

Drill Monitoring Annual Report

2008

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2008 Drill Report Index

Date	Report Number	Drill Description
31-Jan	752.431.080131	Cordova Nearshore and Open Water Exercise
27-Feb	752.431.080227	450-3 Nighttime TransRec Exercise
10-May	752.431.080510	Polar Adventure Emergency Towing Exercise
14-May	752.431.080514	Valdez Marine Terminal Area 58 Drainage Exercise
28-May	752.431.080528	Oil Tracking and Surveillance Exercise
19-June	752.431.080619	Solomon Gulch Hatchery Deployment
5-Sept	752.431.080905	Robe and Lowe River Geographic Response Strategy Exercise
24-Sept	752.431.080924	Tesoro Gulf of Alaska Drill
28-Oct	752.431.081028	Valdez Marine Terminal Scenario 5 Drill
6-Nov	752.431.081106	Ocean Buster Deployment
15-Nov	752.431.081115	Duck Flats Geographic Response Strategy Exercise

2008 Drill Summary

Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) staff observed and evaluated 11 drills and exercises in 2008. In addition to the drills and exercises, the PWSRCAC staff also participated in Alyeska's Ship Escort/Response Vessel System (SERVS) 2008 spring and fall fishing vessel trainings. All of these reports fall into the categories described below.

Tanker Towing Exercises

The tanker towing exercises are generally divided between the four shippers (SeaRiver, Polar Tankers, Alaska Tanker Company, and Seabulk) calling on the Valdez Marine Terminal. In 2008 SERVS conducted eight towing exercises that included not only the usual stop the advance tactic but also towing the tanker with the Prevention and Response Tug's (PRT - yellow tugs) emergency tow package. The reason for doubling the number of exercise was to allow all of the PRT captains a chance to practice.

Open Water Response Exercises

The PWSRCAC staff attended three open water exercises in 2008. SERVS again incorporated the Cordova Rapid Response Fleet exercise with the *Valdez Star*. A TransRec barge exercise was conducted in the dark in February and an Ocean Buster deployment was conducted in November.

In early February, SERVS conducted an exercise with the *Valdez Star* and the eight bowpickers that make up the Cordova Rapid Response Fleet. These eight bowpickers are under contract to ensure that four are available for a one-hour response to provide the initial boom towing for the open water barges at Hinchinbrook Entrance. While no exercise was conducted with the barges and the Rapid Response Fleet in 2008, these bowpickers were used to tow boom for the *Valdez Star* in an open water task force.

The Barge 450-3 was used for a nighttime open water deployment in late February. The official deployment took place after numerous practices leading up to the drill. Overall this drill went well but a number of issues related to darkness was identified including the barge lights making it difficult for fishing vessels to see, booms needing reflective marks, fishing vessels needing extra crew, and the tankerman being overloaded with tasks.

The third of the open water exercises was the deployment of the Ocean Buster system. This was the first deployment of this piece of equipment that the PWSRCAC staff has been able to observe. The Ocean Buster deployment was designed to be a training exercise and allowed those involved with the deployment to take their time and learn how to properly deploy the Ocean Buster.

Nearshore Response Exercises

Nearshore exercises continue to be the most frequent of the SERVS deployments. All of the annual fishing vessel training incorporated a nearshore deployment during the on-

water training. In addition to the usual readiness exercises, SERVS (through the last tanker plan approval) committed to deploying and average of five Geographic Response Strategies (GRS) per year. Therefore, sensitive area protection has and will likely continue to be a focus of the nearshore deployments over the next few years.

SERVS conducted three GRS deployments that were observed by PWSRCAC staff in 2008. All three were in the Port of Valdez and included the Duck Flats, Solomon Gulch Hatchery, and the Robe and Lowe Rivers.

In addition to the GRS deployments, a readiness nearshore deployment was conducted in Cordova in conjunction with the open water exercise in early February.

