



# **Prince William Sound RCAC Annual Drill Monitoring Report**

**2023**

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## 2023 Exercise Report Index

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3/22/23	752.431.230322.D58ContainEx.pdf	Drainage 58 Oil Containment Exercise
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## 2023 Exercise Summary

Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) staff observed and wrote twenty-five exercise and training reports in 2023. This is up from fifteen reports from 2022.

### Tanker Towing Exercises

PWSRCAC staff observed one tanker emergency towing exercises in 2023. The Prince William Sound Shippers and SERVS conduct at least one emergency towing exercise per quarter each year. The emergency towing exercise that PWSRCAC observed was with Crowley Alaska Tankers Washington went well with not issues observed.

### Open-Water Response Exercises

Eight open-water oil recovery exercises reports were developed by staff in 2032. The Valdez Star skimmer conducted two of the deployments in Port Valdez and the Oil Spill Recovery Barges (OSRB) conducted deployments throughout Prince William Sound. The number of these exercise increase over the last few years as SERVS were training barge and fishing vessel program crews.

### Nearshore Response and Sensitive Area Protection Exercises

Nearshore and sensitive area protections exercises were greatly reduced in 2020 and 2021 because of the number of vessel crew interactions required for these types of deployments and Covid-19 precautions. During the annual fishing vessel trainings in the spring and fall of 2022 and 2023, SERVS began conducting operational readiness exercises (ORE) again that focused on nearshore response tactics. Staff wrote one report on these nearshore OREs in addition an open water and non-mechanical OREs. SERVS also conducted training and deployments for the Valdez Duck Flats and the Solomon Gulch Hatchery. These are two of the key sensitive area protection (SAP) sites in Port Valdez for the Valdez Marine Terminal's oil discharge contingency plan. Staff attended two of these training deployments at Solomon Gulch Hatchery. SERVS also conduct six geographic response strategy (GRS) sites in the Orca Bay area in September 2023, but staff was unable to attend because the dates conflicted with the PWSRCAC Board of Directors meeting in Homer.

## Valdez Marine Terminal Drills

The Valdez Marine Terminal (VMT) conducted five exercises specific to the terminal in 2023 that staff observed. There were three equipment deployment exercises that focused on the drainage 58 at the VMT. This is the area identified at the VMT where the worst-case spill from the tank farm would likely take to get to the Port of Valdez. Alyeska also conducted an on-land tactic exercise and a no-notice safety exercise in 2013. In October, Alyeska conducted their annual incident management team exercise that included an equipment deployment at the VMT.

## Annual Prince William Sound Shipper's Exercise

The annual Prince William Sound Shipper's exercise was conducted by Hilcorp and Alaska Tanker Company (ATC) in May of 2022. This was a hybrid exercise with both a physical (SERVS Valdez Emergency Operations Center (VEOC)) and virtual command post using the Teams platform. The command post also moved from Valdez on the first day of the exercise to Anchorage for days 2 and 3. The SERVS Valdez Emergency Operation Center (VEOC) because a forward base primarily for operations.

## SERVS Annual Fishing Vessel Training

PWSRCAC staff attends in- and out-of-region annual fishing vessel trainings. Normally, 400+ contracted fishing vessels participate in SERVS' program and trainings in Kodiak, Homer, Seward, Whittier, Cordova, and Valdez. These trainings were changed during the pandemic with more online components and a reduced number of on-water exercises. In 2022, the trainings increased to two on-water days but still no hands-on equipment training or other activities that required vessel crews to physically interact with each other. In 2023, Alyeska recognized the value of the hands-on stations that allow all the vessel crews to see and be instructed on how to run the various spill response equipment at different stations prior to going out on the water and brought the hands-on stations and instruction back into the program.

## Other exercises and trainings

PWSRCAC staff also attended a lightering barge exercise in May with the new OSRB-5. The OSRB-5 is a purpose-built barge for lightering and nearshore support. This barge is very similar to the other OSRBs but with the fendering and other equipment for lightering and the inclusion of offloading stations for supporting nearshore task forces.

