



**Second Requests for Additional Information
on the
2012 Prince William Sound Tanker
Oil Discharge Prevention and Contingency Plan**

**Submitted
By
PRINCE WILLIAM SOUND
REGIONAL CITIZENS' ADVISORY COUNCIL**

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This is the second request for additional information (RFAI) submitted by the Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) to the Alaska Department of Conservation (ADEC) for consideration in the review of the 2012 Prince William Sound Tanker Oil Discharge Prevention and Contingency Plan (C-plan). PWSRCAC submitted its first RFAI in this round of the C-plan review on March 23, 2012.

As previously indicated, PWSRCAC appreciates many aspects of the new C-plan and Ship Escort Response Vessel System Technical Manual (SERVS TM) outline and format. In addition, the Response Planning Group (RPG) made numerous changes to the documents in response to ADEC's first RFAI. While some of those changes addressed our concerns and added clarity, PWSRCAC is concerned that many areas appear to remain inadequate in the level of detail provided and the extent to which the plan demonstrates the planholders' ability to meet the requirements specified in ADEC regulations and standards established through years of on-water drills and planning efforts.

PWSRCAC notes the extensive amount of material for review during this phase warrants careful scrutiny of the C-plan, and the time to do so has been very limited. Due to this relatively short public comment period, PWSRCAC focuses this second RFAI on five key areas of particular concern regarding the safe and effective protection of Prince William Sound resources. Examples of concerns being raised are included in these comments. These examples do not constitute an exhaustive list of every change that needs to be made. Additional improvements are likely be warranted, including many of those described in PWSRCAC's first RFAI of March 23, 2012 that have not been addressed or resolved in the RPG's RFAI response.

The main issues identified in the 2012 C-plan below are described more fully in the remainder of this document.

1. Open water task forces (OWTF) require improvements in crewing and boom deployment to meet containment and recovery requirements.
2. The plan does not account for adequate numbers of vessels of the appropriate type and personnel with the necessary level of training.
3. Inadequate resources are dedicated to the protection of sensitive areas.
4. Inadequate resources are dedicated to nearshore task forces (NSTF).
5. Tankers and barges of opportunity require additional clarification.

I. Open Water Task Forces (OWTF)

Alaska statutes (AS 46.04.030) and regulations (18 AAC 75.438) establish a clear standard for containment and control of spilled oil. Without control of the spill source and containment of the oil on water, oil cannot effectively be recovered. Regulations at 18 AAC 75.990 define “contain” and “control.” Depending on the unpredictable movement of the spilled oil, it is possible that extensive recovery operations will have to be implemented in open water conditions. The current plan does not provide or specify a sufficient level of crewing or appropriate booming methods that are required to ensure maximum effectiveness of these operations.

Select RFAI related to OWTF:

RFAI for Section 1.6.1, page 1-15: Provide a specific number describing the average time it will take for the TransRec barges to be on scene and operational in Assumption #14. This should be 7.7 hours based on the ANVIL study. The amount of time it takes to get the skimmers fully operational is critical to ensure the higher recovery efficiency described.

RFAI for Section 1.6.2, page 1-49: Provide information indicating that the skimmer operator (who is required to ensure that the equipment functions optimally) will be deployed at the appropriate time. Planholders provide assumptions about the GrahamRec skimmers’ total recovery volumes, but the timing of skimmer operator deployment is critical.

RFAI for Section 1.6.2, page 1-53: Provide information that GrahamRec skimmers will have dedicated operators. Barge crews are already stretched thin and working long hours; all barge personnel, including necessary skimmer operators, must be available during the first 24 hours in order to maximize oil recovery.

RFAI for Section 1.6.2, page 1-53: Confirm that cascade booms will be deployed as soon as the fishing vessels capable of setting up the system arrive on scene. The scenario mobilization chart shows that cascade booming does not begin until Hour 26. Deployment of cascading boom needs to occur as soon as possible and not wait until Hour 26.

