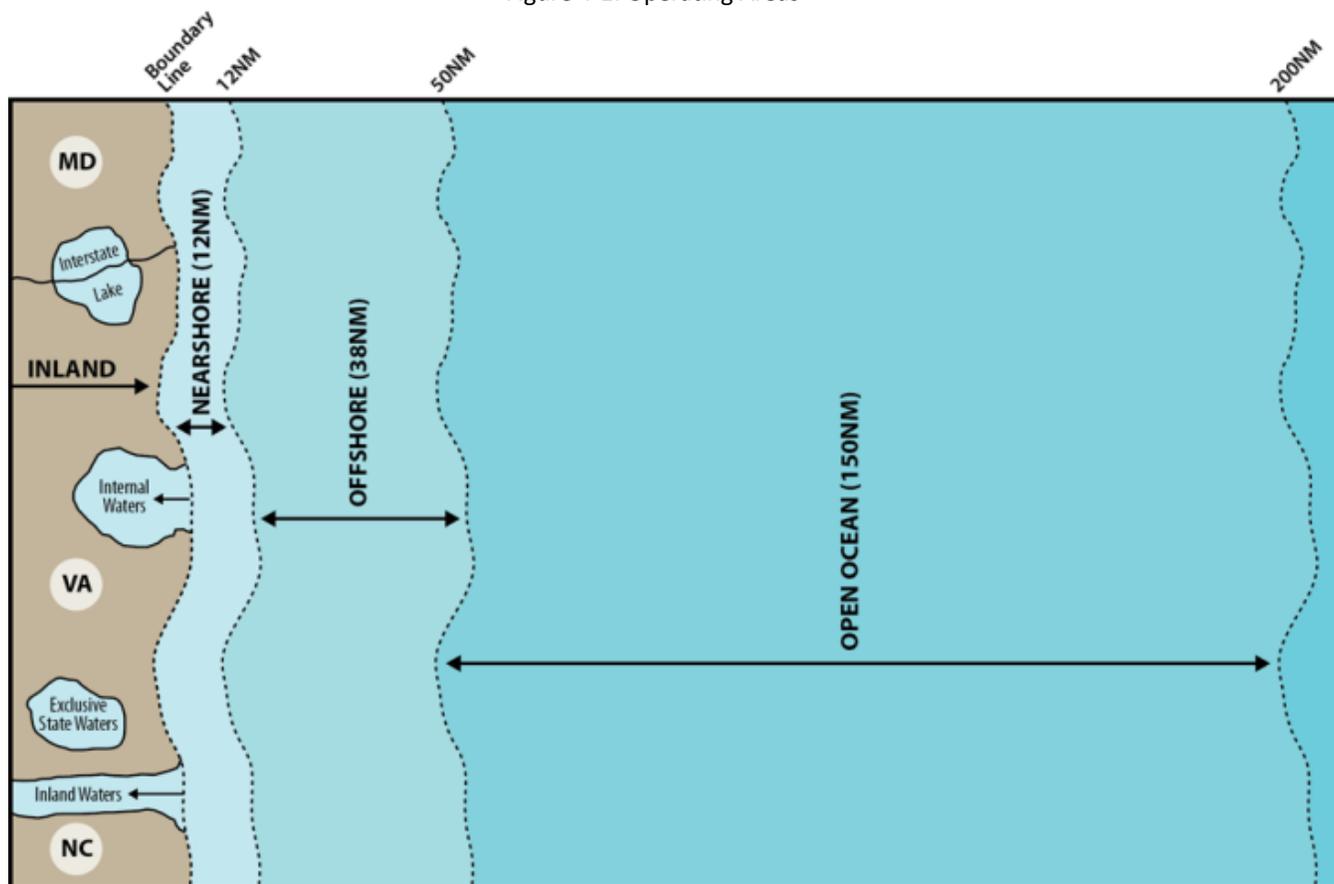
Area	Facility or Vessel	MMPD	WCD1	WCD2	WCD3
Rivers/Canals	Facility	12	12	36	60
	Vessel	24	24	48	72
	Facility HVPAs	6	6	30	54
	Vessel HVPAs	12	12	36	60
Great Lakes	Facility	6	12	36	60
	Vessel	12	18	42	66
	Facility HVPAs	N/A	N/A	N/A	N/A
	Vessel HVPAs	N/A	N/A	N/A	N/A
Inland	Facility	12	12	36	60
	Vessel	24	24	48	72
	Facility HVPAs	6	6	30	54
	Vessel HVPAs	12	12	36	60
Near shore	Facility	12	12	36	60
	Vessel	24	24	48	72
	Facility HVPAs	6	6	30	54
	Vessel HVPAs	12	12	36	60
Offshore	Facility	12	12	36	60
	Vessel	24	24	48	72
	Facility HVPAs	6	6	30	54
	Vessel HVPAs	12	12	36	60
Open Ocean	Facility	12	12	36	60
	Tank Vessel	24	24+	48+	72+
	Nontank Vessel	24	24	N/A	N/A

CHAPTER 4. Mechanical Classification Standards by Operating Area

A. Operating Areas

1. The operating areas for the Mechanical classification standard include inland, nearshore, offshore, and open ocean operating environments, as defined by 33 CFR § 154.2001 and 33 CFR § 155.1020 (see definitions in Appendix B of this document) and depicted in Figure 4-1 below.

Figure 4-1: Operating Areas



B. Adverse Weather Considerations

1. All equipment identified in a response plan must be capable of operating in the conditions expected within the geographic area in which a vessel operates. These conditions vary widely based on the location and season.
2. Vessels storing, handling, or transporting oil in more than one operating environment must identify equipment capable of successfully functioning in each operating environment. For example, vessels moving from the ocean to a river port must identify appropriate equipment designed to meet the criteria for transiting oceans, inland waterways, rivers, and canals. This equipment may be designed to operate in all of these environments or, more likely, different equipment may be designed for use in each area.

3. When identifying equipment, a vessel owner or operator must consider the inherent limitations in the operability of equipment components and response systems. The criteria in Table 1 of Appendix B to 33 CFR § 155 must be used for evaluating the operability in a given environment. These criteria reflect the general conditions in certain operating areas.
4. Table 1 of Appendix B to 33 CFR § 155 lists criteria for oil recovery devices and boom. All other equipment necessary to sustain or support response operations in a geographic area must be designed to function in the same conditions. For example, boats that deploy or support skimmers or boom must be capable of being safely operated in the significant wave heights listed for the applicable operating environment. The Coast Guard may require documentation that the boom identified in a response plan meets the criteria in Table 1 of Appendix B to 33 CFR § 155. Absent acceptable documentation, the Coast Guard may require that the boom be tested to demonstrate it meets the criteria in Table 1 of Appendix B to 33 CFR § 155. Testing must be in accordance with certain ASTM standards.
5. A vessel owner or operator must refer to the applicable ACP to determine if ice, debris, and weather-related visibility are significant factors in evaluating the operability of equipment. The ACP will also identify the average temperature ranges expected in a geographic area in which a vessel operates. All equipment identified in a response plan must be designed to operate within those conditions or ranges.

C. Shallow Water Requirements

1. Depending on the operating area, a certain percentage of OSRO resources must be capable of operating in waters of six feet or less as required by 33 CFR § 154.1045 and § 155.1050 (see Table 4-1 below). An OSRO must identify equipment in its application to meet this requirement.

Table 4-1: Percentage of Response Equipment Capable of Operating in Shallow Waters

Area	Facility	Tank Vessel
Rivers/Canals	20	20
Great Lakes	20	20
Inland	20	20
Near shore	20	20
Offshore	10	10
Open Ocean	None	None

D. Rivers and Canals

1. The following table summarizes the equipment standards and maximum response times for classifying OSROs for a planned response to spills in a river/canal operating area. All equipment to be used in this area must be capable of operating in 1-foot wave heights.

