

The Observer

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Independent review of air study disputes Alyeska findings

The Valdez Marine Terminal is responsible for much more of the benzene in the air in Valdez than an Alyeska study indicates, according to a peer review by independent scientists.

The RCAC's Terminal Operations and Environmental Monitoring Committee hired the scientists to review Alyeska's Valdez Air Health Studies (VAHS). The scientists, called the Valdez Air Study Review (VASR) Committee, generally supported Alyeska's findings regarding how much benzene there is in Valdez, but took issue with Alyeska's conclusions that the terminal is not responsible for most of it.

The share of benzene attributed to the terminal is important because it will be a major factor in whether Alyeska is required to reduce emissions of volatile organic compounds (VOCs), including benzene, released during tanker loading. Alyeska estimates that controlling those emissions will cost \$120 million.

The marine terminal in Valdez is the largest single source of VOC emissions in the U.S. Tanker loading at the terminal emits 43,000 tons of VOCs, including 450 tons of benzene, per year. The VASR study noted that, relative to the size of the Valdez basin, these emissions are "substantially greater than the emission area density for any large industrialized urban area, let alone a rural area."

Alyeska's study concluded that the terminal is responsible for 25 percent of the benzene found outdoors in Valdez. The VASR Committee said it's more like 90 percent or more. The Alyeska study said the terminal is responsible for 11 percent of the benzene to which Valdez residents are exposed, indoors and outdoors. The VASR Committee said it's more like 30 to 60 percent. The Alyeska study, predicting the terminal will shut down in the year 2015, said the terminal's contribution to Valdez residents'

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Members of RCAC's Valdez Air Study Review (VASR) Committee at the Aug. 25 public meeting in Valdez. From left, Gerald Anderson, Lyle Chinkin, Dr. Charles Schmidt, Dr. Yoram Cohen, Dr. Gary Pascoe and Dr. Arthur Winer. At far right is Greg Winter, chairman of RCAC's Terminal Operations and Environmental Monitoring Committee, which sponsored the review.

lifetime cancer risk from benzene is 1.7 in one million. The VASR Committee said cancer risk from benzene at the terminal is 20 to 110 in a million.

The VASR Committee agreed with Alyeska's estimate of how much benzene there is in Valdez and praised Alyeska's ambient air monitoring program as "well-thought out, thorough and state-of-the-art... one-of-a-kind and deserving of recognition."

But serious flaws in the tracer study, designed to track where benzene goes when it enters the air from the terminal, rendered some of Alyeska's conclusions unsupportable. The VASR Committee said the tracer gas should

have been released from the tankers themselves, or as close to them as possible. Instead, it was released from a site uphill from the tankers, approximately a kilometer away.

"Failure to conduct a tracer release that closely follows the location and trajectory of the VOCs emitted from the tankers casts serious doubt on the conclusions reached in the VAHS regarding terminal contribution to outdoor, indoor and personal exposure," the report said. The Alyeska tracer study failed to note that different wind and dispersion patterns could impact the validity of the findings, according to the VASR Committee.

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Comments submitted on vessel escort rules

The U.S. Coast Guard's proposed rule on vessel escorts for oil tankers should spell out requirements specific to Prince William Sound because of the sound's unique conditions and operating environment, according to comments filed by RCAC.

The proposed rule would require single-hulled oil tankers carrying oil in certain areas, including Prince William Sound, be escorted by two towing vessels. The double escort requirement would apply to all single-hulled tankers over 5,000 gross tons that transport oil in bulk. In addition to Prince William Sound, the rule would apply to tankers operating in Rosario Strait and Puget Sound, including the Strait of Juan de Fuca east of Port Angeles, Haro Strait and the Strait of Georgia. The escorts would assist a tanker in case of mechanical difficulties.

RCAC comments are in response to the U.S. Coast Guard's notice of proposed rulemaking on vessel escort requirements as mandated by the Oil Pollution Act of 1990 (OPA 90). RCAC's comments parallel current escort practices in Prince William Sound. Double escorts are already required for laden tankers under the state-approved Prince William Sound Tanker Spill Prevention and Response Plan.

RCAC argues that the rule should take into account and address Prince William Sound's severe operating conditions and extreme weather. In addition, the remoteness of the region means that escort and response resources are limited to equipment on hand.

Alyeska already operates an extensive escort organization in Prince William Sound. Laden tankers leaving the Valdez Marine Terminal are escorted by two vessels, one a dedicated towing "It is important that this rule not require less than the capabilities of the organization which is currently in place."

- RCAC

vessel, and the other outfitted with oil spill skimming and onboard storage capabilities.

"It is important that this rule not require less than the capabilities of the organization which is currently in place," the RCAC comments said.

RCAC also recommended that:

- double escorts be required for all tankers over 5000 gross tons, not just single-hulled tankers. "The mere fact a vessel is double-hulled does not obviate the need for response vessels that can reach a disabled tanker in a timely fashion."
- consistent with current practice, at least one of the two required escort yessels be fitted with oil skimming and onboard storage capabilities.
- escort response vessels for Prince William Sound be required to have controllable pitch propellers or an alternative equivalent multidirectional propulsion system, allowing the vessel to go slow enough to tow containment boom.

