

HJR

41

HOUSE COMMITTEE REPORT

(9)

Date Referred: April 5, 1989

FURTHER REFERRALS: TRANSPORTATION

Date of Committee Action: 4-19-89

The RESOURCES Committee considered:

HJR 41

HOUSE JOINT RESOLUTION NO. 41

[CONGRESSIONAL OVERSIGHT OF TANKER SAFETY]

Relating to the safety of oil tanker traffic into and out of the Port of Valdez.

RECOMMENDATIONS:

- [] be replaced with CS HJR 41 (RES) [] the same title
[] have attached amendment(s) [] a new title
[] do pass
[] do not pass
[] no recommendation
[] individual recommendations
[] additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(s):
(Dept)

APPROVES PREVIOUS: _____ (Date/Dept)

- [] fiscal impact _____ [] fiscal note(s) _____
[] zero fiscal note _____ [] zero fiscal note(s) _____
[] zero with analysis _____ [] zero fn/analysis _____

SIGNING DO PASS:

SIGNING:
(Check approp. column)

Do Not
Pass
No Rec
Amend

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Chairman's Signature

6-1172E ✓
Chenoweth
4/18/89

Original sponsors: M.Davis, Goll,
Brown, and Menard

1 IN THE HOUSE

BY THE RESOURCES COMMITTEE

2 CS FOR HOUSE JOINT RESOLUTION NO. 41 (Resources)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SIXTEENTH LEGISLATURE - FIRST SESSION

5 Relating to the safety of oil tanker
6 traffic into and out of the Port of
7 Valdez.

8 BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 WHEREAS the wreck of the oil tanker Exxon Valdez in Prince William
10 Sound has resulted in the largest oil spill in United States history; and

11 WHEREAS the tanker ran aground on a well known and well charted navi-
12 gation hazard; and

13 WHEREAS an investigation by the National Transportation Safety Board
14 determined that the captain of the vessel had a blood alcohol content above
15 the allowable limit for piloting the craft; and

16 WHEREAS the spill will have a significant long-term effect on the
17 environment and economy of the State of Alaska; and

18 WHEREAS the responsible parties were unable to contain the more than
19 250,000 barrels of crude oil that escaped the tanker hold; and

20 WHEREAS equipment and personnel promised by Alyeska Pipeline Service
21 Company in its oil spill contingency plan were not immediately available
22 during the crucial early hours of the spill; and

23 WHEREAS further development of the state's oil resources is dependent
24 on environmentally sound practices of extraction and transport; and

25 WHEREAS profits generated for the oil industry can compensate for the
26 cost of increased safety;

27 BE IT RESOLVED that the Alaska State Legislature supports the United
28 States Congress in its oversight hearings on the safety of oil tanker
29 traffic in the Prince William Sound area; and be it

1 FURTHER RESOLVED that the Congress is urged to examine the ability of
2 the United States Coast Guard under its current budget to maintain secure
3 traffic through Prince William Sound, the criteria for certifying oil
4 tanker crews and officers, the oil spill containment equipment that should
5 be available on each tanker, and any changes in enforcement that can help
6 prevent this type of tragedy from occurring in the future; and be it

7 FURTHER RESOLVED that the Congress is urged to examine the best avail-
8 able technology for the design of oil tankers allowed into Prince William
9 Sound, including tanker size and the use of double hulls; bow thrusters,
10 and navigational and radar systems; and be it

11 FURTHER RESOLVED that the Congress is urged to examine the need for
12 adequate bonding for tanker owners and the need to require the mandatory
13 retirement of aging tankers.

14 COPIES of this resolution shall be sent to the Honorable Dan Quayle,
15 Vice-President of the United States and President of the U.S. Senate; the
16 Honorable Jim Wright, Speaker of the U.S. House of Representatives; the
17 Honorable George Mitchell, Majority Leader of the U.S. Senate; the Honor-
18 able Ernest F. Hollings, Chairman, U.S. Senate Committee on Commerce,
19 Science and Transportation; the Honorable Bennett Johnston, Chairman, U.S.
20 Senate Committee on Energy and Natural Resources; the Honorable Dale
21 Bumpers, Chairman, Subcommittee on Public Lands, National Parks and Forests
22 of the U.S. Senate Committee on Energy and Natural Resources; the Honorable
23 Quentin Burdick, Chairman, U.S. Senate Committee on Environment and Public
24 Works; the Honorable Walter P. Jones, Chairman, U.S. House of Representa-
25 tives Committee on Merchant Marine and Fisheries; the Honorable Morris K.
26 Udall, Chairman, U.S. House of Representatives Committee on Interior and
27 Insular Affairs; the Honorable George Miller, Chairman, Subcommittee on
28 Water and Power Resources of the U.S. House of Representatives Committee on
29 Interior and Insular Affairs; the Honorable Brock Adams and the Honorable

