





FROM THE



PRESIDENT AND THE EXECUTIVE DIRECTOR

In the past year, one issue has emerged as perhaps the most important the council has faced since its birth: the future of the Prince William Sound tanker escort system.

That system, instituted after the Exxon Valdez oil spill of 1989, requires two powerful tugs to accompany each loaded oil tanker out of the Sound. The tugs can rescue a tanker if it runs into trouble, or begin the response if, despite all efforts, an oil spill occurs.

However, the oil industry and its government regulators have discussed reducing the requirement to a single tug. Moreover, under the Oil Pollution Act of 1990, federal escort requirements disappear altogether when the tanker fleet serving the Valdez oil terminal has switched entirely to double-hull vessels. As this report went to press, the council

was seeking a written agreement with the oil industry that no changes will be made to the Prince William Sound escort system until a definitive study has demonstated that no increase in risk will result.

The oil industry is seeking cost reductions in other areas, as well. One example is plans by Alyeska Pipeline Service Co. for major changes at the Valdez tanker terminal, as discussed later in this report. The company's stated goals are to simplify the facility and reduce costs. The council has commented extensively on this proposal, and will continue to monitor the process as it moves forward.

Even as we address the technical aspects of such issues, we are also tackling the common thread that increasingly runs through them: the oil industry's claim that cutbacks and other changes are nec-

essary for financial reasons. For this reason, the council in autumn 2004 commissioned a study of oil-industry profits in Alaska.

That study, by Fairbanks economic consultant Dr. Richard Fineberg, shows that the industry unsurprisingly makes enormous profits — more than \$5 billion a year — at oil prices around the \$50-a-barrel level seen recently. But it also shows the industry made a healthy return of about \$800 million in Alaska even in 1998, when prices were as low as \$13 a barrel. So, at any imaginable price level, oil companies can afford to protect our environment, and Alaskans needn't worry

the cost will drive the industry out of the state.

However, the council's right to conduct such studies is under attack from Alyeska Pipeline. Several months after Dr.

Fineberg was retained, but before his report was finished, the company served notice it considers

profitability analysis outside the scope of its contract with us, and demanded that we not use Alyeska Pipeline contract funds to pay him. Because we believe this type of information to be essential in dealing with the financial arguments being made more and more frequently by Alyeska Pipeline, we went to court in May 2005 to

Although we sometimes find ourselves at odds with the industry, we know they share our desire to make sure nothing like the Exxon Valdez spill befalls Alaska again.

establish our right to conduct such studies.

So we are always eager to give credit where credit is due and to spotlight noteworthy accomplishments. Such was the case when we recommended that the Valdez oil shippers — ConocoPhillips' Polar Tankers unit, ExxonMobil's SeaRiver Maritime, Tesoro's Seabulk Tankers, and Alaska Tanker

Co., which hauls oil for BP — receive a 2004

Legacy Award for spilling no oil to the sea the previous calendar year. The award is given annually by the Pacific States/British Columbia Oil Spill Task Force for commendable work in the areas of oil spill prevention, preparedness, or response.

In addition, we were happy to sponsor another symposium this spring for training land-based firefighters to combat fires aboard ships. As usual, we had many partners, but we were particularly gratified that ConocoPhillips made available its Polar Endeavour, allowing the firefighters to see

for themselves what the new double-hull tankers entering service are like.

As noted above, the next few years promise to confront the council with some very high-stakes issues, the two most noteworthy being the prospect of reductions to the escort system, and Alyeska Pipeline's proposed overhaul of the tanker terminal in Valdez.

Through it all, the council will bear in mind its central mission: making sure the oil transportation system in Prince William Sound is as safe as can be, so that future Alaskans can enjoy the state's natural wonders as much as we do today.



STAN STEPHENS

President

JOHN DEVENS Executive Director

Citizens Promoting Environmentally Safe Operation of the Alyeska Terminal and Associated Tankers



The Prince William Sound Regional Citizens' Advisory Council is an independent non-profit corporation guided by its mission: citizens promoting environmentally safe operation of the Alyeska Pipeline Service Co. terminal in Valdez and the oil tankers that use it.

The council's 18 member organizations are communities in the region affected by the 1989 *Exxon Valdez* oil spill, as well as aquaculture, commercial fishing, environmental, Alaska Native, recreation, and tourism groups.

Consistent with its mission, the council's structure and responsibilities stem from two documents. The first is a contract with Alyeska Pipeline, which operates the trans-Alaska pipeline as well as the Valdez terminal. The council's basic operating funds come from this contract.

The second guiding document, enacted after the council was created, is the federal Oil Pollution Act of 1990, which required citizen oversight councils for Prince William Sound and Cook Inlet. Their purpose is to promote partnership and cooperation among local citizens, industry and government, and to build trust and provide citizen oversight of environmental compliance by oil terminals and tankers.

The Act allows an alternative, pre-existing organization to fulfill the requirement for a citizen group and our council has done so for Prince William Sound since 1991. Each year, the U.S. Coast Guard assesses whether the council fosters the general goals and purposes of the Oil Pollution Act and is broadly representative of the communities and interests as envisioned in the Act.

AND NS PONS



Loaded oil tankers in Prince William Sound are escorted by two powerful tugs. For part of the trip, one must be tethered to the tanker's stern for immediate response in emergencies.

policies, permits, and regulations relating to the oil terminal and tankers.

As part of these undertakings, the council regularly retains experts in various fields to conduct independent research on issues related to oil transportation safety.

The Alyeska Pipeline contract also calls for the council to increase public awareness of the company's oil spill response, spill prevention and environmental protection capabilities, as well as the actual and potential environmental impacts of terminal and tanker operations.

This Alyeska worker participated in oil spill response training near Cordova in April 2005.

The council's contract with Alyeska Pipeline predates the Oil Pollution Act, but the similarities in the powers and duties given the council in the two documents are not coincidental. Many people involved in the establishment of the council also actively promoted citizen involvement provisions in the federal law.

In accordance with the provisions of the two documents, the council performs a variety of functions aimed at reducing pollution from crude oil-transportation through Prince William Sound and the Gulf of Alaska:

O Monitor, review and comment on oil spill response and prevention plans prepared by Alyeska Pipeline and by operators of oil tankers.

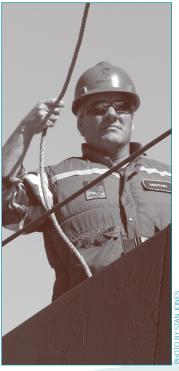
O Monitor, review and comment on the environmental protection capabilities of Alyeska Pipeline and the tanker operators, as well as on the environmental, social and economic impacts of their activities.

