Combining the Firehouse Model and Community-based Response Teams for an Improved Regional Oil Spill Response System in Alaska

Report to
Cook Inlet Regional Citizen's Advisory Council
and
Prince William Sound Regional Citizens' Advisory Council

October 2004

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Forward

This report was initially published as a concept paper, intended to foster discussion of the future of the "Firehouse" model for oil spill response and community-based response teams in Alaska. The concept paper was developed through a joint effort between the Prince William Sound and Cook Inlet Regional Citizens Advisory Councils. The concepts and models were presented as an entrée into a meaningful dialogue about the future of the oil spill response system in Alaska. The report was published on the Internet and broadly distributed through the Alaska oil spill response community, to invite the readers to join in the challenge of maintaining and improving Alaska's spill response system during times of declining oil production and revenues. A one-day workshop was scheduled for September to allow interested parties to gather to discuss these topics, and to develop steps and commitments to move the concept into the next level of implementation.

Unfortunately, the results of feedback on the proposed concept made it clear that further consideration and work on this project, as is, would likely be futile. Therefore, the September workshop was cancelled, and further work on this project has been suspended. The remainder of this paper describes the concept as presented to the target audience of spill response professionals, agency representatives, and stakeholders, and concludes with the results of the feedback process.

Introduction

Presently, Alaska boasts the largest oil spill response system of any U.S. state. But the oil production and revenues that help fund this system are declining, as are the state and federal budgets. While the regulated oil production facilities and transporters have tremendous spill response capabilities, other potential spill sources, such as small coastal communities and fishermen, have little or no response capabilities available to them. The challenge facing the state is to obtain the best achievable level of response for everyone, while keeping response costs at a reasonable level. The same response system should serve both the regulated and unregulated operators.

"Firehouse Response System" Model

The Firehouse response system model, as envisioned by the Alaska Department of Environmental Conservation,[1] provides an approach to address the challenge of providing an effective response system for all operators. Under the firehouse model, one organization would be designated to respond to all oil spills within a region under a single, joint agency-approved Subarea Contingency Plan (SCP), regardless of the spiller. Regulated contingency plan holders would only be required to arrange for response services with the firehouse organization responsible for each SCP for a plan holder's areas of operation. This would obviate the need for each plan holder to have an extensive duplication of responders and equipment to meet its response planning standards for each geographic area of operation. Regulated owners and operators would then focus their planning efforts on their responses to spills on and near their facility, vessels, pipelines, and/or operations. Added benefits would include having a group of local responders working together who are better trained and have more local knowledge and experience in their region of operation.

This firehouse organization would receive all "9-1-1" type calls for oil spills in the designated region. They would have relationships and agreements with all the potential responders in the region such that the appropriate resources would be dispatched to the oil spill scene to meet the response planning standards.

Community-based Oil Spill Response Teams

Community-based Oil Spill Response Teams are another viable approach to improving the oil spill preparedness and response system for response in certain locations in Alaska. Community-based teams would respond to oil spills within their community and in nearby coastal waters.[2] These teams would be made up of mariners and citizens with local knowledge of the resources and operating environment (waters, winds, tides and currents, etc.), and would be motivated by a strong desire to remove pollution from their home waters. Well-trained and organized local response groups would fit into a cost-effective, comprehensive oil spill response system for coastal Alaska as volunteers who would likely be responsible for local nearshore response operations, working under the direction of the regional response group.

[1] Personal communications with Larry Dietrick, ADEC's SPAR Director, March 8, 2004. Also, described in McDowell Report "Cleanup Alternatives for Alaska," prepared for: Alaska Department of Environmental Conservation by McDowell Group dated March 1998.
[2] See "Community-based Nearshore Strike Teams," A draft final report to PWS RCAC Advisory Council by Tim Robertson, undated.

Regional Oil Spill Response System

If the two concepts, the Firehouse model and the Community-Based spill response model, were combined, there would be one oil spill organization (firehouse) for each region of the state with a network of community-based response teams to distribute the response capabilities throughout the region. The central oil spill organization would be staffed with full-time professionals, while the community-based response teams would be comprised primarily of part-time staff and volunteers. For purposes of discussion in this paper, we will call this concept the Regional Oil Spill Response System (ROSRS).

Elements Of The Regional Oil Spill Response System Concept

The ROSRS concept is comprised of the following elements:

- Regional Oil Spill Contingency Plan
- Regional Oil Spill Response System Organization.
- Regional Response Teams
- Community Response Teams

REGIONAL OIL SPILL CONTINGENCY PLAN

Regional oil spill contingency plans already exist in the form of Subarea Contingency Plans (SCP), which are parts of the Alaska State/Federal Unified Plan.[3] Most SCP already include:

- Identification of oil production, transportation, and handling operations and facilities;
- Identification of critical and sensitive areas;
- Physical characteristics of regional weather, water bodies, and topography;
- Likely spill scenarios, given oil transportation and handling operations in the region;
- Geographic response strategies (GRS); and
- Field response tactics and methods (including response performance standards) to accomplish GRS.

