

THE OBSERVER

January 2014 Volume 24, No.1

A publication of the Prince William Sound Regional Citizens' Advisory Council

25 YEARS AFTER EXXON VALDEZ



How has oil transportation changed in Prince William Sound?

See page 6 and 7

Real storm plays role in October spill drill

By ROY ROBERTSON
Council Project Manager

Polar Tankers, Inc. conducted the annual Prince William Sound shipper's drill for 2013 on October 7-9. Polar Tankers is the shipping company owned by ConocoPhillips.

This large drill involved more than 700 participants and included command posts in both Valdez and Anchorage as well as field activities in Prince William Sound.

See page 5, **OCTOBER DRILL**

New guidelines for using dispersants proposed

By STEVE ROTHCHILD
Council Administrative Deputy Director

The Alaska Regional Response Team has proposed new guidelines for how chemical dispersants are approved for use in Alaska's waters.

This team is an advisory board of resource trustee agencies that provides federal, state, and local governmental agencies with the means to

See page 11, **DISPERSANTS**

Council study reviews escort tug technology

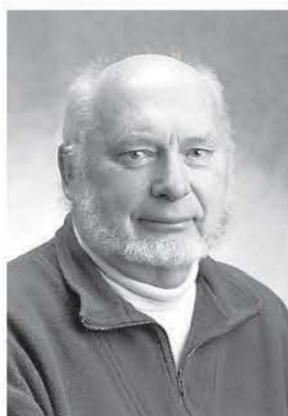
By ALAN SORUM
Council Project Manager

A recent council study found that the escort tugs being used in Prince William Sound, though exceedingly capable, no longer represent the best technology being used for these types of applications and services worldwide.

Loaded oil tankers transiting the waters of Prince William Sound are required by federal law and their oil spill contingency plans to be

See page 10, **TUG TECHNOLOGY**

Sound loses tireless environmental defender



Prince William Sound lost a passionate and dedicated defender on September 21, when Stan Stephens, Valdez resident and council board member since the organization started up in 1990, passed away. Stephens was 78.

See page 4, **STEPHENS**

"The thing I think is so important is that we – industry and people concerned with the environment – work together. I want to see us develop a program the rest of the world can look up to. We support the oil industry but we also need to protect other interests. We want to make sure there's a balance."

- Stan Stephens, on his election to president of the council in July 1993 Observer.

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Volunteer Spotlight**Oil spills have been a major influence on new volunteer**

Sarah Allen

Sarah Allen, newest member of the council's Scientific Advisory Committee, has been fascinated by science and the natural world from a young age.

Allan was born and raised in the tiny Southeast Alaska community of Thorne Bay on Prince of Wales Island.

"I was always interested in science from a really young age, my folks were both high school science teachers, so I was exposed to a lot of science," she says. "There's a mentality that lends itself to science, that wanting to know the why and how of things."

"Understanding the why and how actually makes things that much more interesting and fascinating."

The influence of oil spills

Because the small coastal community was so close to the natural environment, 1989's oil spill in Prince William Sound was a major topic of conversation in the town. The images of the oiled wildlife were quite memorable and scary from a child's perspective. She says these memories were part of what influenced her choice of career later on.

Allan's undergraduate degree and Master's degree from the Universidad Catolica del Norte in Chile were both in marine biology. Though she focused on the marine environment in her early studies, her interests turned to environmental chemistry and toxicology for her doctorate at Oregon State University.

In 2010, she was in Oregon, close to finishing her PhD, when another major oil spill occurred.

"As I was getting close to finishing my PhD, the Deepwater Horizon happened," Allan said. "I had been doing my work on PAHs, or polycyclic aromatic hydrocarbons, which are one of the main toxic chemical classes that's in oil."

The university group she was working with thought her sampling methods and expertise would be helpful.

"So we went down to the Gulf of Mexico a week after the wellhead exploded and collected data from sites along the shorelines, all the way from Louisiana to Florida," Allan said, "That data set that we collected, though relatively limited in scope, is actually one of the very few baseline data sets that we have for the water chemistry piece in the nearshore area."

Allan now works for the National Oceanic and Atmospheric Administration, as the

regional coordinator for the Assessment and Restoration Division, and as an environmental scientist for the Emergency Response Division.

"Most of my work is focused on the Arctic," Allan says. "I'm trying to get the pieces in place, so that if there were a spill in the Arctic, we would have a plan in place on how to assess injuries to natural resources."

"Right now, I'm developing guidelines and protocols for going into the field and collecting samples."

Allan has been looking at guidelines from around the world and trying to find ways to adapt those protocols for the Arctic. She evaluates possible options for restoration. The harsh Arctic environment poses many challenges.

"We're working with really complicated logistics," she says. "It's hard to get into the field, it's hard to get samples out of the field, temperatures might be an issue, holding times might be an issue."

Allan says that the Gulf of Mexico spill set a whole new precedent for how oil spills are dealt with in the U.S.

"A lot of the planning I'm doing for the Arctic is based on lessons learned from Deepwater Horizon, new technologies that might be applicable in the Arctic," she says.

"I'm thinking about what we can do to communicate better with the public about what we're doing, because there were obviously some communication gaps during Deepwater."

The value of science education

Along with her scientific work, Allan worked as a bilingual science educator in Chile and Oregon.

"I think it's really important to have people be scientifically literate," Allan says. "I don't think everybody needs to be a scientist, but having the ability to think critically and have a basic understanding of science is

really important."

Her background in science and education also helps her support environmental and social justice causes.

"I think that it is important to have female role models in science for student, for up and coming potential scientists."

Allan is fluent in Spanish from her time living in Chile.

"It's given me the opportunity to connect with the Latino communities in this country that I think are dramatically underrepresented, especially in those science and technology career fields."

Volunteering with the council's science committee

"Sarah's provided the committee with additional expertise in environmental chemistry and toxicology, especially in the area of hydrocarbons from crude oil" says Joe Banta, the council's project manager who works closely with the science committee, "That's important because the marine resources that residents in the council's region depend upon for their livelihood can be affected by crude oil, so this is a major area of research for the committee."

"It's so easy, working in government to get bogged down in all the non-science stuff that has to get done," Allan says. "So, getting to sit down with SAC and actually talk science is really fun for me, both personally and professionally."



Allan prepares to release a baby halibut she caught from her kayak in Prince William Sound. Photos courtesy of Sarah Allen.

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From the Executive Director

Value of regional stakeholder input process deserves to be preserved

Potential changes to the Regional Stakeholders Committee, a lesson learned during Exxon Valdez, on the horizon

It's time to publically speak out about the importance of the Regional Stakeholders Committee process and its value in oil spill response.