There were three non-mechanical exercises reported on by staff. These included a weather hindered non-mechanical exercise in Whittier, the escort tug Commander vessel dispersant demonstration in Port Valdez, and a tour of the new MSRC 737 dispersant aircraft in Anchorage.

Alyeska conducted a VMT associated oiled wildlife exercise in Nelson Bay near Cordova. SERVS also held its oiled wildlife training in Kodiak in 2023. SERVS rotates this training

yearly between Kodiak, the Kenai Peninsula communities of Homer and Seward, and the Prince William Sound communities of Cordova and Valdez. The oiled wildlife training includes hazing, the capture of oiled birds and sea otters, and the process of stabilizing them and transporting to care facilities.

## **Suggestions for Future Exercises**

The list of exercises and other suggestions below is not meant to be an exhaustive list of all areas that need further focus and attention, but PWSRCAC would suggest it is a good place to begin. It should be noted that many of the concerns and exercise issues that PWSRCAC have noted through the years have remained consistent across time.

### Barge Allison Creek and Valdez Star

Alyeska has been replacing older barges that have reached their life since the marine services transition in 2018. As mentioned above, in 2023 the lightering barge Mineral Creek was replaced with the new OSRB-5. In 2024, the Allison Creek barge is being replaced by a new barge with the same name. This barge's primary function is to provide secondary storage for oil recovered by the Valdez Star. When the new Allison Creek arrives exercise will need to be conducted to ensure fluids can be easily transferred between the Valdez Star and the barge and determine the maneuverability of the Valdez Star when hipped up to the new barge. The Valdez Star needed a workboat to help turn the old Allison Creek barge during certain maneuvers and conditions.

### Operating in Darkness and Dense Fog

Operating in darkness and foggy situations has been included in this list for many years because much of the winter in Alaska is darkness, and long periods of fog or reduced visibility due to weather is not uncommon for the Prince William Sound area in either summer or winter.

Recognizing that darkness and limited visibility are a reality, PWSRCAC suggests that more training and exercise activity take place in darkness or periods of limited visibility and include more fishing vessels and their respective crews so proficiency of working in the dark is improved. In addition, the ECO tug fleet has specific capabilities (FLIR cameras and Rutter Radar spill processing) that allow them to better see oil in limited visibility. More exercises using this improved technology should be conducted with the use of targets on the water for the tugs to practice tracking and positioning the barges effectively.

The PWS Tanker Plan calls for nearshore recovery operations to occur for twelve hours a day even during winter when there are only six hours of daylight. In the past there have been a few exercises to work on tactics for oil recovery in the nearshore environment.

Operating in reduced visibility presents risks to vessels, crews and equipment that must be addressed to safely perform recovery operations during these times. Specific tactics for operating in these low visibility conditions are not included in the current response plan. Structured exercises should be conducted to determine what tactics can and should be used to safely recover oil during darkness or fog.

### Tanker Towing / Tanker Arrest Exercises

SERVS and the Prince William Sound Shippers have committed to quarterly emergency towing exercises quarterly throughout the year. This practice is much better than the previous process of performing the towing exercises primarily during the summer because of the variable conditions that happen seasonally. These exercises provide valuable training that is required for the tug crews and is beneficial to the tanker crews.

An improvement to the quarterly schedule would be to rotate shipping companies and their vessels through these exercises. It appears that Polar Tankers volunteers for these exercises much more often than the other shipping companies. The exercises do require extra time on the transit out but each of the tanker crews should participate in these exercises for the training benefit. There are at least four exercises per year and four tanker companies. There would be a training benefit to having each shipping company participate in one towing exercise each year. Having the tug crews working with the different ships would be an improvement to their training.

