

# The Observer

VOLUME 14, No. 2/May 2004

AK Chamber of Commerce - AK Wilderness Recreation & Tourism Assoc. - Chugach Alaska Corp. - Cordova District Fishermen United - OSREC - PWS Aquaculture Corp.

# **EPA** will reexamine air pollution question

Agency has reopened the question of limiting hazardous air pollution from the Ballast Water Treatment Facility at the Valdez tanker terminal operated by Alyeska Pipeline Service Co.

The decision, announced in an April 16 letter to the citizens' council, means the federal agency will reconsider a position it took in regulations published in February of this year. In those regulations, EPA said it would not regulate emissions from the ballast water facility.

The decision to revisit the matter came in response to a petition for

The Environmental Protection reconsideration filed on March 24 by the citizen's council, which has been campaigning since its earliest days to minimize air pollution at the tanker terminal. The council's petition argued the agency erred in several ways when it decided not to require Alyeska to cut emissions from the ballast water facility. EPA said in the April 16 letter it expected to publish a proposed rule "within the next several months."

> "We commend EPA for its willingness to take another look at this problem," said John Devens, executive

> > See page 7, **EPA**

### **DISPERSANT TEST**



On April 19, the Coast Guard and Alyeska teamed up for a demonstration of how dispersants would be applied from aircraft if approved for use during an oil spill. Here, a Coast Guard C-130 makes a spraying pass over Port Valdez. For the exercise, water was substituted for dispersant. Photo by Pat Welch, Valdez.

# Citizens' council to be formed for gold

When the Oil Pollution Act of 1990 provided for citizens' advisory councils to help prevent industrial disasters like the Exxon Valdez oil spill, it envisioned the organizations as demonstration programs to be emulated elsewhere.

But that didn't happen – until now. Early this month, the Northern Alaska Environmental Center, the Teck Cominco mining company, and Gov. Frank Murkowski announced a citizens' advisory group will be set up to oversee development of the Pogo gold mine near Delta Junction.

Work on the mine had been halted by a permit appeal from the environmental center. Creation of the citizen oversight group was one of a package of compromises that persuaded the center to withdraw its appeal and allow work

Pogo citizen group, Murkowski pointed to his role in creating the citizen-oversight provisions in the Oil Pollution Act. "This is similar to the regional advisory councils I proposed for Prince William Sound and Cook Inlet after the oil spill," Murkowski said.

Under the agreement with Teck Cominco, the citizens' advisory group will periodically review the project, and twice yearly it will evaluate a monitoring system on the Goodpaster River.

Arthur Hussey, executive director of the environmental center, said the Pogo advisory group doesn't have a name or a budget yet, but will consist of seven members drawn from specific interest groups such residents, environmentalists, subsistence users, and commercial fishers.

The commissioner of the Alaska Department of Natural Resources will choose the first seven members based on public input. Thereafter, the group In announcing the agreement for a itself will nominate three candidates for each vacancy that arises, and the natural resources commissioner will make the appointment.

## Big changes loom for Valdez tanker terminal

Alyeska Pipeline Service Co. has begun disclosing some specifics of likely changes at its Valdez tanker terminal as the company pursues the project it calls Strategic Reconfiguration.

While the information released so far is preliminary and the details will likely change as planning and design work are completed, recent briefings from Alyeska indicate some of the main projects will include the installation of floating roofs on the terminal's oil storage tanks, ending onsite power generation, simplifying the vapor control system, switching from salt water to fresh water for fighting fires, and revamping the Ballast Water Treatment Facility.

The goal, according to company officials, is to simplify operations, reduce costs, and end up with a terminal better

suited to the ever-smaller volume of oil produced on the North Slope.

### Oil storage tanks

The terminal has 18 huge tanks for storing up to 9 million barrels of North Slope crude until it can be loaded onto tankers.

Alyeska plans to take some of these tanks out of service, as reduced oil flow means 9 million barrels of storage capacity is no longer needed. It is virtually certain, according to Alyeska, that the four tanks in a cluster at the west end of the terminal will be removed from service. And it is possible that two of the 14 tanks in the East Tank Farm will be decommissioned as well.

The remaining tanks will be equipped with floating internal roofs. Because such roofs remain in con-

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**Volunteer Profile** 

## OSPRC member passionate about wood

One visit to Joe Jabas' home in a converted auto body shop near Valdez and you know you're dealing with a real Alaskan.

There's a sawmill out front, and a shed by the house is full of snowmachines and other outdoor gear. At the back is a woodshop where he turns out beautiful, hand-crafted diamond-willow furniture.

"You have to be busy," Jabas said during an interview last month in his combined studio, kitchen and living room. "You can't be idle."

That pretty much sums up Jabas' life since his birth 59 years ago in Little Falls, Minn. He worked in dairy farming as kid, joined the Air Force in 1962, and worked food service and accounting in Thailand.

In 1966, a civilian once more, he signed on with the Minnesota Historical Society for an uncommonly interesting job that involved, among other things, underwater archaeology. The society was researching the fur trade of the region's earlier days. Using the traders' diaries, they determined which waterfalls had been the scene of the most boat mishaps. Then Jabas and other scuba divers searched the pools below the falls for sunken artifacts.

"There were a couple of weeks in the summer when water conditions were right," Jabas said. "We found things like muskets, trade axes, pewter dishes and kettles."