Valdez Marine Terminal Drills

The Valdez Marine Terminal (VMT) conducted two exercises that were observed by PWSRCAC staff during 2008. The VMT Area 58 Drainage exercise was conducted to demonstrate tactics and equipment for a 15,000 barrel spill from the East Metering Facility into the Area 58 drainage. The Marco and JBF skimmers were used to simulate oil recovery operations inside a boomed area off of Berth 1. Oil transfer operations to a mini-barge, decontamination, and site control were included in this exercise.

The second VMT exercise was a Scenario 5 spill of 203,000 barrels of oil with 155,000 barrels reaching the water. This exercise included an approval for the use of dispersants in Port Valdez, participation of City of Valdez representatives, site security, and sensitive area protection.

Other Exercises

Continuing on the nighttime operations theme, Polar Tankers and SERVS conducted an oil spill tracking and surveillance drill to demonstrate the components associated with tracking oil during darkness and adverse weather. This drill included the use and simulated use of computer models, visual on-water and aerial observations, Forward Looking Infrared Radar (FLIR) observations, and oil tracking buoys. Based on the information coming from these many sources, response decisions on oil recovery and sensitive area protections were made in the command post.

Tesoro conducted a two-day exercise with a command post at the CISPRI building in Nikiski and then field deployments in Kachemak Bay at Homer. This exercise was designed to work a number of issues including security (worked separately), downstream response from oil being shipped from Prince William Sound, places of refuge, and community involvement. Community liaison offices were established in Seward and Homer. Dispersants were used as the primary response tool during this exercise due to the location of the spill and the length time mechanical equipment would arrive on scene.

SERVS Fishing Vessel Training

SERVS, TCC and OSHA have combined to develop a 24-hour marine HAZWOPER training program that focuses on marine oil spill response. In 2008 SERVS conducted these three-day fishing vessel training programs in Kodiak, Homer, Seward, Cordova,

Whittier, Chenega, and Valdez. More than 300 vessels and over 1,000 spill responders were trained again by SERVS in 2008.

Focus of Future Drills and Exercises

There are several areas that should be included in future exercises. The Prince William Sound Tanker Contingency Plan was rewritten in 2007 and many areas of that plan still need to be tested. The Valdez Marine Terminal's Contingency Plan was approved again in 2008 and an effort to rewrite that plan is underway but the current plan still needs to be tested.

Operating in the Dark

Operating in the darkness needs to remain a focus area in drills. As identified by the PWSRCAC Response Gap Analysis, one of the main limiting factors for oil spill response in Prince William Sound is darkness. Over the last couple of years, three exercises have been designed to work on darkness issues. These exercises have only included one open water exercise, one nearshore exercise and an oil tracking and surveillance tabletop exercise. Follow-up exercises are needed for the open water and nearshore task forces. Having one select group of responders and fishermen practice night operations only once in at least five years does not prepare the responders to operate during darkness.

Minimum Personnel Verification

Over the last few years both the Valdez Marine Terminal and the Prince William Sound Tanker contingency plans have each had workgroups to determine the minimum personnel and their training needed to respond to their worst-case scenarios. There have been drills held to put personnel into the slots on organizational charts that are included in the plans. Spot checks have been conducted to determine if selected personnel were qualified to perform their assigned positions. However, the numbers of personnel normally used during other larger drills rarely match the organizational charts in the plans. One example of actual operations not mirroring the organizational charts in the plan is the use of deputies in the various Incident Command sections. There have been other added positions as well. In addition, personnel who would be in the field during a response have been used in the command post because field positions were being simulated. The next logical step in determining if we have the right numbers for the minimum personnel needed for the worst case spill response scenario in each plan is to conduct worst case spill drills that only use the positions identified in the organizational charts included in the plans. Personnel should be assigned to the various positions to see if the minimum number of personnel from the organizational charts can do all of the tasks the need to be completed.

