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SEVENTEENTH DISTRICT MARINE SAFETY INFORMATION BULLETIN (MSIB) 01-15

Subj: ALTERNATIVE PLANNING CRITERIA GUIDELINES FOR NON-TANK VESSELS IN ALASKA

Ref:
(a) Non-tank Vessel Alternative Planning Criteria (APC) Requirements for Western Alaska, Sector Anchorage MSIB 03-14, April 2014
(b) Non-tank Vessel Response Plans and Other Response Plan Requirements; Final Rule, 78 Federal Register 189 (30 September 2013), pp. 60100 - 60135
(c) Oil or Hazardous Material Pollution Prevention Regulations for Vessels, 33 Code of Federal Regulations (CFR) Part 155
(d) U. S. Coast Guard Oil Spill Removal Organization (OSRO) Classification Program Guidelines, COMDT (CG-MER) Policy Letter 03-13, April 2013
(e) Alaska Federal/State Preparedness Plan for Response to Oil & Hazardous Substance Discharges/Releases (Unified Plan), Change 3, January 2010

1. PURPOSE. The purpose of this guidance is to provide the marine industry with procedures for developing and U.S. Coast Guard (USCG) personnel with procedures for reviewing Non-tank Vessel (NTV) Alternative Planning Criteria (APC) in Alaska. This guidance is intended to improve Alaska's pollution response, planning and preparedness posture in order to limit environmental damage resulting from NTV marine causalities.

2. ACTION.

a. Vessel owner/operators (VO/Os) and authorized APC administrators shall utilize these guidelines for Alaskan NTV APC applications and renewals.

(1) Alternative planning criteria requests must be submitted 90 calendar days before the vessel intends to operate under the proposed alternative, or as soon as is practicable. [§5067(a)]

(2) Existing APCs shall submit updates per these guidelines no later than 31 December 2015.

b. COTP and 17th Coast Guard District (D17) personnel shall use this guidance when evaluating NTV APC requests for endorsement, annual reviews and renewals. COTPs shall ensure that Subarea Contingency Plans (SCPs) are updated to align with this guidance. COTPs will bring this guidance to the attention of the maritime industry within their zones of responsibility.

c. This guidance and the above references are available on-line at: http://www.uscg.mil/d17/dpi. The USCG will distribute by electronic means only.

3. DIRECTIVES AFFECTED. This guidance supersedes ref (a).

4. BACKGROUND. The following policies are in effect and influenced the development of these guidelines:

a. Ref (b) required NTV VO/Os to enhance their response planning and update their Vessel Response Plans (VRPs) by October 30, 2013. Its preamble discusses the reasoning and intent of important elements associated with the regulation changes.

b. Ref (c) provides the updated nation-wide regulations for the development of VRPs for NTVs. It's the foundational source for response requirements and its subsections are referenced extensively throughout this guidance (i.e., as [§…]).

c. Ref (d) established guidelines for the classification of OSROs, which are the primary oil spill removal response resource providers for VRPs.

d. Ref (e) established guidelines for conducting oil spill response operations in Alaska (i.e., providing regional policy for Potential Places of Refuge (PPOR), sensitive areas, shoreline cleanup, Geographic Response Strategies (GRSs), SCP regions and development, etc.).

e. Enclosure (1) provides a listing and detailed description of the key terminology used in this document.

5. DISCUSSION. An APC should provide a Qualified Individual (QI), Spill Management Team (SMT) and COTP with a clear understanding of response resource capabilities and limitations for areas that may be impacted from a spill due to NTV operations. In order to effectively endorse alternatives, the USCG's responsibility is to ensure submissions are reviewed to a consistent standard and that response resource providers (i.e., oil spill removal, salvage, marine fire fighting, etc.) are coordinated by industry to the maximum extent practicable. The following paragraphs detail important aspects and requirements for NTV APC development in Alaska.

a. Relationship between the VRP and APC.

In accordance with ref (c), NTV VO/Os [§5015] are required to prepare VRPs [§5030] with Geographic Specific Appendixes (GSAs) [§5035(i)] for the COTP zones where their vessels intend to operate. VRPs cover an extensive list of planning requirements, which are the foundation for responding effectively to a NTV spill. Enclosure (2) provides a summary of these requirements.

If the VO/O believes that national planning criteria contained in ref (c) are inappropriate for the areas in which the vessel intends to operate, an APC may be submitted that highlights shortfalls and proposes alternatives for consideration and approval by the USCG [§5067]. Where response resource gaps exist, the USCG considers an APC as a temporary solution [see paragraph 24, page 60111 of ref (b)].

An APC becomes part of a GSA when the VO/O amends the VRP to include it. [§5070(b)]

The five *minimum* elements (i.e., paraphrased) of an APC submission are [§5067(b)]:

(1) Reason for needing the APC.
(2) Identification of national planning criteria not being met.
(3) Alternative but equivalent capability option(s).
(4) Prevention and mitigation strategies with adequate response measures.
(5) Environmental and economic impact assessments.

APC submissions shall address each of the above elements in accordance with guidance provided in Enclosure (3). An APC shall clearly identify gaps in meeting national planning criteria; define current/available response capabilities; where possible, present implementable alternative response strategies and prevention measures; and propose short and long-term solutions for closing the gaps.

It is important to note that an APC is not intended to replace the following:

- A VRP
- A GSA
- Contracts for response services
- OSRO classification standards

b. Common National Planning Criteria Gaps in Alaska.

For remote regions of Alaska, gaps generally exist due to one or more of the following issues:

- OSRO availability and/or coverage is insufficient [§5035(i)(4)]
- Shoreline cleanup capability is not fully attainable [§5050(m) and paragraphs 5.7, 7.3 & Table 3 of § Appendix B]
- Mobilization timeframes for on-scene arrival are not fully attainable [§5050 (f, g & h) and paragraph 5.6 of § Appendix B]
- On-scene sustainment for the first 7 days of a response is not fully attainable [§5035(i)(3)]
- Aerial oil spill tracking capability is not fully attainable [§1050(l) and §5050(k)]

Enclosure (4) and its two tabs, provide an in-depth discussion of the above issues. APC submissions shall include an analysis of these gaps as applicable for the area intended to be covered.

c. Consistency with Federal and State Plans. [§5030 (f)]

As with VRPs and GSAs, an APC shall be consistent with the associated SCPs, which were developed in lieu of traditional Area Contingency Plans (ACPs) in Alaska, and incorporate available regional guidance for the following topics, as applicable:

- Expectations and challenges for conducting response operations in Alaska (e.g., sensitive area protection)
- Policies and guidelines for response strategies and tactics (e.g., dispersant guidelines)
- Standardized nomenclature for Alaskan responders
- Existing port infrastructure and options for obtaining response resources

The COTP will verify that the APC is consistent with associated SCPs to ensure that no additional Endangered Species Act (ESA) Section 7 consultation is required. If the APC submission is not consistent with the associated SCP, the APC may result in non-approval.

SCPs are available online at: http://dec.alaska.gov/spar/perp/plan.htm

d. Scope of an APC.

Vessels covered. An APC may be written for one or several vessels (e.g., in the same way a NTV VRP may cover one or more vessel classes [§5030(d)]). Consequently, more than one vessel, several classes of vessels, and/or several groups of fuel oil may be covered by an NTV APC.

Minimum geographic area. In the case of Alaska, the smallest region an APC can cover is a subarea. This aligns with the State of Alaska contingency planning regions covered by SCPs. The subareas are geographically defined in Appendix IV, Annex A of ref (e). [§5030(f)] Gap analysis shall be tailored to the national planning criteria for areas within the subareas where covered vessels intend to operate.

Maximum geographic area. The maximum area an APC can cover is one COTP zone. This aligns with GSAs, which are required for each COTP zone where a vessel intends to operate [§5035(i)]. *In the case of the Western Alaska COTP zone, which has seven SCPs, an APC shall address the requirements of Enclosure (3) for each subarea in which a vessel intends to operate.*

e. OSRO requirements for Alaskan NTV APCs.

OSRO capability involves the following elements:

(1) Response resources that are compatible with:

- Mobilization requirements for en route and on-scene arrival timeframes [§5050 (f, g & h) and paragraph 5.6, Tables 5 & 6 of § Appendix B]
- Maritime Operating Environments (OEs) that may be impacted by a spill due to NTV operations [Tables 1 & 3 and paragraph 7.4 of § Appendix B]

- Oil groups carried onboard covered NTVs [Tables 2, 3 & 4 of § Appendix B]

(2) Site(s) for pre-staging resources within the planning standard response range (i.e., within 110 nm) of areas that may be impacted by a spill due to NTV operations (e.g., vessel tracklines that are within 50 nm of the U.S. boundary line require shoreline cleanup capability for persistent fuel oils [Table 3 of § Appendix B]).

In other words, an OSRO listed in a NTV response plan must be located at a site that is within the response range of potentially threatened OEs and its equipment must be capable of operating in the OEs, designed for the oil group used/carried on the vessel; and capable of arriving on-scene within mobilization timelines.

In Alaska, it is understood that there are numerous gaps in OSRO availability where many NTVs operate. The USCG acknowledges these gaps and therefore requires, *at a minimum*, that an APC shall *initially* include at least one OSRO with capability that can meet all of the following:

- Resourced to OSRO planning standard caps for WCD1 [see Tab (a) to Enclosure (5)].
- WCD1 resources suitable for responding in a nearshore OE [Table 1 of § Appendix B].
- WCD1 resources compatible for the fuel oil and/or cargo onboard the vessels being covered (i.e., non-persistent, persistent or both [§1020 *Definitions*]).
- WCD1 resources maintained at a pre-staged site(s) that is within the response range of an area that may be impacted by a spill due to NTV operations (e.g., vessel tracklines within 110 nm of the U.S. boundary line require open water/offshore/nearshore on-water recovery capability for persistent fuel oils).
  [§5050(g & h) and paragraph 2.6 & Table 3 of § Appendix B]
- WCD1 resources maintained in a dedicated status that enables attainment of mobilization timeframes (i.e., en route within 2 hours and on-scene within 24 hour [§5050(g &h)]).

APCs shall provide verification of response contracts, or other approved means, to implement VRP requirements and APC strategies for the subareas where their vessels operate [see paragraph 16, page 60108 and paragraph B.3., page 60111 of ref (b) and §5020 *Contract or other approved means*] For equipment required above the OSRO planning standards caps the APC shall provide verification (e.g., a certification statement from an OSRO to the VO/O) that resource providers are aware they are being listed as meeting part of the VRP requirements [see paragraph 5, page 60106 of ref (b)].

If a *newly* classified OSRO is established, which can address gaps described in an APC(s), the COTP shall notify VO/Os and/or authorized APC administrators that contracting is required if no other response resources are available. The APC and VRP shall be updated as appropriate, with the expectation that associated contracts be established within 90 calendar days of a new classification. Requests for extensions will be considered on a case-by-case basis.
[§1070(c)(5 & 9) and §5070(b)]

See Enclosure (5) for additional information on these potentially complex issues.

f. Documenting Response Resources.

In accordance with refs (c) and (d), OSROs seeking classification shall list required MMPD and/or WCD1 equipment in the USCG Response Resource Inventory (RRI) database. Per ref (c), VRPs with unclassified OSROs shall provide lists of require response resources in the VRP and/or APC.

The National Strike Force Coordination Center (NSFCC), administers the RRI database and should be consulted for updating procedures. The RRI can be accessed on-line at: https://cgrri.uscg.mil/

g. Tracking and Monitoring Systems (TMSs). [§5067(b)(4)]

A TMS is a valuable mitigation tool to ensure compliance with prevention strategies (e.g., a TMS could ensure that vessels are operating outside of International Maritime Organization (IMO) Areas to be Avoided (ATBAs), such as those recently established for the Aleutians).

- If applicable, the APC shall include detailed procedures for the TMS which includes: use of *best available technology* [see Enclosure (1)]; watch-standing; data latency; refresh rate; archiving and trend analysis; notifications to vessels and COTP; routing schemes; system disruption and backup; and response activation protocols.
- The USCG expects that TMS proposals will have 24/7 monitoring capability that verifies compliance with routing scheme(s) and vessel speeds.
- A monthly status report shall be provided to the applicable COTP and D17 (dp) that reviews requested vessel deviations; notifications to vessels of concern; location of deviations; number for vessels participating in the program; comparison to long-term trends (e.g., historic monthly averages); etc. Vessels shall be described in the report by name and official number.

h. Format.

- The USCG is not prescribing a paragraph format for submissions.
- If not specifically formatted to the submission elements as described in Enclosure (3), the contents shall be referenced in the APC by a cross-reference table to assist with USCG reviews. [§5030 (e)]
- APCs shall include a record of changes.

i. Timeline and Milestones.

(1) USCG Review Process.

- Timeline: The APC review process will take up to 90 calendar days.

- COTP: The APC review process begins once the APC is officially received by the COTP. The COTP shall initiate the 90 day timeline by acknowledging receipt of an APC submission via official correspondence to the submitter; copy to D17 (dp), COMDT (MER) and the NSFCC. The COTP will conduct their review of the APC; endorse the APC (with comments, if applicable) and forward to D17 (dp) within 45 calendar days.

  Once the review process starts, external USCG communication with the submitter shall be facilitated through COMDT (MER). Applicants may correspond with their COTP, however final approval resides with COMDT and any correspondence with respect to the submission shall be addressed to the CG Headquarters VRP program. See: https://homeport.uscg.mil/mycg/portal/ep/browse.do?channelId=-44101&channelPage=%252Fep%252Fvrp%252FvrpSearch_advanced.jsp&pageTypeId=13489

- District: D17 will review the APC and COTP endorsement, with special consideration for implications to other Alaskan COTP zones. D17 will forward their endorsement to COMDT within 15 calendar days.

- COMDT: COMDT shall, in coordination with the COTP and D17, issue an approval or return the submission to the submitter for clarification within 30 calendar days. If returned, the 90 calendar day review timeline will restart once resubmitted to the COTP.

- If less than 90 calendar days are available for the review prior to a vessel conducting operations in the COTP zone, the VO/O may request an Interim Operating Authorization (IOA) from the COTP. However, granting of an IOA is not guaranteed as they are only considered under exceptional circumstances.

(2) APC Activation/Enactment.

An approved APC will be valid for 3 years and can be referenced as part of an amendment to a NTV response plan. Amendments require a resubmission of the VRP to COMDT for approval [§5070].

VO/Os that choose to authorize a 3rd party to manage their APC are still ultimately responsible for ensuring that appropriate response resources are available and prepared to response to pollution risks from their vessels. [see paragraph 16, page 60108 of ref (b)]

(3) Response Capability Changes (increase or decrease).

- For unexpected decreases in response capability, the COTP shall be notified immediately.
- For planned/routine maintenance of dedicated response resources, the COTP shall be notified 30 calendar days in advance to jointly determine impacts to response

capabilities, discuss possible options and inform VO/Os, QIs, SMTs, and OSROs, as necessary.

- For permanent changes regarding the national planning criteria gaps and/or the availability of response resources, the APC and VRP shall be amended as soon as contractual updates occur (e.g., a new classified OSRO becomes available). This will require a USCG review and approval of the amendment(s).