The Regional Stakeholders Committee concept is a structured way to involve and engage those who may be affected in a spill response. The concept is a best practice for Alaska and for the entire United States.

The practice of engaging with stakeholders was one of the fundamental lessons learned during the Exxon Valdez oil spill. It is quite simply good public response policy.

That could change if revisions proposed to the state wide oil spill response plan are adopted. Those proposed changes abolish the current stakeholder committee structure and replace it with two newly named groups; one comprised of tribal and local governments and other affected stakeholders. The new process would mean marginally less access to, and significantly less information from, the federal response coordinators to both groups than is currently provided to the stakeholder committee.

Why would such changes be proposed?

According to the lead state and federal responders for the Kulluk grounding incident on Kodiak in January 2013, there were some significant frustrations with the committee process in that incident. National and international public and media interest in the incident was immediate and substantial. Senior state and federal responders have explained that this

intense interest meant this daily access to the response leaders was problematic. As a result, there has been a call to re-think what the value of a regional stakeholders committee is and perhaps how it is managed.

Before changing a process that has historically worked well for Alaskans, it is important to re-visit what the committee is and perhaps also what it is not.

The stakeholder committee is not part of the Unified Command, which is the group that collectively directs spill response activities and is comprised of the person or company responsible for the incident, together with the lead federal and state spill responders. The committee does not get a vote in deciding operational objectives or managing the incident. Under current policy, regional stakeholders are simply afforded daily access to the Unified Command to voice their concerns, offer advice, local expertise, assistance, and to periodically get updated on the key concerns and incident response objectives.

The committee was not designed to be a back-door route to the Unified Command for the media, for incident response vendors, or for national or international organizations who might be inclined to use a particular Alaska incident to advance their own agenda.

The committee meets a unique need and a long standing commitment from our state officials by connecting local stakeholder communities to the incident managers. As such, it needs to be managed and supported jointly by the federal, state, and local response coordinators. These people all have ties to the local region and can most appropriately determine which

stakeholder groups should be included in the committee for a given incident. They can manage and make any tough calls needed to exclude inappropriate participation.



Mark Swanson

Sometimes which entities need to be involved in the regional stakeholder's committee process is obvious. For example, under current state and regional response policy, the council is named as a participant for incidents involving tankers and the Alyeska oil terminal. Other times, committee participation is not so cut and dried.

Following the frustrations of the regional stakeholder's committee process in the Kulluk response, perhaps the management of that committee process simply needs to be refined and its purpose and participation better defined.

Another issue, closely related to these proposed changes is a mandate for state and federal responders to conduct outreach and consult with federally recognized tribes in a real and

Continued on page 6, **SWANSON**

From Alyeska Pipeline

Remembering Stan Stephens: Never an adversary, always an advocate

Alaska lost a true champion in September with the passing of Stan Stephens of Valdez, a man whose passion for protecting Prince William Sound translated to every aspect of his life, a man I was fortunate to know and call a friend. Stan and I shared a relationship dating back many years, long before I became president of Alyeska Pipeline Service Company in 2011. His passing has prompted reflection across the state about his legacy and character. I want to share my thoughts on the life he led, and the legacy of stewardship and integrity he leaves in his wake.

Stan was a practical man and a sailor through and through, a straight-talker and storyteller whose character was defined by strength, patience and practicality. I viewed Stan as an advocate -- never an adversary. Together, we believed positive and practical solutions could be reached. Our rapport dates back to my days as commander of the United States Coast Guard for Alaska, when Stan weighed in on environmental and safety issues. His prowess, acumen and knowledge reflected rich understanding of the unique ecosystem of Prince William Sound, and revealed his innate energy around protecting its waterways and shorelines.

Our paths also crossed with the formation of the council, an organization whose work is synonymous with Stan himself. He helped create

the group and remained devoted for decades, active until he retired from its board of directors in 2012.

Stan had a sweeping impact on our industry. He dedicated thousands of hours to the council. A Legislative citation issued in 1995 called him a shining example of how "citizens can constructively influence decisions that affect their lives and communities." Stan's passion, hard work, and commitment exemplified how a single person can have a profound impact. In his steady and even way, Stan campaigned for vapor recovery systems for tanker loading berths and championed air quality improvements. He advocated for redundant systems to improve safety on the Terminal, and was a staunch supporter of improvements to oil spill prevention and response readiness.

He shared his connection to the Sound with thousands of strangers, shuttling visitors to some of the Sound's most pristine, special places. He understood that Valdez's distinction as the terminus for the Trans-Alaska Pipeline System helped make the town successful, and demanded that a strong level of responsibility and care accompany that success. From our earliest to our final conversations -- talks that took place across the breakfast table at the Totem Inn in Valdez, on decks of boats, and at his hospital bedside --

Stan focused on protecting Prince William Sound. He believed in the compatibility of the missions of the council and Alyeska Pipeline Service Company, and in the importance of always continuing to improve the relationship between the two.



Tom Barrett

Stan kept a weather eye on the horizon. He mentored others, in particular a new generation of boat captains and citizen leaders. This exemplified his leadership -- a belief that a captain is only as good as his crew. In our final meeting, just days before he died, Stan expressed high confidence in Amanda Bauer, whom he

Continued on page 8, **ALYESKA**

STEPHENS: Dedicated to protection of Prince William Sound

Continued from page 1

Born and raised in Minnesota, Stephens was an Alaska resident since 1961. Arriving in April of that year, he first camped on vacant property, later purchasing the land and building his home in the North Pole area. Married in 1964 to Mary Helen, they raised their family of three daughters in North Pole.

Stephens was the owner and operator of Stan Stephens Glacier and Wildlife Cruises based in Valdez. The company, originally named North Star Marine Charters, began sport fishing charters in 1971 and over the years evolved into the sightseeing company it is today.

Stephens became involved with state tourism issues in 1978 and with safety of the shipping of oil in 1986. Stephens held offices and volunteered as a board and committee member for many tourism, conservation, and marine safety organizations over the years.

Stephens received many awards and citations for his tireless volunteer efforts promoting tourism and the sustainability of Alaska's natural and cultural resources. In May 1995, Stephens was presented with a glowing citation by the Alaska

State Legislature for his contributions to Alaska as the president of the council.

"Mr. Stephens has devoted thousands of hours and unbounded energy to RCAC's mission. He has been an example for all Alaskans of how citizens can constructively influence decisions that affect their lives and communities," the citation says.