O Review and make recommendations on government

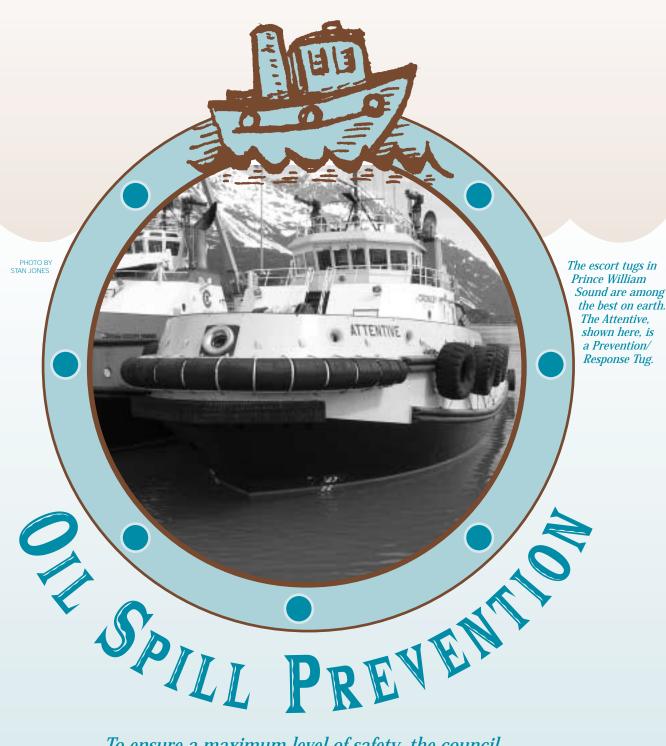
The contract states that the council may work on other related issues not specifically identified when the contract was written.

The council was initially funded at \$2 million a year. The funding is renegotiated every three years; current Alyeska Pipeline funding is approximately \$2.8 million a year. The council's total budget is about \$3.5 million.

Although the council works closely with and is funded chiefly by Alyeska Pipeline, the council is an independent advisory group. The contract is explicit: "Alyeska shall have no right . . . to have any degree of control over the formation or operation of the corporation . . . "



BILITA



To ensure a maximum level of safety, the council reviews all aspects of the oil transportation system in Prince William Sound. These include operations of oil tankers and the Valdez Marine terminal, spills and other incidents, and the adequacy and maintenance of the Vessel Traffic System.

TANKER SAFETY

Escort System

he heart of the oil spill prevention system in Prince William Sound is the fleet of rescue and response tugs that accompany loaded tankers out into the Gulf of

Alaska. Thanks to years of study and analysis, and considerable investment by the shipping industry, this system is widely considered the best in the world. The fleet, operated by Alyeska Pipeline's Ship Escort/Response Vessel System, includes five state-of-the-art 10,000-horsepower tugs that have proved their capabilities in actual incidents, as well as in sea trials observed and reviewed by the council.

Over the past year, however, the oil industry has initiated discussions with regulators about reducing the present

requirement that two tugs escort each loaded oil tanker. The industry has also begun a separate study of reducing the size of the tug fleet — which now totals ten vessels — even if the two-tug escort requirement is preserved.

These moves are of grave concern to the council, which has taken a formal position that the double-escort requirement should be preserved, and has concerns about the methodology of the separate study of whether a smaller tug fleet could meet the present requirement. Many of the council's member entities have passed resolutions also supporting the double-escort rule.

One likely step in any industry effort to reduce escort requirements is a type of study called a risk assessment, which attempts to calculate the increase or decrease in risk associated with any change to a complex system. The council retained an expert on the subject, Dr. Martha Grabowski, to travel from New York to Valdez in spring 2005 to make a presentation to the council staff, board members, and committee volunteers on the standards for conducting a proper risk assessment.

As this report goes to press, the industry has not presented a formal proposal to any regulator for changes to the

escort requirement or tug fleet, but the council anticipates that one or more such proposals could be advanced in the coming 12 months. We will remain vigilant to make sure that no reduction is allowed in the protections for Prince William Sound developed since the *Exxon Valdez* spill 16 years ago.

More information on this issue — including Dr. Grabowski's report on risk assessments — is available at the council's website, www.pwsrcac.org.



Dr. Martha Grabowski, an expert on risk assessments, chats with council volunteer Tex Edwards during a visit to Valdez in June 2005.

Iceberg Detection and Avoidance

cebergs have proven to be one of the greatest hazards to tanker navigation in Prince William Sound. In 1989, the *Exxon Valdez* left the tanker traffic lanes to avoid icebergs. The rest is history. In 1994, a tanker coming into Port Valdez collided with an iceberg, causing significant damage to the hull. Fortunately, that tanker was empty and no spill resulted.

Council-sponsored research has determined that ice from Columbia Glacier will continue to flow into the tanker lanes, and most likely increase, over the next decade or two. After investigating several ice detection and reporting technologies, the council, along with several partners, launched a major project to use radar to reduce the navigational risk posed by ice.



The SeaRiver Baytown heads out of Prince William Sound with its two tug escorts.

A VHF (Very High Frequency) radar system was installed on Reef Island, near Bligh Reef, scene of the *Exxon Valdez* disaster. This system began operation in late 2002 and continues to operate successfully with minimal maintenance. It is linked to Alyeska Pipeline's escort system facility and to the Coast Guard's Vessel Traffic System, both in Valdez, enabling oil shippers, coastal pilots, escorts, and the Coast Guard to make informed decisions about shipping schedules and other ice avoidance measures.

Marine Firefighting Symposium

essel fires are always a pollution threat to Alaska waters, and a fire on a crude oil tanker has the potential for major environmental damage to Prince William Sound. Using proper marine firefighting techniques is one method of reducing this threat, so the council has for several years sponsored symposiums for training land-based firefighters to respond to vessel fires.

The latest of these took place in Valdez in May 2005. Firefighters attended from coastal communities as far apart as Ketchikan and Unalaska. The training included classroom sessions as well as exercises aboard the double-hull tanker *Polar Endeavour* and on a smaller vessel.

Places of Refuge

he 2002 sinking of the fuel tanker *Prestige* off the coast of Spain focused the world's attention on the need for places of refuge for vessels in distress. The *Prestige* began to leak and was towed offshore while the Spanish government tried to decide what to do. But the vessel broke up and sank in two miles of water, where it continued to leak, eventually fouling both Spanish and French coastlines.

Many observers believed that environmental damage would have been less if the vessel could have been towed to a place of refuge — a protected bay where the leaking oil could have been contained while repairs were made on the ship.

Accordingly, the council has been involved in a project to establish potential places of refuge in Prince William Sound by pre-identifying sensitive resources and geographic response options. This very delicate issue required extensive communication with landowners in the Sound and other citizens represented by the council, as well as regulators who would have to make the decision on where to tow a disabled tanker. The project's end-product is a document called the Potential Places of Refuge Matrix. A draft version was expected to be out for public comment by the end of 2005.



The tanker Overseas New York takes on oil at Alyeska's Valdez terminal.

VALDEZ MARINE TERMINAL

While the 1989 *Exxon Valdez* spill focused worldwide attention on the dangers of spills from tankers under way, there is also significant risk of spills and other accidents during crude oil loading operations at Alyeska Pipeline's tanker terminal in Valdez. The terminal is at the end of the trans-Alaska pipeline, which brings more than 800,000 barrels of oil south each day from Prudhoe Bay and other North Slope fields.