(4) Annual Review. VO/Os, or their authorized APC administrator, shall conduct and document an annual strategic plan review. At a minimum, the review shall assess the following:

- Preparedness and/or effectiveness of operations (i.e., analysis of alternative procedures, methods and equipment standards; and prevention and mitigation strategies, as applicable).
- Budgeting elements (e.g., income sources and amounts; administrative and operational costs; maintenance and replacement costs; new acquisitions; future projections; etc.).
- Long-term strategies and milestones (e.g., status of gap reduction strategies; consultation with QIs, SMTs and OSROs; purchases of additional targeted resource equipment(s); reserve revenue designated for future large capital acquisitions; required permits; etc.). [paragraph 24, page 60111 of ref (b)]

VO/Os, or their authorized APC administrator, shall produce an annual report that addresses the above topics. The report shall be distributed to the COTP, D17(dp/dr), VO/O(s), OSRO(s), QI(s) and SMT(s) that are associated with the APC. The report needs to be distributed 30 calendar days prior to the anniversary of the APC's approval date and kept on file for at least 3 years. The report will not be releasable to the public unless consented to by the VO/O(s) or APC administrator.

(5) Preparedness Assessment Visits (PAVs). PAVs of classified OSROs, including those supporting Alaskan APCs, are onsite verifications conducted by the NSFCC in accordance with reference (d) to verify response resources, provide accountability, and enhance coordination amongst both USCG and industry response professionals. Alaskan PAVs may also include the verification of additional equipment. This equipment may include, but is not limited to: shoreline cleanup equipment, ship arrestors, specialized containment booming equipment, etc.

The NSFCC serves as the administrator of the OSRO classification program, including all components of the PAV process. The NSFCC intends to conduct annual PAVs for classified OSROs listed within Alaskan APCs. VO/Os, or their authorized APC administrator, shall coordinate with the NSFCC to schedule these verifications. PAVs shall be coordinated to facilitate involvement of the COTP, D17 District Response Advisory Team (DRAT) and NSFCC personnel. PAV reports shall be distributed to the COTP, D17 (dp/dr), VO/O(s), OSRO(s), QI(s) and SMT(s) that are associated with the APC.

(6) Equipment Verifications. Opportunities may exist for D17 and COTP personnel to conduct additional equipment verifications for the purpose of validating existing and prospective APC applications. These verifications exist to supplement the current PAV process and should also ensure the Response Resource Inventory (RRI) accurately reflects the OSRO's current response equipment inventory.

- If issues are found with a classified OSRO, the notification and correction procedures contained in ref (d) shall be followed.
- For issues with other OSRO or APC equipment, the cognizant COTP shall notify the OSRO, APC holder, D17(dp/dre) and COMDT (VRP), and NSFCC with deficiency details and a established timeline for correction (i.e., typically 30 calendar days).
- To correct deficiencies an additional verification will be conducted by USCG personnel.
- If correction is not completed within the established timeline, corrective action from the COTP could include COTP orders restricting vessel operation under the APC or a recommendation to terminate the APC to COMDT through D17.

(7) Termination of an APC. The USCG may terminate an APC for the following:

- VRP gaps have been addressed; alternative strategies and mitigating measures are no longer needed.
- The VO/O, or their authorized APC administrator, fails to maintain required contracts for alternative strategies as approved in the APC by the USCG.
- An OSRO, which is identified for WCD1 coverage, fails to maintain dedicated response equipment in the subarea.
- A classified OSRO, which is identified for WCD1 coverage, loses their classification.
- Vessel operations change and coverage is no longer needed.
- VRP regulations change.

(8) APC Renewals. Renewals shall be submitted to the COTP at least 90 calendar days prior to the third anniversary of the APC's approval date. Copies of annual reports, as required by paragraph i.(4) above, for the previous 3 years shall accompany the renewal submission.

j. Tank vessel APCs. Due to the additional national planning criteria for tank vessels (TVs), TV and NTV APCs cannot be combined. Recognizing that updated APC guidance for TVs is also needed, the USCG is reviewing associated policy and developing guidance for VO/Os of these vessels. Due to potential complexities related to larger volumes, types of oil carried as cargo and additional VRP planning standards for tank vessels, the guidance will be issued separately from this document.

6. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a regulation. It represents the Coast Guard's interpretation of this topic and is issued for clarification purposes to facilitate compliance with applicable federal law.

7. FORMS/REPORTS. Applicants and reviewers shall utilize the checklist provided as Enclosure (6) to facilitate development and approval of APCs. The checklist shall accompany COTP and D17 endorsements that are sent to COMDT.

8. COMMENTS/QUESTIONS/UPDATES. For routine questions regarding this guidance, please use the contact number provided on the header of the first page. Suggestions for improvements to this guidance should be submitted in writing to D17 (dp) at the address also specified in the header of the first page. Changes to this guidance will be issued as necessary.

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Encl:
(1) Definition of Terms for this Guidance
(2) VRP Elements
(3) APC Submission - Required Elements for NTVs in Alaska
(4) VRP Gaps in Alaska
(5) OSRO Requirements for VRPs
(6) D17 NTV APC Checklist

Definition of Terms for this Guidance

Term	Definition
§	The section symbol (§) is a typographical character used mainly to refer to a particular section of a document, such as a legal code. [http://en.wikipedia.org/wiki/%C2%A7] Within this guidance § means "33 CFR 155.".
~	The tilde symbol (~) means approximately. Within this guidance ~ is used with distance and time estimates.
AAC	Alaska Administrative Code (AAC) is available online at: http://www.legis.state.ak.us/basis/aac.asp
APC Administrator	(1) Vessel owner/operators (VO/Os) may utilize a 3rd party organization to manage the additional requirements associated with an APC. However, 3rd parties must be an authorized agent or power of attorney for the VO/O. [see paragraph 16, page 60108 of ref (b)] (2) VO/Os are reminded that they retain full responsibility for obtaining required response capabilities to cover potential worst case discharges from their vessel operations. VO/Os shall ensure that funding obtained for APC management services includes provisions for closing VRP gaps, as specified in the APC [see paragraph 5.b. of Enclosure (3)].
Best Available Technology (BAT)	The Alaska Department of Environmental Conservation (ADEC) and 18 AAC 75.445 (k)(3), define BAT in terms of availability; applicability to Alaska operations; effectiveness; cost; compatibility with existing technologies; practical feasibility; and environmental impacts and benefits.
Boundary Line	"The boundary line generally follows the high water shoreline, extended across the entrances to small bays, inlets, harbors, rivers, the ends of breakwaters or jetties, etc. In most cases, this means that as soon as an outbound vessel crosses seaward of the entrance, it has crossed outside the Boundary Line." [Source: http://www.uscg.mil/hq/cg5/cg5212/boundaryline.asp]
Strategic Plan	A strategic plan is a formal statement of long-term business goals; reasons they are attainable; and plans for reaching them. Strategic plans are generally written for 3-to-5 year periods and are annually reviewed. A strategic plan clarifies: • Expected income.

	• Expected expenses. • Discussion of long-term goals and milestones (e.g., gap closures). • Analysis of previous year's achievements related to operations and long-term goals. • Anticipated targets and challenges for coming fiscal year(s). Expenses include administrative expenses (e.g., salaries, travel, accounting, information technologies management, human resource activities, board expenses, report production, etc.) and functional expenses for each major program service (e.g., operations, maintenance, training, exercise, infrastructure, equipage improvements, etc.). A one-page budget summary is generally sufficient for an annual review as long as it includes the information specified above.
Classification (*for OSROs*)	(1) In 1992, in order to accommodate response plan development and review, the USCG provided for a system of "classifying" OSROs to the national planning criteria caps for oil spill removal. Once classified by the USCG, VO/Os can list OSROs by name and classification as an alternative to listing individual response resources in their plans. OSRO classification is a voluntary program which VO/Os can use for regulatory compliance. (2) "An OSRO classification does not guarantee the performance of an OSRO, nor does the use of a classified OSRO in a plan relieve plan holders of their ultimate statutory and regulatory responsibility to ensure the adequacy of the [oil] spill [removal] response resources identified in a response plan. … OSRO classification is not intended to represent a certification, but to reflect an approximation of capability." [pages 2 and 45, of ref (d)] (3) Due to VRP planning standards and associated response ranges, OSROs are not classified for an entire COTP zone unless the zone's radius is significantly less than 110 nm. [§5050 (g & h) and paragraph 2.6 of § Appendix B] (4) OSROs seeking WCD1 classification require *dedicated* response resources in order to meet the en route within 2 hour planning standard. For example, personnel for WCD1 must be on-scene at the pre-staging location [Table 2-2 of ref (d)].

	(5) Classifications can vary greatly from one OSRO to the next, based on what they are covering (e.g., facilities vs. vessels, persistent vs. non-persistent oils, one to four operating environments, oil spill planning volumes supported, one to three response tiers, number of classification sites, classification ranges, etc.) *See Enclosure (5) for additional information.*
Dedicated (*with respect to WCD1*)	(1) Equipment and personnel. Designated resources that are specifically committed to covering a VRP's WCD1 response requirements are considered dedicated. These resources shall not be utilized for any activity that would adversely affect their ability to provide oil spill response services within mobilization planning standards. (2) Vessels. Vessels that perform/ are trained for oil spill response functions and are able to meet mobilization planning standards are considered dedicated. This means that a vessel must be located within the response range of the classification site that it supports (i.e., <110 nm) and able to meet the en route to the scene mobilization standard (e.g., a vessel identified to mobilize a response barge containing WCD1 equipment must be within 10 nm of the barge at any time, per planning standards of en route within 2 hours and 5 knot transit speed). (3) COOPs. Cooperative (COOP) equipment may be considered dedicated if COOP members *pre-authorize* access for non-member VO/Os. (4) Operating environment. Only equipment certified by the manufacturer for usage in operating environments that may be impacted by a vessel spill can be listed as dedicated in a VRP (e.g., operating criteria for inland boom is much less than for oceans [i.e., nearshore, offshore, and open ocean]). [Table 1 of § Appendix B] (5) Mutual Aid Agreement (MAA). A MAA is not considered a contractor or other approved means for ensuring availability of equipment, therefore associated equipment is not dedicated (i.e., it cannot be listed in a VRP to cover WCD1 requirements or be used for obtaining an OSRO classification). However it may be important for backfilling or cascading in additional resources to surpass planning standards (e.g., NTV WCD 2 and 3 OWR capability). [see paragraph 16, page 60108 and paragraph B.3., page 60111 of ref (b) and §5020 *Contract or other approved means*]

En route (*to on-scene*)	En route to the scene means a response resource has departed its staging/activation location and is transiting to the site of the spill without stopping along the way (e.g., to load supplies).
In Region	"In region" generally relates to the maximum distance from a staging or on-scene location that a response resource (i.e., vessel, equipment, and/or personnel) can normally operate in order for the resource to respond within the required mobilization timeframes. For APCs, in region determinations are as follows: ▪ Dedicated vessels: Located within the response range of the classification site that it supports (i.e., <110 nm) and able to meet the mobilization planning standards (i.e., en route to the scene and on-scene arrival). ▪ Vessels of Opportunity (VOO): Located within the associated Alaskan subarea and able to meet the on-scene arrival planning standard. ▪ Dedicated equipment and personnel: Located within the COTP zone and able to meet the mobilization planning standards (i.e., en route to the scene and on-scene arrival).
Infrastructure (*needed at OSRO classification sites*)	Infrastructure requirements for pre-staging and supporting OSRO equipment at classification sites includes reliable electrical power; water and sewer; covered storage and staging pad(s); pier capability and access for loading response vessel(s); nearby aviation capability for cascading in supplies, etc.
Initial response operations	Initial response operations include mobilization; vessel and spill trajectory assessments; containment boom deployment of the vessel; aerial oil spill tracking; on-water tactical deployments (e.g., containment, oil recovery, lightering, etc.); shoreline protection and initiating shoreline cleanup; and logistical support activities conducted during the first 7 days of a response.
Inland OE	The operating area shoreward of the boundary line.
Mobilization	Mobilization includes notification, transit time for personnel to staging area(s), vessel loading, and vessel transit times for arrival on-scene of a spill.
National Planning Criteria (NPC)	NPC are *planning* standards, which maintain minimum preparedness capabilities, not *performance* standards, which VO/Os could be legally held to during an actually response. Planning standards are a methodology for creating response goals that attempt to generally account for complexities that *may or may not* be encountered during an actual response (e.g., the 5 knot vessel planning standard accounts for possible speed restrictions, other vessel traffic, weather delays, navigational

challenges, etc.). [§1010 and §1050]

NPC include:

- En route to the scene within 2 hours [§5050 (h)]
- On-scene within 24 hours [§5050 (g)]
- On-water mobilization speed of 5 knots and land speed of 35 miles per hour
  [§ Appendix B: 2.6]
- On-Water Recovery (OWR) durations:
  - Inland and Nearshore - 4 days
  - Offshore - 6 days
  - Open Ocean - 10 days
    [§ Appendix B: 7.2.3, 7.2.4, Table 3 and Table 4]
- On-scene resource deployment by OE (e.g., for daily OWR)
  [§ Appendix B: 7.2.3, 7.2.4 and Table 5]
- Temporary storage on-scene equals 2x daily OWR
  [§ Appendix B: 5.4 and 9.2]
- Initial sustainment capability for first 7 days
  [§5035(i)(3) and § Appendix B: 7.2.4 and 7.3.3]
- Shoreline protection boom for WCD1 in inland and nearshore OEs equals:
  - 30k feet for persistent oils
  - 10k feet for non-persistent oils
    [§ Appendix B: 5.6 and Table 2]
- Shoreline cleanup requirements are determined by a % of the WCD volume and oil emulsification
  [§5050 (m) and paragraphs 5.7 & 7.3 of § Appendix B]
- Aerial oil spill tracking resources capable of arriving on-scene ahead of oil spill removal resources.
  [§1050(l) and §5050(k)]