Table 4-2: Equipment Standards and Response Times for the Rivers/Canals Operating Area

Protective Boom (feet)	Containment Boom (feet)	Oil Recovery Equipment (bbls/day EDRC)	Recovered Oil Storage (bbls TSC)	Facility Response Times (hours)	Vessel Response Times (hours)
MMPD (1,200 bbls/day recovery)					
4,000	1,000 plus 300 per skimming system	1,200	2,400	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other locations
WCD1 (1,875 bbls/day recovery)					
25,000	1,000 plus 300 per skimming system	1,875	3,750	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other Locations
WCD2 (3,750 bbls/day recovery)					
25,000	1,000 plus 300 per skimming system	3,750	7,500	30 for higher volume ports	36 for higher volume ports
				36 for all other locations	48 for all other locations
WCD3 (7,500 bbls/day recovery)					
25,000	1,000 plus 300 per skimming system	7,500	15,000	54 for higher volume ports	60 for higher volume ports
				60 for all other locations	72 for all other Locations

d. Boom properties must include the following:

- (1) Boom height (draft plus freeboard) (inches) = 6-18;
- (2) Reserve buoyancy-to-weight ratio = 2:1;
- (3) Total tensile strength (pounds (lbs)) = 4,500;
- (4) Skirt fabric tensile strength (lbs) = 200; and
- (5) Skirt fabric tear strength (lbs) = 100.

E. Great Lakes

1. The following table summarizes the minimum equipment standards and maximum response times for classifying OSROs for a planned response to spills in the Great Lakes operating area. All equipment used in this operating area must be capable of operating in 4-foot wave heights.

Table 4-3: Equipment Standards and Response Times for the Great Lakes Operating Area

Protective Boom (feet)	Containment Boom (feet)	Oil Recovery Equipment (bbls/day EDRC)	Recovered Oil Storage (bbls TSC)	Facility Response Times (hours)	Tank Vessel Response Times (hours)
MMPD (1,200 bbls/day recovery)					
6,000	1,000 plus 300 per skimming system	1,200	2,400	6	12
WCD1 (6,250 bbls/day recovery)					
30,000	1,000 plus 300 per skimming System	6,250	12,500	12	18
WCD2 (12,500 bbls/day recovery)					
30,000	1,000 plus 300 per skimming system	12,500	25,000	36	42
WCD3 (25,000 bbls/day recovery)					
30,000	1,000 plus 300 per skimming system	25,000	50,000	60	66

- a. Boom properties must include the following:
- (1) Boom height (draft plus freeboard) (inches) = 18-42;
 - (2) Reserve buoyancy-to-weight ratio = 2:1;
 - (3) Total tensile strength (lbs) = 15,000–20,000;
 - (4) Skirt fabric tensile strength (lbs) = 300; and
 - (5) Skirt fabric tear strength (lbs) = 100.

F. Inland

1. The following table summarizes the minimum equipment standards and maximum response times for classifying OSROs for the planned response to spills in the inland operating area. All equipment used in this operating area must be capable of operating in 3-foot wave heights.

Table 4-4: Equipment Standards and Response Times for the Inland Operating Area

Protective Boom (feet)	Containment Boom (feet)	Oil Recovery Equipment (bbls/day EDRC)	Recovered Oil Storage (bbls TSC)	Facility Response Times (hours)	Tank Vessel Response Times (hours)
MMPD (1,200 bbls/day recovery)					
6,000	1,000 plus 300 per skimming system	1,200	2,400	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other Locations
WCD1 (12,500 bbls/day recovery)					
30,000	1,000 plus 300 per skimming system	12,500	25,000	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other locations
WCD2 (25,000 bbls/day recovery)					
30,000	1,000 plus 300 per skimming system	25,000	50,000	30 for higher volume ports	36 for higher volume ports
				36 for all other locations	48 for all other Locations
WCD3 (50,000 bbls/day recovery)					
30,000	1,000 plus 300 per skimming system	50,000	100,000	54 for higher volume ports	60 for higher volume ports
				60 for all other locations	72 for all other locations

- a. Boom properties must include the following:
- (1) Boom height (draft plus freeboard) (inches) = 18-42;
 - (2) Reserve buoyancy-to-weight ratio = 2:1;
 - (3) Total tensile strength (lbs) = 15,000–20,000;
 - (4) Skirt fabric tensile strength (lbs) = 300; and
 - (5) Skirt fabric tear strength (lbs) = 100.

G. Near Shore

1. The following table summarizes the minimum equipment standards and maximum response times for classifying OSROs for the planned response to spills in the near shore operating area. With the exception of shoreline protection boom, all equipment used in this operating area must be capable of operating in 6-foot wave heights.

Table 4-5: Equipment Standards and Response Times for the Near Shore Operating Area

Protective Boom (feet)	Containment Boom (feet)	Oil Recovery Equipment (bbls/day EDRC)	Recovered Oil Storage (bbls TSC)	Facility Response Times (hours)	Tank Vessel Response Times (hours)
MMPD (1,200 bbls/day recovery)					
8,000	1,000 plus 300 per skimming system	1,200	2,400	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other Locations
WCD1 (12,500 bbls/day recovery)					
30,000	1,000 plus 300 per skimming system	12,500	25,000	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other locations
WCD2 (25,000 bbls/day recovery)					
30,000	1,000 plus 300 per skimming system	25,000	50,000	30 for higher volume ports	36 for higher volume ports
				36 for all other locations	48 for all other Locations
WCD3 (50,000 bbls/day recovery)					
30,000	1,000 plus 300 per skimming system	50,000	100,000	54 for higher volume ports	60 for higher volume ports
				60 for all other locations	72 for all other locations

a. Boom properties must include the following:

- (1) Boom height (draft plus freeboard) (inches) = ≥ 42 containment; ≥ 18 shoreline protection;
- (2) Reserve buoyancy-to-weight ratio = 3:1 to 4:1 containment; $> 2:1$ shoreline protection;
- (3) Total tensile strength (lbs) = $> 20,000$ containment; $> 15,000$ shoreline protection;
- (4) Skirt fabric tensile strength (lbs) = 500 containment; > 300 shoreline protection; and
- (5) Skirt fabric tear strength (lbs) = 125 containment; > 100 shoreline protection.

H. Offshore

1. The following table summarizes the minimum equipment standards and maximum response times for classifying OSROs for the planned response to spills in the offshore operating area. All equipment used in this operating area must be capable of operating in 6-foot wave heights.

Table 4-6: Equipment Standards and Response Times for the Offshore Operating Area

Protective Boom (feet)	Containment Boom (feet)	Oil Recovery Equipment (bbls/day EDRC)	Recovered Protective Boom (feet)	Facility Response Times (hours)	Tank Vessel Response Times (hours)
MMPD (1,200 bbls/day recovery)					
8,000	1,000 plus 300 per skimming system	1,200	2,400	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other locations
WCD1 (12,500 bbls/day recovery)					
15,000	1,000 plus 300 per skimming system	12,500	25,000	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other locations
WCD2 (25,000 bbls/day recovery)					
15,000	1,000 plus 300 per skimming system	25,000	50,000	30 for higher volume ports	36 for higher volume ports
				36 for all other locations	48 for all other locations
WCD3 (50,000 bbls/day recovery)					
15,000	1,000 plus 300 per skimming system	50,000	100,000	54 for higher volume ports	60 for higher volume ports
				60 for all other locations	72 for all other Locations

a. Boom properties must include the following:

- (1) Boom height (draft plus freeboard) (inches) = ≥ 42 containment; ≥ 18 shoreline protection;
- (2) Reserve buoyancy-to-weight ratio = 3:1 to 4:1 containment; $> 2:1$ shoreline protection;
- (3) Total tensile strength (lbs) = $> 20,000$ containment; $> 15,000$ shoreline protection;
- (4) Skirt fabric tensile strength (lbs) = 500 containment; > 300 shoreline protection; and
- (5) Skirt fabric tear strength (lbs) = 125 containment; > 100 shoreline protection.

I. Open Ocean

- The following table summarizes the minimum equipment standards and maximum response times for classifying OSROs for the planned response to spills in the open ocean operating area. All equipment to be used in this operating area must be capable of operating in 6-foot wave heights.