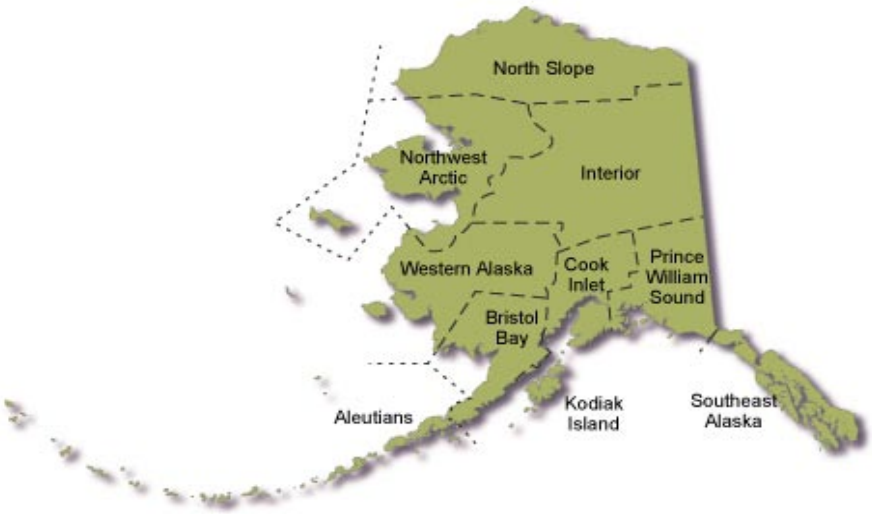
With some modifications, these plans would become the primary common response plan for all spills in the region. Regardless of the spill source, this plan would be implemented to provide organization and resources for the response. As in current practice, the SCP would be drafted and revised by the Subarea Committee, which is comprised of governmental agency representatives. Unregulated users, such as small vessel owners, small heating oil storage tanks, and fishing vessel owners/operators would have no other contingency plan. Regulated users, such as oil producers, tank vessels and barges, non-tank vessels greater that 400 gross tons, and oil storage facilities would still be required to have individual contingency plans. However,

[3] The Alaska Federal and State Preparedness Plan for Response to Oil and Hazardous Substance Discharges and Releases. See the Alaska Regional Response Team website at http://www.akrrt.org.

these plans would be simplified to cover prevention and response actions specific to their facility, vessel, and operations, since the SCP would address spill response region-wide with response strategies, tactics, and methods developed by the Subarea Committee. For spills beyond the immediate area, the spiller would simply arrange for response by the response organization assigned responsibility for the SCP.

Figure 1 is a graphic depiction of the Alaska regions, or Subareas, for oil spill response planning.

Figure 1. Alaska Subarea Boundaries (Source: ARRT)



REGIONAL OIL SPILL RESPONSE SYSTEM ORGANIZATION

In each region, or Subarea, of the state, the Subarea Committee would establish a steering committee to oversee the creation or selection of a ROSRS. Response organizations -- Oil Spill Removal Organizations (OSRO) or Primary Response Action Contractors (PRAC) -- that intend to serve as a ROSRS for a particular region would apply to the Subarea steering committee to be designated as ROSRS within that specific region. Any response organization could apply to be ROSRS, but once selected, only the selected organization would be allowed to operate in the region as the ROSRS. A response organization selected as ROSRS for one region of the state may apply to be ROSRS for another region in the state.

REGIONAL RESPONSE TEAMS

To be approved as a ROSRS, a response organization must demonstrate a capability to respond for the entire region, as described in the Region's Oil Spill Contingency Plan. This may require the ROSRS to maintain a Regional Response Team comprised of full-time professional responders capable of mobilizing an immediate response to a spill. The Regional Response Team could also rely on industry-based employee/responders that could be called

as immediate mutual-aid responders to form the core response to any large oil spill in the region.

COMMUNITY RESPONSE TEAMS

The ROSRS would be required to operate (or contract with existing, qualified) community-based oil spill response teams for specific geographic areas throughout the region. ROSRS contracts with local response teams would provide base funding for training, equipment, administration, and insurance for its local response teams. The establishment of Community-based oil spill response throughout the region would provide a response network of trained local citizens available to respond directly to small spills or protect shoreline impacts from larger spills that originate outside the community. These local strike teams would be created or contracted by an approved ROSRS to provide response services, including equipment maintenance and readiness for specific geographic areas.