By 1973, Jabas was ready for a change, so he headed for Alaska. After a brief stretch working with the geology department at the University of Alaska Fairbanks, he became one of the thousands of people who built the trans-Alaska pipeline system.

He worked primarily as a construction labor foreman, doing such tasks as stringing pipes and erecting the Hshaped supports that carry the pipeline across areas where permafrost prevents it from being buried. Once the pipeline was completed, he helped build ice roads in the North Slope oilfields.



WOOD LOVER - Wood is the great passion of Joe Jabas. He has his own sawmill to make lumber for the Valdez market. And, as shown above, he's a consummate woodworker. Top, the headboard of a diamond-willow bed he made. Bottom left, the pattern that gives the diamond willow its name. Bottom right, a dining set made by Jabas. Photos by Stan Jones, citizens' council.

He lived in Homer during this period, and worked at logging when he wasn't up north. He acquired his sawmill in 1985.

On March 24, 1989, Jabas was help-

ing move a warehouse from Prudhoe Bay to Valdez when the Exxon Valdez hit Bligh Reef. He became oil-spill response supervisor at Alyeska's tanker terminal and stayed in the job until his

retirement from full-time work as a laborer in 1996.

That was when he moved to Valdez permanently and bought his place a few miles east of town on the Richardson Highway. Since then, he's run his sawmill and taken occasional labor jobs at the terminal.

He's been mostly out of action for heavy work since a back injury in 2000, and is just now starting to feel up to getting into it again.

His sawmill supplies lumber for local builders, both professionals and do-it-yourselfers, and he spends a lot of time on woodworking, especially on the diamond-willow furniture.

The hardy little tree is so named because of the diamond-shaped red depressions that form in its creamy yellow-white wood, nearly always around the stub of a dead branch. The cause is believed to be a fungus.

Whatever their origin, the vibrant colors and fascinating patterns have long made the diamond willow a favorite of woodworkers like Jabas.

It's a labor of love, though. Jabas said it took him several years to collect and dry the willow for a bed he's working on. If he paid himself \$20 an hour for his work, he calculates, the bed would be worth at least \$20,000.

As he left his full-time job at the Alyeska terminal eight years ago, Jabas decided to involve himself with the citizens' council and joined the Oil Spill Prevention and Response Committee. He believed his long experience with the oil industry, especially in oil-spill response, would be an asset to the organization.

"I have more insight from that history as to what may occur," Jabas said. "Most people don't consider someone who has his own sawmill an environmentalist, but I do consider myself an environmentalist to some degree. I do support the oil industry, but they have to do it without trying to sidestep the issues."

## Council elects new officers, seats new members

Tom Jensen was elected president of the citizens' council at its March annual has represented the state chamber on board meeting in Anchorage. He represents the Alaska State Chamber of Commerce on the board.

The other offices of the council's executive committee were filled as fol-

Vice president: Marilynn Heddell, representing the City of Whittier.

Secretary: Steve Lewis, representing the City of Seldovia.

Treasurer: Patience Andersen Faulkner, representing Cordova District Fishermen United.

Members at large and the organizations they represent are: Jane Eisemann, City of Kodiak; Blake Johnson, Kenai Peninsula Borough; Stan Stephens, Alaska Wilderness Recreation and Tourism Association.

Jensen, who lives in Eagle River, the council since March 2003. He was also the group's representative from 1997 to 2001.

He spent his professional life in the communications industry, starting out as a commercial radio and television broadcaster and finishing up as an executive with Alaska Communications Systems. He retired from the company in 2001.

The council also seated two new board members.

Walter Parker of Anchorage will represent the Oil Spill Region Environmental Coalition.

Nancy Bird will represent the City of Cordova.

Parker has had a long career of involvement in environmental issues,







Nancy Bird



Walter Parker

including serving as chairman of the Alaska Oil Spill Commission that investigated the Exxon Valdez spill.

Bird is president of the Prince William Sound Science Center and director of the Oil Spill Recovery Institute, both located in Cordova.

She is also a member of the Cordova city council.

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# Is Alyeska ready for non-crude oil spills?

John Devens

Like the public in general, we at the citizens' council focus primarily on the threat of crude oil spills in Prince William Sound. The Exxon Valdez disaster was, after all, a central event in the history of Alaska.

But non-crude spills are also a risk. Tens of thousands of gallons of products such as diesel are used to power and lubricate oil tankers and the fleet of Alyeska vessels that support and escort them. Alyeska is required to be able to clean up spills of these products, the same as for North Slope crude.

Unfortunately, an incident late last month near Valdez has raised worrisome questions about Alyeska's ability to do

The incident was a small spill of diesel fuel in Jack Bay, the site of a state marine park just outside Valdez Narrows. The spill – from an Alyeskachartered tug called the Pathfinder occurred during an Alyeska-sponsored training exercise for the fleet of fishing vessels that are on call to help clean up spills. As I'll detail below, numerous vessels and personnel were on scene and the wind was nearly calm in the sheltered bay.

Nevertheless, the spill escaped con-

tainment and went on to contaminate some 500 yards of shoreline, despite the fact that no more than 50 gallons of diesel are estimated to have reached the water.

How is it that the elaborate response system put in place after the Exxon Valdez was unable to deal with a small spill in the middle of a training exercise?