Table 4-7: Equipment Standards and Response Times for the Open Ocean Operating Area

Protective Boom (feet)	Containment Boom (feet)	Oil Recovery Equipment (bbls/day EDRC)	Recovered Oil Storage (bbls TSC)	Facility Response Times (hours)	Tank Vessel Response Times (hours)
MMPD (1,200 bbls/day recovery)					
No requirements	1,000 plus 300 per skimming system	1,200	2,400	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other location
WCD1 (12,500 bbls/day recovery)					
No requirements	1,000 plus 300 per skimming system	12,500	25,000	6 for higher volume ports	12 for higher volume ports
				12 for all other locations	24 for all other location
WCD2 (25,000 bbls/day recovery)					
No requirements	1,000 plus 300 per skimming system	25,000	50,000	30 for higher volume ports	36 for higher volume ports
				36 for all other locations	48 for all other location
WCD3 (50,000 bbls/day recovery)					
No requirements	1,000 plus 300 per skimming system	50,000	100,000	54 for higher volume ports	60 for higher volume ports
				60 for all other locations	72 for all other location

- a. Boom properties must include the following:
 - (1) Boom height (draft plus freeboard) (inches) = ≥ 42 ;
 - (2) Reserve buoyancy-to-weight ratio = 3:1 to 4:1;
 - (3) Total tensile strength (lbs) = $> 20,000$;
 - (4) Skirt fabric tensile strength (lbs) = 500; and
 - (5) Skirt fabric tear strength (lbs) = 125.

J. Prince William Sound Classification

- 1. The FRP and VRP regulations establish more stringent planning criteria for tank vessel plan holders loading cargo at a facility permitted under the Trans-Alaska Pipeline Authorization Act. The regulations also classify OSROs intending to respond in the Prince William Sound, Alaska COTP zone to the more stringent standard.

CHAPTER 5. OSRO Classification Dispersant Program

A. Introduction

1. NSFCC evaluates OSROs seeking classification for dispersants on their ability to apply safely set volumes of surface dispersant within set periods to the furthest 50 NM offshore areas within each COTP zone or ACC. This chapter provides guidance to OSROs concerning planning standards, core resource expectations, and how to meet the regulatory criteria of dispersant operations.
2. NSFCC separates core resources into four categories: dispersant product; EDAC; dispersant application platform; and aerial oil tracking and application capabilities. NSFCC calculates Dispersant classifications through the RRI and EDSP program.
3. NSFCC evaluates OSRO Dispersant classification levels, assesses the OSRO's dispersant plan, and estimates the EDAC for its dispersant application systems. The regulations (33 CFR § 155.1035, 33 CFR § 155.5035, and 33 CFR § 154.1035) only sanction the EDSP. The EDSP is available at <https://www.bsee.gov/sites/bsee.gov/files/dispersants-cal.html>. OSROs should contact the NSFCC prior to submitting their dispersant plan.

B. Response Plan Requirements

1. VRP and FRP regulations—specifically 33 CFR § 155.1035, 33 CFR § 155.5035, and 33 CFR § 154.1035—require a plan holder operating in any inland, near shore, or offshore area with pre-authorization for dispersant use to be able to apply enough dispersant to meet a WCD or the requirements in 33 CFR § 154.1045(i), 33 CFR § 155.1050(k), or 33 CFR § 155.5050(j), whichever is the lesser amount. The dispersant identified must be of a type listed on the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) Product Schedule (400 CFR § 300.915). The plan must identify: specific dispersant application platforms and payloads; the primary dispersant staging site for each dispersant application platform; the platform type; resource provider; location; dispersant stockpiles and location; and trained personnel necessary to continue operation of the equipment and staff the OSRO and spill management team for the first seven days of the response.
2. If the Coast Guard has evaluated and classified an OSRO, then a plan holder may reference the classified OSRO in their response plan instead of listing all of the required dispersant resources.

C. Tier 1, 2, and 3 Worst Case Discharge (WCD) Classifications.

1. The Coast Guard categorizes Dispersant classifications by WCD Tiers 1, 2, and 3 and labels them WCD1, WCD2, and WCD3, respectively. The Dispersant classifications can be achieved independently of each other and each classification is determined separately for each COTP zone or ACC. The plan holder can then contract with multiple OSROs to fulfill its Tier 1, 2 and 3 requirements.
2. WCD1: To qualify for the WCD1 classification, an OSRO must be able to commence dispersant operations within seven hours **and** must be able to apply 8,250 gallons (gulf coast region)/4,125 gallons (all other U.S regions), within 12 hours of the FOSC's decision to use dispersants, as per 33 CFR § 155.1050(k) (1), 33 CFR § 155.5050(k) (1), and 33 CFR § 154.1045(i) (1). For planning

and classification purposes, the Coast Guard assumes that the FOSC's decision to use dispersants will occur at the time of spill notification. Therefore, an OSRO has seven hours to move dispersant stockpiles and commence dispersant operations. Dispersant-dedicated aerial oil tracking resources must be capable of being on-scene (50 NM offshore) within seven hours.

3. WCD2: To qualify for the WCD2 classification, an OSRO must be able to apply 23,375 gallons of dispersants in a 12-hour window within 36 hours of the FOSC's decision to use dispersants. For WCD2, planners can estimate the dispersant timeframe to begin at hour 24 and end at hour 36. To get credit for classification, 11,687 gallons of dispersant must arrive at the OSRO selected primary staging site within 24 hours of the FOSC's decision to use dispersants, and the remaining 11,688 gallons must arrive at the primary staging site within 30 hours. Aerial oil tracking resources must be capable of being on-scene (50 NM offshore) within 24 hours of the FOSC's decision to use dispersants.
4. WCD3: To qualify for the WCD3 classification, an OSRO must be able to apply 23,375 gallons of dispersants in a 12-hour window within 60 hours of the FOSC's decision to use dispersants. For WCD3, planners can estimate the dispersant application timeframe to begin at hour 48 and end at hour 60. To get credit for classification, all 23,375 gallons of dispersant must arrive at the OSRO selected primary staging site within 48 hours of the FOSC's decision to use dispersants. Aerial oil tracking resources must be capable of being on-scene (50 NM offshore) within 48 hours of the FOSC's decision to use dispersants.
5. WCD1, 2, and 3: To qualify for all Dispersant classifications, an OSRO must meet the total requirements for EDAC and response times as listed in Table 5-1 in Section D of this chapter.
6. Dispersant application requirements assume 12 hours of daylight in each tier period as a planning standard. For independent classifications, OSROs must be able to apply the EDAC for each tier within a 12-hour period.

D. Effective Daily Application Capacity

1. EDAC is the estimated amount of dispersant that can be applied to a discharge by an application system or multiple application systems, given the availability of supporting dispersant stockpiles. As per the regulations, EDAC is calculated for responding to a spill at the furthest 50 NM point offshore in the COTP zone from the staging or home airport. EDAC is evaluated by the following primary categories: aircraft and vessel delivery systems and payloads, the location (home base) of each identified platform, OSRO-selected primary staging airports, application pattern, and any other input parameters specified.
2. For dispersant application platforms not detailed in the EDSP, or for changes to listed values, adequacy of performance criteria must be documented by presentation of independent evaluation materials (33 CFR § 154.1045(i)(2)(ii)) and provided to the NSFCC. The EDAC requirements are listed in Table 5-1 below and can be found in 33 CFR § 154.1045(i), 33 CFR § 155.1050(k), and 33 CFR § 155.5050(j).

Table 5-1: Tiers for EDAC

Tiers	Response time for completed application (hours)	Dispersant application/Oil treated in gallons (Gulf Coast)	Dispersant application/Oil treated in gallons (All other U.S.)
Tier 1	12	8,250/165,000	4,125/82,500
Tier 2	36	23,375/467,000	23,375/467,000
Tier 3	60	23,375/467,000	23,375/467,000
Totals	60	55,000/1,100,000	50,875/1,017,500

3. For Tier 1, dispersant operations must commence at the site of a discharge within seven hours of the FOSC’s decision to use dispersants. EDAC counted towards Tier 1 will be de-rated through the EDSP by completing the cascade information within the EDSP calculator. Aircraft and vessel platforms will observe 12-hour daytime operational periods during Tier 2 and Tier 3 dispersant operations.
4. Mobilization times for dispersant platforms are added in to EDAC calculations. For dispersant-applying aircraft, OSROs shall use the time specified in their contract with the aircraft to determine mobilization time. The OSRO must provide to the NSFCC a letter of attestation stating the times that the contracted aircraft can mobilize. Actual contracts must be available for review by the NSFCC during PAVs. For vessels, OSROs shall apply the times as listed in Table 5-2 in Section N of this chapter.
5. If there are additional dispersant quantities that exceed a Tier’s EDAC requirement, credit the excess dispersant quantities towards meeting the next Tier’s EDAC requirements. For example, if an OSRO is trying to qualify for WCD2 and WCD3 classifications and can apply 30,000 gallons of dispersants to the site in 36 hours, then 23,375 gallons will go towards the WCD2 classification and the remaining 6,625 gallons will be applied towards the WCD3 classification.