D17 incorporated these NPC as entering arguments for APC policy development and submission requirements (i.e., not meeting them triggers the need for an APC). With regard to plan development and OSRO classification, NPC are the entering arguments for determining and maintaining *minimum* industry preparedness capability. Though the regulations do not state how they were determined, they do set a level playing field for VO/Os and are certainly not overly aggressive as requirements for mounting an initial response for most areas of the U.S. However, during a response the situation will be unique due to many unknowns (e.g., weather, time of day notifications occur, time of

	year, vessel stability issues, priorities established by the incident management team, etc.) and the VO/O will not be held to the planning standards for these extenuating circumstances (i.e., they do not become performance standards).
Nearshore OE	The operating area extending seaward 12 miles from the boundary line.
Non-dedicated (*with respect to VRP WCD1*)	(1) Response resources that are not limited exclusively to oil or hazardous substance spill response-related activities (e.g., fishing Vessels of Opportunity (VOOs), salvage equipment, etc.). (2) Response resources that are <u>not</u> in region.
Offshore OE	The operating area up to 38 nautical miles seaward of the outer boundary of the *nearshore OE* (i.e., 12-to-50 nm).
Open Ocean OE	The operating area from the outer boundary of the offshore OE out to the U.S. Exclusive Economic Zone (EEZ) (i.e., 50-to-200 nm).
Operate <u>or</u> Operations (*with respect to NTVs and VRP requirements*)	Vessel operations that require VRPs include: • Transiting through the U.S. EEZ while not on innocent passage • Transferring fuel to/from the vessel in the U.S. EEZ
Operating Environments (OEs)	(1) Six OEs are entering elements for determining VRP equipment requirements per the tables in § Appendix B. The OEs that apply in determining non-tank vessel requirements in Alaska are: inland, nearshore, offshore <u>and</u> open ocean. (2) OSROs may be classified for one or more OEs at different sites.
Remote	(1) For OSROs classification, a staging site is considered remote if it lacks infrastructure, responders, <u>and/or</u> supplies required for a COTP City or Alternate Classification City (CC/ACC). (2) For initial response operations, an on-scene location is considered remote if one or more of the following conditions exist: • The spill is outside of the planning standard OSRO response range of 110 nm. • Operations require establishing overnight accommodations on-scene (i.e., on-shore man camps and/or accommodation vessels/barges). • Long-term operations require routine sustainment transits of greater than 6 hours (e.g., waste stream management

	for shoreline cleanup). • Availability of aircraft suitable for aerial oil spill tracking is limited-to-nonexistent. • Availability of support infrastructure, services and personnel are limited-to-nonexistent due to seasonal maritime activities.
Response Range (*for VRP WCD1 equipment and OSRO Classification*)	Response range is the geographic area covered within a certain distance of a classification site. The range is determined per the en route, vessel transit speed, and on-scene planning standards (i.e., an ACC's response range is 110 nm based on 5 knots; en route to the scene within 2 hours; and on-scene within 24 hours). If response vessels must navigating around shoal water and/or islands the associated response range cannot be determined by simply drawing a circle with a 110 nm radius from the classification site (i.e., the "as the crow fly's" distance may be significantly less). Coverage within the response range includes all operating environments that the OSRO is classified for (e.g., a nearshore classified OSRO would be able to mobilize response equipment to and conduct initial response operations in any nearshore areas within 110 nm transit distance of a CC/ACC). [paragraph 2.6 of § Appendix B]
Response Resources	Response resource categories include (not listed in priority): [§5035(i) & §5050] • Shore-based management • Oil spill removal • Salvage (i.e., which includes emergency towing and lightering) • Marine fire fighting • Dispersant applications • Aerial oil spill tracking Response resources can include *dedicated* and non-dedicated assets. Response resources include any equipment, personnel, boats, vessels, supplies and other capabilities necessary to manage, mobilize, conduct and sustain response activities.
Subarea (*in Alaska*)	Ten subareas are defined in Alaska per Appendix IV, Annex A of ref (e), which is available on-line at: http://dec.alaska.gov/spar/perp/plans/uc.htm For VRP development these subareas have associated Subarea

	Contingency Plans (SCPs) that are equivalent to Area Contingency Plans (ACPs) in other regions of the U.S.
Sustainment (*for initial response operations*)	"The organizations [e.g., OSROs identified in a VRP for WCD1] … must be capable of providing equipment and support … and sources of trained personnel to continue operation of the equipment and staff the OSRO … for the first 7 days of the response." [§1035(i)(6) and §5035 (i)(3)] Support for personnel includes supplies required on-scene for transfers to/from response vessel(s) and shore; lodging and shelter options; requirements for fresh water, meals, garbage and sewage; medical and decontamination support; refueling workboats, ATVs, pumps, and generators; communications equipment; etc.
Tracking and Monitoring System (TMS)	TMSs require the use of best available technology; watch-standing; data latency; refresh rate; archiving and trend analysis; notifications to vessels and COTP; routing schemes; system disruption and backup; and response activation protocols. The USCG expects that TMS proposals will have 24/7 capability that verifies compliance with routing scheme(s).
Worst Case Discharge Tier-1 (WCD1)	WCD1 is defined by mobilization timeframes and equipment amounts/types for oil spill removal. The NPC that define WCD1 are: (1) Tier 1 oil spill removal resources are calculated per § Appendix B. [§5050(f) and §1050 (f)] (2) Tier 1 on-water recovery resources require contracts or other approved means for NVT operations within 12 nm of the U.S. boundary line for non-persistent fuel oils or for operations within 110 nm for persistent fuel oils. [Table 3 of § Appendix B)] (3) Tier 1 oil spill removal resources shall be capable of being en route to the scene within 2 hours of notification. [§5050(h)] (4) Tier 1 oil spill removal resources shall be capable of arriving on-scene within 24 hours of notification. [§5050(g)] (5) Tier 1 resources must be sustainable for the first 7 days of operations. [§5035 (i)(3)] (6) Aerial oil spill tracking resources capable of arriving on-scene ahead of oil spill removal resources. [§1050(l) and §5050(k)] (7) Tier 1 resources are *dedicated* resources. [ref (d), page 11]

	(8) For a classification site, designated WCD1 resources shall be *dedicated* to covering only that response range (e.g., an OSRO classified for Miami, Florida can't cover the whole East Coast, which consists of many ACCs) [ref (d), page 7]

Vessel Response Plan (VRP) Elements

a. In accordance with ref (c), VO/Os of non-tank vessels (NTVs) [§5015] are required to have approved vessel response plans (VRPs), which details over twenty required elements as outlined below.

1. The basic elements of a VRP are [§5030]:

(a) General information
(b) Notifications procedures
(c) Shipboard spill mitigation procedures
(d) Shore-based response activities
(e) List of contacts
(f) Training procedures
(g) Exercise procedures
(h) Plan review and update procedures
(1) Geographic Specific Appendix (GSA) … *see next paragraph*
(j) Vessel specific appendix

2. Additional elements that are required in the GSA [§5035(i)]:

(a) Description of the geographic area
(b) Volume and group of oil
(c) Federal and state notifications
(d) Identification (ID) of a Qualified Individual (QI)
(e) ID of OSRO(s)
(f) ID of a Spill Management Team (SMT)
(g) ID of equipment and supplies for the *first 7 days* of response operations
(h) ID of additional response equipment not being covered by an OSRO(s)
(i) ID of salvage (i.e., emergency lightering, towing, etc.) and marine fire fighting resources
(j) ID of dispersant resources, if applicable
(k) ID of aerial oil spill tracking resources

3. Additional elements specified for VRP development and evaluation criteria [§5050 (l, m & n)]

(a) Identify response capabilities for on-water recovery (e.g., for the Tier 1 nearshore bbl/day recovery capability, meeting the calculated planning volume or 25k bbl/day, whichever is lower).
(b) Identify oil spill removal response resources necessary to perform *shoreline protection* operations, to include boom amounts in accordance with Table 2 of § Appendix B (e.g.,

for persistent oil in a nearshore environment 30k feet of boom is required for on-scene arrival within 24 hours).

(c) Identify oil spill removal response resources capable of performing *shoreline cleanup* operations to a calculated planning volume in accordance with Tables 3 & 4 of § Appendix B.

b. As applicable, there are additional state planning requirements for NTVs making port calls to Alaska.

1. Deployment strategies (e.g., Procedures for the transport of equipment and personnel to the spill site and staging areas, etc.). [paragraph (b)(2)(E) of 18 ACC 75.427]
2. Response scenario (e.g., plans, procedures and locations for temporary storage). [paragraph (b)(2)(F) of 18 ACC 75.427]

APC Submission - Required Elements for NTVs in Alaska

1. Reason for the APC. [§5067(b)(1)]
Submissions shall present risk potentials from the vessel(s) and summarize associated VRP response resource requirements by providing the following information:

a. Worst Case Discharge (WCD) volume(s) and oil group(s).

- If the APC covers one vessel, provide WCD fuel or cargo whichever is greater to include volume and group of oil [§5035 (i)(1)(ii), (j)(3)(ii)]
- If the APC covers two or more vessels of the same class, provide the greatest WCD volume;
- If the APC covers vessels from several classes, provide the greatest WCD volume from each group of oil (e.g., largest container ship volume of group 4 oil, largest fish processer volume of group 1 oil, etc).

b. Vessel operating location(s). Submissions shall provide trackline information for vessels covered by the APC. Vessels not on innocent passage that operate within 200 nm of the U.S. boundary line [§5015(3)] are required to meet applicable WCD Tier 1 (WCD1) requirements as follows:

- For NTVs carrying non-persistent fuel oils (i.e., Group I), contracted WCD1 response resources are required for operating environments (OEs) where vessel tracklines come within 12 nm from the U.S. boundary line [Table 3 of § Appendix B)].
- For NTVs carrying persistent fuel oils (i.e., Groups II through IV), contracts are required for tracklines within 110 nm.

c. Required response equipment. Based on paragraphs 1.a. and 1.b. above, submissions shall provide the number of OSROs and additional resources required to meet WCD1 requirements for each class of vessel covered by the APC (i.e., per paragraphs 2.6 & 7 of § Appendix B). *See Enclosures (4 & 5) for additional information and analysis of this issue.*

2. Identification of national planning criteria not being met. [§5067(b)(2)]

a. Response capability shortfalls. APCs shall document response resources under contract; provide a comparison to VRP requirements (i.e., as discussed in paragraph 1.c. above); and list shortfalls, as applicable. Shortfalls in Alaska are often related to the following:

- OSRO availability and/or coverage is insufficient [§5035(i)(4)]
- Shoreline cleanup capability is not fully attainable [§5050(m) and paragraphs 5.7, 7.3 & Table 3of § Appendix B]

b. Remote response shortfalls. APCs shall also provide analysis for responding with available response resources to remote on-scene locations and/or outside of available OSRO(s) response range(s), as applicable. The analysis shall include passes, sensitive areas, and PPORs that are identified in ref (e). Pre-planning considerations for seasonal response

limitations (e.g., capability to ensure maximum response during spring/summer cleanup windows) shall be included in the analysis. Shortfalls in Alaska are often related to the following:

- Mobilization timeframes for on-scene arrival are not fully attainable [§5050 (f, g & h) and paragraph 5.6 of § Appendix B]
- On-scene sustainment for the first 7 days of a response is not fully attainable [§5035(i)(3)]

Enclosure (4) provides a more detailed discussion of the above issues.

3. Alternative response approach. [§5067(b)(3)]
Submissions shall describe strategies, tactics, and/or procedures that will provide *equivalent* capability to address WCD1 shortfalls/gaps. Examples might include:

- *Lowering equipment required but providing a quicker response time.* A submission might provide details for pre-staging tailored response equipment on the vessel(s) to respond immediately and develop an associated crew training program.

- *If not able to meet the on-scene arrival timeframe, provide enhanced protection and shoreline cleanup pre-planning and mobilization capability*. A submission might provide tailored protection resources for pre-identified sensitive areas, with contracts to facilitate mobilization of these assets no later than following the on-water recovery planning standard timeframe for inland/nearshore (i.e., 4 days per Table 3 of § Appendix B).

- *For areas with limited dedicated assets, provide an enhanced response vessel tracking system for non-dedicated assets*. A submission might provide details for a vessel of opportunity (VOO) training program with a tracking system, to ensure an adequate number of VOOs are continually available in the region to mount a response (e.g., ~25 VOOs monitored to ensure a minimum of 5 are available at any one time).

The USCG acknowledges that equivalent solutions may not be possible in some operating areas, especially remote areas. Where response coverage gaps exist, the USCG considers an APC as a temporary solution [see paragraph 24, page 60111 of per ref (b)]. Prevention/mitigation strategies are encouraged until such time that these gaps can be closed (see paragraph 4. below). In addition, a strategic plan is required to manage solutions for closing the gaps (see paragraph 5.b. below).

4. Prevention/mitigation strategies that ensure lower risk of spills. [§5067(b)(4)]
If applicable, submissions shall detail prevention/mitigation strategies to ensure lower risk of spills while gap reduction strategies are being developed and implemented. Examples might include:

- *Routing procedures*. Providing detailed vessel routing procedures to minimize tracklines coming within 110 nm of the U.S. boundary line for vessels carrying persistent fuel oils,

especially in areas without OSRO coverage, and establishing a Tracking and Monitoring System (TMS) to ensure compliance.

- *Enhance on-board emergency procedures*. Maintaining onboard equipment, procedures and training to transfer fuel from a breached tank to other tanks thereby reducing the amount of oil that could potentially be lost.
- *Enhanced lightering*. Providing onboard or in region lightering capability, procedures and training to expedite lighter of fuel to vessels of opportunity or on-shore.
- *Providing emergency towing capability*. Provide details for monitoring vessel movement; notification of potential emergencies; and dedicated tug capability, which could be dispatched to arrive on-scene within the timeframe needed to prevent the vessel from grounding.
- *Prioritize and tailor OE capability*. A submission might provide for response capability above VRP requirements for a more environmentally sensitive operating environment (OE) while gapping the capability for another (e.g., enhancing nearshore capability while having gaps in open ocean capability).

5. Environmental and economic impact assessments. [§5067(b)(5)]

a. Environmental. As applicable, submissions shall provide an environmental assessment that discusses implications for not meeting WCD1 requirements for environmentally sensitive areas (i.e., when on-water tactics are no longer an option and priorities become shoreline assessments, cleanup operations and protection from downstream oiling). The-analysis shall include discussions of oil tracking capability; estimates for volumes of oil potentially impacting the shoreline; prioritization of existing Geographic Response Strategies (GRS) protection on sensitive areas; etc.

b. Economic. Where response coverage gaps exist, the USCG considers an APC as a temporary solution [see paragraph 24, page 60111 of per ref (b)]. In this circumstance, an APC shall include a detailed strategic plan, which includes strategies and milestones to move toward full compliance or equivalences with VRP regulations.

(1) The plan shall discusses how revenue from VO/Os will be utilized over a 3-to-5 year period to enhance response capability and close OSRO coverage gaps. Revenue shall be primarily used to develop and maintain response resources (i.e., per the regulations, administrative overhead and/or prevention measures are secondary to improving response capabilities).

(2) The strategies for closing gaps shall be developed in consultation with QIs, SMTs and OSROs that are listed in the VRP(s) and APC.

(3) APC management activities and associated costs shall be provided in the strategic plan.

For example, if an APC covers 2,000 vessels and charges an annual fee of ~$7k per vessel, the gross annual revenue would be ~$14 million. If administrative costs were at 6%

(~$900k), the remaining 94% (~$13.1 million) in revenue could be used for operations and reducing response gaps. Over the course of 3-to-5 years, a strategic plan would provide VO/Os with significant options for increasing response capability for the associated subarea(s) (i.e., with ~$39-to-$65 million potentially available during this timeframe).

6. Scenario information.

VO/Os who are required to have a State of Alaska NTV contingency plan shall include the required response scenario (i.e., per paragraph (b)(2)(F) of 18 ACC 75.427) as an enclosure to their APC. If more than one vessel has this state requirement, then the APC administrator may select or develop a representative scenario for each class of vessel as enclosures.