Additional awards included the Legacy Award from the States/British Columbia Oil Spill Task Force for Oil Spill Prevention in recognition of his personal commitment to improving the maritime safety in Prince William Sound; the Alaska Conservation Foundation's Celia Hunter award for outstanding volunteer contributions; the Alaska Visitors Association's Life Time Achievement Award; the Alaska Land Managers Forum Outstanding Long-Term Programs Award for the environmentally conservative operations of Growler Island Wilderness Camp; and the Coastal Living Magazine Leadership Award recognizing his work in protecting Prince William Sound.

Stephens led the council's effort to convince regulators and the oil industry that a system to control tanker loading vapors was needed at the Valdez Marine Terminal, which led to the completion and start-up of such a system in 1998. He advocated for the use of advanced tractor tugs to increase the safety of tanker traffic in Prince William Sound, and this effort was rewarded in 1999 with the advent of two new tractor tugs to



Stan Stephens

assist and protect tankers carrying North Slope crude. Prince William Sound now has a total of five tractor tugs facilitating the safe oil transportation throughout the Sound.

"Stan created and left for all of us a tremendous and very unique gift, the foundation for our future to build upon. We all must continue to work together to ensure that what we build on that foundation stands the same test of time his legacy surely will."

-Amanda Bauer, President of the council's Board of Directors

"Stan was a tireless advocate for Prince William Sound. He was instrumental in building trust and partnerships between citizens, the oil industry and regulators that helped lead us to many of the protections that we have today. He wore his heart on his sleeve and was not afraid to speak up for what he felt was right. People may not have always agreed with him, but he was always respected for his passion and commitment. Prince William Sound lost a hero with Stan's passing and he will be greatly missed."

-Donna Schantz, Director of Programs for the council



Left: The Valdez tour dock was dedicated to Stan Stephens during a memorial service on October 6. Photo by Nelli Vanderburg.

"He always was a gentleman and he spoke calmly, yet truthfully. He didn't pull any punches. He spoke the truth, and he was honest. He kept his word, too. When you put those things together, that's the combination of a great leader."

-Joe Banta, Council Project Manager

Right: Several SERVS' tanker escort tugs, owned by Crowley Maritime, put on a water display during the memorial. The tugs are just one example of the oil spill prevention measures that Stephens promoted. Photo by Nelli Vanderburg.



From Stan Stephens' journal on April 18, 1989:

"Today is absolute confusion. They found a lot of oil north of Perry Island in Wells Passage. Equipment is starting to break down. So there are less and less skimmers working. The oil is getting so spread out they cannot handle it. Here is a whole month gone by without a real understanding of those in charge how big Prince William Sound really is. I'm dedicating the rest of my life and spare time to the protection of the environment."

Workshop helps citizens understand incident command system

This fall, the council sponsored a series of community workshops to teach citizens how an oil spill response is organized and managed.

The workshops in Homer, Whittier and Seward examined the power and decision making structure used during an emergency, and the role of federal, state, and local responders, and the role of the communities in the system. The goal was to help communities understand how to be more effective in representing themselves during an incident and understand more about how a spill would be handled.

Topics covered included:

- Basics of the Incident Command System, a standardized incident management system that is used to respond to all types of hazards and emergencies
- Laws that affect oil spill response
- The prevention and response system in place for the Prince William Sound shipping trade
- How community interactions with Unified Command occur

Participants included representatives from the oil and tourism industries, government agencies, elected officials, and other concerned citizens. Steve Russell, who is the State representative for South Central vicinity incidents from the Alaska Department of Environmental Conservation was on hand at each of the workshops to help answer questions.



Tim Robertson, council contractor, leads a discussion during the Seward workshop on how contingency plans relate to the Incident Command System. Photo by Amanda Johnson.

OCTOBER DRILL: Weather can have an effect on oil spill response

Continued from page 1

The scenario had a Polar Tankers ship colliding with two barges being towed in tandem close to Montague Point on Montague Island in Prince William Sound.

New drill features

This drill included some unique features not normally included in the annual exercises in Prince William Sound:

- The location of the simulated oil spill and scenario was not released to the drill participants until the start of the drill. In most drills, the scenario is known or developed by members of the response team.
- This drill scenario used actual weather and currents, and included activation of two open water barge taskforces and two sensitive area protection taskforces. Many drills used prescribed weather to provide certainty of where the oil spill will go.
- The drill ran continuously, around the clock, for 48 hours.
- The Valdez command post transitioned to a command post in Anchorage.

The use of actual weather played a big role in this drill. While tugs, barges, and fishing vessels were sent to deploy oil spill response equipment in the area of the simulated spill, no equipment could be deployed due primarily to weather conditions at the spill site during these few days. The weather also precluded the use of simulated aerial dispersant applications.

This exercise confirmed that there are conditions when oil spill response activities cannot be performed as planned at the spill site. In fact, no simulated oil was recovered during this drill.

This exercise included not only a transition of command from Alyeska to Polar Tankers, but

also a transition of command posts from Valdez to Anchorage. This transition occurred earlier than it could realistically be implemented during an actual spill response. Preplanning allowed the Anchorage command post to be set up prior to the start of the spill response. However, it is likely that at some point during a major spill response in Prince William Sound or the Gulf of Alaska a similar transition of command post would occur. The weather also played a role in the transition of the command post by forcing the response team members to go by road to Anchorage instead of flying.

Lessons learned

This drill provided many lessons for those involved.

First, the weather will dictate spill response actions that can be used. If weather does not permit response activities in the immediate

area of the spill, response organizations need to focus on spill response measures that can be accomplished in other areas.

Because the drill continued through the night, industry companies, agencies and other organizations involved with this exercise were pushed to the limit regarding numbers of personnel available to perform their roles. This is realistic as everyone involved with a spill response will be scrambling to cover all of the bases.

Another lesson identified during this exercise is that while the transition of command posts will likely occur, this transition needs to be well-thought-out and should not occur until the separate command posts are functioning concurrently before the formal transition occurs from one to the other.

For more information about this drill, contact Roy Robertson: robertson@pwsrca.org.



Response personnel gather to hear an update on the drill's progress. Photo by Amanda Johnson.

We want your feedback! Questions or comments about anything in The Observer? Another topic that you want to hear about? Send your comments to newsletter@pwsrca.org

THE OBSERVER is published in January, May, July and September by the Prince William Sound Regional Citizens' Advisory Council.

How has oil spill prevention and response improved?

Much has changed in Prince William Sound over the 25 years since the Exxon Valdez struck Bligh Reef on March 24, 1989. An estimated 11 million gallons poured into Prince William Sound, resulting in the worst tanker oil spill in U.S. history, and affecting more than 1300 miles of Alaskan coastline.