E. Location and Documentation of Dispersant Resources

1. 33 CFR § 155.1035, 33 CFR § 155.5035, and 33 CFR § 154.1035 require that plans provide dispersant application platform, stockpile, and staging site locations. OSROs must enter these locations into the RRI. Furthermore, OSROs must maintain documentation that captures manufacturer-specific data, the type of dispersants at each stockpile and/or staging site location, and their shelf life and/or expiration date.

F. Captain of the Port Zones

1. The Coast Guard bases COTP zones and Marine Safety Unit (MSU) zones on the zones described in 33 CFR § 3.05-10 through 33 CFR § 3.85-15.

G. Travel Time

1. The standard speeds used for Dispersant classifications are the same as those used for Mechanical classifications for calculating travel time. Travel over water is calculated at 5 kts and travel over land is calculated at 35 mph as per 33 CFR § 154, Appendix C and 33 CFR § 155,

Appendix B. The regulations use actual land and air routes and not a straight line between the staging and response locations.

2. Calculate aircraft speed for the transport of dispersant stockpiles at 100 kts, based on average speeds including delays, preparation time, and layovers. The EDSP designates aircraft speed used for calculating EDAC. If an OSRO adds a new aircraft to the EDSP, then an alternative speed request should be submitted to the NSFCC. With valid documentation, it is possible for an OSRO to request higher aircraft or vessel transit speeds for dispersant stockpile movement.

H. Dispersant Application Platform

1. Dispersant application platforms must be capable of delivering and applying dispersant on a discharge. At least 50% of each EDAC tier requirement must be achieved by fixed-wing aircraft application platforms.

I. American Society for Testing and Materials Standards

1. All dispersant application personnel must be trained in and capable of applying dispersants as outlined in ASTM F1413: "Standard Guide for Oil Spill Dispersant Application Equipment: Boom and Nozzle Systems" as per (i)(2)(iii).
2. Boom and nozzle dispersant application systems must be capable of applying dispersants in accordance with ASTM F1413.
 - a. Minimum Equipment Performance Specifications, as per ASTM F1413 include:
 - (1) Target Dosage: Dispersant spray equipment must provide a dispersant dosage between 2-10 gallons per acre. Five gallons per acre is the standard used for determining EDAC;
 - (2) Droplet Size Distribution: The droplet size distribution of the dispersant reaching the target shall have a Volume Median Diameter (VMD) of 300-500 μ m; and
 - (3) Maximum Delivery Variation over Swath Width: The equipment shall be capable of delivering dispersant with a maximum delivery variance of 10% over the swath width. Swath width is the length between the points at which the delivery drops below 90% of the design.
3. Document the adequacy of dispersant application systems not fully covered by ASTM F1413 by presenting independent evaluation materials (e.g., laboratory and field tests or reports of actual use). If an OSRO plans to use such a system, then the evaluation materials should be submitted to the NSFCC for evaluation.
4. NSFCC evaluates equipment for compliance with ASTM standards during the PAVs. OSROs must maintain manufacturer data on all dispersant spray equipment. If the manufacturer cannot supply the performance data, then the OSRO can perform independent testing of dispersant applicators; this testing should be done in accordance with ASTM F1738 when applicable. Documentation for performance data or equivalents should include:
 - a. Performance data:
 - (1) Droplet size: VMD;
 - (2) Volumetric output distribution over the swath width;

- (3) A table of pump rates and dispersant injection rates or equivalent indices;
 - (4) Nozzle design height for ship/boat systems;
 - (5) Swath width;
 - (6) Differential speeds for aircraft systems at various pump settings (or equivalents) and aircraft speeds; and
 - (7) Recommended operating pressures at the inlet to the boom.
- b. Dosage chart: A chart of dosages achievable with different application vehicle speeds and different dispersant flow rates, boom pressures or other appropriate injection indicators.
5. OSROs must ensure routine maintenance is performed on all dispersant equipment. They should conduct calibration of oil spill dispersant application equipment per ASTM F1460 and testing of oil spill dispersant application equipment in accordance with ASTM F1738.

J. Aerial Oil Tracking and Application Capabilities for Dispersant Use

1. Per the VRP and FRP regulations—33 CFR § 155.1035, 33 CFR § 155.5035, and 33 CFR § 154.1035—plans must provide oil-tracking capabilities, and thus must identify a resource provider and the type and location of aerial surveillance aircraft that are ensured available through contract or other approved means. The aerial tracking resources must be capable of arriving at the site of a discharge in advance of the arrival of response resources identified in plans for WCD Tiers 1, 2, and 3 response times, and for a distance up to 50 NM from shore. Aircraft and personnel must be appropriately staged to meet the response time, number of aircraft pilots, and trained observation personnel requirements for supporting oil spill operations. This should commence upon initial assessment and aircraft and personnel must be capable of coordinating on-scene cleanup operations for dispersant operations. Observation personnel must be trained in the protocols of oil spill reporting and assessment and be familiar with the use of pertinent guides including, but not limited to, NOAA's *Open Water Oil Identification Job Aid for Aerial Observation* and the *Characteristic Coastal Habitats* guide.
2. As a planning standard for classification, aerial observation aircraft used for tracking the oil spill must be able to arrive at the site of the discharge (up to 50 NM offshore) within seven hours for Tier 1 WCD, 24 hours for Tier 2 WCD, and 48 hours for Tier 3 WCD.
3. Mobilization times are added to the calculated transit time from the home base to the primary staging site to determine the time of arrival on-scene. For oil tracking aircraft, mobilization times are listed in Table 5-2 under paragraph (M)(3) of this chapter.
4. OSROs shall provide the NSFCC with a list of their aerial oil tracking and application capabilities, to include: type of aircraft; aircraft transit speed; aircraft housing locations (address and latitude/longitude); mobilization times; and distances from the aircraft housing locations to the OSRO selected staging sites for each COTP zone.

K. Personnel

1. The number of personnel needed to support a response depends on numerous factors. OSROs seeking Dispersant classification shall ensure they have sufficient numbers of pilots, staging

airport support and management personnel, and trained observation personnel to support aerial requirements.

2. OSROs must meet the personnel requirements for dispersant operations in 33 CFR § 154.1045(i)(2)(iv) and 33 CFR § 155.1050(k)(2)(iv). An OSRO must provide confirmation that personnel have received the proper training and are capable of applying dispersants according to the recommended procedures contained in ASTM 1737. PAV teams will review personnel training records and rosters to ensure compliance.

L. Response Times and Dispersant Stockpiles

1. In addition to dispersant resource quantities, OSROs are required to meet certain response times (33 CFR § 154.1045, 33 CFR § 155.5050, and 33 CFR § 155.1050). Dispersant application operations must commence within seven hours of the FOSC’s approval to use dispersants. The dispersant provider has 12 hours to complete dispersant application for WCD Tier 1, 36 hours to complete dispersant application for WCD Tier 2, and 60 hours to complete dispersant application for WCD Tier 3. The amount that must be applied within the time frames is listed in 33 CFR § 154.1045(i) and 33 CFR § 155.1050(k).
2. Dispersant stockpiles are calculated within the RRI and arrival times are based on the distance from the stockpile location to the OSRO’s selected primary staging location for an incident using the applicable transit speeds and routes. For WCD Tier 1, all required dispersants must arrive within seven hours of the FOSC’s decision to use dispersants. For WCD Tier 2, 50% of the required dispersants (11,687 gallons) must arrive within 24 hours of the FOSC’s decision to use dispersants and the remaining dispersants (11,688 gallons) must arrive within 30 hours. For WCD Tier 3, all required dispersants must arrive within 48 hours of the FOSC’s decision to use dispersants.
3. Mobilization times for moving dispersant stockpiles are the same as oil tracking aircraft and are listed in Table 5-2 below.

