REGIONAL CITIZENS' ADVISORY COUNCIL 2007-2008 In Review



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t has been almost 20 years since the Exxon Valdez oil spill in Prince William Sound and, thanks to Alaskans' commitment to avoiding another disaster, citizen oversight in the Sound has grown from a concept to a reality. I am also proud to say that today our group is recognized around the world as a model for effective, cooperative safekeeping of a world-class shipping industry. This year the council has seen some long-standing issues resolved, such as air quality improvements at the Valdez terminal, and has confirmed new threats, such as the oil spill response gap.

Building on a momentum of cooperation, the council and industry continue to maintain positive working relationships to address our concerns and to keep the Sound a safe and clean environment. Here are some highlights of the past year:

FROM THE PRESIDENT

We saw the first steps toward solving a long-running problem at Alyeska Pipeline Service Co.'s tanker terminal in Valdez: hazardous air pollution from the facility that cleans oily residue from tanker ballast water.



PATIENCE ANDERSEN FAULKNER

Vapor controls at the first stage of the treatment facility came online in February 2008. We were able to review

engineering designs and see the facility first hand. The new design is a big step toward reducing air pollution in Valdez and the council continues to monitor work by Alyeska on additional renovations to the final stages of the treatment facility that should bring an even cleaner process.

The council is studying an oil spill response gap that could severely limit the ability to effectively respond to a spill, considering the extreme weather conditions that exist in the Sound. This response gap confirms a long-standing concern that tankers are allowed to move oil at times when sea and weather conditions make it impossible for the existing response system to perform as designed.

Further research into the response gap is needed and may help the council, regulators, and industry to identify ways to narrow the gap.

Continuing our effort to better understand the capabilities of the Sound's escort tugs, including performance abilities at Hinchinbrook Entrance, the council has joined the joint industry project SAFETUG initiated by Maritime Research Institute Netherlands. SAFETUG will be evaluating the best available tug technology including winches, tow lines and the human factor in order to define their operable limits.

The council is wrapping up a comprehensive oral history of the Exxon Valdez oil spill. The working title is "The Spill: Personal Stories of the Exxon Valdez Disaster." This book will feature interviews with over 60 people who experienced the spill first-hand. They include Alaska citizens; government agency personnel involved with the spill and cleanup; elected officials who dealt with the spill; and oil industry personnel involved in the spill and cleanup. We plan a follow-up volume that will analyze the lessons in oil spill impacts, prevention, and response to be drawn from this wealth of personal experience.

We remain active against the threat that non-indigenous species arriving via hull fouling or tanker ballast water could invade Alaska's maritime environment. The council has entered



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and the EXECUTIVE DIRECTOR

into a project with the University of Washington to research hull fouling on large vessels that operate in Prince William Sound. The council continues to monitor the Sound for invasive species. Efforts to monitor

for the European green crab now include Homer, Cordova, Kodiak, Tatitlek, Valdez, Unalaska, Chenega Bay, Whittier, Valdez, and Ketchikan.

- We produced "Then & Now, The Alaska Oil Spill at 20," a 30-minute video history recalling the aftermath of the Exxon Valdez oil spill. It includes interviews and footage of the spill, and shows some of the improvements the council has worked toward in the safety of oil transportation since the spill.
- The Alaska Legislature passed a measure that had been a high priority for the council and the region's commercial fisherman. House Bill 289 passed without opposition. The bill eliminates a problem that arose in 2007, when the state began requiring fishing vessel captains to pay unemployment taxes on crewmembers who worked during oil spill response drills. The council pointed out that this problem could push vessel owners to drop out of the program because of the inconvenience of figuring and paying unemployment taxes on their crews for just a few days of work per year.
- The long-awaited ruling in the case of the Exxon Valdez oil spill was finally handed down this year. The Supreme Court capped punitive damages at \$507.5 million, whittled down by a series of court rulings from \$5 billion.

The citizens' councils for Prince William Sound and Cook Inlet filed a friend of the court brief in January 2008 arguing for the retention of punitive damages as a deterrent to risky corporate behavior of the sort that led to the Exxon Valdez spill. In light of this extremely disappointing decision, the council's mission to promote environmentally safe operation of Alyeska Pipeline's Valdez Marine Terminal and associated oil tankers has taken on a renewed vigor.

As we move toward 2009, the 20th Anniversary of the Valdez spill is at the forefront of our minds. We are organizing a multi-community commemoration called Partners in Prevention: 20th Anniversary of the Exxôn Valdez Oil Spill, featuring events held in several spill-affected communities. Cicizens

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



MISSION

he Prince William Sound **Regional Citizens'** Advisory Council is an independent non-profit corporation guided by its mission: promoting environmentally safe operation of the Alyeska 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 Alaska Native. aquaculture. commercial fishing. environmental. 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, which operates the trans-Alaska pipeline as well as the Valdez terminal. Most of the council's operating funds come from this contract.