1 Slade Gorton, U.S. Senators from the State of Washington; the Honorable Rod
2 Chandler, the Honorable Norman D. Dicks, the Honorable Thomas S. Foley, the
3 Honorable Jim McDermott, the Honorable John Miller, the Honorable Sid
4 Morrison, the Honorable Al Swift, and the Honorable Jolene Unsoeld, members
5 of the U.S. House of Representatives from the State of Washington; the
6 Honorable Joel Pritchard, President of the Senate of the State of Washing-
7 ton; the Honorable Joseph E. King, Speaker of the House of Representatives
8 of the State of Washington; and to the Honorable Ted Stevens and the Honor-
9 able Frank Murkowski, U.S. Senators, and the Honorable Don Young, U.S.
10 Representative, members of the Alaska delegation in Congress.

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FISCAL NOTE

REQUEST:

Revision Date: _____
 Title: Congressional Oversight of Tanker
 Safety
 Sponsor: _____
 Requestor: House Resources Committee

Agency Affected: _____
 BRU: _____
 Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES	-0-	-0-	-0-	-0-	-0-	-0-
TRAVEL	-0-	-0-	-0-	-0-	-0-	-0-
CONTRACTUAL	-0-	-0-	-0-	-0-	-0-	-0-
SUPPLIES	-0-	-0-	-0-	-0-	-0-	-0-
EQUIPMENT	-0-	-0-	-0-	-0-	-0-	-0-
LAND & STRUCTURES	-0-	-0-	-0-	-0-	-0-	-0-
GRANTS, CLAIMS	-0-	-0-	-0-	-0-	-0-	-0-
MISCELLANEOUS	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-

CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
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REVENUE	-0-	-0-	-0-	-0-	-0-	-0-
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FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	-0-	-0-	-0-	-0-	-0-
FEDERAL FUNDS	-0-	-0-	-0-	-0-	-0-	-0-
OTHER	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART-TIME	-0-	-0-	-0-	-0-	-0-	-0-
TEMPORARY	-0-	-0-	-0-	-0-	-0-	-0-

ANALYSIS : (Attach a separate page if necessary)

Prepared by: House Resources Committee
 Division: Representative Cliff Davidson, Chairman
 Phone: 465-2487
 Date: 4/18/89

Approved by Commissioner: _____
 Agency: _____
 Date: _____

Distribution (by preparer):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

AMENDMENTS TO HJR 41

- page 1, line 27: after "legislature" delete [RESPECTFULLY
REQUESTS] AND add "SUPPORTS"
- page 1, line 28: after "Congress" delete [TO CONDUCT] and
add "IN ITS"
- page 2, line 4: after "sound" add [INCLUDING REQUIREMENTS
FOR DOUBLE HULLS AND BOW-THRUSTERS]



Alaska Center for the Environment

700 H Street, Suite 4 • Anchorage, Alaska 99501 • (907) 274-3621

Recommendations For Regulatory Change

I. Overview

II. Issues that need to be examined

A. Safety and vessel construction regarding marine transportation of oil.

The federal Ports and Waterways Safety Act (PWSA) regulates the design, construction, operation, and movement of bulk cargo vessels that carry oil and hazardous substances. The current regulations adopted under the PWSA are inadequate regarding the protection of the marine environment from spills. More stringent regulations must be adopted.

Strengthened vessel construction regulations should include:

1. Vessels that transport oil and hazardous substances must be double-hulled.

2. Vessels that transport oil and hazardous substances must be equipped with bow thrusters for maximum maneuverability.

3. Tanker size must be limited to a volume no larger than that which can be dealt with in a worst-case spill, as demonstrated by successful completion of simulation drills and attested to by impartial spill cleanup experts not associated with the oil companies, or running larger tankers at less than maximum capacity to achieve that result.