Some 30 fishing boats were assembled in Jack Bay the morning of April 28, together with two response barges, two tugs and various work boats from Alyeska's Ship Escort/Response

Vessel System, or SERVS. The plan was to conduct training in response techniques and strategies using all of the assembled personnel and equipment.

Shortly before 8 a.m., the Crowley tug *Pathfinder* reported a diesel spill of approximately 20 gallons, with perhaps five gallons reaching the water. By 8: 20 a.m., the SERVS Incident Management Team had been activated and the Pathfinder had been boomed off, with

absorbents placed inside the boom to collect the diesel. Helicopter overflights began and by 10:00 a.m., there were reports of a diesel sheen measuring 100 by 300 yards heading towards Tongue

Point at the mouth of Jack Bay.

With the failure of initial booming around the Pathfinder, the training exercise had suddenly become a real spill response.

Unfortunately, it was a largely ineffective response. The fishing vessels towed various booms into place, but in most cases the sheen escaped under

the booms. By early afternoon, reports were coming in of diesel on the shoreline around Tongue Point.

Response efforts continued, but shoreline contamination increased. By the end of the day, around 500 vards of shoreline were contaminated with diesel and some estimates of the amount reaching the water had risen to 50 gallons.

The Jack Bay spill clearly suggests

major gaps in the SERVS response system. But it's not clear that Alyeska has learned this lesson. Much of a postspill briefing on the Jack Bay incident was focused on what went right, rather than on the fact that the response was almost completely ineffective.

Alyeska attributes some of its problems to the fact that the product spilled was diesel, arguing that its equipment is less effective at containing and recovering refined products than crude oil.

The company also argues that, in general, standard practice is for less aggressive recovery efforts with spills of diesel because it evaporates or disperses faster than crude. If so, this incident would seem to demonstrate it's time for these practices to be revised, and for SERVS to add equipment capable of handling diesel spills to its arsenal.

Whether the problems were a matter of technique, equipment, tactics, management, complacency, or outdated practices, the performance at Jack Bay was unacceptable. Alyeska must take whatever steps are needed to be sure it can meet its responsibility to respond effectively to non-crude spills.

• John Devens is executive director of the citizens' council.

### Council board praises heavyweather towing exercises

"All persons involved . . .

agreed that the objectives of

the exercise were met and that

a tanker save was well within

the safe operating limits of

Hinchinbrook Entrance"

Resolution of the

citizens' council board,

March 25, 2004

The citizens' council board of directors at its March quarterly meeting approved a resolution commending the oil industry for tanker towing exercises conducted early this year.

The resolution lauded "the efforts of the personnel involved in this vital and important training opportunity which was conducted at a very short notice to all participants."

The exercise took place during heavy

Alyeska's escort tugs are capable of rescuing a disabled tanker in the have been scheduled.

worst conditions they are allowed to sail through at Hinchinbrook Entrance. Such exercises had been a long-sought goal of the council.

Since the February exercises, a

working group made up of representatives from industry, tanker companies, Crowley Marine Services (which operates the escort tugs), the Coast Guard, the state of Alaska, and the citizens council has

weather in early February, and, despite discuss and plan ship assist exercises, some equipment problems, indicated but at present no further exercises at or near Hinchinbrook closure conditions

continued to

## Technology conference scheduled for Anchorage later this month

The Alaska Department of Environmental Conservation will hold a conference on Best Available Technology later this month. The dates are May 27-28, at the Egan Center in Anchorage.

The purpose of the conference is to survey the latest and best technology for preventing and controlling oil spills, and to determine which technologies should be adopted for use in Alaska.

The topics scheduled for consideration are:

- · Leak detection for crude oil transmission pipelines;
- Secondary containment liners for oil storage tanks;
  - Fast water booming;
- Viscous oil pumping systems; and,
- Well capping and source control.

## Tom Copeland appointed to a national panel on dispersants

Tom Copeland may have left the citizens' council board, but he continues to be involved in what was one of his main issues as a board member: chemical oil spill dispersants.

Copeland, who represented the Oil Spill Region Environmental Coalition on the council until his resignation this past winter, has been appointed to the National Academy of Science's Committee on Understanding Oil Spill Dispersants: Efficacy and Effects.

Copeland was nominated to the committee by the citizens' council, which

Copeland's long involvement with the by June of next year.

dispersants issue: He commented on the Alaska Dispersant Use Guidelines set up in 1989, served on the council's Dispersants Project Team, and repre-

sented the council before the Alaska Regional Response Team.

"Mr. Copeland's participation in this committee," wrote Executive Director John Devens, "would go a long way in facilitating public confidence in this process and any future decisions made to use chemical dispersants."

The committee is to study existing research on

suggested he be seated as a "citizen rep-oil spill dispersants and recommend how to fill any information gaps identified in The nomination letter outlined the study. Its work is to be completed



Tom Copeland

## Project manager hired in Anchorage office

Linda Swiss has been hired as a project manager in the council's Anchorage office. She replaces Janelle Cowan, who left the job several months ago.

Swiss, who started work in January, provides staff support to the council's technical advisory committees. She holds a master's degree in environmental quality science from the University of Alaska Anchorage.

She is married to Tyler Swiss, a commercial fisherman, hunting guide, and lifelong Alaskan. They have one child, a daughter.