The second guiding document, enacted after the council was created, is the Oil Pollution Act, 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, to build trust, and to provide citizen oversight of



RESPONSIBILITIES

environmental compliance by oil terminals and tankers. The Act allows an alternative, pre-existing organization to fulfill the requirement for citizen oversight and our council has done so for Prince William Sound since 1991. Each year, the U.S. Coast Guard certifies that the council fosters the general goals and purposes of the Oil Pollution Act of 1990 and is broadly representative of the communities and interests as envisioned in the Act.

> The council's contract with Alyeska 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 promoted citizen involvement requirements 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:

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

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

Review and make recommendations on government policies, permits, and regulations relating to the oil terminal and tankers.



Sunrise in Valdez at the Petro Star dock.

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

The Alyeska 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.

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 funding is approximately \$3 million a year. The council's total annual budget is about \$3.7 million.

Although the council works closely with and is funded chiefly by Alyeska, 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."



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, oil spills and other incidents, and the adequacy and maintenance of the Coast Guard's Vessel Traffic Service.

TANKER SAFETY

ESCORT SYSTEM

he heart of the system for preventing oil spills in Prince William Sound is the fleet of rescue and response tugs that accompany loaded tankers in the Sound. Thanks to years of study and analysis, and considerable investment by the shipping industry, this system is widely considered among the best in the world. This fleet, operated by Crowley Maritime Corporation under contract to Alyeska's Ship Escort Response Vessel System, includes five state-ofthe-art 10,000-horsepower tugs.

Federal law requires that loaded single-hull oil tankers be escorted by two tugs in Prince William Sound. The current practice is for double-hull tankers to have double escorts as well. However it's unclear what will happen as the tanker fleet completes the transition to double-hull vessels. Only one single hull tanker remains in the fleet and it has a mandatory retirement date of January 2010. After that, the use of double escorts will hinge on voluntary compliance or on state-level requirements. The council is concerned that the tanker companies may propose to reduce the escort and response system once double-escort requirements are dropped.

As a result, the council in January 2007 adopted a new position on the escort system. It calls for all laden tankers in Prince William Sound, including double-hulled tankers, to continue to be escorted by two escorts.

OIL SPILL PREVENTION



IRTESY OF KATE GOLDEN ALYESKAVSERVS



Alyeska SCRVS rugs assist a vessel during a rowing excercise.

Additionally, the tug stationed at Hinchinbrook, pending future technological improvements, should always be a prevention/response tug and should only be replaced by an equivalent vessel during its rotated maintenance schedule.

MARINE FIREFIGHTING SYMPOSIUM

 he council helped bring firefighters from more than a dozen communities to Valdez for a Land-Based Marine Firefighting Symposium in May 2008.
Participants learned about shipboard



The rug Tanerliq escorts a tanker via touline through Prince William Sound.

firefighting as well as fire awareness and prevention for tank farms, cruise ships, small boats, and marinas.

The symposium successfully promoted dialog between firefighters and industry and stressed the importance of public/private partnerships. A panel discussion was held so participants from local, state and federal regulatory agencies, industry, tug and salvage operators and local fire departments could understand how best to work together in the event of a fire aboard a tanker in Prince William Sound or at the Valdez Marine Terminal.

SAFETUG PROJECTS

operational modes.

he council is joining the Maritime Research Institute Netherlands' SAFETUG joint industry projects. The SAFETUG projects are a gathering of nearly 30 industry participants interested in studying the performance of tugs in waves, while assisting vessels at a variety of speeds and

The council's objective is to increase understanding about the capabilities of escort tugs in exposed conditions through focused, systematic model testing at the MARIN facility in Wageningen, Netherlands. This information will be used to address limitations in the Sound's current fleet and to decide whether a more capable vessel is needed for duty at Hinchinbrook Entrance and the Gulf of Alaska.



OIL SPILL REPAREDNESS AND RESPONSE



The council has devoted significant resources to preventing oil spills, but the risk cannot be eliminated entirely. We must be prepared to respond quickly and effectively in case 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

tate 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 many cases, the council participates with government and industry in workgroups that develop contingency plans. The council also conducts independent reviews and submits comments and recommendations.

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

During the past year, the council reviewed applications for new contingency plans for oil tankers and for the Valdez terminal.



Firefighters accending the Land-Based (Darine Firefighting Symposium route hose to a vessel during an exsercise.