B. Bonding

The state and federal governments should require the posting of adequate bonds from terminal, pipeline and tanker operators which can be immediately used to initiate government-directed containment and cleanup operations. There are numerous precedents for this sort of bonding in other environmental regulatory statutes.

C. Oil Spill Contingency Plans

As the Exxon-Valdez incident indicates, there is a huge discrepancy between the response capability stated in contingency plans and the real operational performance when a spill actually occurs. Plans are drafted to comply with regulations, but unless the regulations require periodic compliance monitoring and enforcement, they are of minimal value. Similarly, the requirements become meaningless unless the responsible agencies are adequately funded to carry out their mandates.

We endorse the California Coastal Commission's use of a compliance representative who calls surprise drills to test contingency plan claims.

It is imperative that the government require successful completion of simulation drills, including immediate revision to upgrade any deficiencies and rerunning the drills until all kinks are worked out.

Backup equipment should be mandatory, so that when, as here, a barge is down for repairs, there is no interruption in response capability.

Mandatory stockpiles of all necessary equipment for containing the spill and cleaning oiled wildlife should be located around the state. Any contingency plan that calls for flying in equipment is inadequate and should be rejected.

Individual tankers should be required to have their own Spill Prevention, Control and Countermeasure Plans that include a spill response plan effective during the critical 24-48 period immediately following a spill.

Regulations should provide for public comment on SPCC plans so that local expertise can be incorporated into the plan.

D. Evaluation of Cleanup Capability

In order to assess the existing oil spill response capability of potential polluters, a systematic evaluation of available cleanup resources needs to be done. This evaluation should inventory the equipment necessary for each stage of a complete response from the point of the spill to the point of disposal of the recovered oil and contaminated sand, vegetation, etc.

E. Research fund

A federal and industry-supported fund should be established to study habitat recovery and research the long-term effects on wildlife. Studies should be conducted by a qualified, independent institution.

F. Revitalization of Test Tank

Congress should provide funding for the currently defunct Oil and Hazardous Materials Simulated Test Tank to test the effectiveness of oil spill cleanup equipment.

G. Compensation and Liability

Congress should enact a comprehensive oil spill liability and compensation regime that includes international, national, and state components. This program should:

1. Fairly assign risks and internalize cost of handling and transporting oil among potential spillers.

2. Ensure rapid repair, restoration, and rehabilitation of damaged or destroyed natural resources. (See Superfund law for analog.)

3. Completely and quickly reimburse victims and compensate the public for loss of use and enjoyment of natural resources.

4. Provide more effective incentives to prevent oil discharges.

H. Other Concerns

1. There should be a fully equipped federal response center in or adjacent to Prince William Sound. Currently, the closest one is hours away by plane in Stockton, California.

The government should require the oil companies in Alaska to fund such a center, including establishment and training of a dedicated oil spill response team whose responsibility it would be to respond to spills throughout Alaska.

2. The Vessel Traffic System (VTS) for the Sound needs to be re-examined. Specifically, the VTS should incorporate an alarm feature that would sound when a vessel goes outside authorized lanes. The Coast Guard should be authorized, and required, to close the shipping lanes to all traffic when ice or other obstructions are reported. The Coast Guard should not allow deviation from the safe shipping lanes.

3. EPA Region X, and possibly EPA Headquarters, has decided in the last few years to put enforcement of Clean Water Act requirements for SPCC plans on a low priority when they react to cleanups. We need to focus on both preventive and response actions; and EPA must strictly enforce SPCC plan regulations.

4. EPA must take a stronger position with Alyeska. Historically, Alyeska is one of the worst polluters of air and water in Alaska, which renders the Sound even more susceptible to oil spill damage. EPA should revise the draft NPDES permit to match the more stringent state permit for allowable surface water discharges. In addition, EPA must step in and enforce the Clean Air Act as it applies to emissions from tankers and the terminal.

5. Seasonal drilling restrictions should be codified in federal law to protect endangered species and ensure effective spill cleanup. Specifically, exploration, drilling and transportation of oil should be prohibited during bowhead whale migration and during broken ice season unless industry can demonstrate (and independent experts are willing to confirm) its ability to detect, contain, clean up and dispose of oil spills in ice-laden waters.