Although the immediate cause of the spill was a navigational error on the part of the tanker's captain and crew, complacency among the oil industry, regula-

tory agencies, and the public was found to play a part in the disaster.

Few prevention measures were in place and cleanup resources were inadequate.

Since 1989, regulatory agencies, the industry and citizens have been working together to learn lessons on how we can prevent oil spills and be better prepared to clean up if another spill should occur.

What has improved in oil spill prevention?

Double hulls

All tankers transporting oil through Prince William Sound are now double-hulled. Double hulls, basically two steel skins separated by several feet of space, are an effective design feature which can reduce or eliminate spills that result from groundings or collisions.

Risks from human error

All tanker captains, and any crew member suspected of consuming alcohol, are now subject to alcohol tests before sailing. Crews now receive more training and work hours are limited to reduce accidents caused by fatigue.

In addition, the two escort tugs mean extra trained crew members are watching and can notify the tanker crew if they are off course.

Monitoring marine traffic

The Coast Guard now monitors the speed and heading of all tankers and other vessels in Prince William Sound through improved radar and the Automatic Identification System. Vessels equipped with this system send real-time information about their locations and movements to the Coast Guard's Vessel Traffic System offices in Valdez, as well as council offices.

Ice detection

The Exxon Valdez left the tanker lanes because of reports of ice drifting into the tanker lanes from nearby Columbia Glacier. One of many improvements to help avoid such problems includes the council-led collaborative effort between the Coast Guard, the

oil industry, regulatory agencies, the council, and several other organizations, led to the installation of an ice-detecting radar system on Bligh Island, near Bligh Reef. The Coast Guard and Alyeska's Ship Escort/Response Vessel System, known as SERVS, receive information from the strategically located reef-island radar at their Valdez offices and can warn tanker captains when ice may pose a threat.



Tanker escorts

Powerful tugs escort all loaded tankers from the terminal at Valdez, through Prince William Sound and Hinchinbrook Entrance, and out into the Gulf of Alaska. These tugs are designed to keep a disabled tanker off the rocks or begin cleanup if there is a spill.

These escorts were originally only mandated for single hull tankers carrying oil. The Coast Guard Authorization Act of 2010, signed into law by President Obama, guaranteed this escort system will now continue for all double hulled tankers.

Photo by Alan Sorum.

Improvements at the terminal

Air quality in Valdez

For the first twenty years of operations at the terminal, thousands of tons of toxic vapors were emitted annually during the tanker loading process. These harmful vapors were vented into the atmosphere, threatening the health of the terminal's workers and Valdez residents.

In 1998, Alyeska installed vapor controls at two loading berths, which eliminated nearly all of the pollution from the tanker loading operations.

The Ballast Water Treatment Facility, the facility designed to clean oily residue from tanker ballast water before it is released back into the environment, has also seen improvements. A system has been installed to reduce the vapors released into the environment from the facility.



What has improved in response?

While prevention measures can help to avoid environmental damage, the best system cannot prevent all spills. The best system in Prince William Sound has since 1989. Alyeska's SERVS is the best oil spill response force.

Contingency plans

Contingency plans, extensive documents that contain details on the prevention and response to oil spills, are required by state and federal requirements in these plans have since 1989, and must demonstrate that the spill can be cleaned up and more spill response resources are immediately available.

Some changes in the contingency plans since 1989 include:

- Local fishing vessels are now included in the response plans. The contingency plans provide training for the crews annually.
- More emphasis on shore-based response and wildlife protection.
- Special strategies have been developed to protect specific areas that have been identified as a sensitive area of concern, such as salmon streams or herring spawning grounds.



A fishing vessel practices using oil spill response equipment last year. The fishermen bring the rafts to the vessel in response. Photo by Jeremy Robida.

Prince William Sound changed since 1989?

in oil spill response?

es are the best way to from oil spills, even the risks. Oil spill response en many improvements s now considered one of s in the world.

ensive documents which ting and cleanup of and federal law. The ave expanded since hat larger spills can response equipment

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Citizen oversight

One of the most innovative changes was the establishment of permanent, industry-funded, independent citizen oversight. Citizens are now guaranteed a voice in safety planning and in oversight of the oil transportation industries in Prince William Sound and Cook Inlet. These councils maintain the constant vigilance needed to prevent a return of the complacency that allowed the Exxon Valdez spill to happen.



The council's board and committee members volunteer many hours using their expertise to help maintain safe oil transportation in Prince William Sound. Photo by Amanda Johnson.

Spill response equipment

In 1989, there were only 13 oil-skimming systems in Alyeska's response inventory; today, 108 units are available for oil spill response in the Sound.

Only 5 miles of oil spill boom were available in 1989; today, 49 miles of various types of boom are available.

Alyeska had only about 220,000 gallons of storage capacity for recovered oil and oily water immediately after the Exxon Valdez spill; today, on-water storage capacity is over 900,000 barrels of oil (almost 38 million gallons).



spill boom and skimmers during fishing vessel training. Valuable knowledge about local waters during a spill

Spill drills

Before 1989, few oil spill drills were conducted in Prince William Sound. Today, two major exercises per year, along with several smaller drills, take place. The drills provide opportunities for response personnel to work with equipment and practice procedures. At right, a Prince William Sound escort tug practices towing a tanker during a 2012 exercise. Photo by Anna Carey.



Concerns remain

Although there have been many improvements, there are still many areas of concern, meriting the continued attention and sustained efforts from the council. A few of these include:

- Aging infrastructure and reduced oil throughput bring new risks that must be understood and safely managed.
- Agencies and industry are increasingly relying on dispersants as a preferred oil spill response option. This reliance must be tempered with scientific knowledge and solid guidelines to ensure the environmental tradeoffs of such choices are well founded.
- Though prevention strategies and regulations are on the horizon, the potential for harmful invasive species to arrive in Prince William Sound in oil tanker ballast waters remains and response and detection options are needed.
- New federal and international ship air pollution and fuel quality regulations are now coming into force. These regulations will affect the oil tankers in Prince William Sound. These are expected to provide a dramatic reduction in sulphur dioxide emissions and overall coastal air pollution as the improvements are phased in.



Traps, such as this one, are used to monitor for invasive European green crabs in Prince William Sound. This crab, known to travel in the ballast water of ships at sea, is an efficient and voracious predator that has invaded the West Coast from San Francisco to Vancouver Island. Photo by Janice Banta.

Firefighting symposium held in Seward; includes live fire training for first time

The 2013 Marine Firefighting Symposium was held October 8-10 in Seward. Through partnerships with the Seward Fire Department and AVTEC – Alaska’s Institute of Technology, this year the symposium included live fire training for the first time.