Valdez was one of many places in Alaska devastated by the Good Friday Earthquake of 1964. Because the area is at risk for major earthquakes in the future, the council is moving to review the design of the tanker terminal to be sure it meets appropriate seismic engineering standards. Specific concerns include the stability of containment dikes around storage tanks, slope stability, stability of earth and rock support under storage tanks, and the structural integrity of the terminal's oil-handling equipment, especially where weakened by corrosion since the terminal's construction 30 years ago. The council was in the process of recruiting a contractor for the seismic review of the terminal as this report went to press.



The Oil Pollution Act of 1990 says the council should review, monitor and comment on Alyeska Pipeline's environmental protection capabilities, as well as the actual and potential environmental impacts of terminal and tanker operations. The Act also calls on us to develop recommendations on environmental policies and permits. The council carries out this work through two major programs: Terminal Operations and Environmental Monitoring. Under the leadership of the Scientific Advisory Committee and the Terminal Operations and Environmental Monitoring Committee, the council engages in scientific studies to determine actual or potential risks, to document levels of pollution and biological effects, and to better understand new technologies and what environmental costs or benefits might be associated with their use.



In August 2004, Alyeska tested this device — called an Induced Gas Flotation System — for removing oil remnants from tanker ballast water.

TERMINAL OPERATIONS

Besides posing the risk of a major oil spill caused by accident or earthquake, the Valdez tanker terminal produces ongoing pollution from routine operations, as allowed by its permits from regulatory agencies. The council oversees terminal operations in an effort to make sure that pollution is within regulatory limits and that those limits are set at the lowest feasible levels.

Ballast Water Treatment

ankers arrive in Valdez with significant quantities of oily ballast water carried in cargo tanks to provide navigational stability during the trip north. The water is cleaned at the terminal's Ballast Water Treatment Facility, where concentrations of specified pollutants are reduced to a few parts per million before the water is discharged into Port Valdez. These discharges occur under a National Pollutant Discharge Elimination System permit issued by EPA and a separate permit issued by the Alaska Department of Environmental Conservation. Both permits were renewed in January 2005.

Air Quality

he terminal is a major source of volatile organic compounds and other air pollutants, primarily from the Ballast Water Treatment Facility. Some of these emissions are known carcinogens and may be affecting health or the quality of life in Valdez. The council is working to reduce concentrations of hazardous air pollutants in Valdez and at the terminal.

The council has been active on multiple fronts in pursuit of this goal.

We have worked for several years to have emissions from the facility made subject to EPA limits under a regulation called the National Emission Standards for Hazardous Air Pollutants — Organic Liquids Distribution (or NESHAP-OLD) Rule.

However, the final NESHAP-OLD rule adopted in February 2004 exempted emissions from the ballast water facility. The council filed a Petition for Reconsideration with the EPA, which the EPA granted. In January 2005, EPA announced that the reconsidered rule would regulate emissions from the facility and was expected to be issued in final form in early 2006.

Alyeska's current air quality permits (which do not apply to the ballast water facility) were developed by the Alaska Department of Environmental Conservation with many comments from the council and are now before EPA for final approval. If approved as submitted to EPA, they will include some new provisions inserted on the council's recommendation. These include requirements for testing two of the terminal's three vapor incinerators for the first time in the facility's history, and requirements for monitoring oil tanker smokestack emissions to ensure they produce no visible smoke in violation of state opacity regulations.



Oil is poured into a Canadian seawater tank designed to test chemical dispersants.

Strategic Reconfiguration

ince 2002, Alyeska Pipeline has been engaged in reconfiguring its management, business, and operational practices, as well as the Valdez tanker terminal and the trans-Alaska pipeline. Alyeska Pipeline's stated goals are to simplify the terminal and to reduce costs by replacing outmoded facilities.

The council has been working to ensure this process — called Strategic Reconfiguration — will result in a redesigned terminal that operates with the minimum feasible level of environmental risk. (Reconfiguration of the trans-Alaska pipeline is outside the council's purview.)

Alyeska Pipeline originally identified the following items as some of the elements to be considered for the Strategic Reconfiguration project:

- Redesign or replacement of the Ballast Water Treatment Facility
- O Removal from service of up to eight of the 18 crude oil storage tanks now operating at the terminal
- Installation of internal floating roofs on the remaining storage tanks
- O Conversion of the current salt-water fire system to a gravity-fed fresh water system
- O Switching from onsite power generation (using hydrocarbon vapors given off by the crude oil handled at the terminal) to purchased power from the local electrical utility, with emergency backup generators onsite
- O Installation of a combustion system to burn vapors no longer used for power generation
- O Installation of control, data-acquisition and communications systems capable of operating the terminal (and the pipeline) remotely.

After extensive review and comment by the council, the U.S. Department of the Interior gave conceptual approval to Alyeska Pipeline's formal reconfiguration proposal in March of 2005, though each project will require specific approval from regulators before proceeding.

Nonetheless, the future of Strategic Reconfiguration at the Valdez terminal is unclear. On one hand, Alyeska Pipeline has advised the council that most Strategic Reconfiguration activities at the terminal have ceased for the present and that no projects are likely to proceed before the end of 2005.

On the other hand, some activities, such as those pertaining to a switch from seawater to fresh water for the terminal's firefighting system, are continuing as projects independent of Strategic Reconfiguration. As this report went to press, the council was requesting information from Alyeska Pipeline as to the scope and schedule for these projects.

Environmental Science

Chemical Dispersants

hemical dispersants are substances that, when applied to spilled oil, do as their name suggests: they disperse it into the water column, rather than leaving it floating on top in a slick. Because of concerns about the efficacy and toxicity of dispersants, the council urges regulatory agencies to take a conservative approach towards their use and supports mechanical recovery as the primary oil spill response strategy.

The council promotes research and testing to increase knowledge about dispersants and the consequences of their use



The Ohmsett test tank, located in New Jersey, is operated by the federal government.



on oil spills in Alaska waters. Over the next several years, we hope to determine if chemical dispersants stockpiled in our region are effective and how toxic they are to the environment.

The council participates in two dispersant work groups operating under the auspices of the Alaska Regional Response Team (an advisory group to the federal and state officials who manage oil spill response).

One of the work groups identifies research gaps in the dispersants field and recommends ways to fill them. The other is reviewing and revising the guidelines for dispersant use in Prince William Sound. The guidelines now in effect were adopted before the *Exxon Valdez* oil spill of 1989.

The council has also sponsored its own research and investigations, including a report that evaluated the effect of

salinity on dispersants. Another report provides an overview of various wave tanks around the world that could be used for testing dispersant effectiveness and toxicity. The council also sent staff and volunteers to observe demonstrations at the newly built wave tank in Nova Scotia, Canada and at the federal Ohmsett tank in New Jersey.