6. Criteria should be established for effective oil spill response to be taken by the state, Coast Guard and/or EPA if a spiller fails to comply with containment and cleanup standards.

7. EPA should prepare an environmental impact statement to evaluate the impact of in-situ burning and chemical dispersants used as part of an oil spill response.

-- Draft --

Exxon Valdez-Related Actions/Demands

1. Ecologically sound and effective cleanup initiatives need to be carried out by federal and state government officials, Exxon/Alyeska, and private/non-profit concerns -- now and in the coming months/years. In addition, intensive scientific efforts are needed in two other related areas: (1) damage assessments of the impacted natural resources (the ecosystem and critters); and (2) in-depth ecological research into the long-term effects of the spill on the waters, ocean beds, marine life and their food chains, the beaches, coastlines and other affected areas.
2. There should be no exploration for or production of oil or gas in the Arctic National Wildlife Refuge. In addition to the Refuge, the Secretary of Interior needs to remove highly sensitive and controversial offshore areas from the Department of Interior's Outer Continental Shelf (OCS) Oil and Gas Leasing Program that are located offshore southern and northern California, in Georges Banks off the New England coast, the Florida Keys, Bristol Bay off Alaska, off the North Carolina coast, and in the coastal and nearshore waters, submarine canyons and the shelf-break zone of the mid-Atlantic.
3. Improvements are needed in oil tanker design, operating requirements and personnel/manning standards. Such improvements might well include: double bottoms for tankers; increased vessel space allocated to protectively located segregated ballast tanks (PL/SBT); upgraded vessel traffic service (VTS) in Prince William Sound, and other congested U.S. ports, harbors and traffic fairways; and increased Coast Guard inspection of Alaskan pipeline trade vessels. Complementing those measures, current personnel policies need to be significantly improved in order to reduce the risk of human error. These include: restrictions on eligibility for masters' licenses that would exclude anyone with a "driving while intoxicated" conviction or a history of alcoholism; more stringent and more frequent physical exams; more frequent license renewals; increased minimum manning requirements for vessels (e.g., a dedicated radar aide); more stringent retraining and refresher courses, as well as monitoring for alcohol and drug abuse on the job. Despite all of these types of measures, given that oil spills are still likely to occur, oil and other hazardous spill contingency plans need to be routinely tested (to determine response time, ability to deploy personnel, and working condition of necessary equipment). In addition, industry using the Port of Valdez and all other ports with heavy oil and other hazardous cargo traffic should be required to maintain an adequately staffed, full-time emergency response team.
4. A comprehensive regime for oil spill liability and compensation is needed, including legislative reform to prohibit Exxon from deducting oil-spill cleanup expenses.

5. Special measures should be taken to protect the health and welfare of Native Americans.

6. Reagan-Bush budget/Coast Guard budget - The environmental protection budget of the Coast Guard should be fully restored.

7. RCRA - oil industry exemption from RCRA regulation should be dropped...other oil-related spinoffs

8. "Worst case" scenario analyses should be conducted in all EISs under NEPA. This provision, which was dropped by the Reagan administration, should be restored.

9. Energy Efficiency/CAFE standards.

PROVIDES
AK STATE
POUCH
JUNEAU AK

GES

ANCHORAGE, ALASKA, SUNDAY, MARCH 5, 1989

VALDEZ TANKER FLEET HAS TAKEN A BEATING



The oil tanker Exxon Long Beach sails through the Valdez Narrows for Prince William Sound after loading at the port facility in Valdez.



And Daily News map

Rough seas leave mark on vessels laden with oil

By PATTI EPLER
Daily News reporter
© Copyright 1989 Anchorage Daily News

A decade of sailing the world's roughest seas has taken its toll on the giant tankers that carry millions of gallons of North Slope crude oil from Valdez to the Lower 48.

The Valdez fleet now includes some of the world's worst tankers, according to one ranking, and a rising frequency of spills and hull cracks is causing concern about how safe Alaska waters are from a devastating oil spill.

The January oil spills in Port Valdez have sharpened focus on the issue of the tanker fleet's soundness and prompted shipping industry scrutiny of the vessels.

Records and reports obtained under the Freedom of Information Act, a search of state files and interviews with shippers and government officials reveals:

- An increasing number of structural failures — mainly hull cracks — has prompted the Coast Guard and the American Bureau of Shipping to put the Alaska fleet under closer review. Coast Guard records show the number of hull cracks in tankers has doubled since 1984.