Participants came from all parts of Alaska. The 39 participants and eight facilitators represented a mix of communities and industry. Attendance numbers were lower than previous symposiums due to several factors, including the federal government shutdown.

On the first day, participants learned basics of marine firefighting and vessel terminology. The State of Alaska has been developing a “marine firefighting for land-based firefighters” certification standard. This year, for the first time, attendees could seek the awareness level certification under that program. Background information required for passing the written test was presented during Monday’s classroom session.

The morning of the second day, participants were broken into groups which rotated through training stations at AVTEC’s Marine Fire Training Facility. Training at the stations included: mounting a ladder to a ship’s deck, conducting

a search and rescue, transporting a patient off a vessel, and advancing a charged fire hose from shore onto a vessel.

During lunch, a representative of Honeywell discussed portable gas detectors, which are used to sense carbon monoxide, oxygen, flammable vapors and hydrogen sulfide. Students were able to use these detectors later that day.

In the afternoon, students rotated between live fire training stations, which included: the AVTEC ship fire simulator, fire extinguisher training with a propane burnpit, a diesel fire, and burning timber.

On the third day, training stations were set up at Seward’s small boat harbor. Training stations included two Kenai Fjords cruise ships, the Cook Inlet tug

Junior, the vessel Bering, and a Resolve Marine pump. The Seward Fire Department also provided two engines and their fireboat for the exercises.

In addition to Seward’s fire department and AVTEC, other organizations and businesses lent support to the program: Seward

Chamber of Commerce, Scott and Eagle Safety, Kenai Fjords Tours, Foss, Crowley Maritime, Cook Inlet Tug & Barge, Resolve Marine and the International Fire Service Training Association. The Alaska Department of Homeland Security helped fund travel for 11 firefighters from across the state.



Above: A firefighter practices on live fire in a controlled situation during the 2013 Marine Firefighting Symposium. Photo by Alan Sorum.



Above: Live, controlled fire at the 2013 Marine Firefighting Symposium. Photo by Alan Sorum.

Valdez resident takes over committee support for council

The council recently hired Valdez resident Nelli Vanderburg to fill the vacant project manager assistant position. Vanderburg began working for the council in October 2013.

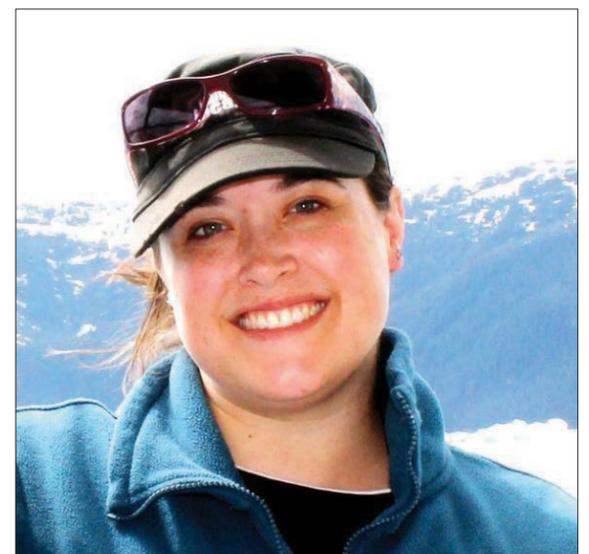
Vanderburg was born and raised in Valdez. She has a degree in English from Southern Oregon University and a degree in web design from Kaplan University. She moved to the Lower 48, but wound up coming back, because she says she missed the scenery and the waters of Prince William Sound.

She worked previously as a library assistant at the Valdez Consortium Library and as a board operator and all-around gopher at Valdez’s KVAK radio.

She now provides support to the council’s project managers and the Terminal Operations and Environmental Monitor-

ing, Port Operations and Vessel Traffic System, Legislative Affairs, Board Governance and Long Range Planning committee volunteers and their projects.

Vanderburg took over the position left vacant by Anna Carey, who joined the Alaska Department of Environmental Conservation’s staff in September.



Nelli Vanderburg

ALYESKA: Remembering Stan Stephens

Continued from page 2

mentored closely and who is now president of the council’s board of directors, carrying on his legacy.

What I will remember most about our last visit in his office at the Valdez Boat Harbor, the port spread out behind it, the mountains

rising up, is that we were reflective together, like sailors standing at the rail on a calm ocean.

Thank you for everything, Stan. Alaska will miss you.

Tom Barrett is president of Alyeska Pipeline Service Company. This column also appeared in the Alaska Dispatch in September.

Council tours tanker Overseas Martinez at the Valdez Marine Terminal

By **ALAN SORUM**

Council Project Manager

On October 27, Board President Amanda Bauer, Executive Director Mark Swanson, Director of Programs Donna Schantz and Project Manager Alan Sorum were given the opportunity to tour the tanker Overseas Martinez at the Valdez Marine Terminal. Arrangements for the visit were made by Marine Superintendent Patrick Callahan of Overseas Shipping Group, commonly known as OSG, who traveled from Tampa, Florida to Nikiski and rode the tanker over to Valdez to conduct the tour. Mr. Callahan provided the group with a unique opportunity to become better acquainted with the OSG fleet.