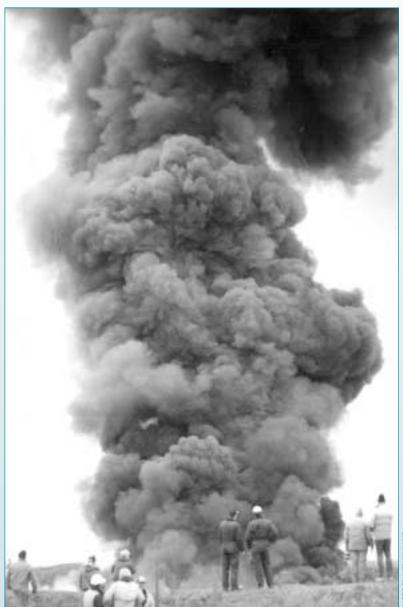
The council's research reports on dispersants are available to the public. Some are listed near the end of this report. Additional information is available on the council website at www.pwsrcac.org.

A significant national effort on dispersants was undertaken this past year under the auspices of the National Research Council of the National Academies. Former board member Tom Copeland, after being nominated by the council, was appointed to a committee created to review existing research on dispersants and identify information gaps. The committee recently released its findings in "Understanding Oil Spill Dispersants: Efficacy and Effects." The report outlines a number of areas where more research is needed to guide oil spill responders in deciding whether to use dispersants.

In-Situ Burning

ne technique for dealing with spilled oil is to burn it in place – on the surface of the water. This is known as insitu burning. As logical and straightforward as it may sound, this approach presents many problems, including the effects of the burn residue on the sea life underneath.

Over the past year, the council reviewed the research on in-situ burning and the board adopted a position paper on the subject in December 2004. The position favors mechanical response, such as booming and skimming, over in-situ burning. However, it recognizes there are times when burning may be appropriate, such as when oil is spilled in broken ice or trapped by natural barriers. The paper outlines needed future research, such as tests of the toxicity of burn



In-situ burning refers to burning oil where it spills. This photo shows an in-situ burning test on the North Slope in 1994.

HOTO BY LISA

residue on sea life. These will be started in the next year.

The council is also involved in the state of Alaska's process for revising its in-situ burning guidelines for oil spill response.

Aquatic Nuisance Species

ot all ballast water discharged in Port Valdez requires treatment to remove oil. Some tankers employ segregated ballast tanks where "clean" sea water is used for stability and then discharged untreated into Prince William Sound as tankers approach Alyeska Pipeline's Valdez Marine Terminal for loading. Because of the potential for harmful invasion created by the billions of living organisms present in this discharged ballast water, the council has made non-indigenous marine species a high priority since 1996.

We lead a multi-stakeholder working group to coordinate programs in our region. In addition, we hold seats on the national Invasive Species Advisory Committee and on the Western Regional Panel of the National Aquatic Nuisance Species Task Force.

In partnership with the U.S. Fish and Wildlife Service, NOAA's Sea Grant program, Alyeska Pipeline, and the University of Alaska Fairbanks, the council has co-sponsored a series of scientific studies by the Smithsonian Environmental Research Center since 1996.

The Smithsonian submitted a report detailing the results of ballast water exchange experiments, and concluded that ballast water exchange is an effective way to reduce the problem of harmful aquatic nuisance species arriving in Alaska waters.

The council also played a significant role in hosting the Western Regional Panel on Aquatic Nuisance Species. This panel is comprised of Federal, State, Canadian, Tribal, and other members based in the western region of North America. Their annual meeting was held in Anchorage this



The council sets traps to detect the presence of the European green crab, a non-indigenous species that has invaded ports on the U.S. West Coast. Students are involved in the project to educate them about the issue. So far, the project has succeeded by failing — no green crabs have been found in Prince William Sound!

past year with the council's assistance.

Over the past year, the council added material to the Non-Indigenous Species section on its website, including more information on ballast-water treatment technologies. These web pages provide a friendly interface for users to explore the vast amount of information on invasive species the council has compiled over the years. It also includes information on current laws and regulations; useful links to other websites; and fact sheets on species and technology.

Council staff continued to monitor for the presence of the European green crab, a potential ballast-water-borne invasive species, in Port Valdez, by setting out specially

designed crab traps. The crab is an efficient predator and poses a significant threat to indigenous marine life. Local school children help with the trapping. Fortunately, no green crabs have been found to date.



One technique for combating aquatic nuisance species in ballast water is at-sea exchange, shown here.

age agent Criticals Advisor

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Regional Environmental Monitoring

he council established a Long-Term Environmental Monitoring Program (LTEMP) in 1993 that continues

with an annual study designed plan address trends and new circumstances. Mussels are collected at 10 intertidal sites in Prince William Sound and the Gulf of Alaska. Tissues from the mussels are analyzed in a laboratory to determine whether hydrocarbons are accumulating and, if so, their source. The LTEMP contractor presents an annual report to the council. All the data collected over the years is available to the public via the council website.

During the past year, the council entered into a partnership with NOAA's Auke Bay Laboratory in Juneau to obtain funding from the *Exxon Valdez* Oil Spill Trustee Council for an expanded sampling effort in the summer of 2005.

Reports and other information on the LTEMP pro-

gram are available at www.pwsrcac.org.



For more than a decade, the council has checked for traces of oil in the marine environment by analyzing mussel tissues from various sites in the council region. Here, researcher Bill Driskell collects samples at Sleepy Bay in Prince William Sound.

are an important species in the food chain, and they can readily accumulate hydrocarbons from the surrounding water.

Using nets designed for capturing plankton, the copepods were harvested from several sites in Port Valdez and a site outside of the Port in late April 2004. Direct water samples were also taken.

Study results showed that hydrocarbons from the oily ballast water were present in Port Valdez water and had accumulated in the copepods; however the concentrations were very low.

At the current rates of discharge into Port Valdez, ballast-water effluent likely has little effect on the plankton community.

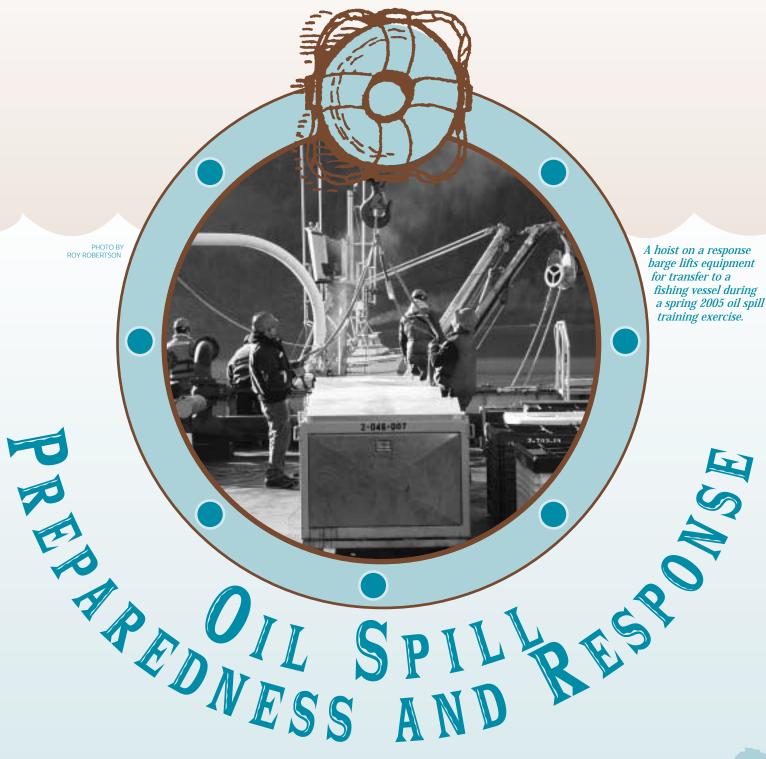
Copepod Testing

he council routinely sponsors research to determine the impact of oil discharged as a result of crude oil industrial activities in Prince William Sound. A study was initiated this year to determine if Alaska North Slope oil released by the Ballast Water Treatment Facility at Alyeska Pipeline's Valdez Marine Terminal was accumulating in *Neocalanus plumchrus*, a common copepod in the zooplankton community. Copepods were chosen because they