Community-based oil spill response teams would be organized, supported, and operated as follows:

- 12 personnel (minimum) trained in the use of locally available equipment.
- Eight contracted fishing vessels (minimum) with crew trained to tow water-deployable equipment.
- One strike team manager providing administrative and logistical support.
- Strike team office and warehouse.
- Communications equipment.
- Staff support provided by the ROSRS for planning, risk management, emergency response, and legal services.
- During a response, the RP, ROSRS, FOSC/SOSC or Unified Command would direct the team in authority over the spill, depending on circumstances at the time of the spill response.
- The local strike team would be trained and equipped to employ field response tactics and methods to accomplish the geographic response strategies in the area(s) assigned.
- Initial responders and resources would be on-call to respond within two hours of activation.
- The strike team would maintain all locally available equipment assigned to the team.
- The ROSRS may administrate the local strike teams or they may have their own managers to make sure readiness obligations are met.

ROSRS would enter into contracts with community-based strike teams whom they determined to be qualified. They will be responsible for ensuring the contracted strike teams remain qualified during the term of the contract.

Training

Community-based responders must be trained professionals capable of working in teams with other qualified responders. They may be volunteers, but all responders must meet minimum training and qualification standards to be established in the SCP. All of those meeting training and qualification standards would be listed in a roster maintained by the ROSRS. A local, community-based strike team must ensure its members are fully qualified and subject to review by the employing ROSRS.

Regional Response Equipment

The creation of a Regional Oil Spill Response System will not require the purchase of o additional response equipment. However, the SCP would designate the location for existing response equipment within the region (both private and public), so that a reallocation of existing resources may result. This would allow the Subarea Committee to maximize response capability throughout the region.

Funding

The fundamental premise of funding the Regional Oil Spill System is that any potential spiller of oil should pay their fair share of the cost of maintaining response readiness.

Regulated Contingency Plan Holders

The regulated plan holders would continue to declare a response planning standard for their operations within their individual contingency plans. This requirement would serve as the basis for a cost sharing agreement to partially fund the ROSRS readiness costs. These regulated plan holders would be members and form the managing board of the ROSRS.

Unregulated Users

The ROSRS would also serve unregulated owners and operators who are likely to have oil spills and require response services. Unregulated operators may choose to become associate members of the ROSRS prior to having a spill and thus receive greatly reduced response service costs. Otherwise, as non-members of the ROSRS, they would incur greater response costs at the time of a spill from their operation. It is possible that oil pollution insurance companies would see the advantages of membership and require their policyholders to become members through preferential insurance rates.

Governmental Users

Appropriating additional direct government funding support for ROSRS seem unlikely at this time. However, governmental facilities and vessels that store significant amounts of oil should also be required to become associate members of the ROSRS. Also, the ROSRS would be the designated response organization for all publicly funded spill responses. The Subarea Committee would assume much of the contingency planning burden, thus generating cost-savings for regulated contingency plan holders. Finally, Federal and State agencies should direct existing oil spill response training funds into the ROSRS training program.

Why This Model?

Oil production and transportation is changing in Alaska, affecting some regions significantly. Cook Inlet crude oil production is declining. North Slope oil production is declining. Pipelines are aging. The Trans-Alaska Pipeline vessel fleet is migrating to state-of-the-art double hull vessels with redundant technologies, and they are accompanied by high-powered escort tugs as they transit Prince William Sound.

As oil production declines, infrastructure ages, and spill prevention technology continues to improve, the cost of preparedness is being distributed among a shrinking pool of operators. As a result, the cost-per-barrel-produced of Alaskan oil is increasing without a corresponding increase in services and environmental protection. Spill prevention and response costs for smaller businesses may cause unintended consequences that will affect continued business operations.

The balance of the State's Oil and Hazardous Substance Release Prevention and Response Fund ("Response Fund") created by the Legislature in 1986 to provide a readily available funding source for spill response is declining as oil production declines. The Prevention Account – used to fund ADEC and other state agency spill prevention and response programs, including paying the costs for responding to spills that are not declared disasters – is under tremendous strain, as agency costs increase and the available balance decreases.

The spill response system for Alaska needs to be evaluated and updated to meet the current and future needs of government, citizens, and industry, and to protect Alaska's resources. It is important to strike a balance in the Alaska oil spill prevention and response system so that the industry, government, and public expenditures are yielding the highest net benefit in terms of oil spill prevention and environmental protection.

The proposed Regional Oil Spill Response System concept provides an updated starting point for discussing how Alaska's oil spill response system can be improved during this time of change. It identifies a regional approach that includes streamlined, effective contingency plans and cost-effective roles for local citizen responders in key locations.