Linda Swiss

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# Alyeska ballast-water facility under study

Late last month EPA's Deputy Administrator announced plans to initiate rulemaking in response to petitions submitted by the citizens' council and industry parties to EPA. These petitions requested that EPA reconsider its standards, issued in February, for hazardous air pollutants for facilities like the Valdez Marine Terminal that handle organic liquids. The citizens' council describes its efforts elsewhere in this issue of the *Observer*. (See story, page 1.)

What is Alyeska's perspective?

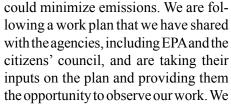
Alyeska acknowledges that benzene and other volatile organics are released to the air from operations at the terminal's ballast water treatment facility. We comply with our air quality permit requirements, though it's true there are no specific air permit requirements governing waste water processes at our facility. As we've noted before, we disagree that a public health risk is presented by these emissions. A thorough air study in 1992 showed even without tanker vapor controls there was no unacceptable health risk associated with air emissions at the terminal. Today's total terminal hazardous air pollutant emissions, including the ballast water treatment facility, are well under 10 percent of the emissions before tanker vapor controls were installed. Any health risk associated with terminal emissions has been correspondingly reduced more than 90 percent. Safety and health practices at the ballast water treatment facility to limit employee exposures, coupled with medical surveillance of potentially affected employees, show that we are taking appropriate steps to protect employee health. In over

20 years of medical surveillance, we have found no evidence of adverse health risk or adverse health effects to employees who participate in the surveillance program.

We recognize that many remain unsatisfied with these answers.

Alyeska values not only full compliance with regulatory requirements, including the strict terms of our fed-

eral water quality permit for the ballast water treatment facility. We are also committed to the health and safety of our workers and to the protection of the Alaska environment. We recently began a project to examine the performance of the Ballast Water Treatment Facility in light of continuing reduction in ballast volumes handled by the facility, a project that will also examine air emissions from the facility. Alyeska expects to learn from this study how well the facility is operating and how our operations may affect these emissions, and whether there may be operational steps that



will share the information we obtain from this effort with the agencies, the citizens' council and the public.

Concurrently, we have initiated preliminary engineering studies that will evaluate the future operation of the ballast water treatment facility and the need to modify or otherwise replace portions of the facility. The engineering studies will include

consideration of processes and equipment that may reduce emissions while maintaining or improving the efficiency of the facility. We have also provided access to the facility to the citizens' council's staff and consultants to allow the citizens' council to conduct its own studies of its processes. We expect to share information as these efforts move forward. As we make decisions about potential changes at the Valdez Marine Terminal, we will look for ways to further reduce any health and safety risks and further reduce emissions from Ballast Water Treatment Facility as we

are with other terminal facilities and operations.

Our vision for the Valdez Marine Terminal of the future is for a simpler, less complex operation that strives for flawless safety and system integrity and meets standards of environmental performance and regulatory commitments. The tanker fleet is already transitioning to modern double hull tankers that do not carry, or carry much less, ballast water that requires treatment. Throughput at the ballast water treatment facility is less than a third of design capability, and diminishing. As ballast throughput diminishes, emissions diminish as well. Declining ballast throughput and tanker fleet changes are realities that drive our engineering analysis for a cost-effective, environmentally sound operation.

There is no question that we will continue to have many discussions about the ballast water treatment facility. In the meantime, Alyeska is not standing still. We are taking initiatives today to assure that future treatment of much smaller volumes of oily ballast at the Valdez Marine Terminal will be part of a package of operations that will be more cost effective, occupy a smaller footprint, reduce the risk and consequence of spills, and reduce impacts to the environment we all share.

• Rod Hanson is manager of Alyeska's Valdez Marine Terminal.



Rod Hanson

## Council documents available to the public

Single copies of most documents produced or received by the citizens' council are available free to the public. To make a request, contact either council office. Addresses appear on the back page of the Observer.

### Reports

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Final report summarizing the development of an Non-indigenous Species Database, 6/2/2003, Susan Harvey. 952.431.030602.NISdatabase.doc

### Letters

Letter to the GEM Program expressing PWSRCAC's strong support of the PWS Shore-Zone Mapping grant application by Carl Schoch and John Harper through PWS Science Center. From the citizens' council to Exxon Valdez Oil Spill Trustee Council, 4/14/2004. 900.105.040414.EVOSTszmG rnt.pdf

Letter thanking the students of Herman Hutchens Elementary School (Valdez) for submitting drawing for possible inclusion in the PWSRCAC coloring book. From the citizens' council to HHES, 4/7/2004. 350.105.040407.HH EScolorbk.doc

Nomination for the Coastal America Partnership Award - letter nominating the PWSRCAC SAC committee for this award. From the citizens' council to Coastal America, 4/7/2004. 250.105.040407.CAPAnominat2.doc

A letter in response to Dietrick's December 5, 2003 letter and also responding to ADEC's Kurt Fredriksson's March 2, 2004 letter to Rep. John Harris regarding ADEC oversight of the TAPS VMT and tanker traffic in Prince William Sound, Staffing. From the citizens' council to ADEC, 4/5/2004. 400.105.040405.ADECstaffing.pdf

Letter in response to the February 20, 2004 public notice requesting comments on the Alaska Department of Natural Resource's (DNR) proposed changes to the Alaska Coastal Management Program (ACMP) regulations in response to requirements in the legislation passed last year (HB 191). From the citizens' council to DNR Office of Project management and Permitting, 4/1/2004. 600.105.040401.ADNRacmp.doc

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Letter to ADEC regarding PWSRCAC's comments on the Marine Terminal C-Plan. We support the proposed amendment. From the citizens' council to ADEC, 3/23/2004. 651.105.040323.ADECvmtCmmts.pdf

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Letter listing various research and information on PWSRCAC projects that may be of assistant to the AK LNG Development Authority. From the citizens' council to AK LNG Development Authority, 2/16/2004. 270.105. 040216.AKLNGHeinze.doc

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## Auke Bay lab: The council's research partner

researchers from Auke Bay Laboratory in Juneau for several years. Auke Bay is one of four divisions of the National Oceanic and Atmospheric Administration's Alaska Fisheries Science Center. It has been active in fisheries research in Alaska since 1960. The facility is situated between Auke Bay and Auke Lake, a location that provides access to both freshwater and marine organisms for research.