RFAI for Section 1.6.2, page 1-59: Provide information showing that additional out of region resources can be available prior to Day 4. An effective response to a spill resulting from, for example, a tanker grounding at Seal Rocks, would be severely limited by the delay in ramp-up of open-water response until Day 4.

RFAI for Table 1-13, p 1-61: Clarify the information contained in columns N and O in Table 1-13 Oil Recovery Capacity. PWSRCAC is unable to confirm the math used to generate columns N and O. This table needs to clearly show how recovered fluids are tracked.

II. Vessel Types and Personnel Numbers and Qualifications

State regulations at 18 AAC.438(a) require that planholders maintain, or have under contract within their region of operation, sufficient discharge containment, storage,

transfer and cleanup equipment, personnel and other resources to meet the response planning standard (RPS) within 72 hours.

Fishing Vessels

A sufficient number of fishing vessels is needed to adequately fill out task forces necessary to meet the RPS. This shortfall has become apparent during recent drills.¹

In the event of a major spill, the RPG will rely heavily upon the fishing vessel fleet for both pre-contracted and pre-trained Tier I and Tier II vessels as well as the Tier III “Vessels of Opportunity” (VOOs). The SERVS Fishing Vessel Program plays a significant role in the response effort, and is dependent upon the number of available vessels as well as available crewmembers to operate fishing vessels.

The 2007 plan showed at least 50 vessels maintained at Tier I and over 300 vessels at Tier II for a total of more than 350 vessels in the PWS tanker response system. The planning assumption used in the 2007 plan relied on availability of all Tier I vessels along with 75% of Tier II vessels. Thus, a total of 275 vessels would be available at any given time from the pool of Tier I/II vessels. PWSRCAC is concerned that the 2012 revisions to the plan *still* represent a reduction to maintaining this minimum level of vessels. The fishing vessel workgroup determined that 291 vessels was the minimum number needed to respond at any given time.² By applying the same calculations and logic, SERVS should actually plan to have 50 Tier I vessels plus 321 Tier II vessels for a total of 371 vessels in the system. Instead, the 2012 plan commits to only 275 vessels total being available through Tier I/Tier II contracts.

PWSRCAC’s analysis of the 546 Scenario, mobilization tables, and SERVS TM indicates that approximately 300 fishing vessels are required to meet the RPS. These calculations are summarized in the following table. These vessels are either in operational status or have been mobilized prior to Hour 72 and in transit by Hour 73, or called for in the tactic that is being deployed. This table shows that vessel totals exceed the minimum 275 vessels tracked by SERVS, and PWSRCAC recommends the minimum number of vessels be increased to ensure enough vessels are available.

¹ October 10, 2010 Unannounced Nearshore Drill and April 18, 2011 Nearshore Drill.

² The workgroup took the 809 scenario and counted each vessel that was required minus some support vessels that would be needed such as crew transport, SCAT, and other vessels not identified specifically in the tactics. The workgroup concluded that 291 fishing vessels were required for the first 72 hours.

Scenario 546 Required Fishing Vessels

Activity	Number of Vessels	Remarks
Open Water Response	23	OWTF 1-5 and 1 Support
Nearshore Response	216	NSTF 1-8
Nearshore Support	7	4 support vessels (tenders) and 3 Secondary Storage Barge Fishing Vessels/Jitneys/Workboats
Wildlife Task Forces	33	2 WTF within 72 hours and 1 WTF in transit prior to Hour 72 to be operational at Hour 73 As identified in Table 10.1 of the STM, PWS-3 requires 11 Fishing and Support vessels
Sensitive Area Protection	8	SAPTF 1-2
In-Situ Burning vessels	7	ISB TF 1-3 and 1 Support in Transit at Hour 73. Vessels would have to be mobilized prior to Hour 72 to be in transit at Hour 73.
Dispersant Monitoring Vessel	1	Monitoring Team
Tracking and Surveillance	2	PWS-TS-1 Table 1-14 STM
SCAT	1	PWS-OS-1 Table 1-14 STM
Waste Management	2	PWS-OS-WM-1 Table 1-14 STM
Totals Vessels in 72-73 Hours	300 Fishing and Support Vessels	This total does not include vessels needed to transport relief crews, small and/or large vessel decon that would be needed before Hour 72.