- when the Automated Dependent Surveillance System is incorporated into the Vessel Traffic System in Valdez and is functioning properly, the Captain of the Port have discretion to lift the escort requirement between 60° 49' North latitude (west of Bligh Reef) and 60° 25' North latitude (five miles north of Hinchinbrook). However, a standby escort vessel would be required at Naked Island and the double escort would resume through Hinchinbrook Entrance.
- the Captain of the Port have discretion to require continuous double escort through all of Prince William Sound in certain situations, e.g. if a tanker suffers engineering casualty or on a first visit by a foreign-flagged tanker.
- when maneuverability is limited, the speed selected for the escort be determined by the escort vessels' ability to overtake and assist the tanker, in the event of a casualty, before the tanker reaches extremis.

The public comment period on the proposed rule closed Sept. 8.

Tell me and I'll forget.
Show me and I might not remember. Involve me and I'll understand.

- Native American saying

Making the RCAC 'democracy' work

By Sheila K. Gottehrer, Executive Director



Sheila Gottehrer (Photo by Hal Gage)

The RCAC is about to begin a long-range planning process. As part of this process, we will seek to answer questions

about what RCAC has accomplished, how it has conducted itself, what has worked and what hasn't and what we want to see accomplished in the long term.

Central to these questions is democracy. The RCAC prides itself on being a democratic organization with democratic ideals. We promote the interests of the entities we represent; we follow the principles of social equality and respect for the individual; and we rule by majority. An essential element of how we work is careful consideration of the ideas, concerns and thoughts of council members, committee members and staff.

With 19 directors, nine ex-officio members, five committees and 14 staff our procedures are not the most efficient, expedient or streamlined one might find. Consultation and consensus take time. At times the process is awkward and frustrating. Tiresome debate and frustration notwithstanding, the process works because it is founded on democratic principles.

An excellent example is the working group process, a method we have applied to what is

now a growing list of issues and problems. Working groups are slow and inefficient. They also work. The working group process brings together people with different perspectives, interests and values. They hammer out consensus where possible, try to minimize the differences where consensus isn't possible and put on the table those points of absolute disagreement.

RCAC has participated in working groups dealing with state oil spill regulations and oil spill contingency plans. In a working group environment, participants are forced to listen to each other. We have been most successful when we persuade instead of fight, cooperate instead of confront.

To be heard we must speak about our issues in a way the other side can hear. Difficult people and situations can be unmanageable and formidable. But reaching consensus works when, and only when, those at the table are committed to making it work.

Community impact mitigation study off the ground

A major study has begun that ultimately will help communities reduce or prevent the social, cultural and economic impacts of a major oil spill or other disruption.

The community impact mitigation study – also called the "socioeconomic study" – will be conducted by the Institute of Social and Economic Research (ISER), at the University of Alaska, Anchorage. The two-year project is sponsored by the RCAC's Scientific Advisory Committee (SAC).

The project seeks to assist communities in identifying impacts and ways to prevent and mitigate the disruptions that would occur in each community after a large oil spill. Communities impacted by the Exxon Valdez oil spill have suffered higher alcoholism and drug use, family dysfunction and community conflict, employment disruption, sudden influx of strangers, labor shortages and a resulting strain on services and facilities.

The study was conceived more than two years ago by founders of RCAC, according to Lynda Hyce, Whittier's representative on the RCAC Board of Directors and former SAC Chair. A study of social, cultural and economic impacts on communities is referenced in both RCAC's contract with Alyeska and the Oil Pollution Act of 1990 (OPA 90).

"For the first time we'll be able to document social and economic impacts of a catastrophic oil spill and attempt to incorporate prevention and mitigation strategies in contingency plans," Hyce said. "There's been a lot of work on the impacts of the spill, but none of it was done with the purpose of preventing these things from happening in the future," she said. In the process the study will pull existing disparate information together.

The study will focus on five areas of impact on communities:

- Local involvement in response and mitigation planning
 - Subsistence and cultural transmission
 - Psychological and social trauma
 - Local government and fiscal planning
 - Economy fishing and tourism

RCAC has notified impacted communities of the study and is requesting their help and participation.

"The study's success depends on each community's participation in the project, since ultimately it is individual communities who need to identify, prioritize and plan for their own protection and mitigation from a future oil spill," SAC member Chuck Smythe said.

An important and early step in the project is to review and update past public testimony on oil spill impacts. Project researchers, along with SAC members and other RCAC representatives, will work with 18 communities to validate the earlier testimony and determine whether concerns raised then still hold and whether other concerns have emerged over the past few years. This information

will be obtained through personal interviews and community discussions.