Table 5-2: Resource Notification/Mobilization Response Times in Hours

Resource Status	Response Personnel Availability	
	On-Site	Recall
Owned/Dedicated	1	2
Contract or Dedicated	1.5	2.5
Owned/Non-dedicated	2.5	3.5
Contract/Non-dedicated	3	4

Note: Full-time personnel are a dedicated resource. Part-time personnel are a non-dedicated resource. On-site indicates a 24-hour staffed resource site, as opposed to personnel who have to be recalled.

M. Estimated Dispersant System Potential Calculations

1. The NSFCC requires that an OSRO records and maintains its EDSP calculations, as documentation, for each dispersant application resource for Tiers 1, 2, and 3 WCDs, and for each staging area within the COTP zone or ACC for which they are applying for classification.
2. OSROs should understand the requirements below to help facilitate the EDSP calculation process:
 - a. There is only one Dispersant classification level for each COTP zone based on response times and resources arriving at a point 50 NM offshore from each OSRO's primary dispersant staging site or home base. OSROs need to provide one set (one for each Tier) of EDSP records for each COTP zone or ACC. If using multiple staging sites, documentation is required for each staging site for that COTP zone or ACC.
 - b. The NSFCC requires an OSRO provide a screenshot of their EDSP calculations, as documentation, for each dispersant application resource for Tiers 1, 2, and 3 for each staging area within the COTP zone or ACC for which they are applying for a classification.
 - c. There is only one Dispersant classification level for each COTP zone based on response times and resources arriving at a point 50 NM offshore from the OSRO-selected primary dispersant staging site. OSROs need to provide one set (one for each tier applied for) of EDSP screenshots for each COTP zone. If using multiple staging sites, a screenshot is required for each staging site for that COTP zone.
 - d. Screenshots should display the mobilization time. If electronic means are not available then a hand-written mobilization time on the screenshot will suffice.
 - e. Screenshots should be sent via email to the NSFCC at D05-SMB-NSFCC-RR1@uscg.mil.

CHAPTER 6. OSRO Classification Guidelines for Nonfloating Oils

A. Overview

1. Heavy oils and Group V oils, hereby merged and defined as nonfloating oils, exhibit qualities that could potentially cause the oils to submerge or sink, due to the oil characteristics, weathering, environmental factors, or how they are discharged. Examples of these types of oils include, but are not limited to, Diluted Bitumen (Dilbit), Group V Residual Fuel Oils, LAPIO (Low API Oil), Asphalt, and Asphalt Products. Regulations categorize certain Heavy oils within a different persistent oil grouping than Group V oils; however, due to the technical fact that environmental and geographic conditions can subject Heavy oils to submerge and sink, applicable plan holders and OSROs must be aware of and strongly consider the risk.
2. To capture the detection and response capabilities of OSROs more efficiently and enhance the response to nonfloating oils, the Coast Guard created the Nonfloating Oil classification. Previously, OSROs submitted Group V oil plans to the Coast Guard and, if deemed sufficient, would be listed as a Group V OSRO. The Group V OSRO classification is no longer valid. All OSROs seeking the Nonfloating oil classification must reapply through procedures outlined in this chapter.
3. OSROs that are already classified in the Mechanical classification program for a plan holder that handles, stores, or transports oils that are not Group V oils but that fall under the Heavy oil definition, should notify the NSFCC of their intention to classify as a Nonfloating Oil OSRO. An OSRO's current Mechanical classification will not be impacted. A Nonfloating Oil classification does not equate or supersede any other classification nor relieve the OSRO of any contractual responsibilities to their respective plan holders.
4. While this specific classification is focused on nonfloating oil spill response, the Coast Guard strongly emphasizes that oils with a higher specific gravity than 1.0 can still remain positively buoyant when discharged into the environment, given certain environmental conditions. While the Coast Guard is not requiring a certain type of Mechanical classification as a prerequisite to earn the Nonfloating Oil classification, the Nonfloating Oil classification has no bearing on the responsibility that each OSRO has to the plan holder for responding to what could become a positively buoyant or surface-oriented oil spill.
5. The underwater environment, poor visibility, and irregular behavior of nonfloating oils present significant response challenges to the oil spill response community in comparison to surface-oriented oil spills. Standard measures such as EDRC, and response techniques such as containment, have been proven to be inadequate and are difficult to apply for an oil spill where most of the oil is submerged below the surface or has sunk to the bottom, termed nonfloating oil. Therefore, to accommodate different ranges of technology and facilitate flexibility for each OSRO, the Coast Guard has created a detailed application for the Nonfloating Oil classification.
6. To earn a Nonfloating Oil classification, OSROs shall submit an application to the NSFCC requesting classification, along with nonfloating oil plan procedures. The NSFCC will ensure all proper documentation is included and will disseminate the plan to CG-MER. With assistance from subject matter expert reports (e.g., *the American Petroleum Institute's (API) Technical Report on Sunken Oil Detection and Recovery*), the NSFCC and CG-MER will then qualitatively

assess whether the OSRO has met the minimum level of safety and capability for the nonfloating oil classification.

7. Upon delivery of the OSRO's Nonfloating Oil application to the NSFCC, the determination of the OSRO's Nonfloating Oil classification will occur no later than 60 days. This chapter provides further guidance to OSROs on how to apply for and attain the Nonfloating Oil classification and expectations of what information should be included in the Nonfloating Oil procedures.
8. **The Nonfloating Oil classification meets the regulatory requirements of Group V oils in accordance with the criteria set forth by 33 CFR § 154.1047, 33 CFR § 155.1052, 33 CFR § 155.5052, and the OSRO classification guidelines.**
 - a. Plan holders who handle, store, or transport oils that are not Group V oils, but that fall under the nonfloating oil definition, are highly recommended to resource Nonfloating Oil OSROs in addition to OSROs already classified in the Mechanical classification program. Plan holders that handle, store, or transport oils that are Group V oils shall utilize Nonfloating Oil OSROs. The Coast Guard's classification program no longer recognizes the Group V OSRO listing, which was removed from the RRI.
9. OSROs should be aware of the types of oil that their plan holder's vessel or facility handles, stores, or transports, as each type of oil presents unique response challenges. Overall, this document and chapter emphasize the vital role that the COTP and the NSFCC/CG-MER maintain in oversight and examination of an OSRO's nonfloating oil response capabilities, planning, and execution. Guidance is provided to assist with the following field responsibilities:
 - a. Conducting a review of the nonfloating oil application and procedures;
 - b. Using GIUEs to evaluate Nonfloating Oil OSRO response capabilities;
 - c. Employing existing field activities to validate overall nonfloating oil response capabilities.

B. Nonfloating Oils Classification Evaluation

1. The Coast Guard will evaluate equipment that is owned or contracted and used to respond to nonfloating oil spills based on its suitability and ability to respond to nonfloating oils.
2. Government and industry plan holders are responsible for screening OSROs to ensure they meet the planning standards for specific operating locations. Specifically, government and industry plan holders should compare the environments and depths in which they operate with the Nonfloating Oil OSROs' capabilities (and what depth they extend to).
 - a. **Nonfloating Oil PAVs:** Upon concurrence of an OSRO's Nonfloating Oil application, the NSFCC will coordinate a PAV to verify certain or all capabilities. With respect towards mitigating excessive costs for the OSRO, the assessment may include testing certain equipment, training verification, and an audit of the OSRO's documentation with contractors. PAVs will be conducted in accordance with NSFCC, cognizant COTP's frequency posture, and CG-MER policy.
3. The following are fundamental expectations for the NSFCC and CG-MER evaluation of an OSRO's Nonfloating Oil Procedure:

- a. Do they possess appropriate detection capabilities such as sonar, sampling equipment, or other methods for locating the petroleum oil on the bottom or suspended in the water column?
- b. Do they possess appropriate recovery capabilities such as dredges, pumps, or other equipment necessary to recover petroleum oil from the bottom and shoreline?
- c. Do they possess appropriate equipment and processes necessary to assess the environmental impact of nonfloating oil discharges? Examples include detection equipment listed in Section (B)(1)(a) and Section (C) of this chapter and trained response personnel.
- d. Do they possess other appropriate equipment necessary to respond to a discharge involving the type of petroleum oil handled, stored, or transported?
- e. Is the equipment suitable for intended geographic of operations (e.g., restricted visibility, inland rivers, ice conditions in Alaska)?
- f. Are there any records of the OSROs past performance that should be taken into consideration?