It is also critical for planning purposes to provide detail and clarity regarding the type of vessels that will be used for different purposes. In response to ADEC’s first RFAI, the RPG has provided a definition of “support vessel” that is very broad. In reality, a seine skiff is very different from a landing craft, for example, in terms of expected crew roles, pay rates, contractual requirements, crewing requirements, and length of potential work day. The previous definition of “support vessel” referred only to small craft such as seine skiffs, rigid hull and other inflatable boats, etc. Landing crafts and large tenders play an important role, but should be accounted for elsewhere. The confusion of this terminology will make it harder for the incident management team to quickly and accurately identify and engage vessels appropriate to their needs at any given moment.

In addition, jitneys should only be used to account for 15% of fishing vessels. Jitneys are generally small, open vessels with just one operator and no human conveniences or shelter, and that they must, therefore, stay near the parent vessel.

Select RFAI related to fishing vessels:

RFAI for Section 1.6.2, page 1-27: Explain how planholders will ensure sufficient vessels are available for wildlife task forces, including the need for support vessels to transport food and other resources to capture and carcass-retrieval task forces.

RFAI for Section 1.6.2, page 1-44: Explain how planholders will ensure that all vessels used for in-situ burning are Tier 1 vessels equipped with the necessary personal protective equipment, including respirators. In order to be transiting at Hour 73, these Tier 1 vessels must already be incorporated in the fishing vessel program.

RFAI for Section 12.3.5, page 12-18: Provide information to show that sufficient personnel will be available by Hour 18. The revised plan changed the number of additional Crowley personnel who would be at the work site within 18 hours after the spill occurs. Personnel numbers (now up to 48 people by Hour 18) are still far below the 90 people indicated in the 2007 plan.

RFAI for Section 12.7 (general): Clarify the definition of “support vessel,” and include a high level of detail regarding the type of vessel being referenced in each tactic.

RFAI for Section 12.7.7.1, page 12-55: Add information to the effect that jitneys can only be included as fishing vessels for up to 15% of the total vessel count.

RFAI for Section 12.7.7.1, page 12-57: PWSRCAC requests that the minimum number of contracted and trained vessels be clearly represented. The 2007 plan better addressed the typical 25% “buffer” that was employed to ensure sufficient vessels would be available. This table currently shows the absolute minimum but does not provide any reassurance that a greater number of vessels are actually contracted.

Personnel

In addition to having adequate vessels available, the safe and effective operation of those vessels requires that enough people with appropriate training are available at the right time. Crew numbers and roles are addressed elsewhere in the RFAI.

As noted in the RPG’s RFAI responses, SERVS does indeed train fishing vessel crew in excess of minimums shown in Table 12-46. The October 2011 FV newsletter notes that 311 vessels and 1,124 crewmembers were trained in the spring and 140 vessels and 500 crewmembers were expected to train that fall. This represents an average of 3.6 and 3.57 crewmembers per vessel respectively. In 2012, 325 vessels and 1,294 crewmembers attended spring training for an average of 3.98 crew members per vessel. In the fall of 2012, approximately 120 vessels and 400 people (or 3.33 people per vessel) are expected to be trained. This is indeed more than Table 12-46 shows, but past exercises have illustrated that these minimums are insufficient.³

³ October 10, 2010 Unannounced Nearshore Drill and April 18, 2011 Nearshore Drill.