- About 20 percent of the fleet is rated undependable by a former tanker officer who provides the only rating service for potential charterers.

Please see Page A-9, TANKERS

merger media giant

... would have a total volume of \$3 billion, including long-term debt, and annual revenue of \$1 billion.

The deal would create a media giant, making it a substantial force in both the production and distribution of movie and television programming, as well as in magazines and book publishing.

The merger would insure Time Warner as one of a handful of global media giants able to produce and distribute information in virtually any medium.

The agreement is subject to regulatory approval.

Please see Back Page, GIANT

ase raises issue of computer security

Protecting computer data has become a \$3 billion-a-year industry. The problem is that each dollar spent locking up data threatens to undermine the information

WEATHER

	Sunny today with north winds to 20 mph; stronger gusts likely near the hills. High near 25. Clear tonight and not as windy. Low tonight near 10, above to 5 below zero. Outlook for Monday: Continued sunny. High near 25.
High Saturday.....	25
Low Saturday morning.....	14
9 p.m. temperature.....	29.82
Barometer.....	29.82
Humidity.....	43%
Wind.....	11-15
Normal high March 4.....	29
Normal low March 4.....	13
Record high March 4 (1884).....	49
Record low March 4 (1884).....	10
STATE, NATIONAL WEATHER FORECASTS PAGE A-2	

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Special.....	B-1
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Travel.....	G-1
Yellow Pages.....	K-1
FOR HOME DELIVERY CALL 257-4100	
For Sunday delivery missed please call before 10 a.m.	

The first day is a tough one

By GARY HEISENCHEN
Daily News reporter

Libby Riddles parked her truck on Fourth Avenue to await the start of the Iditarod. She had an early Saturday morning and tried to remember if she'd ever been so calm on a March day in Anchorage.

"I had the first day so much and in the past it's been a real headache," said Riddles, the 1985 champ from Bonner Creek.

"So this year I really concentrated on preparing and making the pre-race less neurotic. I think it worked."

Riddles slowly sipped coffee out of a Styrofoam cup. Conversation had to be yelled over the din of hundreds of barking dogs, but she was at ease to the last drop.

"The last cup of cappuccino before I hit the trail," said Riddles, who was carrying her fifth Iditarod.

For others, particularly rookies, tension brewed. What had they forgotten? What would the trail conditions be like? How would their dogs respond to





A tugboat trails the tanker Exxon Long Beach through the Valdez Narrows, about three-quarters of a mile wide at its narrowest. The tug is required in case the tanker loses power.

TANKERS: Wear of rough seas shows in the cracks of steel hulls

Continued from Page A-1

Tanker owners and operators have paid only token fines for oil spills caused by hull cracks, equipment problems or general sloppiness. The Coast Guard, which has the main authority over tankers, hasn't fined a tanker more than \$1,000 in at least four years. And the state Department of Environmental Conservation has issued more than 150 notices of violation to tankers in the past five years but only once has tried to collect money for more oil cleanups.

Alaska tankers have a higher rate of structural failure than any other class of U.S. commercial ship, mainly due to the rough weather they encounter. The Gulf of Alaska, a place the textbooks call "the mother of storms," can generate seas as tall as a five-story building and winds up to 150 miles per hour. Even the relatively benign 25-foot swells that are routinely storm driven shoreward across the vast North Pacific can bend the steel hull of a heavily loaded tanker like a wire coat hanger.

"If you bend a coat hanger once a day, it's going to take a long time to break," says Coast Guard Lt. Cmdr. Tom Purcell, author of a recent report on the structural soundness of American shipping. "But if you bend it once a month, you might get it to fail in a day."

"It's the same stresser for a ship. How many times can you flex a piece of steel before whatever imperfections are in it come to fail? A ship exposed to the extremes of the environment is going to suffer a higher frequency of failure."

Tankers have made more than 11,000 voyages up and down the West Coast since the first Alaska pipeline began operating in 1977, creating the so-called TAPS trade. Despite early fears of catastrophic oil spills, the shipping environmental record has been "very good." Two major spills happened when tankers ran aground — one off the coast of Washington in 1980 and one last week near Honolulu — and two in the Gulf of Alaska from hull cracks, both involving the same tanker, the Silvermist.