The following communities will be involved in the study: Valdez, Tatitlek, Cordova, Chenega Bay, Whittier, Seward, Kenai, Homer, Seldovia, Port Graham, English Bay, Kodiak, Ouzinkie, Karluk, Old Harbor, Port Lions, Akhiok and Larsen Bay.

Researchers will also review technological disaster research and synthesize all past research on the Exxon Valdez oil spill with respect to social, cultural and economic impacts and concerns.

Ways of mitigating the impacts identified will emerge from local community discussions and

"For the first time we'll be able to document social and economic impacts of a catastrophic oil spill and attempt to incorporate prevention and mitigation strategies in contingency plans."

Lynda Hyce

Hatchery protection a model for mitigation strategies

The hatchery protection plan recently submitted by Alyeska to the Alaska Department of Environmental Conservation is a model of the process for developing mitigation strategies through local community involvement.

The hatchery protection plan was developed in response to a need identified by local residents out of the *ExxonValdez* experience.

Local residents were involved in developing the plan and they are responsible for much of its implementation. The hatchery protection plan will be incorporated into the oil spill contingency plan for Prince William Sound.

consultations with specialists in disaster, anthropologists, sociologists, economists and biologists.

In a later phase of the study, researchers will work with local residents to develop detailed mitigation strategies in nine communities broadly representative of all the communities. The selected communities need to be broadly representative so that the strategies developed will be transferable to others.

RCAC's long term goal is to incorporate detailed mitigation plans, along with procedures for putting them into place, into the spill response plans prepared by industry, as well as local, state and national response plans.

Flatfish study model for cooperative changes

A modest but appropriate model of industry, citizen and government cooperation occurred recently when Alyeska agreed to changes in a plan for studying flatfish metabolites in Port Valdez.

Under its federal discharge permit for the ballast water treatment plant in Valdez, Alyeska is required to conduct a study of flatfish liver bile. The purpose of the liver bile analysis is to monitor a metabolic indicator of hydrocarbon contamination.

The federal permit required Alyeska to conduct the study using a 1986 protocol from the National Oceanic and Atmospheric Administration (NOAA). But unknown to Alyeska and apparently the Environmental Protection Agency (EPA), NOAA had changed the protocol.

As a matter of course, Alyeska sent a copy of the flatfish study scope of work to RCAC's Terminal Operations and Environmental Monitoring (TOEM) Committee. TOEM Chairman Greg Winter asked independent experts and RCAC's Scientific Advi-

sory Committee to review the plan. After conferring with contacts at NOAA, the TOEM Committee suggested specific changes to the scope of work, mostly based on changes to NOAA's 1986 protocol.

Dick Mikkelsen, Manager of Environmental Permits at Alyeska, said Alyeska was quite willing to take the advice.

"We agreed it made sense to do it this way. But the permit said to follow the 1986 protocol, so we had to go to agencies (EPA and the Alaska Department of Environmental Conservation) for approval," Mikkelsen said.

TOEM's Winter wrote to EPA and ADEC, who agreed to the new procedures.

"It's a small thing, but it's a good example of how we can work with industry. Alyeska was willing to listen and make changes," Winter said. "Cooperation does work. The result will be a better study and nobody loses."

New directors seated on RCAC Board

Five new directors have been seated on the RCAC Board of Directors in the past few months.

Tex Edwards (City of Homer) has lived in Homer since 1971, except for two years in Seldovia. Edwards is completing his sixth season as captain of the Glacier Queen, a Westours tour boat operating between Valdez and Whittier.

Edwards' familiarity with the TAPS tanker trade grew out of his work on pilot boats, where he got to know marine pilots, tanker captains and others in the pipeline and tanker trade. Edwards worked on the clean up of the Exxon Valdez oil spill. "I was one of those people for whom the spill was a personal tragedy. I was deeply offended by the events that led up to it, and the attitude of a lot of the people involved in it."

Charles Christiansen (Kodiak Village Mayors Association) is serving his second stint on the RCAC Board of Directors. As an "oiled mayor," he was on the RCAC board from August 1989 to March 1991. Christiansen is Mayor of Larsen Bay, where he has lived since 1967. He has been mayor of Larsen Bay for about 15 years. Though born in Aberdeen, Washington, Christiansen is Aleut; his mother's family hails from Karluk. A retired fisherman and cannery

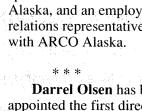
manager, Christiansen now spends most of his time tending to city business.

"A lot of oil came down this way (from the Exxon Valdez) and our area was hit pretty bad," Christiansen said. "We have to make sure it doesn't happen again."

Jim La Belle (Chugach Alaska Corp.) was seated on the RCAC board in July. La Belle is board chairman at Chugach, a full time paid position there. La Belle's background is in general business consulting. He has worked for Chugach Alaska off and on since 1973. He also served as president of the Port Graham Corpora-

tion for three years.

In addition to private consulting, La Belle has been a local government specialist with the State of Alaska, and an employee relations representative with ARCO Alaska.