As in the past, PWSRCAC advocates that more personnel need to be trained than will actually mobilize for any given spill. At any given time, some of the personnel who have undergone training will be out of the region or otherwise unavailable. It is therefore critical to have a large pool of trained personnel to ensure that sufficient crew and other team members will be available when needed.

The RPG should create a verification system to help ensure that crewmembers are available, not just trained, including the necessary “buffer” required to account for the inevitability that some personnel will not be available.

Select RFAI related to personnel:

RFAI for Section 1.6.2, page 1-53: Provide information to show that the group supervisor *and one staff person* will be operating for 12-hour shifts each by hour 24.

RFAI for Section 1.6.2, page 1-53: Provide information to show that personnel on Tier I vessels proposed for use in in-situ burning operations will be adequately trained and fit tested for use of respirators. Out-of-region vessels typically are *not* Tier I and therefore not adequate to be used for this purpose.

RFAI for Section 1.6.2, page 1-53: Provide information indicating that three crew will be used on barge 500-2 (per off-loading station) and at least three crew on barge 450-7 (with six off-loading stations). Additionally, tug crew cannot be counted to work on the barge as necessary; provide information showing how both tugs and barges will have the minimum number of trained crew needed.

RFAI for Section 8.1.1.4, page 8-5: Provide information showing that the task force leader will not be the same person as the barge mate. During open water exercises, task force leaders who were also responsible for the safe operation of the TransRec barge were often overwhelmed when they also had to manage crew and deck operations.

RFAI for Section 12.3.5, page 12-18: Provide information indicating that adequate numbers of trained personnel will be available in the region during the critical first 72 hours.

RFAI for Section 12.7.7, page 12-54: Confirm that Tier II and Tier III vessels are crewed for 24 hours/day. Page 12-54 indicates that these vessels may be working for 24 hours/day.

RFAI for Section 12.7.9, page 12-56: Provide information explaining how SERVS ensures that trained vessel crews will be available in sufficient numbers.

III. Sensitive Areas Protection

ADEC regulations at 18 AAC 75.445(d)(4) require that the planholders demonstrate they have sufficient resources to protect environmentally sensitive areas (or areas of public concern) that are likely to be impacted if a spill occurs. The revised C-plan fails to ensure that Zaikof and Rocky Bays – the closest sensitive areas to the grounding described in the

Response Scenario – will be protected using established Geographic Response Strategies (GRS). Although the spill trajectory in the scenario does not predict that Zaikof and Rocky Bays would be impacted by oil as a result of the response, prudent planning (in addition to ADEC regulations as cited above) demands that these identified sensitive areas be protected. Weather and tide conditions make trajectory models inherently unreliable, and response planning must take into consideration the fact that the movement of the spilled oil will be uncertain.

The Response Scenario does not assign sufficient vessels or equipment to accomplish sensitive area protection. The timeline suggests that only a few of the many sensitive areas that would be impacted by an RPS spill would actually be protected during the initial days of the spill when sensitive area protection is most critical (ahead of shoreline oiling). Zaikof and Rocky Bays are not the only areas omitted. Sensitive area tactics should be developed and implemented with the same attention and dedication of resources as nearshore response, including a minimum identified amount of equipment, strike team and task force leaders, and minimum numbers of fishing vessels assigned to support a task force. The plan should also describe the process for resupplying sensitive area task forces as they complete tasking at one site and move to the next one.

Based on our analysis, protection of all GRS sites close to the spill site, or likely to be impacted within 72 hours, would require up to 87 vessels and approximately 53,000 feet of boom. While some vessels may cover more than one GRS, questions remain whether eight vessels and two strike teams for sensitive area protection during the first 72 hours is adequate. Bringing on additional resources at Day 5 does nothing to prevent the oiling of these sensitive areas. The purpose of deploying boom – and therefore the vessels and personnel required to place the boom – is to prevent the oiling of shoreline areas. It is critical that this be completed before oil reaches these sensitive areas