VALDEZ MARINE TERMINAL CONTINGENCY PLAN

he latest Valdez terminal contingency plan was approved in May 2008. The council participated in improvement of this plan over the course of several years, meeting regularly with a work-

group. Workgroup participants included the state-federal Joint Pipeline Office, the Coast Guard, Alyeska, and



Oil Tanker docked at the Valdez Marine Terminal.

the Alaska Department of Environmental Conservation.

This workgroup covered issues including training, storage tank status and inspections, and new contingency plan regulations adopted by the state of Alaska in December 2006. We consider cooperation that took place on the contingency plan one of the most successful processes we have participated in.

For 2008, the council focused on tank inspections at the Valdez terminal. For the past few years Alyeska has recently requested deadline extensions for several of its tank inspections. This year Alyeska deferred scheduled internal inspections for two of its crude oil storage tanks until 2012.

The Alaska Department of Environmental Conservation initially rejected the request. However, in March 2008, Alyeska submitted additional data, requesting a waiver to extend their inspection interval from 10 years to 14 years. The waiver was ultimately approved. However, the council has commissioned its own analysis for completion during 2008.

OIL TANKER CONTINGENCY PLANS

he Prince William Sound tanker oil spill contingency plan was approved in November 2007 after being re-written into two volumes: a Core Plan and a Technical Manual for Alyeska's Ship Escort Response Vessel System. As part of the approval,





An Alyeska spill responder preps a culvert during a sectlement pond drill.

there was a commitment by the Alaska Department of Environmental Conservation to partner with the council and the Sound's oil shippers to participate in a steering committee that would guide a work group process continuing to improve the plan.

The council has several issues that it thought were not adequately addressed during the renewal, including escort tugs, response operating limitations, downsteam response, and sensitive area protection. The council will be working to resolve these issues through our participation in the steering committee and associated working groups during the five years the contingency plan will be in effect.

GEOGRAPHIC RESPONSE STRATEGIES

hese are oil spill response mini-plans specific to sensitive areas and resources, such as salmon streams, sea lion haulouts and clamming beaches. These pre-established defense plans allow

response teams to take immediate action, saving time during the critical first few hours of a spill response.

The council has long worked to include them in oil spill contingency plans.

Geographic Response Strategies were finished for Kodiak Island, specifically the eastern and southern zones, in 2008. The next area for geographic response strategy work to be done is Prince William Sound, expected to begin in 2009.

A sensitive area protection exercise was conducted in October 2007 and included both tabletop and field deployment components. This exercise included the deployment of three Geographic Response Strategies in Port Valdez.

More information about Geographic Response Strategies is available at www.state.ak.us/dec/spar/perp/ grs/home.htm on the Internet.

WEATHER AND SEA CURRENT DATA COLLECTION

eather conditions and sea currents affect nearly every aspect of oil transportation safety. They can play a critical role in efforts to prevent or to clean up oil

spills. Consequently, the council promotes constant improvements in the system for collecting weather and





Workers block oil from moving downscream with inflatable equipment during a drill in a settlement pond.

current information for Prince William Sound.

A surface current mapping project by the University of Alaska Fairbanks, co-funded by the council is scheduled for summer 2009. The council also co-funded work to collect wave data in the central sound over the past winter.

There are now 15 webcams set up or scheduled to be set up in the Sound that were co-funded by the council. Web images from Tatitlek and the Sound's hatcheries can be seen at the AOOS PWS Ocean Observing System web site, http://ak.aoos.org/pws/web_cams.php

SHOREZONE MAPPING

he council has been involved in Shore-Zone Mapping in the Sound since 2004. ShoreZone mapping involves shooting aerial video of shorelines during the lowest tides of the year. Biologists and geologists aboard the aircraft provide commentary on the video sound tracks during the overflight. The information is used to create detailed maps and a database of these shorelines and the terrestrial and marine organisms; in addition, the video itself becomes part of the ShoreZone information bank.

The council's primary goal in ShoreZone mapping is to have this detailed information available for use in oil spill response planning (including the preparation of Geographic Response Strategies) and in actual responses. However, the information has other uses as well, including education and research unrelated to oil spills. Imaging and mapping work for Alaska following the summer 2007 field season added a large volume of imagery collected in Southeast Alaska, Prince William Sound and the Copper River Delta.

In the summer of 2007, the council, working through a cooperative funding agreement with the Alaska Department of Natural Resources gathered 125 miles of aerial video-imaging data in the Sound as well as an additional 621 miles of data from the eastern region of the Sound towards Icy Bay.

When work by other organizations is completed, there will be a continuous set of habitat map-

ping data stretching from Southeast Alaska to Kodiak. ShoreZone mapping data, including aerial video imagery—is available to the public at www.CoastAlaska.net on the Internet.