Jim La Belle

Darrel Olsen has been appointed the first director representing the Community of Tatitlek. Olsen is employed as bookkeeper at Tatitlek Corporation, a position he has held about six years. A lifelong resident of Cordova, Olsen is a shareholder in Tatitlek Corporation and Chugach Alaska. He is active in the Cordova Iceworm Festival and St. Michael's Russian Orthodox Church.

"RCAC is a new thing for me and I have a lot to learn. But RCAC's work is particularly important for Tatitlek, so I'm looking forward to contributing," Olsen said.

Larry Evanoff, Chenega's representative on the RCAC Board of Directors, sees oil spill prevention as key to RCAC's charge. "I don't want to see something like this happen again. We have to stop it before it starts," he said.

Evanoff was born and raised in the old village of Chenega. He moved to the new village of Chenega Bay when the ribbon was cut in 1984. A Vietnam veteran and former air traffic controller, he spent three years in Nome with the Alaska Army National Guard, worked as a radiographer in Prudhoe Bay and as a Village Public Safety Officer in Chenega Bay. Evanoff currently manages various projects for both the IRA council and the village corporation.

Seats added for Chenega, Tatitlek

The communities of Chenega and Tatitlek have been added to the membership of the Prince William Sound Regional Citizens' Advisory Council (RCAC). At a teleconference meeting July 8, the RCAC Board of Directors amended its bylaws to add a seat for each of the two communities, which lie in the path of oil tankers transiting Prince William Sound.

"These communities have been concerned about oil activities for nearly 20 years, but their voices have never been heard," Jim La Belle, of Chugach Alaska, told the board. "The people of Chenega and Tatitlek have advice and insight; they have a lot to contribute," he said.

The proximity of Chenega and Tatitlek to the tanker lanes in Prince William Sound puts them at very high risk from oil spills. The subsistence economy on which Chenega residents depend was decimated by the Exxon Valdez oil spill. The aftermath of the spill also took a major toll on the cultural and social fabrics of the two rural communities.

The board also formalized the membership of the Alaska Wilderness Recreation and Tourism Association (AWRTA) in RCAC. The RCAC now has 18 member organizations. There are 19 seats on the Board of Directors because the City of Valdez has two.

RCAC Board of Directors

Charles Christiansen Wayne Coleman Tex Edwards Larry Evanoff Mike Gallagher **Chris Gates** John Herschleb Lynda Hyce Jim La Belle Andy Mack Carl Marrs Michelle O'Leary Darrel Olsen * Ann Rothe Kristin Stahl-Johnson Stan Stephens Scott Sterling Bill Walker

Kodiak Village Mayors Association Kodiak Island Borough City of Homer Community of Chenega City of Valdez City of Seward Prince William Sound Aquaculture Corp. City of Whittier Chugach Alaska Corporation Kenai Peninsula Borough Alaska State Chamber of Commerce Cordova District Fishermen's United Community of Tatitlek National Wildlife Federation City of Kodiak Alaska Wilderness Recreation & Tourism City of Cordova City of Valdez City of Seldovia

Ivan Widom

Ballast water treatment studies completed

More information is needed before independent scientists can say whether the ballast water treatment (BWT) plant at the pipeline terminal in Valdez is treating all contaminants coming into it. That was one of the findings of a statefunded review of testing procedures at the BWT plant.

Tankers carry ballast water in their empty tanks to stabilize the vessel. The water is contaminated by oil and other residue, so before the water can be discharged into Port Valdez, it goes through a treatment plant.

The review consisted of three separate components addressing current monitoring of what goes in, what comes out and whether what comes out is toxic to sea life. The studies were conducted for RCAC's Terminal Operations and Environmental Monitoring (TOEM) Committee, with funding from the State Department of Environmental Conservation.

The studies, conducted by three different consultants, represent the first phase of a more extensive project designed to determine whether there is room for improvement, and what those improvements might be, in the treatment of ballast water.

Influent sampling

A driving force for studying the influent has been allegations that toxic wastes are being dumped illegally into the BWT plant. Beak Consultants, Inc. and AJBL Consultants Limited reviewed the sampling and analysis of influent to the Alyeska BWT plant. Their report said current testing and analysis programs at the terminal do not provide sufficient information to address that allegation.

"There is limited information available about the performance of the individual (treatment) processes," the report said. "As a result, there are reasonable grounds to be concerned about the ability of the BWT plant to deal with a diversity of influents." The report said available data are insufficient to determine the quantity of oily residues being discharged into the BWT plant.

The consultants recommended four sampling programs to detect "unusual" or unauthorized substances; to establish what happens to contaminants in each of the BWT processes; to provide a more comprehensive picture of the influent and changes in it over time; and to validate and supplement the data already reviewed.

Effluent sampling

Investigative Science, Inc. (ISI) reviewed the effluent monitoring program. ISI found that the sampling and analysis now being done generally meets the federal and state permit requirements, but "there is good evidence that there are some environmentally important chemicals being discharged into Port Valdez that are not being properly monitored."