In keeping with State of Alaska planning requirements, all APCs are *encouraged* to provide scenarios that highlight mobilization and sustainment of WCD1 resources to a remote on-scene location from OSRO pre-staged equipment site utilized in the APC. The scenarios should include oil weathering and trajectory analysis; on-water recovery (i.e., which uses the planning standards from paragraph 6 of § Appendix B); lightering equipment related to the WCD volume and fuel group (e.g., heavy fuel oils require heating to pump); hazardous cargo removal (e.g., hazmat containers from a container ship); shoreline assessment and cleanup strategies; waste management associated with shoreline cleanup [e.g., see example calculations provided in Tab (b) to Enclosure (4)]; etc.

VRP Gaps in Alaska

For several regions in Alaska, VRP gaps generally exist due to one or more of the following issues:

- OSRO availability and/or coverage is insufficient [§5035(i)(4)]
- Shoreline cleanup capability is not fully attainable [§5050(m) and paragraphs 5.7, 7.3 & Table 3 of § Appendix B]
- Mobilization timeframes for on-scene arrival are not fully attainable [§5050 (f, g & h) and paragraph 5.6 of § Appendix B]
- On-scene sustainment for the first 7 days of a response is not fully attainable [§5035(i)(3)]
- Aerial oil spill tracking capability is not fully attainable [§1050(l) and §5050(k)]

1. OSRO Coverage.

   a. Response Range.

   In accordance with refs (c & d), OSROs may seek USCG *classification* to a maximum response range of up to 110 nm (i.e., per planning standards of underway within 2 hours, 5 knot response vessel transit speed and on-scene within 24 hours) from a COTP City or Alternate Classification City (CC/ACC).

   In Alaska, many CC/ACC response ranges do not overlap and may be separated by tens-to-hundreds of miles. In addition, many regions do not have sufficient infrastructure for designating additional ACCs. This situation means that large areas of Alaska are without classified OSRO coverage.

   In association with this guidance, the NSFCC is updating ref (d) and intends to create new classification options for remote regions in Alaska to assist OSROs in providing verified services for VO/Os. The new classifications will involve differing response ranges, on-scene arrival times and associated equipment requirements. Draft concepts for these new classifications are provided in Tab (a) of this enclosure.

   b. VRP Equipment Requirements.

   For some vessels the VRP WCD1 planning volume for on-water recovery may exceed the OSRO planning standard cap (e.g., 12,500 bbl/day on-water recovery capability). In this case, the VRP must list additional OSRO(s), or other equipment resources, needed to meet the WCD1 planning volume [§5035(i)(4), §5050(n) and paragraph 7.2.4 of § Appendix B]. Scenarios 1 and 2 of Tab (b) of this enclosure provide examples of this situation for a container ship.

Currently, most subareas in Alaska are only covered by one OSRO and have limited contractors available to provide additional response resources outside of major ports and populated areas. If operating in a remote region, contractors are likely to be already engaged on a project and may take some time to acquire (i.e., they would be non-dedicated and unable to meet WCD1 mobilization requirements).

For areas where response resources are limited, APCs shall discuss gaps associated with VRP planning standards and propose alternative response strategies.

2. Shoreline cleanup.

VRPs are required to identify OSRO capability to conduct shoreline cleanup operations; either concurrently with or following on-water recovery operations [§5050(m) and paragraphs 5.7, 7.4 & Table 3 § Appendix B]. Currently OSROs are not *classified* for this requirement. While requirements for shoreline cleanup are largely undefined in the regulations, except for a planning volume calculation, experience gained from past responses is readily available for developing associated requirements (see Tab (b) of this enclosure).

For regions in Alaska where WCD1 coverage is not available, shoreline cleanup is likely to be the only remaining response tactic available when responders arrive on-scene. The identification of an OSRO(s) with the capability to support large numbers of personnel in the field will likely be a significant challenge (e.g., the M/V Kuroshima [1997] and M/V Selendang AYU [2004/5] responses in Alaska required 200+ personnel in the field at any given time).

Seasonal response limitations may also exist during the winter months (i.e., October through March) in many parts of Alaska. Therefore, an OSRO may not be capable of sustained shoreline cleanup operations in remote areas during this timeframe due to personnel safety concerns.

For areas where response resources are limited, APCs shall discuss gaps associated with this VRP planning standard and propose alternative response strategies. Without detailed pre-planning, the activation, indemnification and mobilization of large numbers of response resources could easily exceed 30-to-60 days, as occurred during the M/V Selendang AYU response.

3. Mobilization.

For NTVs, WCD1 oil spill removal and aerial tracking response resources must be capable of meeting time requirements for the mobilization of equipment, personnel and support to areas that may be impacted from a spill due to vessel operations [§5050 (f, g & h) and paragraph 5.6 of § Appendix B]. The underway and on-scene mobilization requirements were established to facilitate response resources arriving in time to conduct vessel containment, on-water recovery and shoreline protection operations.

For remote areas where these timeframes cannot be met due to limited-to-no support infrastructure, APCs shall discuss gaps associated with this VRP planning standard and propose alternative response strategies. Alternative strategies should focus on tactics likely to be

available to responders for timeframes when they are capable of arriving on-scene (e.g., arrival after 24 hours may require additional on-water recovery systems due to spill trajectories and weathering; greater focus on shoreline cleanup; lightering; waste management capability; etc).

4. Sustainment.

VRPs are required to obtain *dedicated* OSRO and/or SMT capability for supporting initial response operations for the first 7 days [§5035(i)(3) and paragraph 7.2.4 & Table 3 of § Appendix B].

This requirement is a significant challenge for remote on-scene locations since it involves providing hotel services for personnel in the field (i.e., food, water, sewage, lodging, decontamination, medical, etc.). In remote areas of Alaska, land based hotel services are not available. Hotel services may require certificated commercial/passenger vessels. If not pre-identified, they may not be available within VRP mobilization requirements.

For remote areas where response resources are limited, APCs shall discuss gaps associated with this VRP planning standard and propose alternative response strategies.

5. Aerial oil spill tracking.
Aerial oil spill tracking requires aircraft that can operate at slow speeds and low altitudes to locate and track oil slicks. Tracking requires trained observers and/or specialized detection equipment. Marine band radio capability is also required for communicating with response vessels. In many remote areas only cargo and passenger aircraft, which are used for long-distance logistics, are available. These aircraft generally are not configured to meet the tracking requirements described above.

OSRO Classification Sites - Options for Alaska

Classification options are defined by sites with varying capabilities to maintain, mobilize and support response requirements. These capabilities depend on community infrastructure and availability of *dedicated* response vessels, response equipment and response personnel.

a. COTP-City (CC) and Alternate Classification City (ACC):

Currently, OSROs are classified at CC/ACCs and are expected to be able to mobilize to a response range of 110 nm. When there are no response options other than a classified OSRO, VO/Os shall contract with a *classified* OSROs at these sites, as applicable (see paragraph 3 of Enclosure (5) for additional information).

(1) Infrastructure.
- (a) Port facilities are available to provide staging, maintenance, and dockside mobilization capability.
- (b) Community has capability to provide response personnel and on-scene sustainment supplies.

(2) Response vessels.
- (a) All vessels shall be pre-staged and/or operate within the ACC response range.
- (b) All vessels shall be capable of being en route to the scene of a discharge within 2 hours of notification.
- (c) For mobilization of equipment, dedicated vessel(s) are required to be positioned so they can be loaded within 2 hours.
- (d) For deployment on-scene, as applicable, dedicated vessel(s) and/or non-dedicated Vessels of Opportunity (VOO) can be used.
- (e) All vessels shall arrive on-scene within 24 hours.
- (f) All vessels shall be capable of conducting initial response operations (i.e., 7 days before needing resupply/relief).
- (g) For VOO programs that rely on fishing vessels, the OSRO shall have written procedures in place to facilitate their mobilization, which specifically address requests for compensation for loss of revenue due to the spill [per 33 CFR 136, subpart 230 (series)].

(3) Response equipment.
- (a) All equipment shall be pre-staged within the ACC response range.
- (b) Only dedicated equipment qualifies for this classification.
- (c) As applicable, all equipment, parts and consumables shall be loaded on response vessel(s) within 2 hours.
- (d) All necessary parts and consumables shall be on-scene within 24 hours to support initial response operations.

(4) Response personnel.
- (a) All personnel shall reside within the ACC response range.
- (b) Dedicated personnel shall be available as necessary to load response vessel(s) within 2 hours of notification.
- (c) Dedicated and/or non-dedicated personnel shall arrive on-scene within 24 hours to effectively deploy response equipment and maintain tactical operations.

(d) Supplies shall be on-scene within 24 hours to support initial response operations.

b. Remote ACC (RACC):

A RACC is a *new* classification *being developed* by the NSFCC for Alaska to support APCs that cover areas with limited infrastructure (e.g., a small community with no road assess). An OSRO classified at a RACC would be expected to be able to mobilize to a response range of 60 nm. When there are no response options other than a classified OSRO, VO/Os shall contract with a *classified* OSROs at these sites, as applicable.

(1) Infrastructure. As per the above ACC requirements, with the following exceptions:
- (a) Port facilities exist at the site, but options may be limited (e.g., limited dockside access for loading response vessels).
- (b) Community has limited-to-no capability to provide response personnel and on-scene sustainment supplies.
- (c) Nearby airport logistics are available to fly in equipment, responders, supplies and/or consumables.
- (d) The mobilization planning standard has been increased to 12 hours (vice 2 hours for ACCs) to account for the logistical shortfalls mentioned above. However, the necessary increase in mobilization time limits the response range to 60 nm (i.e., when applying the 5 knot planning standard and the remaining time to arrive on-scene of the spill within 24 hours). The maximum distance from a RACC from which equipment can be staged is dependent on normal/routine aviation speeds for the sites (i.e., speed multiplied by 12 hours).

(2) Response vessels. As per the above ACC requirements, with the following exceptions:
- (a) Non-dedicated vessels can also be utilized for mobilization.
- (b) All vessels required for equipment/personnel mobilization shall complete loading operations and be en route to the scene of a discharge within 12 hours of notification.

(3) Response equipment.
- (a) All equipment shall be located in the COTP zone within 12 hour flight range (i.e., equipment does not have to be pre-staged within the RACC response range).
- (b) As applicable, all equipment, parts and consumables shall be loaded on response vessel(s) within 12 hours.
- (c) Only dedicated equipment qualifies for this classification.
- (d) All necessary parts and consumables shall be on-scene within 24 hours to support initial response operations.

(4) Response personnel.
- (a) Dedicated and/or non-dedicated personnel as necessary shall be capable of loading response vessel(s) within 12 hours of notification.
- (b) Dedicated and/or non-dedicated personnel shall arrive on-scene within 24 hours to effectively deploy response equipment and maintain tactical operations.
- (c) Supplies shall be on-scene within 24 hours to support initial response operations.

c. Remote Designated Zone (RDZ):

A RDZ is a *new* classification *being developed* by the NSFCC for Alaska to support APCs that cover areas with high vessel risks and no infrastructure (e.g., a remote pass used by great circle route traffic). An OSRO classified for a RDZ would be expected to respond to any area between the nearest ACC/RACC and the RDZ with RDZ designated equipment, as discussed below. The OSRO would also need to be classified at the nearest ACC or RACC. When there are no response options other than a classified OSRO, VO/Os shall contract with a *classified* OSROs for these zones, as applicable.

(1) Infrastructure.
   (a) No infrastructure exists at RDZs, however, vessel risk is considered high at these sites (e.g., a remote pass along great circle route).
   (b) Logistical support for on-scene response operations will rely on vessel and/or helicopter mobilization from the nearest ACC or RACC with a nearshore classified OSRO.

(2) Response vessels.
   (a) On-scene arrival time is estimated by calculating the distance from the nearest ACC or RACC to the RDZ, dividing by the 5 knot vessel transit speed and adding the en route mobilization allowance for the ACC or RACC (i.e., 2 or 12 hours respectively).

   For example, Amchitka Pass (i.e., as a proposed RDZ) is ~120-to-160 nm from Adak (i.e., a possible ACC or RACC site). Mobilization would be the transit time at 5 knots (i.e., ~24-to-32 hours) plus the en route mobilization allowance for an ACC (i.e., 2 hours) or for a RACC (i.e., 12 hours). Therefore, on-scene arrival for would be ~26-to-34 hours if Adak is classified as a ACC or ~26-to-44 hours if it is classified as a RACC.

   (b) OSROs will need to demonstrate capability, through dedicated vessels and/or VOOs, for transport of nearshore equipment to on-scene, which may require transiting through offshore and/or open-water areas.
   (c) Vessels shall be capable of conducting initial response operations for a minimum of 7 days plus transit time to/from on-scene (e.g., if arriving 30 hours after getting underway, fuel capability needs to be for at least 7 days on-scene plus 1.5 days of transit to/from the RDZ).

(3) Response equipment.
   (a) Equipment shall be capable of being loaded to vessel(s) within the ACC or RACC time standards as discussed above.
   (b) The type of equipment shall be tailored to the anticipated spill situation when response vessels are able to arrive on-scene. For example, if arriving on-scene after ~30 hours; equipment should support tactics available to responders at that time (e.g., shoreline cleanup becomes a higher priority because there is less opportunity for on-water recovery).
   (c) OSROs seeking this classification shall propose equipment categories and types that support this unique situation (i.e., initial response equipment arriving on-scene after 24 hours) for COTP, DRAT, and NSFCC approvals.

1. Planning standard methodologies used in Table 3 of § Appendix B, shall be incorporated into proposals (i.e., spilled oil group and arrival on-scene will determine % of oil onshore). APC submissions shall discuss requirements for shoreline cleanup and associated estimates for waste tonnage (see Tab (b) of this enclosure).

2. Protection and cleanup strategies for associated Most Environmentally Sensitive Areas (MESAs), Potential Places of Refuge (PPOR) and Geographic Response Strategies (GRSs) shall be incorporated into proposals. Details are provided online at:

   - MESAs: http://www.adfg.alaska.gov/index.cfm?adfg=maps.mesamaps
   - PPORs: http://dec.alaska.gov/spar/perp/ppor/home.htm
   - GRSs: http://dec.alaska.gov/spar/perp/grs/home.htm

3. The Alaska Spill Tactics for Alaska Responders (STAR) manual shall be consulted for developing nearshore and on-shore cleanup strategies. [https://dec.alaska.gov/spar/perp/star/docs.htm].

(4) Response personnel.

(a) Personnel shall be available as necessary to load response vessel(s) within the ACC or RACC time standards as discussed above.

(b) Supplies shall be available for the required 7 day initial sustainment plus transit time to/from on-scene.

(c) OSROs seeking this classification shall propose appropriate support packages for COTP, DRAT, and NSFCC approvals.

NTV - Example Planning Standard Scenarios

Scenario 1:
Key variables: (1) Container ship; (2) Incident - grounded in a nearshore OE; (3) On-scene - 110 nm from the nearest classified site with a qualified OSRO (i.e., with a WCD1/nearshore/persistent oil classification); (4) WCD volume - 60,000 bbl; and (5) Oil group – IV (IFO-380 at 991 kg/m^3).