Monitoring Ultraviolet Radiation

rained staff continued to take measurements of ultraviolet radiation as part of an on-going effort to characterize it in Prince William Sound. This work is a continuation of our investigation into the photoenhanced toxicity of chemically dispersed oil. Research supported by the council in 2003 demonstrated that chemically dispersed oil is more toxic in the presence of ultraviolet radiation, a component of sunlight. This phenomenon is known as photoenhanced toxicity or phototoxicity. Measurements are taken seasonally at several sites in Prince William Sound. This will continue into 2006 so as to compile a robust data set for any future assessment work on the toxicity effects of ultraviolet radiation.





The council has devoted significant resources to preventing oil spills, but that risk cannot be eliminated entirely. We must be prepared to respond quickly and effectively when prevention measures fail. Two council programs address emergency preparedness and response: Oil Spill Prevention and Response Planning, and Oil Spill Prevention and Response Operations.



OIL SPILL PREVENTION AND RESPONSE PLANNING

State and federal laws require the operators of oil tankers, the Valdez Marine Terminal, and the trans-Alaska pipeline to prepare detailed plans showing how they will respond to oil spills, should prevention measures fail. The council devotes much time and attention to oversight of these all-important plans.

In some cases, the council participates with government and industry on working groups that develop the plans, known as contingency plans. In other cases, the council conducts independent reviews and submits comments and recommendations.

The council promotes compliance, enforcement, and funding for state and federal regulations and oversight, and supports the Alaska Coastal Management Program. Along with local communities, the council encourages the incorporation of local knowledge of sensitive areas into contingency planning.

This year's efforts in the program focused on follow-ups to the 2003 approvals of contingency plans for Alyeska Pipeline's Valdez Marine Terminal and for the oil tankers that use it. The council also participated in a state process for revising oil spill response regulations, and another for reviewing the Prince William Sound tug escort system.



These fishing vessels participated in oil spill training exercises near the village of Chenega Bay in spring 2005.



Geographic Response Strategies

hese are oil spill response mini-plans specific to sensitive areas and resources, such as salmon streams and clamming beaches. The council has worked to have them included in oil spill contingency plans for Prince William Sound, the Gulf of Alaska, Kodiak, and the Kenai Peninsula — all areas that received oil from the *Exxon Valdez* spill. As of June 30, 2005, more than 220 Geographic Response Strategies were in place or under development in the council region.

More information about these strategies is available at http://www.state.ak.us/dec/spar/perp/grs/home.htm on the Internet.

Oil Spill Response Outside Prince William Sound

he "downstream communities" south and west of Prince William Sound are at risk from spilled oil because currents and wind are likely to carry it out of the Sound, as happened after the 1989 *Exxon Valdez* spill.

The council works to ensure that industry and regulators are committed to protecting these areas and that detailed plans exist for doing so. An important component of the plans is to guarantee that sufficient equipment is available and can be transported into the area in a timely manner in the event of a spill.

The council launched its project with a white paper to provide a framework for downstream planning. The council issued a press release to publicize this effort in the downstream communities. The council continues to work to see that the downstream response plan is formally incorporated into the contingency plans maintained by regulators and the oil industry.

Coastal Community Oil Spill Response

his study examined the feasibility of creating a network of community-based oil spill response cooperatives in the council region, and evaluated the related "Firehouse Response Model" proposed by the Alaska Department of Environmental Conservation. Under this model, each region of Alaska would have its own spill-response organization overseeing a network of community-based response teams around the region. The central oil spill organization would be staffed with full-time professionals, while the community-based response teams would be comprised primarily of part-time staff and volunteers. These



teams could both respond to small local spills and join the cleanup effort for major regional spills like the *Aware*.

While the idea of regional co-ops wasn't adopted, several areas of the state were identified where the concept could work on a smaller scale, including the council region in Prince William Sound, Kodiak and the Kenai Peninsula. In these areas, there are several small organizations and communities that could benefit from increased networking and shared resources.

To evaluate the potential of the small-scale community-response concept, our council and the citizens' council for Cook Inlet co-sponsored a forum on community-based response in January 2005 for representatives of agencies, industry and communities. More than 40 participants came from around the council region and a final report with recommendations was issued in mid-summer 2005. Our council has been asked to present the concept at the annual meeting of the state harbormasters this coming winter.

Scientific Response Plan

If there is another major oil spill, it will be crucial to instantly begin monitoring the environmental changes that follow. The council is conducting a multi-year project to develop a scientific contingency plan to guide this work and other scientific research activities related to a major oil spill response. One component is the development of a water sampling plan for areas of the Sound that would be affected by a spill.

Weather and Current Data Collection

eather conditions and sea currents affect nearly every aspect of oil-transportation safety. They can play a role, sometimes the determining role, in efforts to prevent or to clean up oil spills. Consequently, the council promotes constant improvements in the system for collecting weather and current information for Prince William Sound.

We are partners with the Cordova-based Oil Spill Recovery Institute in a project to install weather stations in the Sound. The Institute has completed upgrades to the weather stations by switching from a radio-based network to a satellite-based network. The council funded the upgrade of the station at Nuchek, which is of prime interest because of its proximity to Hinchinbrook Entrance.

In addition, we co-funded a University of Alaska project to install radar stations at two sites near the tanker lanes in the central part of the Sound to measure surface ocean currents. The network was installed in May 2004 and is fully operational today.

Understanding current patterns in the Sound is important in developing accurate models for predicting the path of spilled oil. It can also be useful for navigation and for spill-response operations. Measuring actual currents makes it possible to test predictive models against reality.

OIL SPILL RESPONSE OPERATIONS

It takes more than volumes of carefully written and reviewed contingency plans to effectively respond to an oil spill. It takes equipment, trained people, and a management system to implement the plan; and it takes practice, practice, practice. The council's oil spill response operations program is tasked with monitoring the operational readiness of the Alyeska Pipeline Ship Escort/Response Vessel System and the tanker companies, and with making sure the council is prepared to respond to an oil spill.

Council staff members, volunteers, and contractors monitor and report on spill response drills, exercises, and training throughout the region to provide citizens, regulatory agencies, and responders with information about the state of readiness and to make recommendations for improvement. Most of the monitoring work is done by two council staffers, who present annual reports summarizing each year's activities, lessons learned, recommendations, and outstanding issues.