Auke Bay Lab researchers have helped the council evaluate oil pollution from the Valdez Marine Terminal and the associated tanker trade. Currently, the researchers are studying copepods for the council. Copepods — tiny shrimplike animals — are the biggest source of protein in the oceans, including the waters of Prince William Sound. The purpose of this study is to check for oil pollution in the copepods and relate the results to the associated food chain. In April, the researchers harvested copepods in Port Valdez and off Lone Island in Prince William Sound.

Research programs have included investigating the effects of the Exxon Valdez oil spill on salmon, herring, mussels, and intertidal habitats. The lab has monitored the persistence of oil in the environment from the oil spill and confirmed that over 121,000 gallons of subsurface oil remains in the spill area. This may be a factor in the lack www.afsc.noaa.gov/abl.

The council has worked with of recovery of some species of seabirds in the Sound.

> In recent years, Auke Bay Laboratory, through its oil pollution research, has shown that very small amounts of oil in the environment can be much more harmful to certain species, especially larvae, than previously accepted by the scientific community. This was a very significant finding, causing scientists to re-think previously held notions about the effects of oil pollution.

> Habitat studies also include fish nutrition, nearshore habitat mapping, Steller sea lion prey studies, Alaska coral, bottom fish and effects of fishing. Research on marine salmon interactions research has included such subjects as juvenile marine ecology, aquaculture stock enhancement, identification of stocks using genetics and radiotelemetry, and developing models of juvenile growth and migration.

> Auke Bay lab, with an annual budget of nearly \$10 million, has 70 permanent employees and 15-25 contractors. It contains a large aquarium with numerous species, and several tanks with separate study species such as salmon fry and shellfish. Recent published reports include "The Exxon Valdez Oil Spill: How Much Oil Remains?" and "Long-Term Ecosystem Response to the Exxon Valdez Oil Spill."

For more information, visit





ABOVE: Dr. Adam Moles of the Auke Bay laboratory shows a sampling device for detecting oil pollution to Lisa Ka'aihue, a project manager for the citizens' council.

LEFT: One of the lab's residents is this wolf-eel, perhaps the most voracious fish in Alaska waters.

Photos by Linda Robinson, citizens' council.

## **Tatitlek Heritage Festival**

Each year, the village of Tatitlek puts on a heritage festival for students from Alaska schools. This year's was the tenth festival and took place the first week of May. Students spent the week learning traditional crafts and activities. Clockwise from right: 1. Tatitlek nestles between mountain and sea about 20 miles southwest of Valdez. 2. Sue Johnson was planner of the festival for the fourth year in a row. 3-4. Crafts included figurines, beadwork and fur hats. 5. Friday night featured a potlatch and an auction, with an exhibition of Eskimo dancing, which was taught by Ossie Kairaiuak of the musical group Pamyua.









1.



Photos by Stan Jones, citizens' council Volume 14, No. 2 May 2004

# Council's campaign against invasive sea species stretches back for past eight years

By Marilyn Leland

**Deputy Director** 

Since 1996, the citizens' council has had a high-priority goal of preventing non-indigenous aquatic species from establishing themselves in Alaskan waters. Millions of tons of ballast water are carried to Port Valdez in crude oil tankers. In fact, Port Valdez receives the third largest volume of ballast water of any U.S. port and much of it comes from ports already invaded by aquatic nuisance species such as European green crabs and Chinese mitten crabs.

Our studies with Smithsonian Environmental Research Center over the last eight years have confirmed that live and viable non-indigenous species are arriving in tankers coming to Port Valdez. The research has included an extensive literature review, field surveys, ballast water exchange experiments and laboratory studies. The studies were co-sponsored by the U.S. Fish and Wildlife Service and the citizens' council through a working group process that also included the U.S. Coast Guard, Valdez shippers, Alyeska, National Sea Grant, University of Alaska Fairbanks, Alaska Department of Fish and Game and Alaska Department of Environmental Conservation.

In addition to the Smithsonian research, the citizens' council has been active in advocating for federal laws that would regulate ballast water management in Alaska and require state management plans. We commented on the draft management plan for Alaska, which has now been finalized.

We are now shifting our focus from research into what may be arriving in ballast water, to treatment options for preventing invasions. Unfortunately, there is no one simple answer because of the various tanker designs and routes involved, and the variety of potential invaders from bacteria to fish and crabs. A number of promising studies are under

**ALIEN INVADERS** – Marilyn Leland, the council's deputy director, holds plastic-cased examples of two foreign species that have invaded other U.S. ports but not, so far, Prince William Sound. On the left is a European green crab and on the right a Chinese mitten crab. Photo by Stan Jones, citizens' council.

way, including a test of an ozone system that has been installed on Alaska Tanker Company's ship, the *Tonsina*. In the next few months, we will be working with the state of Alaska to mount a symposium to look at some of the treatment options being developed.