Planning Volumes:
- On-water Recovery (OWR) [§ Appendix B, 7.2] = WCD x 50% (Table 3) x 1.4 (Table 4) = 42k bbl
- Shoreline Cleanup (SC) [§ Appendix B, 7.3] = WCD x 70% (Table 3) x 1.4 (Table 4) = 58.8k bbl

OWR for 4 days: [§ Appendix B, 7.2.3 and 7.2.4]
- Day-1 OWR = 42k bbl x .15 (Table 5) = 6.3k bbl/day effectiveness
- Day-2 OWR = 42k bbl x .25 (Table 5) = 10.5k bbl/day effectiveness (i.e., +4.2k OWR)
- Day-3 OWR = 42k bbl x .40 (Table 5) = 16.8k bbl/day* effectiveness (i.e., +6.3k OWR)
- Day-4 OWR = 42k bbl - 33.6k bbl (Day 1-3 OWR) = 8.4k bbl/day effectiveness
- Day-5 OWR = 0, no oil available for on-water recovery. Anticipated demobilization of this capability.

*Note: An OSRO classified to WCD1 has a planning standard cap of 12.5k bbl/day, therefore during the third day of OWR an additional 4.3k bbl/day OWR capability is required to arrive on-scene to meet the 16.8k bbl/day planning requirement (i.e., need not be under contract per cap rules, BUT must be identified in the VRP [§5050 (n)]).

Temporary Storage Capacity (TSC): [§ Appendix B, 5.4 and 9.2]
- Day-1 TSC = 6.3k bbl x 2 = 12.6k bbl
- Day-2 TSC = 10.5k bbl x 2 = 21k bbl
- Day-3 TSC = 16.8k bbl x 2 = 33.6k bbl**
- Day-4 TSC = 42k bbl (equals the OWR planning volume)

**Note: An OSRO classified to WCD1 has a planning standard cap of 25k bbl capacity, therefore during the third day of OWR an additional 8.6k bbl storage capacity would be required on-scene (i.e., need not be under contract per cap rules, BUT must be identified in the plan [§5050 (n)]). On the fourth day of OWR an additional 8.4k bbl storage capacity would be required on-scene. The overall total above the cap being 17k bbl.

Shoreline Protection (SP): [§ Appendix B, 5.6]
VRPs are required to have SP capability up to 30k feet of boom (Table 2) on-scene within 24 hours. SP shall be deployed and maintained while the threat from on-water oil exists for shoreline impacts (i.e., during Days 1-to-4, while OWR is still possible [§ Appendix B, 7.2.4]).

SP for 4 days: Using the mobilization factors in Table 5, deployed requirements would be:

- Day-1 SP = 30k ft x .15 = 4.5k ft deployed
- Day-2 SP = 30k ft x .25 = 7.5k ft additional boom deployed
- Day-3 SP = 30k ft x .40 = 12k ft additional boom deployed
- Day-4 SP = 30k ft – 24ft = 6k ft additional boom deployed
- Day-5 SP = 0, no free floating oil available. Anticipated demobilization of this capability.

Note: An OSRO classified to WCD1/persistent oil has a planning standard cap of 30k feet of boom, which is the same value as the VRP planning standard. However, additional boom may be required for locations based on strategies associated with pre-identified Most Environmentally Sensitive Areas (MESAs) and Geographic Response Strategies (GRSs) within subareas.

Shoreline Cleanup (SC): [§5050 (m), Appendix B, 5.7 and 7.3]
SC should start by Day-5, after OWR and SP has occurred [§ Appendix B, 7.2.4]).

Notes:

- OSROs are not currently classified to this capability even though VO/Os are specifically required to contract with an OSRO capable of effecting SC operations and listing them in the VRP.
- Past nearshore vessel spills have generated SC waste between *2-to-10 times* the spilled oil tonnage (e.g., in 2004 the M/V Selendang AYU spilled 80% of its fuel, which equaled ~1.3k metric tons (t) and generated five times that weight in SC waste; ~5.3k t). Additional references which support this analysis:
  - *Guidance on Waste Management during a Shoreline Pollution Incident*, Cedre Operational Guide, December 2011, which is available online at: http://wwz.cedre.fr/en/.
  - *Comparison and Assessment of Waste Generated During Oil Spills*, IOSC 2014 paper by Tim Wadsworth, ITOPF Ltd, which is available online at: http://www.itopf.com/.
  - *Unique Logistics Difficulties Encountered During Response to the M/V Selendang AYU Stranding and Break up*, IOSC 2008 paper by John J. Gallagher et al., Gallagher Marine Systems, LLC, which is available online at: http://ioscproceedings.org/.

  - A conversion calculator for barrels (bbl), for a specific oil density (i.e., kg/m^3), to metric tons (t) is available online at: http://www.thecalculatorsite.com/conversions/substances/oil.php.

- SC planning volume converted to waste tonnage (i.e., based on a 2-to-10 times estimate). [§ Appendix B, 9.3]
  - With OWR, ~58.8k bbl/9.3k t impact shorelines. Consequently, waste tonnage is possible in the range of 18k-to-93k t, median being ~56k t (i.e., the best case scenario represents ~3.4 times M/V Selendang AYU spill).
  - Without OWR an additional 42k bbl impacts shorelines (i.e., arriving after Day-5), therefore ~100k bbl/15.8k t impact shorelines. Consequently, waste tonnage is possible in the range of 31.6k-to-158k t, median being ~95k t.

On-scene Sustainment: [§5035(i)(3), Appendix B, 7.2.4 and 7.3.3]
VRPs require on-scene sustainment capability for the first 7 days of a response.

Note: A WCD1 classification for an OSRO does not currently verify this capability. VO/O(s) shall ensure that resources are available to sustain initial response operations [§ Appendix B, 9.1]. For remote regions of Alaska, sustainment capability includes lodging/berthing; fresh water, meals, garbage and sewage; medical and decontamination support; refueling workboats, ATVs, pumps, generators; personnel protective equipment (PPE) for responders; communications, command and control; etc.

Table 1: Daily on-scene capability for Scenario 1.

	On-scene	7 day sustainment							Comments
	Mobilize, Assess & Contain	On-water Oil recovery & Shoreline Protection Booming				Shoreline Cleanup			
Classification	Day-1	Day-2	Day-3	Day-4	Day-5	Day-6	Day-7	Day-8	
CC or ACC (110 nm max)		OWR=6.3k TSC=6.3k SP=4.5k SC=0	OWR=10.5k TSC=16.8k SP =12k SC=0	OWR=16.8k TSC=33.6k SP=24k SC=0	OWR=8.4k TSC=42k SP=30k SC=0	OWR=0 TSC=0 SP=<30k SC=>18k t	OWR=0 TSC=0 SP=<30k SC=>18k t	OWR=0 TSC=0 SP=<30k SC=>18k t	■ At 110 nm, with 2 hour activation and 5 knots planning standards, on-scene arrival is ~24 hours (i.e., ~1 day to arrive on-scene). ■ Day 4 requirements exceed one classified OSRO for OWR and TSC. ■ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ Waste is possible in the range of 18k-to-158k t.*
RACC (60 nm max)									
CC or ACC w/RDZ (>110 nm)									
RACC w/RDZ (>60 nm)		OWR=3.15k TSC=3.15k SP=2.3k SC=0	OWR=10.5k TSC=13.65k SP=9.8k SC=0	OWR=16.8k TSC=30.45k SP =22k SC=0	OWR=11.55k TSC=42k SP=30k SC=0	OWR=0 TSC=0 SP=<30k SC=>18k t	OWR=0 TSC=0 SP=<30k SC=>18k t	OWR=0 TSC=0 SP=<30k SC=>18k t	■ At 110 nm, with 12 hour activation and 5 knots planning standards, on-scene arrival is ~34 hours (i.e., ~1.5 days to arrive on-scene). ■ Day 4 requirements exceed one classified OSRO for OWR and TSC. ■ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ Waste is possible in the range of 18k-to-158k t.*

Note: *SC bbl converted to waste tonnage based on 2-to-10 times the spill volume.

Scenario 2:
Key variables: (1) Container ship; (2) Incident - grounded in a nearshore OE; (3) On-scene - 300 nm from the nearest classified site with a qualified OSRO (i.e., with a WCD1/nearshore/persistent oil classification); (4) WCD volume - 60,000 bbl; and (5) Oil group - IV (IFO-380 at 991 kg/m^3).

Planning Volumes:

- On-water Recovery (OWR) [§ Appendix B, 7.2] = WCD x 50% (Table 3) x 1.4 (Table 4) = 42k bbl
- Shoreline Cleanup (SC) [§ Appendix B, 7.3] = WCD x 70% (Table 3) x 1.4 (Table 4) = 58.8k bbl

OWR for 4 days: [§ Appendix B, 7.2.3 and 7.2.4]

- Day-1 OWR = 42k bbl x .15 (Table 5) = 6.3k bbl/day effectiveness
- Day-2 OWR = 42k bbl x .25 (Table 5) = 10.5k bbl/day effectiveness (i.e., +4.2k OWR)
- Day-3 OWR = 42k bbl x .40 (Table 5) = 16.8k bbl/day* effectiveness (i.e., +6.3k OWR)
- Day-4 OWR = 42k bbl - 33.6k bbl (Day 1-3 OWR) = 8.4k bbl/day effectiveness
- Day-5 OWR = 0, no oil available for on-water recovery. Anticipated demobilization of this capability.

*Note: An OSRO classified to WCD1 has a planning standard cap of 12.5k bbl/day, therefore during the third day of OWR an additional 4.3k bbl/day OWR capability is required to arrive on-scene to have a 16.8k bbl/day effectiveness (i.e., need not be under contract per cap rules, BUT must be identified in the VRP [§5050 (n)]).

Temporary Storage Capacity (TSC): [§ Appendix B, 5.4 and 9.2]

- Day-1 TSC = 6.3k bbl x 2 [§ Appendix B, 9.2] = 12.6k bbl
- Day-2 TSC = 10.5k bbl x 2 = 21k bbl
- Day-3 TSC = 16.8k bbl x 2 = 33.6k bbl**
- Day-4 TSC = 42k bbl (equals the OWR planning volume)

An OSRO classified to WCD1 has a planning standard cap of 25k bbl capacity, therefore during the third day of OWR an additional 8.6k bbl storage capacity would be required on-scene (i.e., need not be under contract per cap rules, BUT must be identified in the plan [§5050 (n)]). On the fourth day of OWR an additional 8.4k bbl storage capacity would be required on-scene. The overall total above the cap being 17k bbl.

Shoreline Protection (SP): [§ Appendix B, 5.6]
VRPs are required to have SP capability up to 30k feet of boom (Table 2) on-scene within 24 hours. SP shall be deployed and maintained while the threat from on-water oil exists for shoreline impacts (i.e., during Days 1-to-4, while OWR is still possible [§ Appendix B, 7.2.4]).

SP for 4 days: Using the mobilization factors in Table 5, deployed requirements would be:

- Day-1 SP = 30k ft x .15 = 4.5k ft deployed
- Day-2 SP = 30k ft x .25 = 7.5k ft additional boom deployed
- Day-3 SP = 30k ft x .40 = 12k ft additional boom deployed
- Day-4 SP = 30k ft – 24ft = 6k ft additional boom deployed
- Day-5 SP = 0, no free floating oil available. Anticipated demobilization of this capability.

Note: An OSRO classified to WCD1/persistent oil has a planning standard cap of 30k feet of boom, which is the same value as the VRP planning standard. However, additional boom may be required for locations based on strategies associated with pre-identified Most Environmentally Sensitive Areas (MESAs) and Geographic Response Strategies (GRSs) within subareas.

Shoreline Cleanup (SC): [§5050 (m), Appendix B, 5.7 and 7.3]
SC should start by Day-5, after OWR and SP has occurred [§ Appendix B, 7.2.4]).

Notes:

- OSROs are not currently classified to this capability even though VO/Os are specifically required to contract with an OSRO capable of effecting SC operations and listing them in the VRP.

- SC planning volume converted to waste tonnage (i.e., based on a 2-to-10 times estimate). [§ Appendix B, 9.3]
  - With OWR, ~58.8k bbl/9.3k t impact shorelines. Consequently, waste tonnage is possible in the range of 18k-to-93k t, median being ~56k t (i.e., the best case scenario represents ~3.4 times M/V Selendang AYU spill).
  - Without OWR an additional 42k bbl impacts shorelines (i.e., arriving after Day-5), therefore ~100k bbl/15.8k t impact shorelines. Consequently, waste tonnage is possible in the range of 31.6k-to-158k t, median being ~95k t.

On-scene Sustainment: [§5035(i)(3), Appendix B, 7.2.4 and 7.3.3]
VRPs require on-scene sustainment capability for the first 7 days of a response.

Note: A WCD1 classification for an OSRO does not currently verify this capability. VO/O(s) shall ensure that resources are available to sustain initial response operations [§ Appendix B, 9.1]. For remote regions of Alaska, sustainment capability includes lodging/berthing; fresh water, meals, garbage and sewage; medical and decontamination support; refueling workboats, ATVs, pumps, generators; personnel protective equipment (PPE) for responders; communications, command and control; etc.

Table 2: Daily on-scene capability for Scenario 2.

	On-scene	7 day sustainment							Comments
	Mobilize, Assess & Contain	On-water Oil recovery & Shoreline Protection Booming				Shoreline Cleanup			
Classification	Day-1	Day-2	Day-3	Day-4	Day-5	Day-6	Day-7	Day-8	
CC or ACC (110 nm max)									
RACC (60 nm max)									
CC or ACC w/RDZ (>110 nm)			OWR=3.15k TSC=3.15k SP=2.3k SC=0	OWR=10.5k TSC=13.65k SP=9.8k SC=0	OWR=16.8k TSC=30.45k SP=22k SC=0	OWR=0 TSC=0 SP=<22k SC=>22k t	OWR=0 TSC=0 SP=<22k SC=>22k t	OWR=0 TSC=0 SP=<22k SC=>22k t	■ At 300 nm, with 2 hour activation and 5 knots planning standards, on-scene arrival is ~62 hours (i.e., ~2.5 days to arrive on-scene). ■ Day 5 requirements exceed one classified OSRO for OWR and TSC. ■ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ An additional 11.55k bbl impacts shorelines; total then is 70.35k bbl. ‣ Waste is possible in the range of 22k-to-158k t.*
RACC w/RDZ (>60 nm)				OWR=6.3k TSC=6.3k SP =4.5k SC=0	OWR=10.5k TSC=16.8k SP=12k SC=0	OWR=0 TSC=0 SP=<12k SC=>26k t	OWR=0 TSC=0 SP=<12k SC=>26k t	OWR=0 TSC=0 SP=<12k SC=>26k t	■ At 300 nm, with 12 hour activation and 5 knots planning standards, on-scene arrival is ~72 hours (i.e., ~3 days to arrive on-scene). ■ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ An additional 25.2k bbl impacts shorelines; total then is 84k bbl. ‣ Waste is possible in the range of 26k-to-158k t.*

Note: *SC bbl converted to waste tonnage based on 2-to-10 times the spill volume.