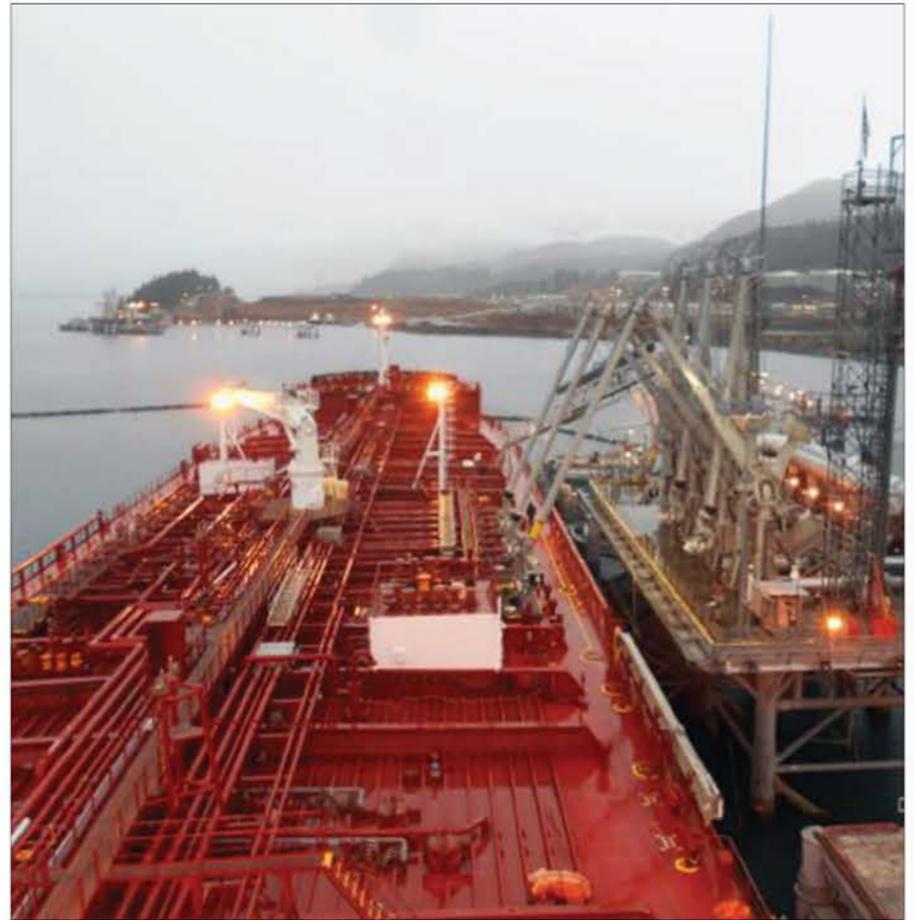
The Overseas Martinez is a 600 foot long tanker operated for Tesoro by OSG. Built in 2010, the tanker can carry 338,447 barrels of cargo. It calls at Valdez, Nikiski and ports along the West Coast. This tanker was built at the Aker Shipyard in Philadelphia as a crude oil and clean product tanker. The vessel received extensive retrofits to provide extra insulation and heating for the rigors of Alaska service.

A number of interesting things were noted about the Overseas Martinez. The vessel is powered by a large, two-cycle diesel engine. Two-cycle engines produce power at every revolution of the crank-

shaft. This ship uses direct drive to turn its propeller shaft and prop. The engine needs to be physically stopped and restarted in the opposite direction to reverse course. This means advanced planning becomes important during maneuvering.

Interestingly, all the rainwater that collects on the deck of the Overseas Martinez is collected and treated and prior to being discarded to prevent potential sheens. During loading operations, the vessel employs a hull stress calculator to ensure its 46,000 tons of cargo is loaded in a sequence that does not damage the tanker. Because of its concerns with potentially illegal overboard discharges, the vessel is equipped with a sentinel system that reports any discharge of water or other substance through the hull to the water to OSG's management team in Tampa, Florida.

This is the first visit the council has had on a tanker moored at the Valdez Marine Terminal in a long time. In the recent past, Polar Tankers has graciously allowed firefighter tours during the Marine Firefighting Symposium at the Valdez Container Terminal. We thank Captain George Kugler and Chief Engineer Mr. Paul Russell for the informative tour and hospitality. The visit would not have been possible without the help of Marine Superintendent Patrick Callahan.



Overseas Martinez moored at the terminal. Photo by Alan Sorum.



Council representatives learn about the tanker. Photo by Alan Sorum.

Council Board Meetings

The citizens' council board of directors meets three times annually. The January meeting is held in Anchorage, the May meeting in Valdez, and the September meeting is rotated among the other communities affected by the Exxon Valdez oil spill.

Here is the tentative board meeting schedule for the coming year:

- May 1-2, 2014: Valdez
- September 18 and 19, 2014: Homer
- January 22 and 23, 2015: Anchorage

Board meetings are open to the public, and an opportunity for public comments is provided at the beginning of each meeting.

Agendas and other meeting materials are available on our website:

www.pwsrcac.org

You may contact either council office for a printed copy: Anchorage, 907-277-7222, or Valdez, 907-834-5000.



Members of the council's board and committees at the May 2012 meeting at the Valdez Civic Center. Photo by Amanda Johnson.

TUG TECHNOLOGY: Report finds Sound tugs' technology is no longer best available

Continued from page 1

accompanied by two escort tugboats. Currently, escort tugs can serve in a primary or secondary role, depending on performance requirements established in the tanker contingency plans. The goal of the escort tug system is to prevent an oil tanker that suffers a mechanical or propulsion issue from running aground.

These tugboats are part of Alyeska's Ship Escort/Response Vessel System, or SERVS. In the acronym-laden world of oil shipping and government regulation, SERVS is known as an Oil Spill Response Organization. This is the organization established in the tanker oil spill contingency plan as being responsible for dealing with spill incidents. Tankers under escort by SERVS operate within an approved framework known as the Vessel Escort and Response Plan or VERP. The VERP and the contingency plans detail when and where an escort is conducted. It outlines the role of the primary and secondary tug involved in any escort directed by the organization.

The council has long been concerned with the stated roles of "primary" and "secondary" tugs used by SERVS for escorts. The primary tug is tethered to the laden tanker in Port Valdez, Narrows and Arm and then closely escorts the tanker throughout the rest of its journey out of Prince William Sound. The secondary tug stays within close proximity of the tanker except in central Prince William Sound when a tug may be stationed underway but not necessarily in close continuous proximity to the tanker. While tanker contingency plans make a distinction in the performance of primary and secondary escort tugs, SERVS routinely swaps its more capable tugboats between these two roles.

The most capable tugboats used by SERVS for tanker escorts are found in two classes of vessel, the "Enhanced Tractor Tugs", or ETT, and "Prevention and Response Tugs", or PRT. ETTs are propelled by a "Voith Schneider" drive. This type of drive uses a vertical series of blades to direct water in any direction, which makes these tugs very maneuverable. The PRTs use "azimuthing stern drive" propulsion. The propeller in this type of drive is encased in a housing that can rotate in a complete circle, allowing more flexibility in turning than seen with conventional tugs.

Beginning in 2012, the council hired Robert Allan Limited of Vancouver, Canada to compare performance of a worldwide fleet of similar escort-rated tugboats, over 35 meters in length, to the escort

tugs used in Prince William Sound. Robert Allan is a highly regarded naval architect known for his innovative work with escort tugboats.

The goal of this study was to determine if the tugs used by SERVS are using the best technology currently available in escort tug design today. Another question focused on the SERVS practice of using the ETT and PRT tugs interchangeably as primary or secondary escort tugs.

The council has taken the stance over the years that the ETT tugs are the only true escort-capable tugs in the SERVS fleet and should be the only vessels used in the primary escort role.