C. Application for Nonfloating Oils Classification

1. To earn a Nonfloating Oil classification, OSROs shall send their application electronically (preferred) or by mail to the NSFCC using procedures listed in Chapter 1 (A) of these guidelines.
2. The application shall include the following information:
 - a. OSRO Name;
 - b. Address;
 - c. Points of Contact;
 - d. Basic Ordering Agreement Number (If applicable);
 - e. The COTP zones or ACCs you intend to operate (if known):
 - (1) The estimated deployment time for the detection and recovery assets for each location; and
 - (2) **[Note]** In COTP zones or ACCs, resources must deploy within 24 hours for vessel response plans; for facility response plans, resources must be on site within 24 hours;
 - f. The maximum depth or range of the OSRO's detection and recovery assets (List the lesser of the two, if different);
 - g. Inventory list (Specify whether resources are dedicated or non-dedicated);
 - h. Any contracts associated with nonfloating response assets;
 - i. Maximum capacity of fixed/temporary storage;
 - j. Location of fixed/temporary storage;
 - k. Training documentation, logs, records and/or professional certificates for all nonfloating oil spill response personnel (includes contracted response personnel such as divers);

- I. General Logistics Narrative. The Coast Guard does not expect a logistics narrative for every COTP zone or ACC, but rather a universal logistics narrative. A logistics narrative should include, but not be limited to:
 - (1) Methods of personnel recall (if applicable);
 - (2) Methods of loading resources for mobilization;
 - (3) Methods of resource transport off-site to incident or staging;
 - (4) Methods of mobilizing, deploying and supporting resources;
 - (5) Special response resources staging (e.g., prepackaging, palletizing, preloading); and
 - (6) Necessary site support services (e.g., tractors, trailers, drivers, cranes);
 - m. Nonfloating Oil Procedures (reference Section D of this chapter).
3. A nonfloating oil application shall be submitted to the NSFCC prior to any entries into RRI. Doing so ensures that the NSFCC and CG-MER have time to review the application and confirm that the OSRO has met the minimum requirements to satisfy the regulations and challenges faced during a nonfloating oil discharge. After a successful submission and upon notification from the NSFCC, OSROs shall input their resources into the appropriate nonfloating oil categories in the RRI and ensure that the resource information is accurate to maintain classification and to service plan holders.

D. Nonfloating Oil Procedures and Core Equipment Standards

1. While each segment within the Nonfloating Oil classification application will increase the level of preparedness for the Coast Guard, OSROs, and plan holders, the nonfloating oil procedures are the heart of the application. 33 CFR § 154.1047(a)(1), 33 CFR § 155.1052(a)(1), and 33 CFR § 155.5052 state that plan holders must identify procedures and strategies for responding to a WCD of Group V petroleum oils to the maximum extent practicable.
2. In effect, the nonfloating oil procedures are an opportunity for the OSRO to present its concept of operations to the Coast Guard for nonfloating oil spills. Given the range of densities and properties of nonfloating oils, and the environments in which they are handled, stored, or transported, it is understood that response operations will be unique to the type of event; therefore, a prescriptive model is not expected within the plan. However, to establish a baseline model, the Coast Guard has established core resources and considerations, in alignment with the intent of 33 CFR § 154.1047 and 33 CFR § 155.1052, for the OSRO to connect its inventory, personnel, and contractual assets and elaborate on their capability to respond to nonfloating oil spills.
3. The regulations separate core resources and considerations into four categories: (I) Detection Capabilities, (II) Recovery Capabilities, (III) Storage Capabilities, and (IV) Environmental Conditions and Operating Areas. A fifth optional category, (V) Containment, can be added to the nonfloating oil procedures if, whether through best practices or new technology, the OSRO deems it a necessary aspect of their operations. OSROs are encouraged to have all of their nonfloating oil related equipment listed within this section under each core resource. At the minimum, each OSRO should include the following within their nonfloating procedures.

- a. **Detection Capabilities:** The timing of a nonfloating oil survey is essential to success in detection of nonfloating oil, because once the oil remobilizes; detection with any relative success becomes more difficult with passing time. OSROs shall identify equipment and methods used for locating the product on the bottom or suspended in the water column, and identify equipment necessary to assess the impact of such discharges. OSROs should include the depth to which these capabilities extend and what limitations may exist. OSROs should state how these capabilities complement their procedures and strategies for responding to a WCD of nonfloating oils to the maximum extent practicable. OSROs shall ensure that all strategies and capabilities follow industry standards and comply with local, state, and federal laws (e.g., contracted diver OSROs will comply with OSHA and Coast Guard regulations).
- (1) Examples of Detection Capabilities.
- (a) **Sonar systems.** Examples of capabilities include the side scan sonar, multi-beam echo sounder, sub bottom profiler, and 3D scanning sonar.
 - (b) **Underwater visualization systems including cameras and video.** Examples of capabilities include cameras with resolutions of >15 megapixels, sediment profile imaging (SPI) cameras, and acoustic cameras.
 - (c) **Diver observations.** OSROs should familiar with *API Technical Report 1154-1: Sunken Oil Detection and Recovery*. Specifically, section 6.0, titled “Diving in Contaminated Water,” should be referenced to protect the safety and health of the divers assigned to complete this work. OSROs shall specifically state the diving capabilities such as surface-supplied, mixed gas, saturation systems, one-atmosphere suits, or submersibles.
 - (d) **Towed or stationary sorbents.** Examples of capabilities include sorbents attached to chains that are dragged on the bottom and sorbents suspended in the water column or placed in cages.
 - (e) **Laser fluorosensors.** The unit is towed close to the bottom.
 - (f) **Visual observations by trained observers.** Trained observers can be rapidly deployed and record vital data about nonfloating oil, as long as the oil is visible to the observer. Preferred capabilities are water surface and aerial observations.
 - (g) **Bottom sampling.** Examples of capabilities include sediment grab, core samplers, wading-depth shovel pits, and agitation methods.
 - (h) **Water sampling in-situ analysis.** Examples include fluorometers and mass spectrometers that are towed in the water column.
- b. **Recovery Capabilities:** OSROs shall identify equipment and methods used to recover the product from the bottom and shoreline. OSROs should include the depth to which these capabilities extend and what limitations may exist. OSROs should state how these capabilities complement their procedures and strategies for responding to a WCD of nonfloating oils to the maximum extent practicable. OSROs shall ensure that all strategies

and capabilities follow industry standards and comply with local, state, and federal laws (e.g., contracted diver OSROs will comply with OSHA and Coast Guard regulations).

(1) Examples of Recovery Capabilities.