OIL SPILL PREVENTION AND RESPONSE OPERATIONS

It takes more than volumes of carefully written and reviewed contingency plans to respond effectively to an oil spill or to an emergency that could cause one. It also 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 Alyeska's Ship Escort Response Vessel System (SERVS) and the tanker companies, and with making sure the council itself is prepared to respond to oil spills and other emergencies.

Council staff members, volunteers, and contractors monitor and report on spill response drills, exercises, and training throughout the region to provide citizens, regulators, and responders with information about the state of readiness and to make recommendations for improvement. Most of the monitoring work



is done by council staffers, who present annual reports summarizing each year's activities, lessons learned, recommendations, and outstanding issues.

In 2007, two major multi-day drills were conducted in Valdez. As a result, no major drills were planned for the first part of 2008; however, several small-scale exercises were conducted.

A major focus of the tanker plan exercises this year was to demonstrate Alyeska's ability to work in darkness. Three drills were held for that purpose: a nearshore drill in Cordova, an open water barge exercise in Valdez, and a tabletop exercise for oil tracking and surveillance in Valdez.

Two drills were conducted with the Cordova Rapid Response vessels, which provide one-hour call-out capability for towing boom from barges. These vessels also worked with the Valdez Star, one of SERVS largest skimmers, during these drills.

THE RESPONSE GAP

he council has long been concerned about the 'response gap'—the fact that loaded tankers are allowed to sail through Prince William Sound in weather so harsh that oil recovery

would not be possible in the event of a spill. To address this problem, the council hired a consulting firm to analyze the response gap, to examine its severity and to develop recommendations for narrowing the gap. The consultant concluded the gap may be 'open'—meaning mechanical oil spill response systems are not effective —as much as two-thirds of the time during the winter, and about one-sixth of the time even in summer. On a year-around basis, the consultant estimated, mechanical oil spill response in Prince William Sound is impossible 38.5 percent of the time, or 140 days a year.

In 2008, further research looked into the application of dispersants and in-situ burning. Dispersants are chemicals intended to dilute spilled oil and in-situ burning is the controlled burning of spilled oil on the water.

This new research found that dispersant application is impossible 80 percent of the year in some parts of the Central Sound and Hinchinbrook Entrance. In situ burning is impossible in parts of the Central Sound and Hinchinbrook Entrance 58 percent of the year.

The council is in the process of communicating the results of the studies to industry officials and regulators, in an effort to develop a collaborative approach to address the response gap.

The reports, Response Gap Estimates for Two Operating Areas in Prince William Sound and Non Mechanical Response Gap Estimate for Two Operating Areas in Prince William Sound, are available in Adobe Acrobat format at www.pwsrcac.org/docs/d0034200.pdf on the council's website.



Cordova vessels practice booming and skimming during the Cordova Fishing vessel training.



The Oil Pollution Act directs the council to review, monitor, and comment on Alyeska's environmental protection capabilities, as well as the actual and potential environmental impacts of terminal and tanker operations. The Act also calls on the council 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 commissions technical and scientific studies to determine actual or potential risks. to document levels of pollution and biological effects, and to better understand new technologies and the environmental costs or benefits that might be associated with their use.

TERMINAL OPERATIONS

B esides posing the risk of a major oil spill caused by earthquake or accident, Alyeska's Valdez tanker terminal produces ongoing air and water pollution from routine operations, as allowed by its permits from regulatory agencies. The council oversees terminal operations in an effort to not only minimize the risk of spills, but to make sure that permitted pollution is within regulatory limits and that those limits are set at the lowest feasible levels.

CONVIRONMENTAL PROTECTION AND SCIENCE



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The council has monitored oil loadings at the terminal since January 2002. At that time, an average of about 968,000 barrels of North Slope crude moved through the terminal and onto tankers every day. Since then, oil flow has decreased steadily, reaching an average of about 661,031 barrels a day during the first five months of 2008. That's just a third of what the trans-Alaska pipeline carried to Valdez at its peak of about two million barrels a day in the early 1990s. However, the value of the oil moving through the terminal has drastically increased, because crude oil prices have risen sharply. In 2002, the oil moving through Valdez was worth about \$700,000,000 a month; in 2008, throughput value exceeded \$2 billion per month.

Council staff continues to monitor oil storage at the Valdez Marine Terminal. Except for periods of time during which loading was restricted due to weather or maintenance, oil stored at the terminal ranged from 40 percent to 70 percent of available capacity.

AIR AND WATER QUALITY

ydrocarbon vapors released from the Ballast Water Treatment Facility at the Valdez terminal have been a major source of volatile organic compounds and other air pollutants. Some of these emissions are known carcinogens and may be affecting health or the quality of life in Valdez. The Ballast Water Treatment Facility services the few tankers arriving in Valdez with oily ballast water, carried in cargo tanks to provide navigational stability during the trip north.