Scenario 3:
Key variables: (1) Cargo vessel; (2) Incident - grounded in a nearshore OE; (3) On-scene - 110 nm from the nearest classified site with a qualified OSRO (i.e., with a WCD1/nearshore/persistent oil classification); (4) WCD volume - 15,000 bbl; and (5) Oil group - IV (IFO-380 at 991 kg/m^3).

Planning Volumes:
- On-water Recovery (OWR) [§ Appendix B, 7.2] = WCD x 50% (Table 3)x 1.4 (Table 4) = 10.5k bbl
- Shoreline Cleanup (SC) [§ Appendix B, 7.3] = WCD x 70% (Table 3) x 1.4 (Table 4) = 14.7k bbl

OWR for 4 days: [§ Appendix B, 7.2.3 and 7.2.4]
- Day-1 OWR = 10.5k bbl x .15 (Table 5) = 1.57 bbl/day effectiveness
- Day-2 OWR = 10.5k bbl x .25 (Table 5) = 2.62k bbl/day effectiveness (i.e., +1.05k OWR)
- Day-3 OWR = 10.5k bbl x .40 (Table 5) = 4.2k bbl/day effectiveness (i.e., +1.58k OWR)
- Day-4 OWR = 10.5k bbl – 8.39k bbl (Day 1-3 OWR) = 2.11k bbl/day effectiveness
- Day-5 OWR = 0, no oil available for on-water recovery. Anticipated demobilization of this capability.

Temporary Storage Capacity (TSC): [§ Appendix B, 5.4 and 9.2]
- Day-1 TSC = 1.57k bbl x 2 [§ Appendix B, 9.2] = 3.14k bbl
- Day-2 TSC = 2.62k bbl x 2 = 5.24k bbl
- Day-3 TSC = 4.2k bbl x 2 = 8.4k bbl
- Day-4 TSC = 10.5k bbl (equals the OWR planning volume)

Shoreline Protection (SP): [§ Appendix B, 5.6]
VRPs are required to have SP capability up to 30k feet of boom (Table 2) on-scene within 24 hours. SP shall be deployed and maintained while the threat from on-water oil exists for shoreline impacts (i.e., during Days 1- 4, while OWR is still possible [§ Appendix B, 7.2.4]).

SP for 4 days: Using the mobilization factors in Table 5, deployed requirements would be:
- Day-1 SP = 30k ft x .15 = 4.5k ft deployed
- Day-2 SP = 30k ft x .25 = 7.5k ft additional boom deployed
- Day-3 SP = 30k ft x .40 = 12k ft additional boom deployed

- Day-4 SP = 30k ft – 24ft = 6k ft additional boom deployed
- Day-5 SP = 0, no free floating oil available. Anticipated demobilization of this capability.

Note: An OSRO classified to WCD1/persistent oil has a cap of 30k feet of boom, which is the same value as the VRP planning standard. However, additional boom may be required for locations based on strategies associated with pre-identified Most Environmentally Sensitive Areas (MESAs) and Geographic Response Strategies (GRSs) within subareas.

Shoreline Cleanup (SC): [§5050 (m), Appendix B, 5.7 and 7.3]
SC should start by Day-5, after OWR and SP has occurred [§ Appendix B, 7.2.4]).

Notes:

- OSROs are not currently classified to this capability even though VRPs are specifically required to contract with an OSRO capable of effecting SC operations. Also the equipment needed for this requirement is not defined in the VRP regulations.

- SC planning volume converted to waste tonnage (i.e., based on 2-to-10 times). [§ Appendix B, 9.3]
  - With OWR, ~14.7k bbl/2.3k t impact shorelines. Consequently, waste tonnage is possible in the range of 4.6k-to-23k t, median being ~14k t (i.e., the best case scenario represents ~0.89 times M/V Selendang AYU spill).
  - Without OWR an additional 10.5k bbl impacts shorelines (i.e., arriving after Day-5), therefore ~25.2k bbl/4k t impact shorelines. Consequently, waste tonnage is possible in the range of 8k-to-40k t, median being ~24k t.

On-scene Sustainment: [§5035(i)(3), Appendix B, 7.2.4 and 7.3.3]
VRPs require on-scene sustainment capability for the first 7 days of a response.

Note: A WCD1 classification for an OSRO does not currently verify this capability. VO/O(s) shall ensure that resources are available to sustain initial response operations [§ Appendix B, 9.1]. For remote regions of Alaska, sustainment capability includes lodging/berthing; fresh water, meals, garbage and sewage; medical and decontamination support; refueling workboats, ATVs, pumps, generators; personnel protective equipment (PPE) for responders; communications, command and control; etc.

Table 3: Daily on-scene capability for Scenario 3.

	On-scene	7 day sustainment							Comments
	Mobilize, Assess & Contain	On-water Oil recovery & Shoreline Protection Booming				Shoreline Cleanup			
Classification	Day-1	Day-2	Day-3	Day-4	Day-5	Day-6	Day-7	Day-8	
CC or ACC (110 nm max)		OWR=1.57k TSC=1.57kk SP=4.5k SC=0	OWR=2.62k TSC=4.19k SP =12k SC=0	OWR=4.2k TSC=8.39k SP=22k SC=0	OWR=2.1k TSC=10.5k SP=30k SC=0	OWR=0 TSC=0 SP=<30k SC=>4.6k t	OWR=0 TSC=0 SP=<30k SC=>4.6k t	OWR=0 TSC=0 SP=<30k SC=>4.6k t	■ At 110 nm, with 2 hour activation and 5 knots planning standards, on-scene arrival is ~24 hours (i.e., ~1 day to arrive on-scene). ■ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ Waste is possible in the range of 4.6k-to-40k t.*
RACC (60 nm max)									
CC or ACC w/RDZ (>110 nm)									
RACC w/RDZ (>60 nm)		OWR=0.79k TSC=0.79k SP=2.3k SC=0	OWR=2.62k TSC=3.4k SP=9.8k SC=0	OWR=4.2k TSC=7.6k SP =22k SC=0	OWR=2.9k TSC=10.5k SP=30k SC=0	OWR=0 TSC=0 SP=<30k SC=>4.6k t	OWR=0 TSC=0 SP=<30k SC=>4.6k t	OWR=0 TSC=0 SP=<30k SC=>4.6k t	■ At 110 nm, with 12 hour activation and 5 knots planning standards, on-scene arrival is ~34 hours (i.e., ~1.5 days to arrive on-scene). ■ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ Waste is possible in the range of 4.6k-to-40k t.*

Note: *SC bbl converted to waste tonnage based on 2-to-10 times the spill volume.

Scenario 4:
Key variables: (1) Cargo vessel; (2) Incident - grounded in a nearshore OE; (3) On-scene - 300 nm from the nearest classified site with a qualified OSRO (i.e., with a WCD1/nearshore/persistent oil classification); (4) WCD volume - 15,000 bbl; and (5) Oil group - IV (IFO-380 at 991 kg/m^3).

Planning Volumes:
- On-water Recovery (OWR) [§ Appendix B, 7.2] = WCD x 50% (Table 3)x 1.4 (Table 4) = 10.5k bbl
- Shoreline Cleanup (SC) [§ Appendix B, 7.3] = WCD x 70% (Table 3) x 1.4 (Table 4) = 14.7k bbl

OWR for 4 days: [§ Appendix B, 7.2.3 and 7.2.4]
- Day-1 OWR = 10.5k bbl x .15 (Table 5) = 1.57 bbl/day effectiveness
- Day-2 OWR = 10.5k bbl x .25 (Table 5) = 2.62k bbl/day effectiveness (i.e., +1.05k OWR)
- Day-3 OWR = 10.5k bbl x .40 (Table 5) = 4.2k bbl/day effectiveness (i.e., +1.58k OWR)
- Day-4 OWR = 10.5k bbl – 8.39k bbl (Day 1-3 OWR) = 2.11k bbl/day effectiveness
- Day-5 OWR = 0, no oil available for on-water recovery. Anticipated demobilization of this capability.

Temporary Storage Capacity (TSC): [§ Appendix B, 5.4 and 9.2]
- Day-1 TSC = 1.57k bbl x 2 [§ Appendix B, 9.2] = 3.14k bbl
- Day-2 TSC = 2.62k bbl x 2 = 5.24k bbl
- Day-3 TSC = 4.2k bbl x 2 = 8.4k bbl
- Day-4 TSC = 10.5k bbl (equals the OWR planning volume)

Shoreline Protection (SP): [§ Appendix B, 5.6]
VRPs are required to have SP capability up to 30k feet of boom (Table 2) on-scene within 24 hours. SP shall be deployed and maintained while the threat from on-water oil exists for shoreline impacts (i.e., during Days 1- 4, while OWR is still possible [§ Appendix B, 7.2.4]).

SP for 4 days: Using the mobilization factors in Table 5, deployed requirements would be:
- Day-1 SP = 30k ft x .15 = 4.5k ft deployed
- Day-2 SP = 30k ft x .25 = 7.5k ft additional boom deployed
- Day-3 SP = 30k ft x .40 = 12k ft additional boom deployed

- Day-4 SP = 30k ft – 24ft = 6k ft additional boom deployed
- Day-5 SP = 0, no free floating oil available. Anticipated demobilization of this capability.

Note: An OSRO classified to WCD1/persistent oil has a cap of 30k feet of boom, which is the same value as the VRP planning standard. However, additional boom may be required for locations based on strategies associated with pre-identified Most Environmentally Sensitive Areas (MESAs) and Geographic Response Strategies (GRSs) within subareas.

Shoreline Cleanup (SC): [§5050 (m), Appendix B, 5.7 and 7.3]
SC should start by Day-5, after OWR and SP has occurred [§ Appendix B, 7.2.4]).

Notes:

- OSROs are not currently classified to this capability even though VRPs are specifically required to contract with an OSRO capable of effecting SC operations. Also the equipment needed for this requirement is not defined in the VRP regulations.

- SC planning volume converted to waste tonnage (i.e., based on 2-to-10 times). [§ Appendix B, 9.3]
  - With OWR, ~14.7k bbl/2.3k t impact shorelines. Consequently, waste tonnage is possible in the range of 4.6k-to-23k t, median being ~14k t (i.e., the best case scenario represents ~0.89 times M/V Selendang AYU spill).
  - Without OWR an additional 10.5k bbl impacts shorelines (i.e., arriving after Day-5), therefore ~25.2k bbl/4k t impact shorelines. Consequently, waste tonnage is possible in the range of 8k-to-40k t, median being ~24k t.

On-scene Sustainment: [§5035(i)(3), Appendix B, 7.2.4 and 7.3.3]
VRPs require on-scene sustainment capability for the first 7 days of a response.

Note: A WCD1 classification for an OSRO does not currently verify this capability. VO/O(s) shall ensure that resources are available to sustain initial response operations [§ Appendix B, 9.1]. For remote regions of Alaska, sustainment capability includes lodging/berthing; fresh water, meals, garbage and sewage; medical and decontamination support; refueling workboats, ATVs, pumps, generators; personnel protective equipment (PPE) for responders; communications, command and control; etc.

Table 4: Daily on-scene capability for Scenario 4.

	On-scene	7 day sustainment							Comments
	Mobilize, Assess & Contain	On-water Oil recovery & Shoreline Protection Booming				Shoreline Cleanup			
Classification	Day-1	Day-2	Day-3	Day-4	Day-5	Day-6	Day-7	Day-8	
CC or ACC (110 nm max)									
RACC (60 nm max)									
CC or ACC w/RDZ (>110 nm)			OWR=0.79k TSC=0.79k SP=2.3k SC=0	OWR=2.62k TSC=3.4k SP=9.8k SC=0	OWR=4.2k TSC=7.6k SP =22k SC=0	OWR=0 TSC=0 SP=<22k SC=>5.6k t	OWR=0 TSC=0 SP=<22k SC=>5.6k t	OWR=0 TSC=0 SP=<22k SC=>5.6k t	■ At 300 nm, with 2 hour activation and 5 knots planning standards, on-scene arrival is ~62 hours (i.e., ~2.5 days to arrive on-scene). ■ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ An additional 2.9k bbl impacts shorelines; total then is 17.6k bbl. ‣ Waste is possible in the range of 5.6k-to-40k t.*
RACC w/RDZ (>60 nm)				OWR=1.57k TSC=1.57kk SP=4.5k SC=0	OWR=2.62k TSC=4.19k SP=12k SC=0	OWR=0 TSC=0 SP=<12k SC=>6.6k t	OWR=0 TSC=0 SP=<12k SC=>6.6k t	OWR=0 TSC=0 SP=<12k SC=>6.6k t	■ At 300 nm, with 12 hour activation and 5 knots planning standards, on-scene arrival is ~72 hours (i.e., ~3 days to arrive on-scene). ■ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ An additional 6.31k bbl impacts shorelines; total then is ~21k bbl. ‣ Waste is possible in the range of 6.6k-to-40k t.*

Note: *SC bbl converted to waste tonnage based on 2-to-10 times the spill volume.

Scenario 5:
Key variables: (1) Cruise ship; (2) Incident - grounded in a nearshore OE; (3) On-scene - 110 nm from the nearest classified site with a qualified OSRO (i.e., with a WCD1/nearshore/persistent oil classification); and (4 & 5) WCD volume - 9,000 bbl [i.e., 7,000 bbl of Group IV (IFO-380/RMG at 991 kg/m^3) and 2,000 bbl of Group III (MGO/DMA at 860 kg/m^3)].

Planning Volumes:

- On-water Recovery (OWR) [§ Appendix B, 7.2] = WCD x 50% (Table 3)x 2 (Table 4) = 9k bbl
- Shoreline Cleanup (SC) [§ Appendix B, 7.3] = [9k x 70% (Table 3) x 1.4 (Table 4)] + [2k x 50% (Table 3) x 2 (Table 4)] = [8.8k + 2k] = 10.8k bbl

OWR for 4 days: [§ Appendix B, 7.2.3 and 7.2.4]

- Day-1 OWR = 9k bbl x .15 (Table 5) = 1.35k bbl/day effectiveness
- Day-2 OWR = 9k bbl x .25 (Table 5) = 2.25 bbl/day effectiveness (i.e., +1.1k OWR)
- Day-3 OWR = 9k bbl x .40 (Table 5) = 3.6k bbl/day effectiveness (i.e., +1.35k OWR)
- Day-4 OWR = 9k bbl – 7.2k bbl (Day 1-3 OWR) = 1.8k bbl/day effectiveness
- Day-5 OWR = 0, no oil available for on-water recovery. Anticipated demobilization of this capability.

Temporary Storage Capacity (TSC): [§ Appendix B, 5.4 and 9.2]

- Day-1 TSC = 1.35k bbl x 2 [§ Appendix B, 9.2] = 2.7k bbl
- Day-2 TSC = 2.25k bbl x 2 = 4.5k bbl
- Day-3 TSC = 3.6k bbl x 2 = 7.2k bbl
- Day-4 TSC = 9k bbl (equals the OWR planning volume)

Shoreline Protection (SP): [§ Appendix B, 5.6]
VRPs are required to have SP capability up to 30k feet of boom (Table 2) on-scene within 24 hours. SP shall be deployed and maintained while the threat from on-water oil exists for shoreline impacts (i.e., during Days 1- 4, while OWR is still possible [§ Appendix B, 7.2.4]).