- (a) **Suction Dredge.** Dredging through use of hydraulic pumps to remove and transport the oil, oiled sediments, and oiled debris.
 - (b) **Diver-directed pumping and vacuuming.** Pumping capabilities refer to the use of a centrifugal or positive-displacement type pump at or below the water surface with a diver-directed suction hose. Vacuuming refers to a vacuum truck or unit above the water surface, either on shore or on a vessel/barge that creates a vacuum, with divers directing the hose attached to the vacuum. OSROs should be familiar with API *Technical Report 1154-1: Sunken Oil Detection and Recovery*. Specifically, section 6.0, titled "Diving in Contaminated Water," should be referenced to protect the safety and health of the divers assigned to complete this work.
 - (c) **Mechanical removal.** Examples of capabilities include excavators, clamshell dredges, environmental dredge buckets, or other machinery used to grab, scoop, or pick up sunken oil, oiled sediments, and oiled debris.
 - (d) **Sorbent/V-SORs.** Sorbents attached to chains that are dragged on the bottom to recover liquid oil.
 - (e) **Trawls and nets.** These are towed in the water column or on the bottom to recover viscous oil.
 - (f) **Manual removal.** Physical removal of viscous oil using hand tools, either by wading in shallow water or by divers in deeper water.
 - (g) **Agitation/refloat.** Agitation of oil on the bottom to get the oil to float to the surface for recovery.
- c. **Storage Capabilities:** While fixed and temporary storage capabilities are not prescriptively listed in 33 CFR § 154.1047, 33 CFR § 155.1052, or 33 CFR § 155.5052, the regulations do require plan holders to identify appropriate equipment necessary to respond to a discharge. Storage resources are essential aspects of a response and fall within the intent of 33 CFR § 154.1047(c)(5) and 33 CFR § 155.1052(c)(4). Therefore, OSROs shall identify storage resources and methods used to store the recovered product. OSROs should state how these capabilities complement their procedures and strategies for responding to a WCD of nonfloating oils to the maximum extent practicable. OSROs shall ensure all strategies and capabilities follow industry standards and comply with local, state, and federal laws.
- d. **Environmental Conditions and Operating Areas:** In accordance with 33 CFR § 154.1047(b) and 33 CFR § 155.1052(b), OSROs shall include a general description of the operating area (water depth included) to which their capabilities can extend and the environmental conditions in which their capabilities can operate without limitation. As OSROs may operate within multiple COTP zones or ACCs, only a general description is expected. OSROs should include any additional equipment that is critical to their nonfloating oil spill response during certain environmental conditions, such as specialized heating apparatuses during colder

weather. OSROs should include methods used to mitigate the additional risks that each operating area and its environment, including seasonal conditions, may pose.

(1) Examples of Environmental Conditions and Operating Areas:

- (a) Ice conditions;
 - (b) Debris;
 - (c) Temperature ranges;
 - (d) Weather and seasonal conditions; and
 - (e) Water salinity and visibility.
- e. **(Optional) Containment:** OSROs may identify equipment and methods used for containing the product that may remain floating on the surface or to reduce spreading on the bottom. OSROs should include the depth to which these capabilities extend and what limitations may exist. OSROs should state how these capabilities complement their procedures and strategies for responding to a WCD of nonfloating oils to the maximum extent practicable. OSROs shall ensure all strategies and capabilities follow industry standards and comply with local, state, and federal laws (e.g., contracted diver OSROs will comply with OSHA and Coast Guard regulations).

(1) Examples of Containment Capabilities:

- (a) Nets or curtains attached to the bottom and/or suspended from the surface;
- (b) Physical barriers such as artificial depressions (e.g., trenching);
- (c) Bottom boom;
- (d) Sheet piling;
- (e) Bubble curtain; and
- (f) Sorbents in filter fences or cages.

E. Resource Requirements

1. To be classified as a nonfloating oil-capable OSRO, the OSRO must be able to demonstrate the minimum requirements listed in Section D of this chapter.
2. The number of personnel needed to support a response depends on numerous factors. For the OSRO classification program, the number of personnel required for a classification for each COTP zone or ACC is based on the location of resources. During the application process, through the NSFCC and/or RRI, an OSRO will identify the number of personnel required to mobilize and operate the resources at each of its resource sites for a nonfloating oil discharge. Each site that meets the time requirements for a classification should have its personnel requirements totaled for that classification. If the OSRO has identified sufficient personnel to meet the response time requirements and concurrently can deploy and operate all equipment necessary for that level of classification, then an OSRO qualifies for that classification.

3. Resources counted for OSRO classification can be owned or contracted. All contracted assets must have a letter of agreement (LOA) between the OSRO and the contracting company on file at the NSFCC. FRP and VRP regulations require plan holders to ensure the availability of response resources by contract or other approved means. OSROs must meet these same requirements for all response resources (dedicated, non-dedicated, owned, and non-owned equipment and personnel) that they claim for classification purposes. All contracted equipment shall be listed in the RRI by the resource owner prior to an OSRO listing a resource as contracted.

APPENDIX A. List of Acronyms

AAR	After Action Report
ACC	Alternate Classification City
ACP	Area Contingency Plan
AMPD	Average Most Probable Discharge
AOR	Area of Responsibility
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
bbbl	Barrel; unit of volume
BSEE	Bureau of Safety and Environmental Enforcement
CDL	Commercial Driver's License
CFR	Code of Federal Regulations
CG-CVC	Coast Guard Office of Commercial Vessel Compliance
CG-MER	Coast Guard Office of Marine Environmental Response Policy
COTP	Captain of the Port
CPFR	Contingency Planning and Force Readiness
DOR	Dispersant-to-Oil Ratio
DRAT	District Response Advisory Team
Dilbit	Diluted Bitumen
EDAC	Effective Daily Application Capacity
EDRC	Effective Daily Recovery Capacity
EDSP	Estimated Dispersant System Potential Calculator
EEZ	Exclusive Economic Zone

EPA	Environmental Protection Agency
EV	Equipment Verification
FAA	Federal Aviation Administration
FI	Facility Inspector
FOSC	Federal On-Scene Coordinator
FRP	Facility Response Plan
FWPCA	Federal Water Pollution Control Act
GIUE	Government-Initiated Unannounced Exercise
HAZWOPER	Hazardous Waste Operations and Emergency Response
HVPA	Higher Volume Port Area
IMD	Incident Management Division
kts	Knots; unit of speed
LAPIO	Low API Oil
LOA	Letter of Agreement
lbs	Pounds
MISLE	Marine Information for Safety & Law Enforcement
MMPD	Maximum Most Probable Discharge
mph	Miles Per Hour; unit of speed
MSU	Marine Safety Unit
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NM	Nautical Miles
NOAA	National Oceanic and Atmospheric Administration
NSF	National Strike Force
NSFCC	National Strike Force Coordination Center

OGA	Other Government Agency
OPA 90	Oil Pollution Act of 1990
OSHA	Occupational Safety and Health Administration
OSRO	Oil Spill Removal Organization
OSRV	Oil Spill Response Vessel
PAV	Preparedness Assessment Visit
PHMSA	Pipeline and Hazardous Materials Safety Administration
PREP	Preparedness for Response Exercise Program
RCP	Regional Contingency Plan
ROV	Remotely Operated Vehicle
RRI	Response Resource Inventory
RRT	Regional Response Team
SPI	Sediment Profile Imaging
TSC	Temporary Storage Capacity
VMD	Volume Median Diameter
VRP	Vessel Response Plan
WCD	Worst Case Discharge

APPENDIX B. Glossary Terms

Adverse Weather	The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include, but are not limited to, significant wave height, ice, temperature, weather-related visibility and currents within the COTP zone in which the systems or equipment are intended to function.
Alternate Classification City (ACC)	A designated geographic location along the U.S. coastline used in addition to or in lieu of a COTP zone for an OSRO classification.
Area Contingency Plan (ACP)	The plan prepared by an Area Committee that is developed to be implemented in conjunction with the NCP and RCP, in part to address removal of a WCD and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility or onshore facility operating in or near an area designated by the President of the United States.
Captain of the Port (COTP) Zone	A zone specified in 33 CFR § 3 and, for coastal ports, the seaward extension of that zone to the outer boundary of the exclusive economic zone (EEZ).
Classification	A process for identifying OSRO capability within geographic locations on the basis of its ownership and/or control of specialized equipment and trained personnel used in the removal of oil from the area.
Containment Boom	Boom that is used to collect and hold oil on the surface of the water for recovery by skimmers or similar collection devices. The regulations require containment boom equal to 1,000 feet or twice the length of the largest vessel served, plus sufficient boom for the efficient operation of recovery devices. For classification, an OSRO is expected to have 1,000 feet of containment boom for each operating area in which it operates, plus 300 feet of containment boom for each recovery system used in its classification.
Contract	<ol style="list-style-type: none">(1) A written contractual agreement between a vessel owner or operator and an oil spill removal organization. The agreement must identify and ensure the availability of specified personnel and equipment required under this subpart within stipulated response times in the specified geographic areas;(2) Certification by the vessel owner or operator that specified personnel and equipment required under this subpart are owned, operated, or under the direct control of the vessel owner or operator, and are available within stipulated response times in the specified geographic areas;(3) Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment required under this subpart that are available to respond to a discharge within stipulated response times in the specified geographic areas;