This water is cleaned so that concentrations of specified pollutants in the water are reduced to permitted levels, typically ranging from a few parts per million to a few parts per billion, before it is discharged into Port Valdez. These discharges occur under a National Pollutant Discharge Elimination System permit issued



Aerial view of the Alyeska Valdez (Darine Terminal.

Courtesy of ALYESKA PIPELINE



by EPA and a separate permit issued by the Alaska Department of Environmental Conservation.

In 2005, Alveska announced a project to renovate its treatment facility. For years, the council had expressed concerns over the emission of hazardous air pollutants and carcinogens from the treatment facility. As the details of the renovation surfaced, it became clear that the council's air pollution issues were being addressed and council staff was invited to partici-



Alyeska Valdez (Darine Terminal overlooking Port Valdez.

pate in engineering design reviews pertaining to the renovations.

New vapor controls for tanks used in the first stage of treatment became operational in February of 2008. As a result of decreasing ballast water throughput and the implementation of these controls, emissions of hazardous air pollutants from the treatment facility are now well below prev-ious levels.

Council staff continues to participate in engineering design reviews for the second and third stages of processing, which now consists of dissolved air flotation and biological treatment. Alyeska has started construction for a closed air stripper and thermal oxidizer system that will replace the biological treatment process. Operation of the air stripper and thermal oxidizer expected to begin the first quarter of 2009.

TERMINAL INTEGRITY ISSUES

n 2006, the council began investigating concerns raised by whistleblowers about faulty welds, incorrect welding procedures, and regulatory indifference during work in 2002 on four tanks that store crude oil, ballast water, or diesel fuel at the terminal.

While it appeared that some welding irregularities may have occurred, Alyeska maintained that all welds were safe. The council hired an independent contractor to examine documentation provided by Alyeska, Alaska Department of Environmental Conservation and Joint Pipeline Office.

The contractor confirmed that minor procedural irregularities existed and reported that the proper heat input to the welds could not be verified. The contractor recommended that a welds expert examine the integrity of the welds. In June 2008, a welds expert, paid for by Alyeska and the council examined the welds by means of hardness testing and found them to be compliant with the applicable standards.

REDUNDANT REMOTE CONTROL OF THE VALDEZ MARINE TERMINAL

uring heavy rains and flooding in Valdez in October 2006, Alyeska's fiber optic communications channel was damaged in several places. The damage caused Alyeska's Operational Control Center

to lose the ability to remotely control many of the check valves between Pump Station 12 and the Valdez Marine Terminal.

In response to previous inquiries by the council pertaining to automatic control of the Trans-Alaska Pipeline System and the terminal, Alyeska said a communications failure of the type observed during the flooding was extremely unlikely because three redundant systems — fiber optics, microwave, and satellite – were in place.

Alyeska has since moved the control center from Valdez to Anchorage to remotely control not only the pipeline but also the Valdez Marine Terminal.

Staff visited the Anchorage control center and verified that the communications infrastructure between the Anchorage control center and the Valdez terminal do indeed appear to be redundant. Multiple communication failures would be necessary to prevent

proper functioning of the control system.

ENVIRONCIENTAL CONITORING CHEMICAL DISPERSANTS

hemical dispersants are substances that, when applied to spilled oil, are designed to disperse it down into the water column, rather than leaving it floating on top in a slick. The council promotes research and testing to increase knowledge about chemical dispersants and the environmental

consequences of their use on oil spills in Alaska waters. The council has voiced concerns about the efficacy

and toxicity of dispersants for years, urging regulatory agencies to take a conservative approach towards their use. Because outstanding questions have not been answered and research has not demonstrated that dispersants would even work in the cold temperatures and low salinity waters of Prince William Sound, these concerns remain largely unaddressed and the council continues its advocacy for research into the many questions about dispersant use in our region.

The council is focusing on revisions to its existing comprehensive literature review, last updated in March 2002. These revisions will summarize all relevant



The Oil and Hazardous (Dazerials Simulazed Chvironmenzal Test Tank. The Facility is a safe place to test clean up technology and techniques.

research that has been conducted on oil spill dispersants since the 2002 update. It will emphasize two dispersants subject areas – biodegradation and bioaccumulation, of chemically and naturally dispersed oil, and the alternate response technology of oil solidifiers.

Biodegradation is the process of organisms breaking down substances. Bioaccumulation is when organisms slowly absorb toxic substance, which can pose risks of poisoning, even when concentrations are very low.

The project will help the council determine the conditions under which chemically dispersed crude oil will harm marine life and will help to plan and design specific, directed studies of these subjects.

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. This "clean" ballast,

taken in at the port of origin, is filled with living organisms that are discharged with it into Prince William Sound and Port Valdez as tankers approach the Alyeska terminal for loading. Because of the potential for invasions by harmful species, the council has made this issue a high priority since 1996.