Since 1977, there have been about 60 oil spills in the Valdez area, nearly all less than a barrel in size, according to oil company and state records. Clear time, the worst ships are being scrapped from the fleet because, at Alaska oil production declines and pipelines carry more oil from the West Coast to the east, fewer ships are needed, shippers say.

Not with us now tankers

"How many times can you flex a piece of steel before whatever imperfections are in it come to fail?"

— Coast Guard Lt. Cmdr. Tom Purcell



U.S. Coast Guard Cmdr. Steve McCarr says that overall the Valdez tanker fleet is still in good shape.

being built, state and federal officials and some tanker owners are concerned repeated stress on remaining tankers could result in more major spills.

"Overall, I think the fleet is in very good condition," says Cmdr. Steve McCarr, head of the Coast Guard's Valdez office. "Whether or not another 10 years from now still be a real problem, we don't know."

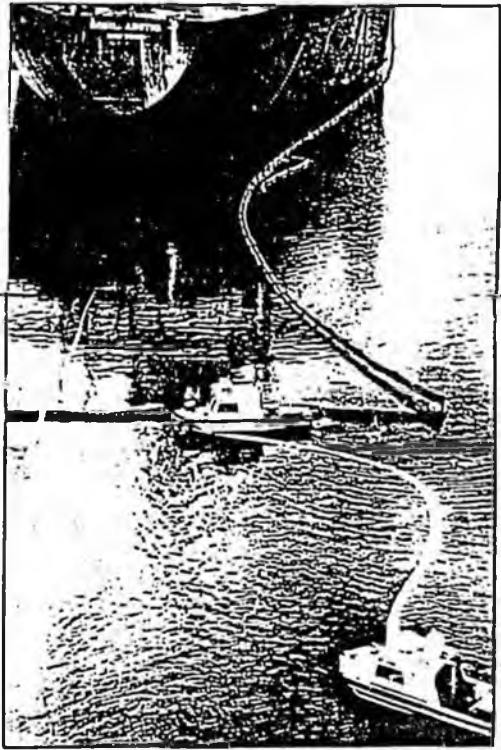
Now the New York-based Tanker Advisory Center gives about 20 percent of the Valdez tanker fleet its lowest rating, and another 10 percent rank only fair. More than 30 percent are rated very high.

Arthur McKeone, a former tanker officer who runs the service in Seattle, points out that many of a tanker's imperfections are problems, generally considers the Alaska tankers to be in good shape.

Still, about 10 of the 80 tankers that regularly call at Port Valdez have earned his lowest rating, based mainly on their age, ownership and the number of casualties — collisions, strandings, groundings, machinery and structural problems — they've had.

According to his 1987 rating guide, which includes information on 1,200 tankers worldwide and requires visits to Port Valdez — the Coast Guard, which spilled 2500 gallons of crude into the port water this year — had more casualties on its record than all but one other tanker. Two other Coast Guard tankers that frequent the Valdez trade also had higher numbers of casualties than most other ships in the guide.

Last April, the Coast Guard denied a loan for any funds of structural problems in the U.S. Greenpeace commercial fleet,



Crews on two small boats clean up oil spilled into Valdez harbor while the tanker Arctic loads oil. Alyaska officials said the oil may have been left over from a January spill.

much the same as the Federal Aviation Administration is trying to pinpoint a pattern of problems with the nation's airlines. The Coast Guard examined the records of 613 ships, including 213 freighters and 200 tankers, and reviewed casualty reports from 1981 through 1986.

Purcell, who headed the study, and his investigators noted a "strong trend" in the number of cracks being reported to tankers plying the North Pacific. "While TAPS tankers make up only 12 percent of the entire fleet, they accounted for 31 percent of all the structural failures during 1984 through 1986," their report said.

The investigators were surprised to find that younger ships actually had three times as many structural failures as ships more than 25 years old. The age generally is considered "old" by the Coast Guard. Most of the

Alaska tankers were built in the past 20 years. "The real intention of that report is to stimulate the TAPS trade as an extreme service that really requires a higher degree of attention," says Purcell. As a result of the study, Coast Guard headquarters has told all offices to give "special consideration" to the TAPS tankers. When in dry dock, the ships are to be given an especially thorough structural inspection and checked for internal fractures that could spread to the hull. Requests to stop longer in dry dock by tanker operators could signal a problem.