A fishing vessel deploys oil spill boom during training exercises in the spring of 2005.

ADVISORY COUNCIL

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T I E S

A fishing vessel crew member prepares to tow a skimming system into place during oil spill training exercises in the spring of 2005.

Towline Partings

uring the year covered by this report, a series of towline partings occurred on one of Alyeska Pipeline's escort tugs, the *Aware*. The council viewed this with great concern, because such a break during a tanker emergency could lead to a catastrophic oil spill, possibly with human casualties. The council monitored the process as regulators, Alyeska Pipeline, and its contractors analyzed the problem. This analysis led to modifications of the winch drums on the *Aware* and its two sister tugs in the fleet. Procedures for winding the towlines onto the winches were also revised.

Oil Spill Response Depots

ederal regulations require regular inspections of the oil spill response equipment stored in depots around the council region. But, in the spring of 2005, a confidential source provided the council with photographs indicating that snow banks had been allowed to build up and block access to equipment containers at the Main Bay depot, established to protect a salmon hatchery in the western part of the Sound. The council reported the problem to the Alaska Department of Environmental Conservation, which requested from Alyeska Pipeline an explanation of its maintenance program for the remote depots. The council also requested that Alyeska Pipeline retain an independent contractor to inspect the depots and catch such problems early.

The Response Gap

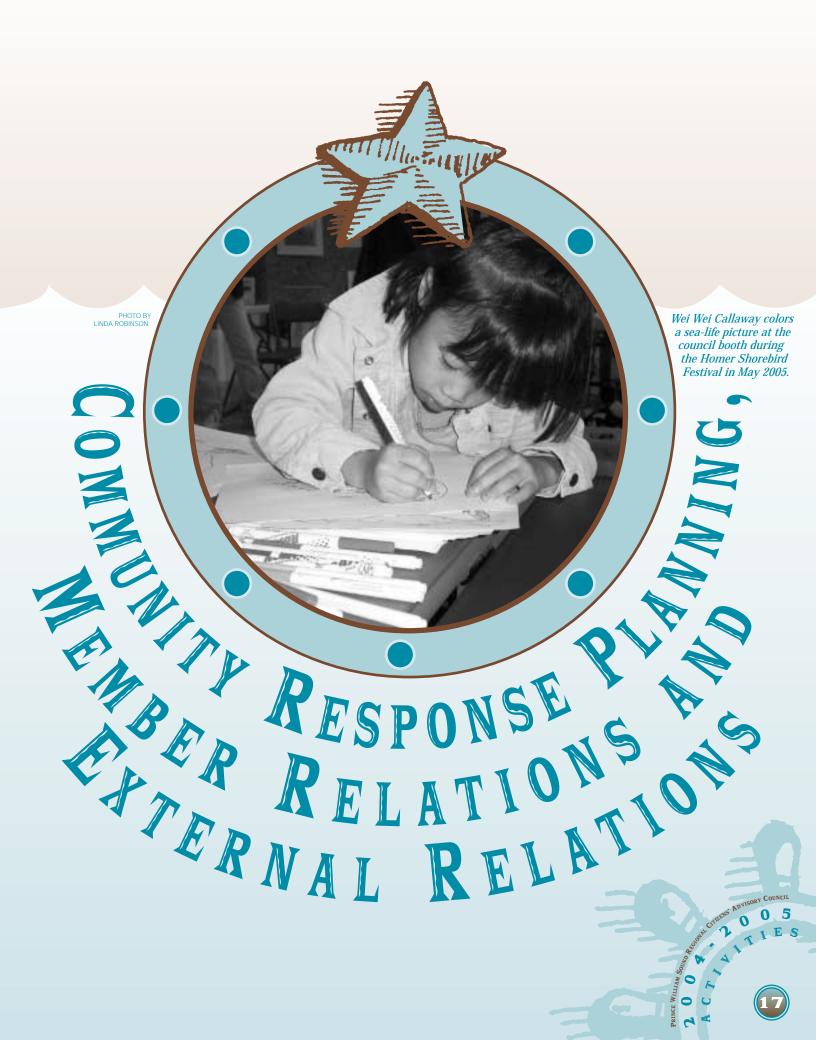
hrough a quirk in the regulations, loaded tankers can legally depart Valdez in weather so severe that no response would be required should an oil spill occur. This problem, known as the response gap, has long been a council concern.

To address it, the council is recruiting a contractor who can analyze the problem, identify possible solutions, and advise on how to proceed.



Contractors with Alyeska Pipeline receive training in the use of an oleophilic disk skimmer.

JTO BY DAN GILSON





MEMBER RELATIONS

The council devotes a full-time staff position, called Community Liaison, to maintaining productive relations with the 18 communities and interest groups that make up its membership. The liaison visits communities in the region, attends member group functions, gives presentations, coordinates special events involving the council and its member groups and generally encourages citizen involvement in the council's work.

During the past year, the liaison and other staffers represented the council at numerous trade shows and conferences, as well as events sponsored by member entities. These included con-

ferences of the Society of Environmental Toxicology and Chemistry; commercial fishing trade shows in Seattle and Kodiak; the annual Arctic Marine Oilspill Program conference in Canada; Alaska Oceans Festival, Kenai Industry Appreciation Day, Alaska Forum on the Environment, Kodiak Whalefest, July 4 celebration in Valdez, Goldrush Celebration in Valdez, Valdez Marine Expo, Homer Shorebird Festival,



Alyeska Pipeline Service Co., here represented by employee Diana Manning, was an exhibitor at the Miami oil spill conference.



The Sea Slug, a giant bladder for holding recovered oil in a spill, was on display at the International Oil Spill Conference in Miami Beach in May 2005.

and the International Oil Spill Conference.

The council conducted receptions in Homer and Kenai, and we participated in outreach activities for the Kodiak Geographic Response Strategies Project and the Invasive Species Project.

And a coloring book produced by the council went into its third edition in the summer of 2005. It features drawings by artists from inside and outside Alaska. Subjects include coastal fish, mammals and plants; human activities such as fishing; and scenes from coastal communities. For a copy, contact our Anchorage office (see back cover).

EXTERNAL RELATIONS

Publications

he council increases public awareness on a wide range of issues pertaining to crude oil transportation through printed and electronic publications.

The Observer, a free quarterly newsletter, is distributed throughout Prince William Sound, the northern Gulf of Alaska, lower Cook Inlet and the Kodiak Archipelago. The Observer is also sent on request to interested citizens elsewhere, as well as to regulators and industry.

The Observer covers council activities, developments in the oil transportation industry and news about policy and operational issues related to marine oil transportation. Major oil spill drills are covered, and Alyeska Pipeline is invited to submit a column for each issue. In the course of preparing

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articles for The Observer, the council frequently invites feedback from appropriate industry and regulatory personnel.

Once a year, the council summarizes its work in an annual report such as this one.

The council maintains an extensive, award-winning website, www.pwsrcac.org, that provides information about our work, structure, membership, mission, and research. This year, we revamped the site with new categories for easier navigation, updated information and photos, and a cleaner look.