The study found a number of significant gaps in what is considered best available technology for escort tugs today and the SERVS fleet. It noted that neither the ETT nor PRT class of tugboats carries a formal escort notation or rating by a "Classification Society." Classification societies are non-governmental organizations that establish performance standards and inspection requirements for vessels used in commercial service. The U.S. Coast Guard often defers to class societies to perform vessel inspections and ensure compliance with regulations.

Robert Allan Ltd. pointed out that neither the ETT or PRT tugs are equipped with render-recover tow winches that satisfy class society requirements for an escort notation. A render-recover winch is considered a much safer way to tow a disabled vessel, because it can automatically compensate for changing loads on a towline caused by surging tug hull motions or varying wind and waves.

The study found that the PRT tugs do not have a hull form appropriate for indirect towing, which is a process of simultaneously braking and steering a moving ship,

and are limited in their ability to generate the indirect forces necessary to counteract the rudder forces generated by the larger tankers that operate in the Sound.

The report concluded that neither the ETT nor the PRT tugs represent the best technology in use by escort tugs today. In the decade since these vessels were built, technology in hull design and towing equipment has improved dramatically. In their present condition, the ETT class tugs are effective escort tugs that would benefit from installation of a better towing winch system.

The PRT class tugs significantly lack escort towing capability and it would be expensive to change them in a way that would provide this escort capability. That said, there are things that could be done to improve their escort performance. These include installing a render-recover towing winch, relocating a "skeg" on the hull forward, and providing a "towing staple" further

back on the tug that could handle higher tow line forces. A towing staple is a device that keeps the towline from moving from side to side on the deck of a tug. Skegs are vertical fins attached to the bottom of a hull that help prevent a boat from moving laterally in the water.

This latest effort by council is one in a series of studies done to improve the tanker escort system used in Prince William Sound and help prevent crude oil from being spilled. While improvements to escort tugs are expensive, the costs are minuscule when compared to the economic and environmental cost of another oil spill in the Sound. World class standards for escort tugs have been established for good cause and should be respected and adopted in Alaska's crude oil transportation system.

This report, A Review of Best Available Technology in Tanker Escort Tugs, is available on the council's website: www.bit.ly/EscortBATReview



This vessel pictured above, the Tan'erliq, is an "enhanced tractor tug," or ETT.



The Alert, pictured above, is an "prevention and response tug," or PRT.

DISPERSANTS: Changes proposed to dispersants use guidelines

Continued from page 1

participate in pollution incident response.

The announcement of these new proposed guidelines came in October, and the team held a series of public meetings to discuss the new approval procedures in November in five Southcentral Alaska communities. Council representatives attended three of the five meetings in Kodiak, Anchorage and Valdez. The other two meetings were held out of the council's geographic area.

The meetings explained how the new guidelines would be used to determine if dispersants could be authorized during a response to an oil spill.

While overall, the council believes many of the proposed changes are positive, there are still many questions within the guidelines that need to be answered.

The biggest proposed change would eliminate currently preapproved dispersant use areas in coastal state waters, Prince William Sound, and Cook Inlet. A new dispersant preapproved zone would be created between 24 and 200 nautical miles (approximately 27.6 to 230 miles) offshore, stretching from Yakutat to Attu. In the event of a

spill, chemical dispersants could be applied in this vast area of ocean without additional public input, at the discretion of the lead federal spill response coordinator.

Other areas of concern in the proposed guidelines include:

- Some scientific questions regarding when and how dispersants are most effective
- The specifics of the environmental tradeoffs that must be considered to justify dispersant use
- The process for consulting stakeholders when dispersants are being considered outside of the proposed preauthorized areas.

The council encourages the public's participation in the review process for this important change to the Alaska Unified Plan for spill response. Comments are being received by the Alaska Regional Response Team until February 14, 2014 at the following address:

Commander (DRM)
17th Coast Guard District
P.O. Box 25517
Juneau, AK 99802-5517

The council created a reader-friendly overview of the changes. To view the council's comments and overview of the proposed changes, please visit our website: www.bit.ly/AKDispersantGuidelines

SWANSON: Current process has value that should not be lost

Continued from page 3

meaningful way. This mandate led to the creation of the tribal and local government subgroup within the proposal. It is not understood how pulling these groups out of the stakeholder committee will enhance this consultation.

To avoid confusion, it is important to note the stakeholder committee process is neither the same as the tribal consultation process, nor does the committee process exactly match the response coordinators objective of keeping the general public informed about the incident response. The committee connects all affected stakeholder communities to the incident management team, in real time, during the response, with a two way communication process for the benefit of both parties.

The committee process is a best practice

As we go forward with updates to the state wide and regional oil spill contingency plans, it is impor-

tant to remember that engaging the regional stakeholders in a spill response in an organized and well defined way is a best practice for Alaska and for the entire United States.

In the 2010 Gulf spill, without a comparable regional stakeholder engagement process, frustrations over local concerns not being addressed, or being under-acknowledged occasionally boiled over and resulted in accusations aimed at the Unified Command getting aired on national television.

In Alaska, many of the oil tanker operating companies have made significant investments and highly commendable commitments to constructively engage regional stakeholders in their preparatory spill response exercises over the past decades since the Exxon Valdez oil spill. We at the council appreciate that commitment and would like to ensure there is no reduction in stakeholder involvement or elimination of the Regional Stakeholders Committee role in the incident response plans for Alaska.

ABOUT THE COUNCIL'S ADVISORY COMMITTEES

Much of the council's work is done through permanent volunteer committees made up of board members, technical experts, and citizens with an interest in making oil transportation safer in Alaska.

These standing committees work with staff on projects, study and deliberate current oil transportation issues, and formulate their own advice and recommendations to the council's full board of directors.

Our committees provide an avenue for public participation in the council's work.

The council has five technical committees:

Terminal Operations & Environmental Monitoring:

The Terminal Operations and Environmental Monitoring (TOEM) Committee identifies actual and potential sources of episodic and chronic pollution at the Valdez Marine Terminal.

Members:

Chair: Bob Benda, Valdez
Vice-chair: Harold Blehm, Valdez
Amanda Bauer, City of Valdez*
Jo Ann Benda, Valdez
Stephen Lewis, Seldovia*
George Skladal, Anchorage

Port Operations and Vessel Traffic Systems:

The Port Operations and Vessel Traffic Systems (POVTS) Committee monitors port and tanker operations in Prince William Sound. POVTS identifies and recommends improvements in the vessel traffic navigation systems and monitors the vessel escort system.