SP for 4 days: Using the mobilization factors in Table 5, deployed requirements would be:

- Day-1 SP = 30k ft x .15 = 4.5k ft deployed
- Day-2 SP = 30k ft x .25 = 7.5k ft additional boom deployed
- Day-3 SP = 30k ft x .40 = 12k ft additional boom deployed

- Day-4 SP = 30k ft – 24ft = 6k ft additional boom deployed
- Day-5 SP = 0, no free floating oil available. Anticipated demobilization of this capability.

Note: An OSRO classified to WCD1/persistent oil has a cap of 30k feet of boom, which is the same value as the VRP planning standard. However, additional boom may be needed for locations based on strategies associated with pre-identified Most Environmentally Sensitive Areas (MESAs) and Geographic Response Strategies (GRSs) within subareas.

Shoreline Cleanup (SC): [§5050 (m), Appendix B, 5.7 and 7.3]
SC should start by Day-5, after OWR and SP has occurred [§ Appendix B, 7.2.4]).

Notes:

- OSROs are not currently classified to this capability even though VRPs are specifically required to contract with an OSRO capable of effecting SC operations. Also the equipment needed for this requirement is not defined in the VRP regulations.

- SC planning volume converted to waste tonnage (i.e., based on 2-to-10 times). [§ Appendix B, 9.3]
  - With OWR, ~10.8k bbl/1.7k t impact shorelines [i.e., 8.8k bbl at 991 kg/m^3 is ~1.4k t and 2k bbl at 860 kg/m^3 is ~0.3k t]. Consequently, waste tonnage is possible in the range of 3.4k-to-17k t, median being ~10k t (i.e., the best case scenario represents ~0.60 times M/V Selendang AYU spill).
  - Without OWR an additional 9k bbl impacts shorelines (i.e., arriving after Day-5), therefore ~20k bbl/3k t impact shorelines [i.e., ~16k bbl at 991 kg/m^3 is ~2.5k t and 4k bbl at 860 kg/m^3 is ~0.5k t]. Consequently, waste tonnage is possible in the range of 6k-to-30k t, median being ~18k t.

On-scene Sustainment: [§5035(i)(3), Appendix B, 7.2.4 and 7.3.3]
VRPs require on-scene sustainment capability for the first 7 days of a response.

Note: A WCD1 classification for an OSRO does not currently verify this capability. VO/O(s) shall ensure that resources are available to sustain initial response operations [§ Appendix B, 9.1]. For remote regions of Alaska, sustainment capability includes lodging/berthing; fresh water, meals, garbage and sewage; medical and decontamination support; refueling workboats, ATVs, pumps, generators; personnel protective equipment (PPE) for responders; communications, command and control; etc.

Table 5: Daily on-scene capability for Scenario 5.

	On-scene	7 day sustainment							Comments
	Mobilize, Assess & Contain	On-water Oil recovery & Shoreline Protection Booming				Shoreline Cleanup			
Classification	Day-1	Day-2	Day-3	Day-4	Day-5	Day-6	Day-7	Day-8	
CC or ACC (110 nm max)		OWR=1.35k TSC=1.35k SP=4.5k SC=0	OWR=2.25k TSC=3.6k SP =12k SC=0	OWR=3.6k TSC=7.2k SP=24k SC=0	OWR=1.8k TSC=9k SP=30k SC=0	OWR=0 TSC=0 SP=<30k SC=>3.4k t	OWR=0 TSC=0 SP=<30k SC=>3.4k t	OWR=0 TSC=0 SP=<30k SC=>3.4k t	▪ At 110 nm, with 2 hour activation and 5 knots planning standards, on-scene arrival is ~24 hours (i.e., ~1 day to arrive on-scene). ▪ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ Waste is possible in the range of 3.4k-to-30k t.*
RACC (60 nm max)									
CC or ACC w/RDZ (>110 nm)									
RACC w/RDZ (>60 nm)		OWR=0.79k TSC=0.79k SP=2.3k SC=0	OWR=2.25k TSC=3.04k SP =9.8k SC=0	OWR=3.6k TSC=6.64k SP=22k SC=0	OWR=1.8k TSC=8.44k SP=30k SC=0	OWR=0 TSC=0 SP=<30k SC=>3.4k t	OWR=0 TSC=0 SP=<30k SC=>3.4k t	OWR=0 TSC=0 SP=<30k SC=>3.4k t	▪ At 110 nm, with 12 hour activation and 5 knots planning standards, on-scene arrival is ~34 hours (i.e., ~1.5 days to arrive on-scene). ▪ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ Waste is possible in the range of 3.4k-to-30k t.*

Note: *SC bbl converted to waste tonnage based on 2-to-10 times the spill volume.

Scenario 6:
Key variables: (1) Cruise ship; (2) Incident - grounded in a nearshore OE; (3) On-scene - 300 nm from the nearest classified site with a qualified OSRO (i.e., with a WCD1/nearshore/persistent oil classification); and (4 & 5) WCD volume - 9,000 bbl [i.e., 7,000 bbl of Group IV (IFO-380/RMG at 991 kg/m^3) and 2,000 bbl of Group III (MGO/DMA at 860 kg/m^3)].

Planning Volumes:

- On-water Recovery (OWR) [§ Appendix B, 7.2] = WCD x 50% (Table 3)x 2 (Table 4) = 9k bbl
- Shoreline Cleanup (SC) [§ Appendix B, 7.3] = [9k x 70% (Table 3) x 1.4 (Table 4)] + [2k x 50% (Table 3) x 2 (Table 4)] = [8.8k + 2k] = 10.8k bbl

OWR for 4 days: [§ Appendix B, 7.2.3 and 7.2.4]

- Day-1 OWR = 9k bbl x .15 (Table 5) = 1.35k bbl/day effectiveness
- Day-2 OWR = 9k bbl x .25 (Table 5) = 2.25 bbl/day effectiveness (i.e., +1.1k OWR)
- Day-3 OWR = 9k bbl x .40 (Table 5) = 3.6k bbl/day effectiveness (i.e., +1.35k OWR)
- Day-4 OWR = 9k bbl – 7.2k bbl (Day 1-3 OWR) = 1.8k bbl/day effectiveness
- Day-5 OWR = 0, no oil available for on-water recovery. Anticipated demobilization of this capability.

Temporary Storage Capacity (TSC): [§ Appendix B, 5.4 and 9.2]

- Day-1 TSC = 1.35k bbl x 2 [§ Appendix B, 9.2] = 2.7k bbl
- Day-2 TSC = 2.25k bbl x 2 = 4.5k bbl
- Day-3 TSC = 3.6k bbl x 2 = 7.2k bbl
- Day-4 TSC = 9k bbl (equals the OWR planning volume)

Shoreline Protection (SP): [§ Appendix B, 5.6]
VRPs are required to have SP capability up to 30k feet of boom (Table 2) on-scene within 24 hours. SP shall be deployed and maintained while the threat from on-water oil exists for shoreline impacts (i.e., during Days 1- 4, while OWR is still possible [§ Appendix B, 7.2.4]).

SP for 4 days: Using the mobilization factors in Table 5, deployed requirements would be:

- Day-1 SP = 30k ft x .15 = 4.5k ft deployed
- Day-2 SP = 30k ft x .25 = 7.5k ft additional boom deployed
- Day-3 SP = 30k ft x .40 = 12k ft additional boom deployed

- Day-4 SP = 30k ft – 24ft = 6k ft additional boom deployed
- Day-5 SP = 0, no free floating oil available. Anticipated demobilization of this capability.

Note: An OSRO classified to WCD1/persistent oil has a cap of 30k feet of boom, which is the same value as the VRP planning standard. However, additional boom may be needed for locations based on strategies associated with pre-identified Most Environmentally Sensitive Areas (MESAs) and Geographic Response Strategies (GRSs) within subareas.

Shoreline Cleanup (SC): [§5050 (m), Appendix B, 5.7 and 7.3]
SC should start by Day-5, after OWR and SP has occurred [§ Appendix B, 7.2.4]).

Notes:

- OSROs are not currently classified to this capability even though VRPs are specifically required to contract with an OSRO capable of effecting SC operations. Also the equipment needed for this requirement is not defined in the VRP regulations.

- SC planning volume converted to waste tonnage (i.e., based on 2-to-10 times). [§ Appendix B, 9.3]
  - With OWR, ~10.8k bbl/1.7k t impact shorelines [i.e., 8.8k bbl at 991 kg/m^3 is ~1.4k t and 2k bbl at 860 kg/m^3 is ~0.3k t]. Consequently, waste tonnage is possible in the range of 3.4k-to-17k t, median being ~10k t (i.e., the best case scenario represents ~0.60 times M/V Selendang AYU spill).
  - Without OWR an additional 9k bbl impacts shorelines (i.e., arriving after Day-5), therefore ~20k bbl/3k t impact shorelines [i.e., ~16k bbl at 991 kg/m^3 is ~2.5k t and 4k bbl at 860 kg/m^3 is ~0.5k t]. Consequently, waste tonnage is possible in the range of 6k-to-30k t, median being ~18k t.

On-scene Sustainment: [§5035(i)(3), Appendix B, 7.2.4 and 7.3.3]
VRPs require on-scene sustainment capability for the first 7 days of a response.

Note: A WCD1 classification for an OSRO does not currently verify this capability. VO/O(s) shall ensure that resources are available to sustain initial response operations [§ Appendix B, 9.1]. For remote regions of Alaska, sustainment capability includes lodging/berthing; fresh water, meals, garbage and sewage; medical and decontamination support; refueling workboats, ATVs, pumps, generators; personnel protective equipment (PPE) for responders; communications, command and control; etc.

Table 6: Daily on-scene capability for Scenario 6.

	On-scene	7 day sustainment							Comments
	Mobilize, Assess & Contain	On-water Oil recovery & Shoreline Protection Booming				Shoreline Cleanup			
Classification	Day-1	Day-2	Day-3	Day-4	Day-5	Day-6	Day-7	Day-8	
CC or ACC (110 nm max)									
RACC (60 nm max)									
CC or ACC w/RDZ (>110 nm)			OWR=0.79k TSC=0.79k SP=2.3k SC=0	OWR=2.25k TSC=3.04k SP =9.8k SC=0	OWR=3.6k TSC=6.64k SP=22k SC=0	OWR=0 TSC=0 SP=<22k SC=>4k t	OWR=0 TSC=0 SP=<22k SC=>4k t	OWR=0 TSC=0 SP=<22k SC=>4k t	▪ At 300 nm, with 2 hour activation and 5 knots planning standards, on-scene arrival is ~62 hours (i.e., ~2.5 days to arrive on-scene). ▪ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ An additional 2.36k bbl impacts shorelines; total then is 13.16k bbl. ‣ Waste is possible in the range of 4k-to-30k t.*
RACC w/RDZ (>60 nm)				OWR=1.35k TSC=1.35k SP=4.5k SC=0	OWR=2.25k TSC=3.6k SP =12k SC=0	OWR=0 TSC=0 SP=<12k SC=>5.2k t	OWR=0 TSC=0 SP=<12k SC=>5.2k t	OWR=0 TSC=0 SP=<12k SC=>5.2k t	▪ At 300 nm, with 12 hour activation and 5 knots planning standards, on-scene arrival is ~72 hours (i.e., ~3 days to arrive on-scene). ▪ SC: ‣ Maximum of 4 days for on-scene mobilization. ‣ Equipment needed is situation specific. ‣ An additional 5.4k bbl impacts shorelines; total then is 16.2k bbl. ‣ Waste is possible in the range of 5.2k-to-30k t.*

Note: *SC bbl converted to waste tonnage based on 2-to-10 times the spill volume.

OSRO Requirements for VRPs

The purpose of this enclosure is to underscore that OSROs are not all the same (i.e., their response resources are tailored to the vessels they cover, especially in terms of oil groups and operating environments). This reality is crucial for vessel owner/operators (VO/Os) and authorized APC administrators to understand in order to effectively analyze VRP resource gaps and to ensure that appropriate contracts are in place for response capabilities that are appropriate to potential spill risks [see paragraph 16, page 60108 and paragraph B.3., page 60111 of ref (b) and §5020 *Contract or other approved means*].

1. NTV WCD1 planning standards.

Where a vessel operates (i.e., and areas shoreward of its trackline that may be impacted from a spill [§ Appendix B, 7.4]) is a fundamental component for determining VRP requirements. The following table summarizes the possible response resource contracting requirements for NTVs based on a vessel's trackline.

Vessel trackline (distance to shore)	Oil group	Required response resource	CFR cite
Open Ocean (>50 to <110 nm)	II, III, and/or IV	On-water recovery & storage	§ Appendix B, Table 3
Offshore (>12 to <50 nm)	II, III, and/or IV	Aerial oil spill tracking	§1050(l) and §5050(k)
		On-water recovery & storage	§ Appendix B, Table 3
		Shoreline cleanup	§ Appendix B, Table 3
Nearshore (<12 nm)	I, II, III, and/or IV	Aerial oil spill tracking	§1050(l) and §5050(k)
		On-water recovery & storage	§ Appendix B, Table 3
		Shoreline protection	§ Appendix B, Table 2
		Shoreline cleanup	§ Appendix B, Table 3

VO/Os can fulfill these requirements by pre-staging equipment at sites along their vessels' tracklines; either by owning and maintaining the equipment themselves and/or by contract with an OSRO(s).

The number of pre-staging sites required [i.e., as discussed in paragraph 2.a.(1) below] will depend on the shoreline areas that correspond to/parallel vessel tracklines divided by the OSRO planning standard response range (e.g., two sites are required along a vessel's trackline if the corresponding/parallel distance is 200 nm along the shoreline; as an OSRO has a response range of 110 nm per the planning standards).

2. OSRO classification. In 1992, in order to accommodate response plan development and review, the USCG developed a system of "classifying" OSROs to the response planning standard caps. The associated planning standard caps are summarized in Tab (a) to this enclosure. Once classified by the USCG, VO/Os can list OSROs by name and classification as an alternative to listing individual response resources in their plans. OSRO classification is a voluntary program which VO/Os can use for regulatory compliance. It should be emphasized that USCG classification of an OSRO does not guarantee the performance of that organization during an oil spill (i.e., it is not a certification or license). [§ 5035(i)(5)]

a. Classifications Elements.

(1) Sites with response ranges.

OSROs are currently classified at COTP-Cities (CCs) and/or Alternate Classification City (ACCs). If classified at these sites an OSRO is expected to maintain the capability to mobilize Maximum Most Probable Discharge (MMPD) and/or Worst Case Discharge (WCD) oil spill removal resources per the national planning criteria to a response range of 110 nm. [§5050 (h), §5050 (g) & § Appendix B: 2.6]

The NSFCC is working to update their classification software to ensure that OSROs are not classified for entire COTP zones, unless the zone's radius is significantly less than 110 nm (i.e., the standard for CC/ACCs). In Alaska where COTP zones are significantly larger than 110 nm in radius, OSROs will be classified at certain sites within the zones (i.e., currently CC/ACCs). Verification of OSRO capability for responding from these sites is not currently conducted by the USCG. *VO/Os are responsible for ensuring their contracted response resources maintain VRP planning standard capabilities* [§5050(f) and § Appendix B, 9.1].