Those chemicals are polycyclic aromatic hydrocarbons (PAHs), some of which may be toxic or carcinogenic; phenols, compounds often detected under the current monitoring program; and heavy metals such as zinc, chromium or vanadium, which are known to be in crude oil. PAHs and heavy metals tend to build up in sediments and animals.

Comprehensive testing for a wider range of compounds is needed before the chemical composition of the effluent can be thoroughly described, the report said.

ISI found Alyeska's analytical lab to be very good, but identified deficiencies with the contract lab used by Alyeska, making the results it reports of limited use.

Among its recommendations, ISI suggested an external audit program for Alyeska and its contract laboratories, to verify that results tested and published are correct. The external audit would include surprise visits and spiked samples.

Other recommendations include a "blind sample" program in which laboratories are given unknown samples to analyze; RCAC production of an annual summary of BWT effluent dis-

charges; tanker ballast sampling and adoption of a "gold standard" sampling plan to thoroughly describe the chemical composition of the effluent.

Toxicity testing

As reported in the April 1992 "Observer," Alyeska received generally high marks on its toxicity testing of discharge from the BWT plant. Northwestern Aquatic Sciences found that the toxicity studies are of good quality and employ scientifically acceptable methodology; meet federal permit requirements; and can be expected to protect marine life againt potential toxins from the BWT plant.

The report did recommend that more attention be paid to the presence of zinc in the BWT discharge. The report noted that even though zinc monitoring is required only quarterly, and its level in the effluent is not limited by the federal permit, it showed up in sufficient levels in Alyeska's testing to warrant closer monitoring as a potentially significant toxicant.

It also said more attention should be paid to polyaromatic hydrocarbons (PAHs) in the sediment.

Benzene from terminal focus of findings

Continued from Page 1

The Alyeska study maintained that 75 percent of the benzene found in Valdez outdoor air comes from non-terminal local sources, such as cars, gas stations and woodstoves. The VASR Committee said that conclusion doesn't hold up under scrutiny. Studies done before the terminal was built provide evidence that, without the terminal, Valdez would be no different from other rural areas, in terms of benzene levels. Yet Valdez now has benzene levels on a par with major metropolitan areas such as San Francisco and Los Angeles. In California, such benzene levels trigger strict emission controls. Alaska has no such emission control regulations.

The VASR Committee described other flaws in the Alyeska study.

- The 69 people who wore vests to monitor personal exposure to benzene did not constitute a representative sample of the Valdez population.
- In calculating the health risk due to benzene exposure, the Alyeska study inappropriately factored in an assumption that oil productivity will decline, thus reducing exposure in the future. Such assumptions about project life are not normally used in calculating

health risk, according to Dr. Yoram Cohen, VASR Committee Chairman.

• Alyeska called its health risk estimate "conservative," a term normally used to mean worse-case. Yet the Alyeska study used only scenarios and numbers that created an optimistic picture. The accepted methodology for performing risk assessments for exposures to air toxics usually includes considerations of a variety of exposure scenarios. Alyeska's did not.

RCAC will use the VASR report to develop recommendations to Alyeska. The findings will also be shared with interested regulatory agencies, including the U.S. Environmental Protection Agency. The EPA has authority to exempt Alyeska from new regulations that would require emission controls to reduce the amount of vapors released during tanker loading.

In addition to Dr. Cohen, a professor of chemical engineering at UCLA, the committee consisted of Gerald E. Anderson and Lyle Chinkin, atmospheric scientists; Dr. Gary Pascoe, a toxicologist; Dr. Charles E. Schmidt, an atmospheric chemist; and Dr. Arthur Winer, head of UCLA's Environmental Health Department.

Nearshore response plan looks good, but some gaps

Failure to address areas outside Prince William Sound, management of the response after 72 hours and temporary storage capacity for recovered oil are the main gaps identified by RCAC in the nearshore response plan submitted to the Alaska Department of Environmental Conservation (ADEC).

Despite the gaps, there is much to be pleased about, according to RCAC board member Lynda Hyce, who chaired the Nearshore Response Working Group. The nearshore response plan was developed by the Response Planning Group (RPG), a consortium of North Slope crude oil shippers, in a year-long cooperative process with RCAC and regulatory agencies.

"It's a real accomplishment to get a near-shore response plan on paper," Hyce said. "As far as we know, it's the first solid effort to keep oil from hitting our shorelines. The challenge that remains is to implement the plan and demonstrate an effective nearshore response capability. A plan on paper doesn't mean the job is done."

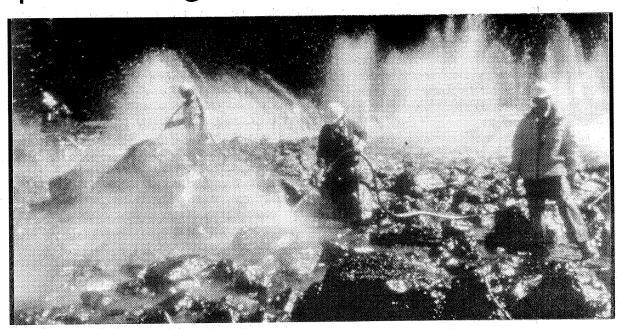
Nearshore response is the effort to prevent shoreline impacts by containing, recovering or diverting oil that has escaped containment at the scene of an spill. Nearshore response relies heavily on local vessels and crews, but they must be organized, trained and managed.