Members:

Chair: Bob Jaynes, Valdez
Vice-chair: Bill Conley, Valdez
Kari Anderson, Seward
Cliff Chambers, Seward
Pat Duffy, Valdez*
Jane Eisemann, Kodiak*
Pete Heddell, Whittier
Orson Smith, Seward

Scientific Advisory:

The Scientific Advisory Committee (SAC) sponsors independent scientific research and provides scientific assistance and advice to the other council committees on technical reports, scientific methodology, data interpretation, and position papers.

Members:

Chair: John Kennish, Anchorage
Vice-chair: Paula Martin, Soldotna
Sarah Allan, Anchorage
Roger Green, Hope
Dorothy M. Moore, Valdez*
Debasmita Misra, Fairbanks
Dave Musgrave, Palmer
Walt Parker, Anchorage*
Mark Udevitz, Anchorage

Oil Spill Prevention and Response:

The Oil Spill Prevention and Response (OSPR) Committee works to minimize the risks and impacts associated with oil transportation through strong spill prevention and response measures, adequate contingency planning, and effective regulations.

Members:

Chair: John LeClair, Anchorage
Vice-chair: Jerry Brookman, Kenai
Robert Beedle, Cordova*
David Goldstein, Whittier
Jim Herbert, Seward*
Walt Parker, Anchorage*
Gordon Scott, Girdwood
John Velsko, Homer

Information and Education:

The Information and Education Committee's mission is to support the council's mission by fostering public awareness, responsibility, and participation in the council's activities through information and education.

Members:

Chair: Patience Andersen
Faulkner, Cordova*
Vice-chair: Savannah Lewis,
Seldovia
Jane Eisemann, Kodiak*
Cathy Hart, Anchorage*
Ruth E. Knight, Valdez
Kate Morse, Cordova
Linda Robinson, Kenai

*council director

Why commemorate the Exxon Valdez oil spill 25 years later?

By LISA MATLOCK
Outreach Coordinator

In 2013, Alaska and Alaskans lost Prince William Sound advocate, Stan Stephens, a constant voice for safe oil transportation in Alaska. Also this past year, "Homer", the last surviving sea otter rescued from the Exxon Valdez oil spill in 1989, died at her aquarium home. Firsthand Exxon Valdez oil spill memories are fading. And who wants to dwell on such a terrible event?

The tragic and emotionally wrenching life-changing personal experiences of those who responded to the Exxon Valdez

oil spill helped motivate a generation of council members and partners to prevent another major oil shipping disaster in the state. Oil spill prevention measures, such as double hulled tankers and dual escort tug systems for shipping, oil spill response drills and Geographic Response Strategies that take into account local knowledge when planning for the protection of sensitive areas, safe marine terminal operations, and long term environmental monitoring, all contribute to minimizing complacency, and the potential for another major oil spill.

But memories of an event, even such a disastrous one, only last so long.

The council remains committed to working with industry and regulatory agencies to safely transport oil through Alaskan waters. Oil spill prevention measures at work in Prince William Sound have extended to other parts of the country and world, helping to improve the safety of oil shipping globally. By remembering what happened during the Exxon Valdez oil spill 25 years later, we hope to motivate Alaskans to continue the unending hard work of oil spill prevention. Oil spill prevention measures are what future generations of people

and the marine environment need to avoid the destructive and expensive experience of another major spill.

The following events are planned to commemorate the spill this year, to honor those who faced it, and to remind those who were not there why the council and others interested in the fate of our region strive to keep it from ever happening again.



Lisa Matlock

- **Public Presentations:** Throughout the month of March, the council is offering public presentations about the Exxon Valdez oil spill and the good that has come out of it and concerns for the future over 25 years to

museums and libraries in the region. Dates so far include:

- March 4 at the Valdez Museum
- March 11 at the U.S. Forest Service in Cordova, in partnership with the Prince William Sound Science Center
- March 24 at the Loussac Library in Anchorage

We are working with several other communities, including Seward, Kodiak, and Homer. More information will be posted on our website as it becomes available.

If you are interested in hosting a presentation in your community, contact: lisa.matlock@pwsrca.org.

- **Project Jukebox:** The council is working to preserve the voices of twenty people impacted by the oil spill online through the University of Alaska Fairbanks Oral History Program's Project Jukebox: www.bit.ly/ProjectJukebox.

- **School Programs:** The council recently revised its K-12 Oil Spill Curricula to both meet new standards and help students who may have never experienced a technological disaster to understand the importance of continued oil spill prevention. Teachers who would like to request a live classroom program using the new curricula or a link to its activities, please email: lisa.matlock@pwsrca.org.



Lisa Matlock and Steve Rothchild took a ride aboard the escort tug Tan'erliq on October 25, which was escorting a tanker from the terminal. They experienced gusts up to 45 knots and 10 ft seas. Many thanks to Alyeska's SERVS and the crew of the Tan'erliq for the opportunity!

PRINCE WILLIAM SOUND REGIONAL CITIZENS' ADVISORY COUNCIL

The Prince William Sound Regional Citizens' Advisory Council is an independent, non-profit corporation formed after the 1989 Exxon Valdez oil spill to minimize the environmental impacts of the trans-Alaska pipeline terminal and tanker fleet.

The council has 19 member organizations, including communities affected by the Exxon Valdez oil spill and groups representing Alaska Native, aquaculture, environmental, commercial fishing, recreation and tourism interests in the spill region.

The council is certified under the federal Oil Pollution Act of 1990 as the citizen advisory group for Prince William Sound, and operates under a contract with Alyeska Pipeline Service Co. The contract, which is in effect as long as oil flows through the pipeline, guarantees the council's independence, provides annual funding, and ensures the council the same access to terminal facilities as state and federal regulatory agencies.

The council's mission: Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers.

Board of Directors

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Vice Pres.: Thane Miller - Prince William Sound Aquaculture Corp.
Secretary: Patience Andersen Faulkner - Cordova District Fishermen United
Treasurer: Jim Herbert - City of Seward

Robert Beedle - City of Cordova
Al Burch - Kodiak Island Borough
Emil Christiansen - Kodiak Village Mayors Association
Pat Duffy - Alaska State Chamber of Commerce
Jane Eisemann - City of Kodiak
Larry Evanoff - Community of Chenega Bay
Nick Garay - City of Homer
Cathy Hart - Alaska Wilderness Recreation and Tourism Association
Blake Johnson - Kenai Peninsula Borough
Andrea Korbe - City of Whittier
Steve Lewis - City of Seldovia
Dorothy Moore - City of Valdez
Walter Parker - Oil Spill Region Environmental Coalition
Diane Selanoff - Port Graham Corporation
David Totemoff - Chugach Alaska Corporation
Roy Totemoff - Community of Tatitlek

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