The council makes available a 14-minute video about its origins, mission and activities. This video, titled A Noble Experiment: The Story of the Prince William Sound Regional Citizens' Advisory Council, is shown at conferences and other events attended by the council, and is distributed free to member entities for use in informing their constituents about the council.

State Government Relations

he council monitors state actions, legislation and regulations that relate to terminal or tanker operations, or to oil spill prevention or response. To track developments in the state capital, the council retains a monitor under contract during the legislative session. This area of council activity is coordinated by a Legislative Affairs Committee made up of members of the council board.

Federal Relations

he council monitors federal government actions and issues through a law firm in Washington, DC. Over the past year, we have had two main concerns at the federal level. One is the future of the Prince William Sound escort system, and the other is federal policy on combating non-indigenous species. Both topics are discussed at length elsewhere in this report.

Recertification

he Coast Guard certifies the council as the federally approved citizens' advisory group for Prince William Sound, pursuant to the Oil Pollution Act. The council has been the certified group since 1991. Under the annual recertification process, the Coast Guard assesses whether the council fosters the general goals and purposes of the Act and is broadly representative of the communities and interests as envisioned in the act.

As part of its recertification process, the Coast Guard considers comments from industry, interest groups, and citizens. The council fulfills the requirement for an industryfunded citizens advisory group, but it was established before the law was enacted.



Deputy Director Marilyn Leland and Executive Director John Devens greet visitors to the council display at the International Oil Spill Conference in Miami Beach, May 2005.

WHOWE ARE

he council is an organization of organizations. Our members include state-chartered cities and boroughs, tiny Alaska Native villages with tribal governments, Native corporations, commercial fishing organizations, an environmental consortium, and groups representing the tourism industry.

Each member entity chooses one representative to our board. The lone exception is Valdez. It has two representatives, giving our board a total of 19 members. The board meets three times a year: in January, May and September. The January meeting is in Anchorage, the May meeting is in Valdez, and the September meeting rotates among other member communities in the oil spill region.

Who serves on the board?

The names and faces change, but current and recent board members have included commercial fishermen, a schoolteacher, a college president, the chief executive of a regional Native corporation, tour-boat operators, an oilfield engineer, and a village mayor.

Executive Committee



STAN STEPHENS
President
Alaska Wilderness Recreation
and Tourism Association



STEPHEN LEWIS
Vice President
City of Seldovia



MARILYNN HEDDELL Secretary City of Whittier



JANE EISEMANN Treasurer City of Kodiak



NANCY BIRD Member at Large City of Cordova



BLAKE JOHNSON Member at Large Kenai Peninsula Borough



CONNIE STEPHENS Member at Large City of Valdez

Other Directors



JOHN ALLEN

Community of Tatitlek



AL BURCH Kodiak Island Borough



SHERI BURETTA Chugach Alaska Corp.



PATIENCE ANDERSEN FAULKNER Cordova District Fishermen United



JOHN FRENCH City of Seward



TOM JENSEN

Alaska State Chamber

of Commerce



PETE KOMPKOFF
Community of Chenega



JoAnn C. McDowell City of Valdez



SHARRY MILLER Prince William Sound Aquaculture Corp.



JIM NESTIC Kodiak Village Mayors Assoc.



WALTER PARKER
Oil Spill Region
Environmental Coalition



JOHN VELSKO City of Homer

Ex-Officio Board Members (Non-Voting)

RON DOYEL

Alaska Department of
Environmental Conservation

MARK FINK Alaska Department of Fish and Game/Habitat Division

SHARON RANDALL U.S. Forest Service

JOE HUGHES Alaska Department of Natural Resources

MICHELLE HEUN Alaska Division of Homeland Security and Emergency Mgmt.

CARL LAUTENBERGER U.S. Environmental Protection Agency

> Doug Mutter U.S. Department of the Interior

COMMANDER
MICHAEL S. GARDINER
U.S. Coast Guard/Marine
Safety Office Valdez

CARL SCHOCH
Oil Spill Recovery Institute

JOHN WHITNEY
National Oceanic and
Atmospheric Administration

AS OF JUNE 30, 2005

As of June 30, 2005

They are approximately consecutive to the second conse

our standing committees advise the Board of Directors and council staff on projects and activities. Committee volunteers also assist the staff on individual projects. The advisory committees are made up of interested citizens, technical experts, and members of the council board. Committee volunteers are selected through an annual application process. They are appointed to two-year terms and may serve consecutive terms.

OSPR

OIL SPILL PREVENTION AND RESPONSE COMMITTEE:

Promote strong oil spill prevention and response capability in the Exxon Valdez oil spill region by advising the council's Board of Directors.

JOHN FRENCH — Chair. Council Director

JERRY BROOKMAN — Kenai

SARA BRUCE — Kodiak

Freddie Christiansen — Anchorage

JON DAHLMAN — Seward

NATASHA EDWARDS CASCIANO — Cordova

Joe Jabas — Valdez

Jerry Brookman, a member of the Oil

Spill Prevention /Response Committee, won a 30-minute ride

on this B-17 Flying Fortress when the

World War II bomber visited Kenai in 2000.

JOHN LECLAIR — Anchorage

Walter Parker — Council Director

GORDON SCOTT — Girdwood

SCIENTIFIC ADVISORY COMMITTEE:

Ensure that council-sponsored research, monitoring, and testing projects are based on the best available scientific information, serve the best interests of the public, and are carried out in accordance with the policies and priorities established by the council and mandated by its contract with Alyeska Pipeline and the Oil Pollution Act of 1990.

RICHARD TREMAINE — Chair, Anchorage

PETER ARMATO — Seward

JOHN FRENCH — Council Director

COURTESY OF JERRY BROOKMAN

ROGER GREEN — Hope

JOHN KENNISH — Anchorage

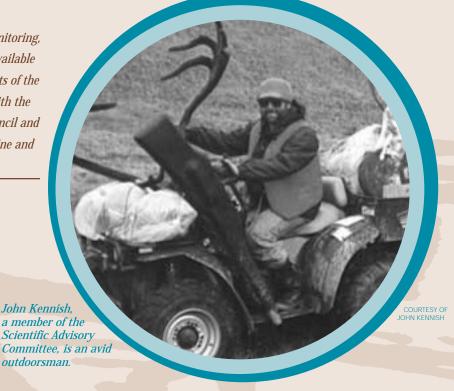
PETE KOMPKOFF — Council Director

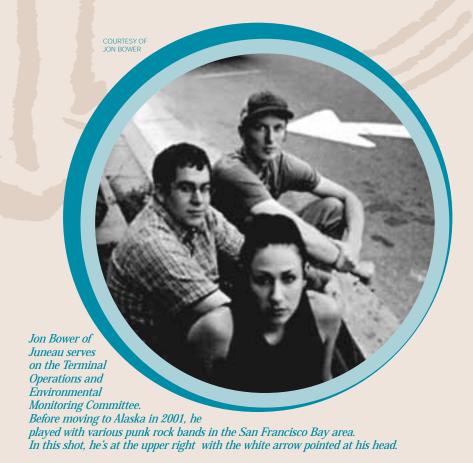
ANDRA LOVE — Anchorage

LESLIE MORTON — Soldotna

MICHELLE HAHN O'LEARY — Cordova

AJ PAUL — Fairbanks





TOEM

TERMINAL OPERATIONS AND ENVIRONMENTAL MONITORING COMMITTEE:

Detect and monitor all existing and potential environmental impacts of the Valdez Marine Terminal and associated tankers, and advise the council of the committee's findings.