Dedicated Response Resources	Equipment and personnel dedicated primarily to oil spill response, cleanup and spill containment. Such equipment and personnel are not utilized for any other activity that would adversely affect their ability to provide oil spill response services.
Dispersant Application Platform	Vessels and aircraft outfitted with dispersant-application equipment acting as the delivery system for the dispersant onto the oil spill.
Dispersant	Chemical agents that emulsify, disperse or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column. Those products of a type that are listed NCP (40 CFR § 300), maintained by EPA.
Effective Daily Application Capacity (EDAC)	The estimated amount of dispersant that can be applied to a discharge by an application system given the availability of supporting dispersant stockpiles.
Estimated Dispersant System Potential Calculator (EDSP)	The Estimated Dispersant System Potential Calculator is a tool for OSROs seeking Dispersant classification. Regulations delineate the Planner requirements. The Planner uses dispersant-related input from the OSROs to evaluate and identify sufficient and appropriately trained personnel, vessels, delivery systems, dispersants and any other input parameters specified in the calculator. These values help the NSFCC with determining the Dispersant classification level of the OSRO.
Great Lakes	Operating area that includes Lakes Superior, Michigan, Huron, Erie and Ontario; their connecting and tributary waters; the Saint Lawrence River as far as Saint Regis; and adjacent port areas.
Gulf Coast Region	The region encompassing the following COTP zones: Corpus Christi, TX; Houston/Galveston, TX; Port Arthur, TX; Morgan City, LA; New Orleans, LA; Mobile, AL; and St. Petersburg, FL.
Heavy Oils	Includes all liquid petroleum products, whether refined, unrefined, diluted or weathered, which, at any point of its fate, possess an API gravity equal to or less than 20°. This definition includes Dense Nonaqueous Phase Liquids (DNAPL), Diluted Bitumen (Dilbit), LAPIO (Low API Oil), Asphalt and Asphalt Products.
Higher Volume Port Areas (HVPA)	Ports listed in 33 CFR § 154.1020 and 33 CFR § 155.1020, including any water area within 50 NM seaward of the port.
Inland Area	The area shoreward of the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) as defined in 33 CFR §§80.740 through 80.850. The inland area does not include the Great Lakes.

Maximum Most Probably Discharge (MMPD)	<p>For a facility, a discharge of 1,200 barrels or 10% of the volume of a WCD, the lesser number.</p> <p>For a tank vessel with a capacity equal to or greater than 25,000 barrels of oil, a discharge of 2,500 barrels.</p> <p>For a tank vessel with a capacity of less than 25,000 barrels, a discharge of 10% of the tank vessel’s oil cargo capacity.</p>
Mobilization	<p>The time it takes to get the resources assembled and prepared at the staging site.</p> <p>Mobilization begins when notification ends and ends when the resources are ready to move off-site.</p>
Near Shore	<p>The area extending seaward 12 NM from the boundary lines (except in the Gulf of Mexico) defined in 46 CFR § 7. In the Gulf of Mexico, it means the area extending seaward 12 NM from the line of demarcation (COLREG lines) as defined in Sections 80.740–80.850 of 33 CFR § Chapter I.</p>
Non-dedicated Response Resources	<p>Response resources with service that is not limited exclusively to oil or hazardous substance spill response-related activities.</p>
Nonfloating Oils	<p>All Heavy oils and Group V oils that have the propensity to move below the sea surface either because of their initial densities or because the changes in their densities as a result of weathering or interaction with sediments. Nonfloating oils may be below the water surface, suspended in the water column or deposited on the seabed.</p>
Nonfloating Oil Plan	<p>A comprehensive plan, owned by the OSRO, which outlines the characteristics of the OSRO’s resources and capabilities for nonfloating oil spills in relation with the classification’s core standards.</p>
Non-persistent or Group I Oil	<p>A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions.</p> <p>At least 50% of which by volume distills at a temperature of 340°C (645°F) and 95% of which by volume distills at a temperature of 370°C (700°F).</p>
Ocean	<p>The near shore, offshore and open ocean operating areas as defined in these guidelines.</p>
Offshore	<p>The operating area up to 38 NM seaward of the outer boundary of the near shore area.</p>
Oil Spill Removal Organization (OSRO)	<p>An entity that provides oil spill response resources</p>
Open Ocean	<p>The area from 38 nautical miles seaward of the outer boundary of the nearshore area, to the seaward boundary of the exclusive economic zone (EEZ).</p>

Operating Area	Rivers/canals, Great Lakes, inland, near shore, offshore or open ocean. These terms are used to define the geographic location(s) in which a facility or tank vessel is handling, storing or transporting oil.
Operating Environment	Rivers/canals, Great Lakes, inland, or ocean. These terms are used to define the conditions in which response equipment is designed to function.
Other Approved Means	For the purposes of these guidelines, means a Letter of Intent as defined in this Glossary.
Owned Resources	Equipment that belongs solely to the OSRO or personnel directly employed by the OSRO submitting an application for classification.
Preparedness Assessment Visit (PAV)	PAVs are a critical component of the oil spill response preparedness system, providing on-site verification of resources and their condition.
Persistent Oil	<p>A petroleum based oil that does not meet the distillation criteria for non-persistent oil. For the purposes of these guidelines, persistent oils are further classified based on specific gravity as follows:</p> <p>Group II: Specific gravity less than 0.85</p> <p>Group III: Specific gravity between 0.85 and less than 0.95</p> <p>Group IV: Specific gravity equal to or greater than 0.95 and less than 1.0</p> <p>Group V: Specific gravity equal to or greater than 1.0</p>
Pre-authorization	Means an agreement, adopted by an RRT or Area Committee, which authorizes the use of dispersants at the discretion of the FOSC without the further approval of other federal or state authorities. These pre-authorization areas are generally limited to particular geographic areas within each region.
Primary Staging Site	Means a site designated within a COTP Zone that has been identified as a forward staging area for dispersant application platforms and the loading of dispersant stockpiles. Primary staging sites are typically the planned locations where platforms load or reload dispersants before departing for application at the site of the discharge and may not be the locations where dispersant stockpiles are stored or application platforms are home-based.
Protective Boom	Boom used for deflecting/diverting or otherwise influencing oil on the water surface away from sensitive environments, often but not always toward containment sites.
Resource Site	A location where personnel and pollution response equipment are staged.
Response Resource Inventory (RRI)	The database of oil spill response resources developed by the Coast Guard to meet requirements of OPA 90.
Response Resources	The personnel, equipment, supplies and other capabilities necessary to perform the response activities identified in an FRP or VRP.

Rivers/Canals	Operating area that includes bodies of water confined within the inland area, including the Intracoastal Waterways and other waterways artificially created for navigation, that have a project depth of 12 feet or less.
Skimming Systems	Devices used to remove spilled oil from the surface of the water through means of mechanical suction, adhesion, absorption, adsorption or some similar mechanism of action that allows separation and recovery of spilled oil from the water's surface. Skimmers may be self-propelled, towed or pushed through the water.
Temporary Storage Capacity (TSC)	Inflatable bladders, rubber barges, certificated barge capacity or other temporary storage that is capable of being utilized on-scene at a spill response and is designed and intended for storage of flammable or combustible liquids. It does not include tank vessels or barges-of-opportunity for which no prearrangements have been made. Fixed shore-based storage capacity, ensured available by contract or other approved means, is acceptable in limited circumstances.
Tiers 1, 2 and	The combination of response resources and the times within which the resources must be capable of arriving on-scene to meet WCD resource requirements as defined in 33 CFR § 154.1020 and 33 CFR § 155.1025.
Worst Cast Discharge (WCD)	As defined by 33 U.S.C. § 1321, means, "in the case of a vessel, a discharge in adverse weather conditions of its entire cargo" and, "in the case of an offshore facility or onshore facility, the largest foreseeable discharge in adverse weather conditions."
Worst Cast Discharge (WCD)	As defined by 33 U.S.C. § 1321, means, "in the case of a vessel, a discharge in adverse weather conditions of its entire cargo" and, "in the case of an offshore facility or onshore facility, the largest foreseeable discharge in adverse weather conditions."