Council staff member Lisa Ka'aihue was recently elected to the national Invasive Species Advisory Committee, filling the seat formerly held by former council



deputy director Marilyn Leland.

With council assistance, the Invasive Species Advisory Committee held one of its meetings in Alaska. Committee members were able to see first-hand one the last places in the United States where we have the opportunity to focus on prevention rather than management of harmful invasive species.

The council contributes to an invasive species monitoring program established by the Smithsonian Environmental Research Center and continues to stay

active in efforts to establish a statewide invasive species group that will foster proactive management strategies, among other things.

The council, in partnership with the U.S. Fish and Wildlife Service, has entered into a project to research biofouling communities on large vessels that operate in Prince William Sound, including oil tankers, barges, ferries and cruise ships. Biofouling occurs when organisms, such as barnacles or mussels, attach themselves to vessel hulls.

The council chose the University of Washington to conduct research for this project. The researchers are developing hull sampling methods and taking samples of organisms from various vessels, with a focus on oil tankers. The study will provide important information on which vessels pose the greatest risk of introducing invasive species via fouling and provide recommendations designed to prevent the spread of nuisance species. GREEN CRAB

> or many years, the council has sponsored a trapping effort in Port Valdez for the
> European green crab, which has traveled up the West Coast from San Francisco Bay at an alarming rate. While the species, report-

edly moving north along the coast of Canada has not been found in Alaska, it is of concern to the council, because ballast water is a known pathway for this

> crab. As of summer 2007, the council, with support from the U.S. Fish and Wildlife Service, had helped expand monitoring efforts to Homer, Cordova, Kodiak, Tatitlek, Valdez, Unalaska, Chenega Bay, Whittier, Valdez, and Ketchikan.

During August 2007, council staff traveled to Southeast Alaska to provide monitoring training to several resource managers and researchers including the Alaska Department of Fish

and Game and National Oceanic and Atmospheric Administration. The council also partnered with other organizations to produce a new



Сикореан дясен скаб.





A Valdez High School scudent collects sediment samples in Port Valdez.

green crab alert poster for education and outreach.

More information on the council's invasive species program and the green crab alert poster can be found at www.pwsrcac.org/projects/NIS on the Internet.

REGIONAL ENVIRONMENTAL MONITORING

n 1993, the council established a Long-Term Environmental Monitoring Program, called LTEMP. The program assesses the status of hydrocarbon levels in the region, as well as long-term trends and any new developments that could have an effect on those levels.

Samples are collected at intertidal sites in Prince William Sound and the Gulf of Alaska. Mussel tissues and sediments from the sites are analyzed in a laboratory to determine whether hydrocarbons are accumulating and, if so, their source. The result is the largest chronological set of data for hydrocarbons in Prince William Sound ever compiled.

One of the most important steps this year has been a review of LTEMP, based on a contractor report that analyzed the project and its data collected from 1993-2005.

LTEMP reports, along with additional information on the program, are available at www.pwsrcac.org/projects/EnvMonitor/Itemp.html on the council website.

HYDROCARBON TOXICITY

his year, the Scientific Advisory Committee completed revisions to a project called Hydrocarbon Toxicity, which combines three projects into a single large project.

The projects being combined include In Situ Burning, Dispersants Bioavailability, and Hydrocarbon Transfer to Prince William Sound Fish Fry.

The unification of these projects will allow for a more comprehensive look at the effects of hydrocarbon pollution from multiple sources in the Sound's marine ecosystem.

Results from the project should provide information regarding whether hydrocarbons introduced into the water are taken up by microscopic organisms and transferred up the food chain to fish or marine mammals in harmful concentrations.





Seudene are work at the Tatielek Heritage Festival.

MEMBER RELATIONS

he council has a full-time Outreach Coordinator to maintain productive relations with the 18 communities and interest groups that make up its membership. The coordinator 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.

Over the past year, the council participated in outreach activities on both local and national levels. Locally, the council participated at the Alaska Association of Municipal Clerks conference; the Alaska Forum on the Environment conference; the Alaska Wilderness, Recreation and Tourism conference, and the Matsu and Kenai Sportsman's shows.

National events included the Arctic Marine Oil spill Program technical seminar in Calgary, Alberta; the Clean Pacific conference and Pacific Marine Expo in Seattle; the Society for Environmental Toxicology and Chemistry's annual meeting in Milwaukee; and the International Oil Spill Conference in Savannah, Georgia.

Plans have begun for events commemorating the 20th anniversary of the Exxon Valdez Oil Spill. Tentative topics include a press roundtable with reporters that worked during the spill; sessions on socio-economic impacts, current prevention and response trends; and a video tour of the Alaska Sealife Center.