Bob Benda — Chair, Valdez

JO ANN BENDA — Valdez

JON BOWER — Juneau

LYNDA HYCE — Valdez

DENISE SAIGH — Anchorage

GEORGE SKLADAL — Anchorage

STAN STEPHENS — Council Director

CORY NOEL TOYE — Anchorage

JANICE WIEGERS — Fairbanks

POVTS

PORT OPERATIONS AND VESSEL TRAFFIC SYSTEMS COMMITTEE:

Advise the council concerning the safe loading, transit and escort of North Slope crude oil tankers in Prince William Sound and the Gulf of Alaska.

BILL CONLEY — Chair, Valdez

DUANE BELAND — North Pole

CLIFF CHAMBERS — Valdez

TEX EDWARDS — Anchorage

JANE EISEMANN — Council Director

Pete Heddell — Whittier

AGOTA HOREL — Valdez

ROBERT JAYNES — Valdez

LINDA LEE — Valdez

CONNIE STEPHENS — Council Director



REPORTS AND PRESENTATIONS

Report titled "METHODOLOGICAL PROBLEMS IN MMS SPONSORED COLD WATER DISPERSANT TESTS AT OHMSETT." Prepared by PWSRCAC, citizens' council, 7/14/2004. 955.431.040714.OhmsettSum.doc

Report titled "Heated Oil and Under-Reported Dispersant Volumes MAR MMS/EXXON Cold Water Dispersant Tests at Ohmsett." Prepared by PWSRCAC, citizens' council, 7/14/2004. 955.431.040714.OhmsettMeth.doc

Presentation titled "HISTORY OF THE PRINCE WILLIAM SOUND REGIONAL CITIZENS' ADVISORY COUNCIL. John Devens, citizens' council executive director, 7/14/2004. Speech and PowerPoint presentation to the Pacific States/BC Oil Spill Task Force.
800.107.040714.BCStatSpeech.doc,
800.107.040714.BCStatPresnt.ppt

Report titled "Combining the Firehouse Model and Community-based Response Teams for an Improved Regional Oil Spill Response System in Alaska." Nuka Research & MAC Services, Nuka Research, 10/1/2004. 659.431.041001.CommbasedRes.pdf

Report titled "Strategic Reconfiguration Working Group (SRWG) Preliminary Draft Comments on the Alyeska Pipeline Service Company Strategic Reconfiguration of the Valdez Marine Terminal Environmental Report dated August, 2004." Citizens' council, 10/5/2004. 500.431.041005.SRWGprelimEA.doc

Report titled "PWSRCAC'S POSITION ON THE USE OF IN SITU BURNING DURING AN OIL SPILL IN THE PWSRCAC REGION THAT INCLUDES PRINCE WILLIAM SOUND AND THE GULF OF ALASKA." Citizens' council, 11/2/2004. 934.431.041102.ISBposition.doc

Report titled "DISPERSANTS, SALINITY AND PRINCE WILLIAM SOUND." Merv Fingas, Environment Canada, 12/1/2004. 955.431.041201.SalinityPWS.pdf

Report titled "Coping with Technological Disasters: A User Friendly Guidebook." Citizens' council, 12/1/2004. 656.431.041201.CopTechDisP1.pdf Report titled "Importance of Maintaining the Prince William Sound Escort System for Double-Hulled Tankers." NUKA Research, citizens' council, 12/3/2004. 801.431.041203.DblEscortPos.pdf

Report titled "Final comments to the JPO/BLM on the Environmental Assessment (EA) and Draft Record of Decision and Finding of No Significant Impact (FONSI) for Alyeska's Strategic Reconfiguration proposal for the Valdez Marine Terminal." John Devens, citizens' council - SR Working Group, 12/30/2004. 500.431.041230.BLMsrEAcmts.doc

Presentation on the Port Valdez Sediment Coring Project. Tony Parkin, citizens' council project manager, 3/14/2005. Association for Environmental Health and Sciences. 961.107.050314.AEHSsdCoring.ppt

Presentation titled "MICROBIAL DEGRADATION IN BIOLOGICAL TREATMENT TANKS AT VALDEZ MARINE TERMINAL BALLAST WATER TREATMENT FACILITY." Tom Kuckertz, citizens' council project manager, 4/5/2005. American Water Resources Association. 557.107.050405.AWRAMicrobil.ppt

Report titled "PRINCE WILLIAM SOUND RCAC LONG-TERM ENVIRONMENTAL MONITORING REPORT FOR 2003-2004." James R. Payne, Ph.D., William B. Driskell, Jeffrey W. Short, Ph.D., 4/18/2005. 951.431.050418.AnnualLT2004.pdf

Report titled "Hydrocarbon Biodegradation in the Ballast Water Treatment Facility, Alyeska Marine Terminal." James Payne, Payne Environmental Consultants, Inc., 5/2/2005. 503.431.050502.PECIMcrblRpt.pdf

Report titled "Telecommunications Review within Prince William Sound." Stephen Hall, SHall Engineering, 5/12/2005. 700.431.050512.TelecomsRpt.pdf

Report titled "The Profitability and Economic Viability of Alaska North Slope and Associated Pipeline Operations." Richard Fineberg, Research Associates, 6/2/2005. 451.431.050602.ANSProfitRpt.pdf

These are a few the many council reports and presentations produced during the year. For further information, or to obtain copies, visit the council web site or contact our Anchorage office.

Work against alien invaders is vital to Alaska's future.

Guest opinion by Marilyn Leland, Deputy Director, Aug. 25, 2004

When the oil stops flowing, who will pay for cleaning up the pipeline route? Guest opinion by John S. Devens, Executive Director, Oct. 4, 2004

Does Puget Sound need a citizens' advisory council? Guest opinion by John S. Devens, Executive Director, Oct. 29, 2004

World-class Prince William Sound escort system could be in peril. Guest opinion by John S. Devens, Executive Director, Jan. 13, 2005

GUEST EDITORIAL

Citizens' group seeks better oil spill plans for Kenai Peninsula,
Kodiak. News release, Jan. 18, 2005

Valdez tour-boat operator elected president of citizens' council. News release, March 11, 2005

Citizen group goes to court over oil profits report. News release, May $27,\,2005$

Report shows oil industry profits are consistently high in Alaska, even when prices are low. News release, June 2, 2005

Contact the council's Anchorage office for copies.



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Financial Manager: Gregory M. Dixon

Community Liaison: LINDA ROBINSON

Project Managers: Joe Banta, Lisa Ka'aihue, Susan Sommer, Linda Swiss

Administrative Assistant: Mary Schonberger

Document Management Specialist: BARB PENROSE

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