We have also encouraged Alyeska Pipeline Service Co. and its owner companies to help with this problem, through a resolution passed by the council board at its annual meeting in March. While it is true that treatment of so-called "clean" ballast water from tankers is a shippers' problem, the board believes that, as with

"dirty" ballast, the best solution could be an on-shore treatment plant in Valdez. So far, neither Alyeska nor the owners have considered that alternative.

On another front, I was appointed to seats on the Western Regional Panel of the National Aquatic Nuisance Species Task Force and on the national Invasive Species Advisory Committee. Both of these bodies were formed to coordinate work on this issue on a national and regional basis. The Western Regional Panel is planning to hold its annual meeting in Anchorage September 8-9, 2004 at the Sheraton Hotel. A number

of issues of interest to Alaskans will be discussed in addition to ballast water, such as how climate change may open new routes and pathways for invasions, and how northern pike affect native fish. More information about the meeting can be found on the Western Regional Panel's website at answest.fws.gov.

For further information on the issue of invasive species, the council's studies and links to other organizations, see our website at www.pwsrcac.org/projects/nis.html. Our website already contains a great deal of information about non-indigenous species, but within the next couple of months, we will be launching a large addition that will include more descriptions of the problem as it relates to Alaska along with a database on species of interest, vessels that call in Valdez and the ballast water they carry.

Finally, on a more positive note, we are still ahead of the curve compared to the rest of the country. Although we know that non-indigenous species are arriving in our ballast water, so far we have not found any that have established themselves and are causing problems. But, if treatment methods are not found that are effective and laws and regulations are not enacted to mandate treatment, Prince William Sound could become the next body of water to suffer an invasion of aquatic nuisance species.

"Invasive aquatic species are one of the four greatest threats to the world's oceans, and can cause extremely severe environmental, economic and public health impacts."

-- Global Ballast Water Management Programme, International Maritime Organization

## Major exercise planned for late summer

Planning is under way for an August oil spill drill in Prince William Sound. The exercise – led by the U.S. Coast Guard and ConocoPhillips – will be managed from Valdez with on-water activities in the northeastern Sound.

The citizens' council and the state Department of Environmental Conservation have been providing advice during planning of the event, which is scheduled for the first week of August.

The scenario being developed is that a tanker develops a leak while outbound from Valdez. This leads to activation of Alyeska's Valdez Emergency Operations Center, as well as an on-water response and efforts to protect sensitive shoreline areas in Jack Bay.

Among the major issues for the council that will be addressed in the drill is the transfer of response management from Alyeska Pipeline Service Co. to ConocoPhillips. Alyeska

handles response efforts for the first 72 hours after a spill. Then the spiller – ConocoPhillips in this case – takes over.

This is the largest drill in the Sound since a 2002 exercise mounted by BP. The U.S. Coast Guard's Valdez Marine Safety Office will participate, and the service will bring in more than 20 personnel from its National Strike Force Coordination Center in North Carolina. ConocoPhillips will bring in over 100 people from Alaska and the Lower 48. The citizens' council will activate its office in the Valdez Emergency Operations Center and will mobilize staff and contractors to work the exercise and keep everyone informed of its progress.

A full report on the drill will appear in the September Observer.

For more information, visit www.akrrt.org/pwsareaex04/Planning.html on the Internet.

## Session raises few issues for council

By Douglas Mertz

Legislative Monitor

No bills of critical importance to the citizens' council got serious consideration in Juneau this year.

The issue of most interest to the council this session involved last year's "sweep" into the general fund of some special-purpose funds, including money for the state's oil spill program. Like many other stakeholders, the council wanted the sweeps reversed and the "swept" funds restored for their original purposes. The Legislature did so, but only in the closing hours of the session.

The Department of Environmental Conservation (DEC) weathered the crisis with a combination of shifting appropriations and luck in that there were no major spills to drain off available funds.

Meantime, several bills that could affect the marine environment passed.

A bill regarding assumption by the state of federal wastewater discharge duties (the National Pollutant Discharge Elimination System program) passed, but only for timber operations. The Murkowski administration decided a bill to assume the program for all purposes was premature, but may introduce it next year. A bill to regulate wastewater discharges from small cruise ships passed, but should not change things significantly.

The Legislature paid a lot of attention this year to gasline proposals, including one that would have mandated consideration of Valdez as a terminus. The result was funding for further studies, but no mandates that should trouble the council.

In the budgets that passed the Legislature – though still subject to the Governor's vetoes – the existing level of funding for DEC's Spill Division was essentially continued.

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# CHANGES: Alyeska will reconfigure terminal

Continued from Page 1

tinuous contact with the oil, there are no potentially explosive hydrocarbon vapors in the space above the oil, assuming the seals function properly, and consequently there is no need for vapor management. This will allow simplification of the vapor control system at the terminal.