Additional remote designations are also being considered by the USCG for Alaska (i.e., see Tab (a) to Enclosure (4) for additional information).

(2) Operating Environments (OEs), with specific equipment types/quantities. OSROs are classified for certain OEs (e.g., rivers, inland, nearshore, offshore, and open ocean). An OSRO may obtain one, all or any combination of these OEs at a classification site within a COTP zone (e.g., at the CC, inland and nearshore; at ACC 1, nearshore and offshore; at ACC 2, offshore, etc.). Furthermore an OE requires specific types of equipment that may not be capable for operations in another OE [e.g., inland boom that is designed for protected waters (e.g., a boat harbor) is not effective in a nearshore environment [Table 1 of § Appendix B)].

(3) Oil group, with specific equipment types/quantities. The NSFCC is working to update their classification software so that OSROs can be classified by the type of oil their equipment can handle. For example, an OSRO may have a Group IV capability at one classification site and Group I capability at another site (i.e., based on the facilities and vessels they are covering). The response range and type/quantity of response equipment needed can vary greatly depending on the oil group (e.g., 10k ft of boom required for Group I oil vs. 30k ft of boom required for Group II-IV oils). Also oceans (i.e., offshore and open ocean) response capability may be different based on the fuel oil onboard the vessels (i.e., for non-persistent fuel oil on-water recovery resources need to be capable of operating on-scene out to 12 nm and for persistent fuel oils they need to be capable out to 110 m). [Tables 2 & 3of § Appendix B]

(4) Response timeframes, with specific equipment quantities. OSROs are classified to Tier 1/24 hours, Tier 2/48 hours, and/or Tier 3/72 hours on-scene arrival for specific types of response resources, as specified by the VRP regulations. It should be noted that high volume ports have more restrictive timeframes. Currently, the port of Valdez is the only identified high volume port in Alaska. [§1050(g) or §5050(g) and Tables 5 & 6 of § Appendix B]

(5) Spill volumes from vessels. OSROs are organized specifically to support client facilities/vessels and their response capabilities are tailored to potential oil spill volumes (i.e., Maximum Most Probable Discharge (MMPD), Worst Case Discharge (WCD), etc.) per ref (c). NTVs only need to contract for WCD1 response resources [§5050(f)].

Therefore, in order to list an OSRO in a VRP and/or APC, the OSRO must be capable at a site that is within the response range of OEs that may be impacted from a spill due to vessel operation; equipment must be capable of operating in the OEs; equipment must be designed for the oil group used/carried on the vessel; and equipment must be capable of arriving on-scene within the national planning criteria.

b. On-water Recovery Capability. The following table summarizes the 18 possible options for an OSRO at a pre-staging site. The option codes in the table represent combinations of response tiers (i.e., WCD1, WCD2 or WCD3) , oil types (i.e., non-persistent [Group I oils] or persistent [Group II, III, & IV] oils), and operating environments (i.e., inland, nearshore, offshore, and open ocean). For example, "2P-N" equates to WCD2, Persistent oil, in a Nearshore operating environment.

	Oil Type	Inland	Nearshore	Offshore	Open Ocean
WCD1	Non-Persistent	1NP-I	1NP-N		
	Persistent	1P-I	1P-N	1P-O	1P-OO
WCD2	Non-Persistent	2NP-I	2NP-N		
	Persistent	2P-I	2P-N	2P-O	2P-OO
WCD3	Non-Persistent	3NP-I	3NP-N		
	Persistent	3P-I	3P-N	3P-O	3P-OO

Per ref (c), NTVs only need to plan for WCD Tier-1 response resources (i.e., identify and ensure availability for mobilization timeframes, by contract or other approved means). [see paragraph 16, page 60108 and paragraph B.3., page 60111 of ref (b), §5020 *Contract or other approved means* and §5050(f)]

An example involving differing classifications might involve a subarea with three designated classification sites [i.e., COTP City (CC), ACC-1 and ACC-2]. An OSRO classified at these sites, could have different capabilities at each site that are tailored to the vessels they are covering. For instance,

- If the CC covers NTVs with persistent fuels in transit at >12 to <50 nm and NTVs with non-persistent fuels making port calls to the CC from <12nm offshore, the OSRO would require 1P-O, 1NP-I, and 1NP-N classifications at this location.
- If ACC-1 covers NTVs with persistent fuels transiting inland waters, the OSRO would require a 1P-I classification at this location.
- If ACC-2 covers NTVs with persistent fuels making a port calls from >110nm offshore, the OSRO would require 1P-OO, 1P-O, 1P-N, and 1P-I classifications at this location.

It is important to note that coverage for tank vessels would require additional classifications (i.e., WCD 2 & 3 options).

Additional details regarding the USCG OSRO classification program are provided in ref (d).

3. VRP contracting requirements for Classified OSROs. When there are no other response options other than a classified OSRO, VO/Os shall contract with *classified* OSROs per the following guidelines:

a. VO/Os are required to contract with available inland, nearshore, offshore and open ocean WCD1 classified OSRO(s) at each classification site that is within response range for areas that may be impacted from a spill due to vessel operations (i.e., per the requirements discussed in paragraph 1. above). The OSRO(s) must also be willing and able to provide response coverage, which may be restricted due to cooperative (COOP) relationships with its membership (i.e., see paragraphs 5 & 7 below for additional information).

b. At a classification site with multiple classified OSROs, a VO/O may have to contract with more than one OSRO as discussed in paragraph 2. above (e.g., an ACC has OSRO 'A' with inland/nearshore and OSRO 'B' with offshore/open ocean; therefore the VRP would need to contract with both in order to cover all four OEs, if applicable to the vessel's tracklines).

c. In sites with more than one classified OSRO with the same classification, the VO/O need only contract with one.

d. If an OSRO obtains the required classifications at all the classification sites within a subarea or COTP zone, then the VO/O *may choose* to contract with only that OSRO in the subarea or COTP zone.

e. For VRPs with an APC, the VO/O shall contract with *newly* classified OSROs that address response coverage gaps. The USCG expects that contracts shall be in place with the newly classified OSRO within 90 calendar days.

However, VO/Os are not required to contract with classified OSROs that cannot provide response services required by their VRP (e.g. if the only available OSRO is classified nearshore/non-persistent oil and the vessel operators >12 nm from shore and carries persistent oil, then the VO/Os is not required to contract with this OSRO).

4. Additional equipment required above a classified OSRO. Based on national planning criteria calculations, VO/Os may need to identify WCD1 response equipment in excess of theOSRO planning standard caps at each classification site (i.e., if WCD1 calculations require >12.5k bbl/day on-water recovery capability). This equipment may be provided from the same OSRO and/or other sources. OSRO planning standard caps are summarized in Tab (a) to this enclosure. [§5050 (n) and § Appendix B, 7.2.4]

5. COOP equipment. An OSRO may be classified at a site by accessing COOP equipment from member companies (e.g., such as from marine oil transfer facilities in a port). However, COOP members may restrict equipment use for non-member responses (i.e., since the members are absorbing the reoccurring costs for maintenance, storage, repairs, training and exercises for their owned equipment). In this situation, pre-authorization for non-member access is required before the OSRO can be listed in an APC to address the national planning criteria. [§5020, *Contract or other approved means*]

6. MAAs. Equipment from a Mutual Aid Agreement (MAA) is not authorized for WCD1 requirements since it is not dedicated (i.e., an "agreement" is not a contract or other approved means to ensure availability for national planning criteria mobilization timeframes). [see paragraph 16, page 60108 and paragraph B.3., page 60111 of ref (b) and §5020 *Contract or other approved means*]

7. Verification of contracts and listings. VO/Os, and/or APC administrators, shall include written verification in an APC that resource providers have consented to being listed as covering WCD1 requirements (e.g., an OSRO that is classified with COOP equipment would furnish a written acknowledgement that they are aware that they are being listed as a resource provider and that they able to respond). [see paragraph 5, page 60106 of ref (b) and §5020 *Contract or other approved means*]

8. Response Resource Inventory (RRI). In accordance with refs (c and d), OSROs seeking USCG classification shall list required WCD1 equipment in the USCG Response Resource Inventory (RRI) database.

OSRO Planning Standard Caps for WCD Tiers

<table>
<tr><th rowspan="2">Tiers (mob)</th><th rowspan="2">Oil Group</th><th>Inland
[Shoreward of Boundary line (e.g., bays, harbors, inlets, etc.)]</th><th>Nearshore
(Boundary line out to 12 nm)</th><th>Offshore
(12-to-50 nm offshore)</th><th>Open Oceans
(50-to-110 nm offshore)</th></tr>
<tr><td colspan="4">Oceans</td></tr>
<tr><td colspan="2">Sea State (max) →</td><td>Up to 3 ft seas</td><td colspan="3">Up to 6 ft seas</td></tr>
<tr><td rowspan="4">WCD 1
(24 hours)

TVs and NTVs</td><td rowspan="2">I
(non-persistent)</td><td>• OWR: 12.5k bbl/day
• OWR boom: 300 ft/system &, 18-to-42 inch
• TDS: 25k bbl</td><td>• OWR: 12.5k bbl/day
• OWR boom: 300 ft/system & >42 inch
• TDS: 25k bbl</td><td rowspan="2">N/A</td><td rowspan="2">N/A</td></tr>
<tr><td colspan="2">• SP Boom: 10k ft, 18-to-42 inch & 3 ft seas
• Shoreline Cleanup: 10% WCD
• Sustainment: first 7 days</td></tr>
<tr><td>II, III, IV
(persistent)</td><td>• OWR: 12.5k bbl/day
• OWR boom: 300 ft/system & 18-to-42 inch
• TDS: 25k bbl</td><td colspan="3">• OWR: 12.5k bbl/day
• OWR boom: 300 ft/system & >42 inch
• TDS: 25k bbl</td></tr>
<tr><td colspan="2">• SP Boom: 30k ft, 18-to-42 inch & 3 ft seas

• Shoreline Cleanup:
▪ Group II (30% WCD x 1.8)
▪ Group III (50% WCD x 2)
▪ Group IV (70% WCD x 1.4)</td><td>• Shoreline Cleanup:
▪ Group II (5% WCD x 1.8)
▪ Group III (20% WCD x 2)
▪ Group IV (30% WCD x 1.4)</td><td>N/A</td></tr>
<tr><td colspan="4">Sustainment: first 7 days</td></tr>
<tr><td rowspan="3">WCD 2
(48 hours)

TVs only</td><td rowspan="2">I
(non-persistent)</td><td>• OWR: 25k bbl/day
• OWR boom: 300 ft /system & 18-to-42 inch
• TDS: 50k bb</td><td>• OWR: 25k bbl/day
• OWR boom: 300 ft/system & >42 inch
• TDS: 50k bb</td><td>N/A</td><td>N/A</td></tr>
<tr><td>II, III, IV
(persistent)</td><td>• OWR: 25k bbl/day
• OWR boom: 300 ft/system & 18-to-42 inch
• TDS: 50k bb</td><td colspan="3">• OWR: 25k bbl/day
• OWR boom: 300 ft/system & >42 inch
• TDS: 50k bbl</td></tr>
<tr><td colspan="2"></td><td>SP Boom (offshore only):
15k ft, 18-to-42 inch & 3ft seas</td><td></td></tr>
<tr><td rowspan="2">WCD 3
(72 hours)

TVs only</td><td>I
(non-persistent)</td><td>• OWR: 50k bbl/day
• OWR boom: 300 ft/system & 18-to-42 inch
• TDS: 100k bbl</td><td>• OWR: 50k bbl/day
• OWR boom: 300 ft/system & >42 inch
• TDS: 100k bbl</td><td>N/A</td><td>N/A</td></tr>
<tr><td>II, III, IV
(persistent)</td><td>• OWR: 50k bbl/day
• OWR boom: 300 ft/system & 18-to-42 inch
• TDS: 100k bbl</td><td colspan="3">• OWR: 50k bbl/day
• OWR boom: 300 ft/system & >42 inch
• TDS: 100k bbl</td></tr>
</table>

Note: Inland and nearshore are not combined because of the different operating environment (e.g., an effective inland TSC could be a fast tank, while a nearshore TSC may require a tank barge; inland harbor boom (i.e., for protected waters) is not effective in the nearshore environment (i.e., exposed to ocean waves and large wind fetch areas); etc.)

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D17 NTV APC Checklist

APC Submitter:	Submission Date:	

#	Item	COTP			D17 comments
		Present	Not present	Comments	
01	Formatted per Enclosure (3) or cross-reference table included [paragraph 5.h. of D17 guidance]				
02	Record of Changes included [paragraph 5.h. of D17 guidance]				
03	Consistent with applicable SCP(s) [paragraph 5.c. of D17 guidance]				
04	Scope of APC clearly defined [paragraph 5.d. of D17 guidance]				
05	Minimal OSRO capability contracted for [paragraph 5.e. of D17 guidance]				
06	Verification of OSRO contracts included [paragraph 5.d. of D17 guidance]				
07	Periodic reporting requirements discussed [paragraphs 5.g. and 5.i.(4) of D17 guidance]				
08	For renewals, copies of annual reports provided [paragraph 5.i.(8) of D17 guidance]				
09	Reason for APC: WCD volumes by oil group and vessel class [paragraph 1.a. of Enclosure (3) to D17 guidance]				

#	Item	COTP			D17 comments
		Present	Not present	Comment	
10	Reason for APC: NTV operating locations [paragraph 1.b. of Enclosure (3) to D17 guidance]				
11	Reason for APC: Required response equipment [paragraph 1.c. of Enclosure (3), Enclosure (4) and Enclosure (5) to D17 guidance]				
12	NPC not being met: Response capability shortfalls [paragraph 2.a. of Enclosure (3) and Enclosure (4) to D17 guidance]				
13	NPC not being met: Remote response shortfalls [paragraph 2.b. of Enclosure (3)) and Enclosure (4) to D17 guidance]				
14	Alternative response approach: NPC equivalencies (if applicable) [paragraph 3. of Enclosure (3) to D17 guidance]				
15	Prevention/mitigation strategies (if applicable) [paragraph 4. of Enclosure (3) to D17 guidance]				
16	TMS details included, if applicable [paragraph 5.g. of D17 guidance]				
17	Environmental impact assessments [paragraph 5.a. of Enclosure (3) to D17 guidance]				

#	Item	COTP			D17 comments
		Present	Not present	Comment	
18	Economic impact assessment: Strategic plan - gap reductions [paragraph 5.b.(1) of Enclosure (3) to D17 guidance]				
19	Economic impact assessment: Strategic plan - APC management costs [paragraph 5.b.(2) of Enclosure (3) to D17 guidance]				
20	Scenario information: *for each class of vessel covered by the APC, as applicable* [paragraph 6. of Enclosure (3) to D17 guidance]				