"For the nearshore response plan to be complete, the post-72 hour plan for utilizing local resources throughout the Exxon Valdez affected area must be developed," the RCAC said in formal comments. "These vessels and crews, many with Exxon Valdez oil spill experience, can make a real difference in the next response, but only if this plan organizes their call-out, plans their training, identifies their equipment and demonstrates that they can be activated within the time necessary to prevent the spill from impacting the shorelines."

The RPG nearshore response plan does not provide for response equipment and trained personnel from outside Prince William Sound, even though shorelines as far as the Alaska Peninsula were oiled by the Exxon Valdez spill. RCAC argues for pre-positioning of equipment throughout the Exxon Valdez impact area. There is also concern about storage and transfer capacity for recovered oil. RCAC continues to argue that inadequate temporary storage capacity will create a bottleneck and hamper oil recovery.

Over the past three and a half years, significant progress has been made in initial response capabilities in Prince William Sound. Alyeska's Ship Escort/Response Vessel System (SERVS) is among the best response organizations in the world. But even under ideal conditions – good weather, optimum machinery and personnel - oil from a major spill is bound to escape initial containment efforts.

That is where nearshore response comes in. The need for nearshore response – and the essential role that local vessels and personnel play in such a response – was one of the lessons of the Exxon Valdez oil spill. After the spill, ADEC required Prince William Sound crude oil



The goal of nearshore response is to recover oil before it hits shore. Photo courtesy U.S. Coast Guard

shippers to develop a nearshore response plan as part of the conditional approval of their overall contingency plan. The federal Oil Pollution Act of 1990 (OPA 90) also requires that oil spill response in Prince William Sound include the mobilization of local resources.

When the nearshore response working group was formed in June 1991, Alyeska announced that as a response action contractor, it would hand over spill response management to the spiller within 72 hours and thus have no responsibility for spill response after three days. Therefore, Alyeska reasoned, it would have no role in a nearshore response.

Now a year later, the Response Planning Group has handed its nearshore plan to Alyeska's SERVS division for implementation. RCAC is concerned about how the response will be handled if Alyeska insists on handing management responsibility back to the spiller after the first 72 hours. RCAC is monitoring SERVS' development of an implementation plan, to ensure that the conceptual plan indeed evolves into demonstrated response capability.

"SERVS' performance on initial response has been great, so we have a lot of confidence in their ability to implement a nearshore plan," Hyce said. "But we're concerned about stretching their resources too thin. This additional responsibility for implementing the nearshore plan shouldn't be at the expense of sacrificing their initial response capability."

Original plans called for the ADEC to take public comment on the nearshore response plan. ADEC officials subsequently decided that because a nearshore response plan constitutes an amendment to an existing contingency plan, it would not take public comment until the entire plan comes up for review again in 1994. ADEC did agree, however, to take comments from RCAC.

People with questions or comments about the nearshore response plan may contact the RCAC.

Observer monitoring spill drills

The RCAC now has a representative on the scene at oil spill response drills, table top exercises and training sessions in the Exxon Valdez impact area.

RCAC contracted with Tim Jones of Valdez in July to be its eyes and ears at spill drills and exercises. Jones, a writer and former journalist, observes all major and most small drills, interviews participants and evaluates the drill on the basis of stated objectives.

Spill drill monitoring is one of RCAC's core responsibilities, under both its contract with Alyeska and the Oil Pollution Act of 1990 (OPA 90). RCAC staff and members of the Oil Spill Prevention and Response Committee will continue to attend spill drills, but Jones provides

an on-going and consistent presence RCAC didn't have in the past.

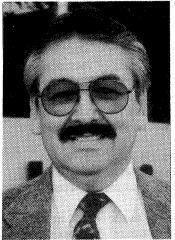
Alyeska's Ship Escort/Response Vessel System (SERVS) division usually conducts at least one exercise a week in Valdez. Larger drills occur less frequently, but still fairly often. Two major drills, using extensive equipment and personnel, are done every year, and a towing exercise must be done with each tanker that comes to the terminal.

"These drills are extremely important because all of the equipment gets used and tested. It's a plus if something breaks during a drill, because you're able to identify weaknesses and correct them before the real thing happens," Jones said.

The PWS Nearshore Oil Spill Response Plan - New and Notable

by Gary Bader, Citizen Group Liaison Manager Alyeska Pipeline Service Company

At the Nearshore Response Workshop in



Gary Bade

try, government and citizen representatives agreed that further development of the existing nearshore response plan should occur. On May 29, 1992, the PWS Nearshore Oil Spill Response Plan (NRP) was submitted to the Alaska Department of Environmental

June 1991, indus-

Conservation (ADEC).