### Vapor control and power generation

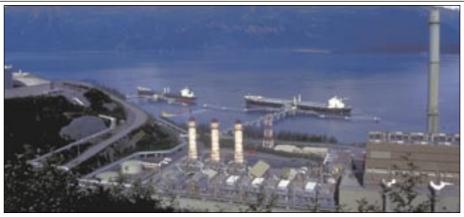
The terminal now handles oily vapors forced out of the onshore storage tanks as crude flows in from the pipeline, and oily vapors forced out of tanker holds during loading. These vapors are burned to produce electricity, or simply incinerated to get rid of them. Alveska regards the vapor handling equipment and the related electric power plant as one of the most complex systems at the terminal.

With the amount of vapors that need to be handled reduced by the switch to floating roofs on the storage tanks, Alveska plans to simplify the process by using incinerators to burn vapors from tanker loading. The new incinerators will be modular, meaning additional units can be brought in if future operations at the terminal generate more vapors.

Alyeska believes these changes will result in a reduction in air emissions.

The company hopes to get out of on-site power generation by switching to commercial power from Copper Valley Electric Association with emergency diesel backup, although the company could install conventional diesel generators if that idea doesn't work out.

Alyeska is also exploring the idea that some power for the terminal could be generated by a novel technology akin to hydroelectric power. Crude oil descending through the pipeline from Thompson Pass arrives at Valdez under considerable pressure. This technology would use the high-pressure oil to drive



The terminal's vapor incinerators and power plant, shown here, are likely to be replaced during the reconfiguration project. Photo by Stan Jones.

an electric turbine, just as water does at a hydroelectric dam.

### Firefighting system

The terminal now relies on salt water pumped from Port Valdez to fight fires. This is a problem because the salt water tends to corrode the metal pipes, pumps and valves in the system. Alyeska wants to switch to fresh water, which is less corrosive.

To achieve this, the company plans to create a freshwater reservoir on the hillside above what is now the West Tank Farm. The reservoir would be filled from nearby Sawmill Creek, and would contain enough water to meet emergency firefighting requirements, and to allow for the fact that stream flow is reduced at certain times of year and thus might not be able to speedily refill the reservoir, should it be drawn down. Because of the reservoir's elevation, no pumps would be required. Gravity would supply adequate pressure for fighting fires.

### **Ballast Water Treatment Facility**

Alyeska believes the terminal's Ballast Water Facility needs to be reworked because the advent of double-hull tankers will greatly reduce the amount of water to be treated in a few years.

(The ballast water facility is also the subject of a rulemaking proceeding by the federal Environmental Protection Agency, which may require the company to reduce hazardous air pollution from the facility.)

The company plans to modify two

of the three major components of the

One is the Dissolved Air Flotation cells, which make up the second phase of the treatment process. These will be replaced by a different technology called an induced gas flotation system, which Alyeska says will largely eliminate the emissions now coming from the Dissolved Air Flotation cells.

Alyeska is also studying possible replacement of the Biological Treatment Tanks, big open-air ponds designed to allow bacteria to consume oily residue in the ballast water before it is discharged into Port Valdez. These tanks, which comprise the third and final phase of the treatment process, may be replaced by a treatment process called carbon adsorption.

The first phase of treatment occurs inside closed tanks, where oil separates out of the ballast water by gravity and is skimmed off. No change is envisioned for this phase of the process.

### Tanker loading berths

The terminal has four loading berths for oil tankers, only two of which are operational. Alyeska believes those two will be able to handle any reasonably likely level of oil flow through the pipeline, and so plans to remove one or both of the other berths.

Other likely changes in Valdez include consolidation of all office personnel into a new building at the east end of the terminal; a new system for metering oil flow into the terminal from the pipeline; new control, data acquisition and communications systems capable of operating the pipeline and terminal remotely; and consolidating maintenance into a single shop at the terminal.

The net effect of the changes envisioned at the terminal would mean it would not be able to handle as much oil as is now the case, though it would be able to handle all oil currently projected for coming years. If a major discovery should change those projections, Alyeska officials say, there would enough time between discovery and production to allow the terminal's capacity to be expanded as needed.

The citizens' council has been pressing for details of Strategic Reconfiguration at the terminal and for the opportunity to participate in the process since last year. The council's aims in monitoring Strategic Reconfiguration are to ensure that environmental safety is preserved and that the terminal remains in compliance with all regulatory requirements.

The work at the terminal is the second phase of Alyeska's Strategic Reconfiguration. The first phase,  $approved \, recently \, by \, regulators, involves$ upgrading many of the facilities along the trans-Alaska pipeline, especially the pump stations. Alyeska has put the price tag for that work at \$250 million over the next two years and estimates it will result in 350 jobs being cut from the work force of the company and its contractors.

Alyeska has indicated the changes at the terminal are also likely to result in job cuts, but has not released any estimates of the number.

Alyeska is also studying the possibility of changes at its Ship Escort/Response Vessel System, but has not yet disclosed the details of any changes under consideration. SERVS operates the fleet of tugs and other craft charged with escorting loaded tankers out of Prince William Sound and responding to oil spills.

## Federal agency starts rulemaking on air pollution

Continued from Page 1

director of the citizens' council. "Valdez residents deserve air that is as clean as is technologically feasible and this is an important step in that direction. We'll do all we can to ensure the final version of the rule covers the ballast water facility."

The regulations published in February were intended to control hazardous air pollution from the tanker terminal and other oil facilities across the nation. The regulations – called National Emissions Standards for Hazardous Air Pollutants/ Organic Liquids Distribution - did cover some significant pollution sources at the Alyeska terminal, such as oil storage tanks and leaking pumps, valves and other connections. But the regulations exempted one of the largest single sources of dangerous benzene vapors in

the United States: the facility that cleans crude oil remnants from the ballast water of arriving tankers before discharging it of regulatory policy that carcinogens not a health hazard. In any event, the into Prince William Sound.