Unannounced Exercises

In the four years that I have been with PWSRCAC, I have been involved with a few exercises that I believe have been truly unannounced to those participating in the exercise. Usually, drill-planning teams design the exercises to get the maximum benefit from the exercise and these teams typically include representatives from all of the

organizations that normally participate in the exercises. For the most part this is a good approach for testing the response system components. However, totally unannounced drills can shed light on what would actually occur during a real incident. For a number of years now, PWSRCAC has received reports of personnel availability shortfalls and training issues with SERVS, TCC, and Crowley Maritime personnel. All of these organizations have experienced cut backs, turnover, or both over the last couple of years. An unannounced exercise should be planned to test the first 12 hours of a response with the understanding that ADEC will conduct the exercise at a later date without notifying any of the other organizations of the time and date in advance of the exercise.

Combined Tabletop and Field Deployment Exercises

It is rare to have drills that combine the command post tabletop and field deployments. Generally, if a drill includes both a tabletop and field deployment the two efforts are not conducted simultaneously. Conducting field deployments during tabletop drills can provide many benefits that simulating the field response cannot. Communications between the field and the command post is a critical part of a real response and needs to be tested to ensure they will work as anticipated. In addition, the time it actually takes to deploy the response resources take longer than simulated in most drills. Actual aerial observations of the deployments should be conducted and communicated back to the command post. All of these activities take more time than is ever simulated during a tabletop drill. Combining a tabletop and field deployments would provide a realism that is not usually provided during the standard tabletop drills.

Geographic Response Strategy (GRS) Deployments

As part of the last Prince William Sound tanker contingency plan approval, a commitment was made by the shippers to test an average of five GRSs per year. The GRS plans are used to protect sensitive areas with predetermined response tactics for the given area. It is important that an emphasis be placed on deploying these strategies during various times of the year. Information gained from these deployments is used to make changes to the GRSs as needed. However, these GRS deployment should be tested in their entirety and not just the boom placements. When a skimming system is called for in the GRS, that element should also be deployed to determine if that element of the strategy is viable as well.

Quantifying the Response Gap

A workgroup should be initiated that involves PWSRCAC, the Alaska Department of Environmental Conservation, SERVS and the shippers to help quantify the response gap. Recommendations from the PWSRCAC board approved response gap reports should be reviewed and incorporated into exercises where possible. A first step should be to develop agreed upon monitoring tools and methods designed to measure the limits of the equipment and vessels in various weather conditions. This suggestion is carried over from the 2007 annual drill report as it has not been addressed to date.

SERVS Technical Manual Tactics

This is another item from the 2007 annual drill report that still needs more implementation. The SERVS Technical Manual provides a detailed description of most

of the tactics that would be used during a response to a spill. These tactics include a listing of both personnel and equipment needed to implement the various tasks. These tactics should be tested to determine if the proper levels and types of equipment and personnel are identified to accomplish the tasks.

Fishing Vessels

The number of exercises available for fishing vessels to participate seems to be diminishing. Having the fishing vessels that are under contract prepared to respond is critical to an effective response. Fishing vessels need to be included in most of the exercises discussed above. While the annual training that SERVS provides these vessels is excellent, more value could be achieved by combining some of the exercises discussed above with the training rather than just having the fishing vessel pick up their assigned gear and form a circle during the on-water day of the training. For example, the fishing vessels could be used to deploy the GRSs during their on-water training.

Tanker-Towing Exercises

In 2008 all of the towing exercises were conducted in the summer. It is good to see SERVS increasing the number of towing exercises and including testing all elements required to stop and then tow the tanker. However, the towing exercises should be conducted throughout the year so the tug crews can practice responding in all of the conditions that occur during normal tanker transits in both summer and winter.

Testing New Systems

The Prince William Sound Shippers began looking at possible improvements to the open water oil recovery systems used in Prince William Sound in 2008. One of the components of this system review was a skimmer test conducted at OHMSETT to try to find a high capacity and high efficiency oleophilic skimmer that could replace the TransRec weir skimmers. This effort to improve the system is ongoing with all of the components of the open water system. While the potential for a new improved system is an exciting prospect, all of the components will need to be thoroughly tested as individual components and together as a system.