The NRP is designed to work in conjunction with the PWS Tanker Spill Prevention and Response Plan (Tanker Plan). The purpose of the NRP is to respond to oil that has either escaped or has the potential of escaping initial containment and recovery activities.

Both the Tanker Plan and the NRP are the

result of a cooperative effort involving working group participation. The industry group responsible for writing the plan for incorporation into the response plans of their owned and chartered vessels were BP Oil Shipping Company, U.S.A., ARCO Marine, Inc., Exxon Shipping Company and Chevron USA.

State agency members of the working group were ADEC, the Department of Natural Resources and the Department of Fish and Game. Federal participants were the Coast Guard, the National Oceanic and Atmospheric Administration and OSHA.

The citizen representatives submitted some 162 suggestions, 75 percent of which were incorporated in whole or in part. All participants deserve credit for making the strong commitment it takes to work through the process.

The NRP is not only notable for the collaborative process in which it was developed but also unprecedented in its focus and content. It is the first 'stand-alone' plan of its kind in existence.

There is a data base listing of fishing boats and other resources as well as a geographical resource data base. The NRP describes notification procedures, management structure, resources, response techniques, and logistics, as well. Additional equipment will also be purchased as a result of the plan.

The RCAC is not in agreement with some aspects of the NRP, including the number and size of vessels, the location of equipment, the geographic area of coverage and on-water/onvessel storage capacity for recovered oily liquids. Alyeska will continue to address these areas in the coming months.

Exercises and drills are being planned to practice implementation of the NRP. Until these take place, what we have might be described as an operating manual for a vehicle that has not yet been fully engineered or built. Consequently, the NRP, like other contingency plans, is a living document that will be updated as necessary.

In this and other projects, Alyeska will continue actively to support a collective effort to work towards consensus, listening and responding as best we can to comments of concerned citizens of the region.

The Observer offers this opportunity for others to comment on issues related to the environment and marine oil transportation. The views expressed are their own and do not necessarily reflect the opinion of RCAC. We welcome rebuttals and will attempt to publish them in future issues of The Observer.

SERVS' first dispersant drop drill goes well

Alyeska's first practice at dropping "dispersant" on an oil spill went off with hardly a hitch, according to RCAC's drill observer Tim Jones. Jones did have some suggestions for changes in future drills, but overall, he said, the exercise went very well.

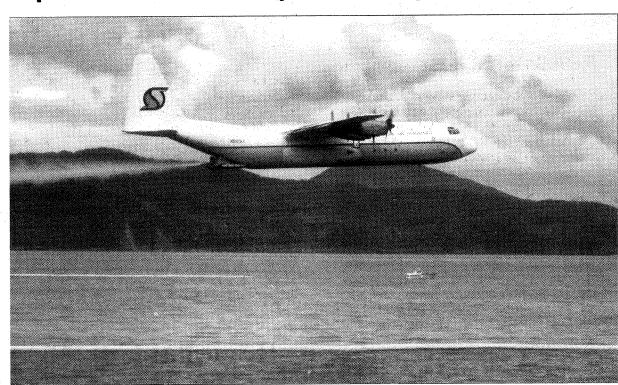
Nine passes were made and the 'dispersant' – 2,000 gallons of water tinted with rhodamine dye to simulate dispersant – hit the target each time.

"The machinery functioned properly and it all went according to their plan," he said.

The drill did not address the factors considered when decisions are made about whether to use dispersant. Rather, the exercise started with the assumption that the decision to use dispersant had already been made.

The test of the Airborne Dispersant Delivery System – called an ADDS pack – was conducted July 30. Alyeska chartered a Southern Air Transport C-130 plane to spray a non-toxic fluid - a substitute for the dispersant - on a specific target area for a half hour period during the exercise. The dispersant exercise took place in an area in Prince William Sound preapproved by the Department of Environmental Conservation for dispersant spraying.

Alyeska's objectives for the dispersant deployment exercise were to test a new mobilization plan and procedures; practice installation



The Hercules aircraft pulls up from its dispersant run between two deflection booms used as markers. The boom is held in place by the fishing vessel Copper Drifer in Prince William Sound. Photo courtesy Alyeska Pipeline Service Company

and flight operations; and develop and practice command and control procedures during a dispersant application operation. Five aircraft and seven vessels, including fishing boats, participated in the exercise along with the C-130.

Industry groups back-pedal on vessel c-plan agreement

Oil industry representatives made a last-minute attempt to weaken vessel response plan requirements, even though they had agreed to the requirements six months ago. The oil industry representatives, led by the American Petroleum Institute (API), lobbied the U.S. Coast Guard to water-down calculations used to determine how much response equipment must be planned for.

RCAC and the Natural Resources Defense Council challenged the industry move and charged the industry group with reneging on an agreement and violating the protocols of a negotiated rulemaking process that all had

agreed to last January.