The EPA itself recently estimated the ballast water facility releases 360 tons of hazardous air pollutants each year, including 130 tons of benzene, a known human carcinogen. Regulated refineries in California typically emit approximately one to three tons per year of benzene each, suggesting the situation in Prince William Sound is roughly equivalent to having 65 California-scale refineries operating in the confined air shed of the Valdez bowl.

EPA's authority over the terminal and other facilities that handle oil and other organic liquids comes from the federal Clean Air Act, which requires the agency to issue rules to protect the public and the environment from toxic air pollution.

in the quantities being released from Alyeska's Ballast Water Treatment Facility are dangerous and should be reduced. No specific showing of health risks is required. Instead, the polluter must reduce emissions if it is technologically feasible to do so. That means effective technology exists for the purpose, and the polluter can afford the cost of installing and using the technology.

After the council filed its petition with EPA, Valdez resident Stan Stephens sued the agency in federal court on the same issues. Stephens is a board member of the citizens' council, but filed the suit as an individual and is responsible for his own costs. However, the Valdez City Council voted early this month to pay up to \$10,000 of his legal fees.

Alyeska has maintained that emis-In general, EPA presumes as a matter sions from the ballast water facility are company says, the facility will undergo a major redesign in the next few years because the amount of oily ballast water it processes will shrink dramatically as the Valdez tanker fleet transitions to doublehull tankers. (See Alyeska Viewpoint, page 4.)

Single-hull vessels, which make up most of the present fleet, carry ballast water in the same tanks used for oil, and the water becomes contaminated with oily residue. Double-hull tankers, by contrast, carry virtually all their ballast water in segregated tanks that are never used for oil. Consequently, their ballast water does not require cleaning before being discharged into the Sound.

Under the federal Oil Pollution Act of 1990, single-hull tankers must be phased out of U.S. waters by 2015.

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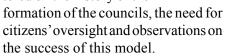
# Marking the council's fifteenth anniversary

Community Corner

Linda Robinson

After the Exxon Valdez Oil Spill observance on March 11 at the Anchorage Hilton. A panel of people involved in the oil spill or in the formation of the regional citizens' advisory councils

recalled their experiences and lessons from 1989. They included Rick Steiner of the University of Alaska; former council board members Scott Sterling, Ann Rothe, Bill Walker and Jim Butler, and council Executive Director John Devens, who was mayor of Valdez at the time of the spill. The discussion centered on the history of the



Several organizations set up displays for the event. They included Alyeska Pipeline, BP, Alaska Tanker Co., ConocoPhillips, Cook Inlet Spill Prevention and Response, the Cook Inlet and Prince William Sound citizens' councils, Exxon Valdez Oil Spill Trustee Council, the U.S. Coast Guard, the Alaska Department of Environmental Conservation, the Alaska SeaLife Center, the Prince William Sound Science Center and the Copper River Watershed program.

Our council participated in a second observance held on March 24 at the Loussac Library in Anchorage. It featured readings, a slide show and music, and provided the opportunity for audience members to talk about their experiences related to the spill.

### Council coloring book is a hit

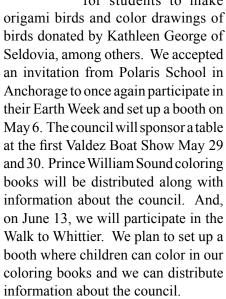
The Prince William Sound coloring book has proven so popular that the council has published a second edition. It features new drawings by RJ Kopchak of Cordova, Tamara Johannes of Anchorage, council Vice President Marilynn Heddell, and students from Valdez and Eagle River. All of the artists from the original coloring book are included as well. A few of the pictures will be available on our website in Adobe Acrobat • Linda Robinson is the council's format so they can be downloaded, community liaison.

Our council sponsored a 15 Years printed, and colored. The address is www.pwsrcac.org.

### Student outreach

This year the council is participating in activities in several of its member communities. Patience Andersen

Faulkner sponsored a table on behalf of the council at Cordova's Earth Day on April 24. She distributed Prince William Sound coloring books, and assisted students in making books out of recycled materials. I attended the Cordova Shorebird festival, where the council sponsored a table for students to make



### On the road again

The council's booth was set up at the Alaska Wilderness Recreation and Tourism Conference in Sitka, at Kodiak Comfish in Kodiak and at a legislative reception in Juneau. The reception was co-sponsored by the Prince William Sound Community College, Chenega Bay IRA, the City of Valdez and the council. While in Kodiak we co-sponsored a reception with the Cook Inlet citizens' council where Sue Saupe gave a presentation on Coastal Shorezone Mapping for Cook Inlet and the outer Kenai coast. For more information on this project go to the CIRCAC website at www.CIRCAC.org.



EARTH DAY - Students at Polaris School check out the council's exhibit on non-indigenous species. Photo by Linda Robinson, citizens' council.

### Prince William Sound Regional Citizens' Advisory Council

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

The council has 18 member organizations, including communities affected by the Exxon Valdez oil spill and groups representing Alaska Native, aquaculture, environmental, commercial fishing, recreation and tourism interests in the spill region.

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

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

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