GRS Close to or Included in the 72 hour Trajectory of Scenario 546

(Source: <http://dec.alaska.gov/spar/perp/grs/pws/home.htm>)

GRS	Fishing Vessels (number of vessels)	Boom (feet)
Zaikof Bay	8	5600
Rocky Bay	20	10490
Seal Island	7	1980
Pt. Eleanor	4	600
Agnes Island	5	1320
Outside Bay	4	2150
Cabin Bay	4	4700
Storey Island	9	8100
Lone Island	2	800
South Bay Perry Island	5	4100
Fool Island	6	2200
Little Axel Lind Island	5	3000
South Easter Passage	3	5900
Point Pellew	5	2100
Total	87	53040

Select RFAI related to sensitive area protection:

RFAI for Section 9.0.1, page 9-1: Provide information describing whether or not the Sawmill Creek barge will be available as a resource and exactly which resources will be available for use in sensitive area protection operations.

RFAI for Section 9.0.2, page 9-2: Describe the methods and resources that would be used to protect sensitive areas (represented by GRS) which are close to the spill site, or may be impacted by the spill trajectory in the first 72 hours, including Zaikof and Rocky Bays. The numbers of vessels currently dedicated to sensitive areas protection are wholly inadequate. As vessels dedicated to sensitive area protection must be *ahead* of the oil, it is not practical to assume that they can rely on the same support vessels that are serving the nearshore task forces.

IV. Nearshore Protection

Nearshore recovery operations rely on the operation of eight task forces in order to meet the RPS. In order to meet the assumptions associated with recovery efficiency estimates, all personnel and vessels must be on scene in the required timeframe to implement operations described in the ANVIL study.

Select RFAI related to NSTF:

RFAI for Section 1.6.2, page 1-34: Planholders now specify that NSTF are *working* 12 hours per day; however, in order to meet the recovery targets specified, these task forces are required to *conduct recovery operations* for 12 hours per day. Provide information indicating that this will be the case.

RFAI for Section 1.6.2, page 1-34: The ANVIL study assumes that NSTF 2-4 will be operational by hour 36 (on average); please add information confirming that this will be the case.

RFAI for Section 1.6.2, page 1-35: Describe the specific equipment on the barge 450-7 when the barge is reassigned to nearshore operations considering that the barge will not likely return to Valdez and which equipment is not already on the barge (offloading pumps, transfer hoses). In addition, describe how extra personal protective equipment, lines, and other supplies will be delivered to the barge.

RFAI for Section 1.6.2, page 1-43: Provide information indicating that NSTF 6-8 will be operational prior to Hour 72 of the response. (RPG noted that this change was made, but it was not.)

RFAI for Section 1.6.2, page 1-53: It does not appear that two additional logistical support vessels for every four NSTF are adequate. Provide information showing that each of the secondary storage barges will have a workboat to move mini-barges and provide support to the NSTF assigned to them.

RFAI for Section 1.6.2, page 1-60: List and describe the specific secondary storage barges that will be used to support the eight NSTF that will be working by Hour 71. It is not adequate to state, “additional secondary storage barges” will be “used as needed.”

V. Tankers and Barges of Opportunity

Planholders assert that a tanker-of-opportunity is likely to be available every 24 hours, but PWSRCAC’s data does not support that assertion.

Select RFAI related to tankers and barges of opportunity:

RFAI for Section 3.1.1, page 3-1: Provide information demonstrating that one vessel per day transits Prince William Sound. While this information was removed from the revised plan, it is critical to assumptions about when a tanker-of-opportunity will be available and needs to be included. Stating merely that vessels travel in the tanker lanes is not useful; this is assumed to be the case.

RFAI for Section 5.1.1, page 5-7: Provide information ensuring that barges-of-opportunity will be available and able to be on-scene in Prince William Sound by the time specified. This is important both to ensure the effective lightering of the stricken tanker, as well as the timely use of the barges for other purposes once that initial task is complete.