The last-minute flurry of activity on vessel response plans took place during the final session of the Oil Spill Response Plan Negotiated Rulemaking Committee, a 26-member group of industry, government and public interest representatives, including RCAC. The Coast Guard formed the committee to help develop the proposed rule on vessel response plans. The members of the so-called "Reg Neg" Committee had agreed at the outset to refrain from making negative comments or working against elements of the rule on which the committee reached consensus.

The industry group lobbied the Coast Guard to weaken requirements regarding increases in response contract capacity, emulsification as a factor in determining response equipment needs, and contracts for shoreline clean-up. RCAC and the Natural Resources Defense Council argued that all points had been agreed to by the Reg Neg Committee, including the industry representatives.

RCAC: What it is

The Regional Citizens' Advisory Council (RCAC) of Prince William Sound (there is also an RCAC for Cook Inlet (CIRCAC)), is an independent, non-profit organization formed in the aftermath of the Exxon Valdez disaster to ensure the safe operation of the Trans-Alaska Pipeline Terminal and the crude oil tankers served by the terminal, so that the environmental impacts associated with the terminal and tanker fleet are minimized.

The RCAC has 18 member organizations, including municipalities, commercial fishing groups, Alaska Native interests, and environmental and business organizations.

RCAC is certified under the federal Oil Pollution Act of 1990 as the citizen advisory organization for Prince William Sound, and operates under a contract with Alyeska. The contract, which is in effect as long as oil flows through the pipeline, guarantees RCAC's independence, provides annual funding at \$2 million, and guarantees RCAC equal access to the terminal as that enjoyed by state and federal regulatory agencies.

RCAC Board Member Ann Rothe, who participated in the final committee meeting in Washington, D.C. in mid August, said it's still not clear whether the industry representatives succeeded in their effort to weaken the regulations

The regulations are to implement provisions in the Oil Pollution Act of 1990 (OPA 90) that set new more stringent standards for oil spill prevention and response planning for vessels carrying crude oil and other petroleum products. The comment period closed Aug. 3. The proposed regulations spell out additional requirements for certain vessels operating in Prince William Sound. The regulations detail what must be included in vessel response plans. The requirements vary, depending on where the vessel operates, type of cargo carried, port of call, and environmental considerations, such as weather

The cost of complying with the proposed regulations was predictably a sore point with those who must comply with the regulations. At a congressional subcommittee hearing in Washington, D.C., July 28, industry representatives bombarded the subcommittee with complaints that, among other things, the regulations are impractical, unrealistic and would be exorbitantly expensive.

In its formal comments on the proposed regulations, RCAC argued that the requirements are not strong enough and poked holes in the cost-benefit analysis conducted for the Coast Guard. The cost-benefit analysis, called a "regulatory impact analysis," analyzes the

impact of draft regulations on those who will have to follow them.

Two regulatory impact analyses (RIAs) were done for the draft regulations. One addresses nationwide requirements for vessels carrying oil in U.S. waters. The other addresses specifics requirements for vessels operating in Prince William Sound.

RCAC's comments faulted the analyses for greatly overestimating the costs of compliance and underestimating the benefits. The RCAC pointed to major errors in the RIAs:

- wrong assumptions and methods are used, resulting in inflated costs and under-counted benefits
- cost estimates are too high: they fail to discount for likely duplication of activities and double-counting of costs, and include costs already incurred
- benefit estimates are too low, and in some cases, important benefits are left out altogether

"Based on our review of the costs and benefits analyzed in these two RIAs, it appears that a recalculation of the benefit-cost rations using proper assumptions and improved data will yield dramatically improved cost-benefit ratios," the RCAC comments said. "As a consequence, the Coast Guard should not rely on on the preliminary regulatory impact analyses to justify reduced requirements for vessel response plans."

The U.S. Coast Guard received 335 responses on the draft regulations; more than half from individuals and groups supporting strong regulations.

PWS "users" to be surveyed

Several hundred masters, mates and pilots will be asked their opinions on issues ranging from weather forecasting to speed limits and aids to navigation in a survey being prepared by RCAC's Port Operations and Vessel Traffic Systems (POVTS) Committee..

The navigation safety survey seeks to hear from the actual users - the people who transit Prince William Sound - about various systems and procedures intended to improve navigational safety. The POVTS Committee will use what it learns to advise Alyeska Pipeline Service Co. Information gleaned from the survey also will be shared with the U.S. Coast Guard, the National Weather Service, the National Oceanic and Atmospheric Administration and tanker owners.

The survey will probably be mailed out in October. The committee expects a high return rate. "People are expected to talk about these issues because they deal with them every day," POVTS Program Coordinator Scott Thompson said. "They have experience that needs to be tapped," he said.

The survey includes questions about speed limits, weather forecasting, ice reporting, the new vessel traffic system, racons, limits on working hours, and ship handling simulators. The survey encourages respondents to write additional comments. Respondents will have up to two months to return the survey. All responses and comments will be held in strict confidence.

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