### Large and Small Vessel Decontamination

SERVS demonstrated their small vessel decontamination process during the Crowley Alaska Tankers drill in May 2022. While the basic function of getting oil off the boat was demonstrated, the process used would have resulted in releasing some oil into the water and eventually out of containment. The process used by SERVS needs to be refined and practiced in additional exercises. It has been many years since large vessel decontamination has been demonstrated and that was with a past contractor that is no longer in business.

### Fishing Vessels

The SERVS Fishing Vessel Program is the backbone of the oil spill response system in Prince William Sound. In 2023, Alyeska changed its fishing vessel training from the covid years to include both a day of hands-on station training and an on-water day in addition to the online Hazwoper class training. This modification was an improvement from the previous year because it provided all the vessel crews the ability to learn the specifics of the equipment and systems that could be expected to use during a spill response.

Often during the SERVS spring and fall annual fishing vessel program training, the weather will hinder the vessels that participate in the training from going out and exercising with the response equipment. When this situation occurs, SERVS conducts radio exercises in the harbor where they are conducting the training. The old process that SERVS used was to simulate the activities that would have occurred that day over the radios with the vessels. This includes simulating the loading of the equipment from the barge to the vessel and the first day of a response. This is what the actions would be if the weather had not precluded the actual deployments. PWSRCAC thinks the time and training during the radio exercises can be better spent, if instead of simulating the first day of operations including the load out of equipment, the response is moved forward a few days. This would allow vessel crews to simulate response actions and management of task forces for periods of the response that most of the vessel crews do not get to see or think about during a one-day exercise. This type of simulation could offer out-of-region vessels a way of becoming more familiar with the areas within Prince William Sound and the vessel crews to exercise resupply and waste management procedures for their vessels, the process of gross decontamination of their vessels, familiarization of geographic response strategies around Prince William Sound, and the identification of equipment needs for operations based on a list of equipment given to them as a inject. Many other areas could also be put into play as part of this type of training. SERVS has now modified their exercise process for the days when the weather conditions do not allow the vessels to go out and deploy the equipment. PWSRCAC is interested in seeing how these new modifications to the exercises work.

### Dispersant/ISB related

Alyeska and the PWS Shippers have switched contractors for aerial dispersant applications when they are needed and approved. The new contractor is MSRC, based out of Washington State, and they replaced the Anchorage-based Lynden. There are still some questions about the ability of the MSRC planes and how this new system should be exercised. The new MSRC 737 dispersant aircraft was brought to Anchorage in June 2023 and PWSRCAC was provided a tour of the aircraft. MSRC has three 737s and they are the first jet aircraft to be approved for dispersant applications.

Dispersant, SMART monitoring, and ISB-related exercises usually are practiced as individual components, and this separation of components may not reflect how these tactics would be employed in a real event. For example, it's possible that both aircraft and tug-based spray dispersant spray system would be in play at the same time, and both these efforts would need SMART monitoring from a vessel on the water as well as spotter aircraft.

- The MSRC dispersant system should be exercised to verify the overall system including the spotter plane, aircraft and spray system, and dispersant monitoring capabilities.



- Council suggests that, during an exercise or training, more of the various components of dispersant application be run simultaneously and managed as they could occur in a real event, versus as separate components.

## Open-Water Response

The SERVS open-water oil recovery task forces consist of four Oil Spill Response Barges (OSRB) and the skimming vessel Valdez Star.

The four open-water Oil Spill Response Barges (OSRB), despite minor differences, are now all essentially standardized. This consistency across platforms allows crews to transfer between barges easier, make training back-up personnel easier, and simplify working with the contracted FV fleet.

Specific open water related suggestions:

- Over the last few years, the open-water response barges and Valdez Star have been primarily exercised during the day and generally for short durations of only a few hours. During the winter months there are more hours of darkness than daylight and the fishing vessel crews working with these skimming platforms need to practice working in hours of darkness to become proficient.

## Valdez Marine Terminal

In a broad sense, PWSRCAC would suggest that all tactics in the VMT technical manual be exercised in a 5-year plan cycle and that exercises take place over a variety of seasons and conditions.