Participating communities may include Kenai,

OUTREACH



17 8

Valdez, Seward, Cordova, Homer, Kodiak and Anchorage. The event will also include art shows in some of the communities, and a book fair in Anchorage.

The council has produced a 30-minute video history of the Exxon Valdez oil spill. It includes interviews and footage of the spill, and also shows some of the improvements in the safety of oil transportation made since the spill. It was accepted for showing at the International Oil Spill Conference and will be shown on Alaska ferries in addition to being sent to many people in and out of the state.

To encourage youth involvement, students from Valdez and Kodiak were brought to a science night event. The council also helped bring Valdez students to part of the Invasive Species Advisory Committee's meeting in Anchorage.



Executive Director, John Devens and Board member John Velsko greet an accendee at Pacific (Darine Expo.

INFORMATION AND EDUCATION COMMITTEE

he Information and Education Committee held its inaugural meeting this year. The mission: support the council's work by fostering public awareness, responsibility and participation through

information and education.

The committee's work will include promoting collaboration with people, communities and organizations in regions that have environmental challenges similar to those faced by the council in its region.



A volunceer inservers a seudene on native erafes during the Tatielek heritage festival.

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. In addition, it is posted on the council website, www.pwsrcac.org.

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 is invited to submit a column for each issue. In the course of preparing articles for The Observer, the council frequently invites feedback from appropriate industry and regulatory personnel.

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.

The council also places public service announcements about its work, mission, and concerns on radio stations in the Exxon Valdez oil spill region. Many



of these announcements feature council volunteers telling about their own lives and why they decided to donate their time and energy to the council's work. These announcements are available for playback at www.pwsrcac.org/newsroom/radio.html on the council website.

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

The council is preparing two publications for release on March 24, 2009, the 20th anniversary of the Exxon Valdez spill.

The first is an oral history of the event and its aftermath. This book will involve interviews with about 70 people who had first-hand experience with the spill. They include such Alaskans as fishermen, villagers, and local government officials; officials of Exxon and other companies involved in the spill and the cleanup effort; and government agency personnel who dealt with the event. The book will also include numerous photographs.

The second council publication for the 20th anniversary is a then-and-now report on safety improvements to the Prince William Sound oil transportation system since 1989.

STATE GOVERNMENT RELATIONS

he council monitors state actions, legislation and regulations that relate to terminal or tanker operations, or to oil spill prevention and 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.

During the 2008 legislative session, the committee focused on securing approval of an exemption from newly enforced state unemployment insurance requirements for captains and crews of fishing vessels engaged in oil-spill response exercises. As such requirements do not apply to these vessels during commercial fishing operations, the new rule threatened to drive vessel owners out of the oil-spill response program because of the burden of figuring and paying unemployment taxes on their crews for just a few days of work per year. The measure passed the Legislature with overwhelming support and was signed into law by Gov. Sarah Palin.

FEDERAL GOVERNMENT RELATIONS

 he council monitors federal government actions and issues through contract representatives in Washington, DC. As in past years, the council's efforts at the federal level in the past 12

months focused on the problem of aquatic nuisance species, especially the issue of requiring oil tankers bound for Valdez to exchange their ballast water at sea to reduce the threat of Alaska waters being invaded by non-indigenous species. While several invasive-species measures of interest to the council were before Congress in 2008, none passed or seemed likely to do so before adjournment.



In October 2007, Executive Director John Devens and board member Scan Stephens traveled to Washington, D.C. to meet with the Alaska Congressional delegation and agency officials to discuss federal legislation on non-indigenous species, among other things. Here, Devens (left) and Stephens (right) are shown with Captain Francis Sturm, the Coast Guard's deputy director of prevention policy.

RECERTIFICATION

The 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 industry-funded citizens advisory group, but it was established before the law was enacted.

CUHO

BOARD OF DIRECTORS

EXECUTIVE COMMITTEE



PATIENCE ANDERSEN FAULKNER PRESIDENT Cordova District Fishermen United



STCPHCN LCUIS



CDARILUNN HEDDELI



JOHN FRENCH TREASURER City of Seward



MEMBER AT LARGE



MEMBER AT LARGE



WALTCR PARKCR MEMBER AT LARGE Oil Spill Region Environmental Coalition

WHO WE 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. 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, the chief executive of a regional Native corporation, tour-boat operators, an oilfield engineer, and a village mayor.



OTHER DIRECTORS

ARC



JOHN ALLEN Community of Tatitlek



SHERI BURETTA Chugach Alaska Corp.