Implementation Challenges

A number of implementation challenges to making the ROSRS concept a reality need to be addressed through cooperative action. The first step is to get concurrence from key players and officials on each element of the model and develop an action plan. From there, implementation could start with a pilot project for a designated region of the State.

Other readily identified challenges include:

- **Funding.** Paying for the base cost of oil spill preparedness should be a shared burden, but creating a fair funding solution will be a challenge.
- **Insurance and Risk Management.** The insurance costs for maintaining a Regional Oil Spill System is significant, but there should be a cost saving over insuring multiple response organizations.
- **Legal Issues.** Legal issues need to be investigated before embarking on a major revision of the existing response system. This report does not attempt to detail, describe, or advise on any legal issues.
- **Administration.** Response organizations are complex organizations and must meet strict standards of training, certification, and organizational readiness. Response agreements and contracts are especially complex. A full-time ROSRS manager is essential to ensuring the system is ready, willing, able, and capable to adequately respond at any time. However, centralizing administration for an entire region should provide a cost savings over multiple response organizations.

Comments And Feedback

Summary of Interviews

Key Alaska oil spill response experts were asked to review the "Combining the Firehouse Model and Community-based Response Teams" concept paper in July 2004. In early August, the authors met with RCAC principles and designed an interview form (attached) to ask several of the stakeholders for their reaction and comments on the Concept.

In mid-August, the consultants completed the interviews of six stakeholders, representing the Alaska Spill Cooperatives, a former oil transportation executive (invited by one of the Spill Co-Op managers), and the Director of the Alaska Spill Prevention and Response Division of ADEC. The consultants targeted the early interviews for those who could be expected to support the Concept to some degree, or who would need to support the project in moving forward if there was to be any progress.

With some slight variance, the overall reaction was significantly negative, thus hampering the plan to move forward with implementing the concept. Several

common themes emerged during the interviews. Key comments are summarized below:

- Several interviewees cited a lack of a clear problem statement – The Alaska/federal response system is not broken, so why fix it? Everything is working well "as is."
- Most liked the idea of one response plan for a region. However, the attitude of most was that the government would be designated the responder. None of them thought this approach was a realistic expectation
- In Alaska, there is already one plan in the major regions (North Slope, Cook Inlet, Prince William Sound, Southwest, Southeast) where a planholder uses a basic plan managed by the Spill Cooperative, and the planholders have their own plan for their facilities/vessels and response resources.
- Major federal legislation would need to be changed on how spill response work is done throughout the whole country and in Alaska – and that's just not going to happen.
- There was consensus that the proposed ROSRS model will cost much more to everyone than what it costs now. The regulated organizations are accustomed to paying for the current services, and they will not support increasing costs for a level of service that is not required.
- Most stated that they would not make this project work a priority for them, although they are willing to do a review of "how's it working." Some see the benefit of evaluating the current response system and looking for improvements, given an analysis of future changes in the industry in Alaska.

Alaska Department of Environmental Conservation support is crucial for moving forward on implementing the ROSRS model. ADEC's recommendations for improving the current response system includes some of the following ideas:

- Continue applying resources on inspections and drills, which have been highly successful and moved the effort away from theoretical review and arguments.
- Consider regulation of the currently non-regulated owners and operators. However, those are at lower risk, because Alaska addressed the higher risks posed by non-tank vessel with recent legislation.
- ADEC favors focusing on efforts to continue the standardizing of spill response (e.g., GRS, ESI, SCP, AIMS manual, technical manuals).
- Communities will continue to be well served with community response

agreements and associated equipment staged in communities (currently with 32 communities).

It is unlikely that the State of Alaska would support moving forward with ROSRS implementation steps at this time.

The one bright spot in support of the ROSRS concept from the responses by key stakeholders interviewed came from the Manager of The Southeast Alaska Petroleum Response Organization (SEAPRO). SEAPRO supports the idea of including communities in their spill response network, and they have done that in Southeast without changes in the response system. SEAPRO relies heavily on their relationships with Southeast communities to have a response capability throughout the region.

Conclusions

1. The Concept for Combining the Firehouse Model and Community-based Response Teams and integrating the teams into a new response system in Alaska is not viable, given the current oil spill response situation.

2. There may be places in Alaska where better integration of community-based response teams with spill cooperatives or other oil spill response organizations would significantly improve response. The SEAPRO model could serve as a model for other areas in the State and should be explored further.

3. There is support for a strategic analysis of the oil spill response system in Alaska to

    - Evaluate performance of the current response system;
    - Assess critical issues that will affect future response;
    - Set goals and objectives to improve or maintain current performance levels;
    - Develop strategies to accomplish the goals and objectives;
    - Develop an action plan to accomplish the goals and objectives; and
    - Institute a performance measures system to monitor success and failures and to initiate corrective action.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