Specific VMT-related suggestions include:

- In 2022, Alyeska put a lot of effort in planning and preparing for the secondary containment exercise for the total loss of a tank. This was a valuable effort and allowed Alyeska to think through how such a response could be conducted. However, that exercise was a tabletop presentation. Components of that response should be tested in the field to confirm those proposed actions could work if needed.
- Continue with the multi-day Duck Flats training and conduct a similar intensive training for the Solomon Gulch Hatchery. The current training for the deployment of the Duck Flats by Alyeska is excellent and should continue. Much attention has been given to the Duck Flats deployment over the past several years, and Council staff have observed the general proficiency level of responder increase. The connection of boom ends under tension in particular has been a responder safety concern, and SERVS has done a good job addressing this topic. Continue this work

on the Duck Flats, but also conduct a similar training for the Solomon Gulch Hatchery.

- Over the last several years, PWSRCAC has pointed out the failure of the boom ends at the Drainage 58 containment site at the Fluor dock and jetty by the settlement pond outflow. Alyeska installed a stout tidal slider for connecting the boom to the Fluor dock. This is great improvement to the system. The other side of the containment strategy can still be improved by the addition intertidal boom and evaluating the best boom placement for that beach.

### Sensitive Area Protection & Nearshore Response

There is a difference between nearshore response and sensitive area protection components in spill response. The missions of these two elements are not the same, though response equipment, vessels, asset management, and training are very similar and overlap. Nearshore response systems should be designed to intercept and recover oil, as that oil gets close to shore, by working the leading edge of the spill. The mission of the sensitive area protection function is to get out ahead of the spill, and boom sensitive areas prior to oil reaching or threatening those areas. The management and logistical support for both of these operations can be challenging and complex, but it's important to realize that they have different goals despite similar and/or shared resources and management.

#### Sensitive Area Protection

- The testing for the various GRS sites throughout Prince William Sound has been excellent and these exercises should continue.

#### Nearshore Response

Nearshore response exercises will always be high on the Council's priority list simply because of the sheer volume of fishing vessels associated with this response area. The crews of all these vessels need to be proficient with the equipment, and equipment does continue to change over time.

- The nearshore response will likely be one of the large response areas during a major oil spill response. Over that last few years, PWSRCAC staff have noticed the number of turnovers in the response crews for SERVS, TCC, and in the fishing vessel captains and crews. As new crews begin participating in the spill response program and the older more experienced and many times original program participants leave the program, more focused and functional area training will be needed to maintain operational proficiency. The newer people need more exercises to learn and become proficient with the response tactics and response equipment.

- The PWS Tanker Contingency Plan notes that nearshore will perform recovery operations for twelve hours a day, which means it's inevitable that many of those hours will require operating in reduced visibility during winter months, or foggy days in summer. As nearshore operations generally do not take place during these situations, we do not have very good benchmarks regarding what operations can safely be conducted, or how to adjust tactics accordingly. More exercises are needed to refine these limited visibility nearshore parameters.

## Unannounced Exercises

Unannounced drills provide the only real measure of a plan holder's ability to respond at a point in time and at a moment's notice. These drills have the ability to test areas of a response that cannot easily be tested otherwise, such as personnel readiness and resupply capabilities. There could even be unannounced aspects to a known event, such as verifying responders have proper PPE once they arrive on scene or discussing what an elevated and unsafe air read would mean for responders and given process, etc.

- No-notice exercises are valuable and should be continued periodically to help ensure readiness. SERVS uses these types of exercises to good effect to monitor their rapid response fleet. ADEC used to require unannounced exercises more frequently for both the Prince William Sound Tanker and the VMT oil spill contingency plans. In fact, it was not uncommon to have three-day exercises that were unannounced that focused on certain response elements. These exercise frequently identified areas or procedures within the response system that were forgotten or just fail to be effective. As mentioned above, turnover of personnel within of all the organizations involved in the Prince William Sound response system has only increased the likelihood of failures to the processes that are rarely or haven't been exercise in the past ten years.