NANCY BIRD City of Cordova



PAT DUFFU Alaska State Chamber of Commerce



GEORGE LEVASSEUR City of Valdez



AL BURCH Kodiak Island Borough



IANC CISECOANN City of Kodiak



Kodiak Village Mayors Association



IVER CDALUTIN



WANICE COULES

Alaska Division of Homeland Security and Emergency Mgmt.

RON DOUCL Alaska Department of Environmental Conservation

> CDARK FINK Alaska Department of Fish and Gamela Habitat Division

JOC HUGHES Bureau of Land Management

CARL LAUTENBERGER U.S. Environmental Protection Agency

> DOUG COUTTER U.S. Department of the Interior

W. SCOTT PEGAU Oil Spill Recovery Institute

SCOTT PEXTON Joint Pipeline Office

SHARON RANDALL U.S. Forest Service

CDR DARRYL VERFAILLIE U.S. Coast Guard Station Valdez

> JOHN WHITNEY National Oceanic and Atmospheric Administration



CATHU HART Alaska Wilderness Recreation & Tourism Association



THANE COILLER Prince William Sound Aquaculture Corp.



JOHN VELSKO City of Homer





C O O



Former committee member, Linda Lee long lines for halibur near Knight Island.

COMMITTEES

As of June 30, 2008

ive standing committees advise the Board of Directors and the 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

Oil Spill Prevention and Response Committee: Minimize the risks and impacts associated with oil transportation through strong spill prevention and response measures, adequate contingency planning. and effective regulations

JOHN FRENCH, PH.D. CHAIR, COUNCIL DIRECTOR City of Seward

JCRRY BROOKCDAN Kenai

BOB FLINT Anchorage

DAVID GOLDSTEIN Whittier

JOC JABAS Valdez

JOHN LECLAIR Anchorage

GEORGE LEVASSEUR COUNCIL DIRECTOR City of Valdez

COUNCIL DIRECTOR Oil Spill Region Environmental Coalition

GORDON SCOTT Girdwood

JOHN VCLSKO COUNCIL DIRECTOR City of Homer

SAC SCIENTIFIC ADVISORY COMMITTEE

Scientific Advisory Committee: Promote the environmentally safe operation of the terminal and tankers through independent scientific research, environmental monitoring, and review of scientific work

JOHN FRENCH, PH.D. CHAIR, COUNCIL DIRECTOR City of Seward

JCNNIFCR BURNS, PH.D. Anchorage

ROGCR GREEN, PH.D. Hope

AGOTA HORCL Fairbanks

JOHN KCNNISH, PH.D. Anchorage

DOROTHY CD. CDOORC COUNCIL DIRECTOR City of Valdez

RICHARD TRECDAINC







A sculpcure by committee member George Skladal.

TOCO TERMINAL OPERATIONS AND ENVIRONMENTAL MONITORING COMMITTEE

Terminal Operations and Environmental Monitoring: Identify actual and potential sources of episodic and chronic pollution at the Valdez Marine Terminal

BOB BENDA CHAIR Valdez

JO ANN BENDA Valdez

NANCY BIRD COUNCIL DIRECTOR City of Cordova

STEVE BUSHONG Valdez

GEORGE SKLADAL

JANICE WIEGERS Fairbanks

POVTS PORT OPERATIONS AND VESSEL TRAFFIC SYSTEMS COMMITTEE

Port Operations and Vessel Traffic Systems: Monitor port and tanker operations in Prince William Sound

ROBCRT JAUNES CHAIR Valdez

CLIFF CHACOBERS VICE CHAIR Seward

DUANC BELAND North Pole

BILL CONLEY Valdez

PAT DUFFU COUNCIL DIRECTOR Alaska State Chamber of Commerce

JANC CISCODANN COUNCIL DIRECTOR City of Kodiak

PETE HEDDELL Whittier

JOHN VCLSKO COUNCIL DIRECTOR City of Homer



(L to R) Pere Heddell, Blake Johnson, (Darilgnn Heddell,



Janelle Cklund, Naney Bird, Savannah Lewis, Amanda Johnson and Carby Harr.

IEC INFORMATION AND EDUCATION COMMITTEE

Information and Education Committee: Support the council's work by fostering public awareness, responsibility and participation through information and education

PATIENCE ANDERSEN FAULKNER CHAIR, COUNCIL DIRECTOR Cordova District Fishermen United

JANC CISCODANN COUNCIL DIRECTOR City of Kodiak

NANCY BIRD COUNCIL DIRECTOR City of Cordova

DOROTHY CD. COORC COUNCIL DIRECTOR City of Valdez

CATHY HART COUNCIL DIRECTOR Alaska Wilderness Recreation & Tourism Association

SAVANNAH LEWIS Seldovia

PETER ARCDATO

STAN STEPHENS Valdez S ORT 2 $\widetilde{\sim}$ EDIA PR amd S PAPER

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