In January, two tankers calling at Port Valdez sprung leaks from hull cracks within a two-week period. Purcell has been asking if the tanker fleet was getting old, and the American Bureau of Shipping decided to investigate.

"In this case, we looked into it rather thoroughly," says Tom Tucker, vice president of the New Jersey-based organization that oversees design and construction standards for the U.S. shipping industry. "We determined it was a problem unique to the Alaskan service." The bureau has alerted its West Coast surveyors and inspectors to be on the watch for stress problems with the fleet.

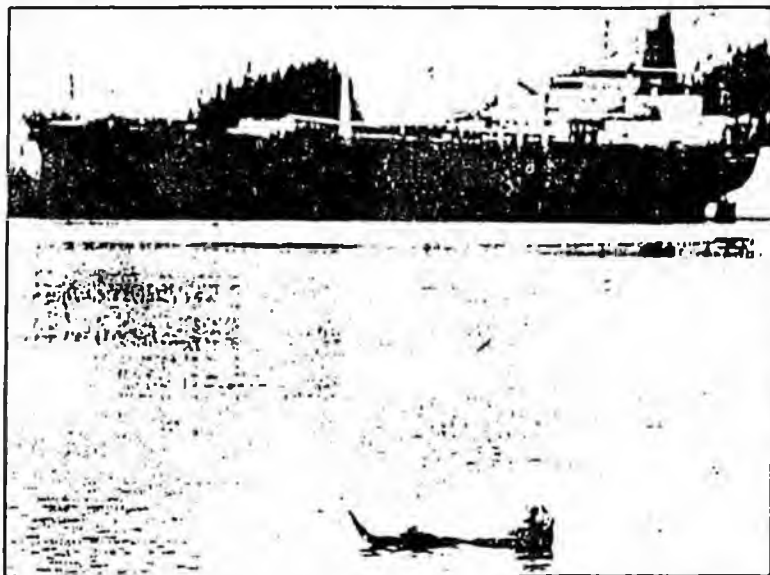
Bureau inspectors examined the two ships, the Thompson Post and the Cave Leader, researching original design and performance records. They noted out construction flaws, he says.

Photo on Page A-10

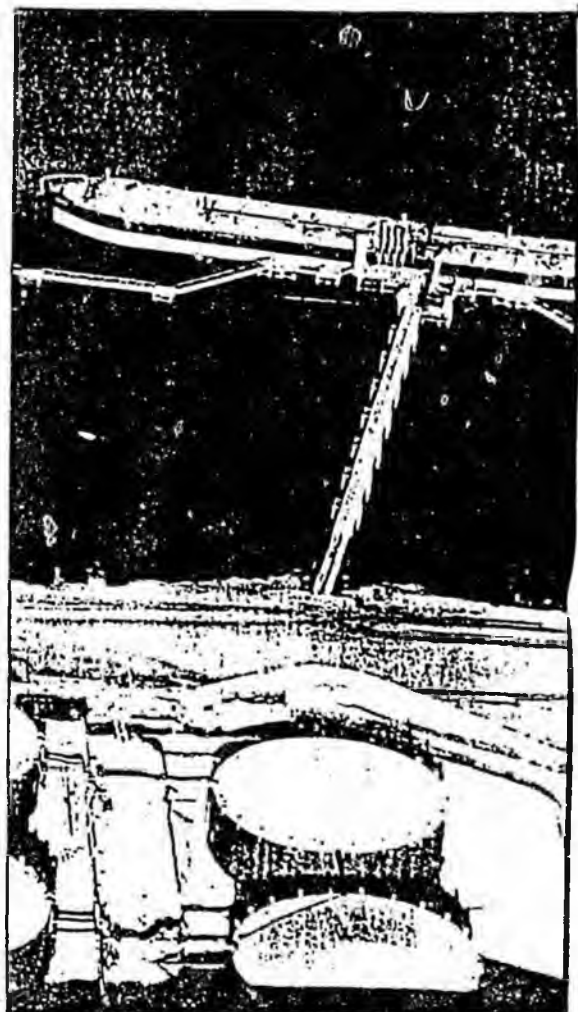
TANKERS



Three huge booms load an Arco tanker at the rate of 85,000 barrels of oil an hour at the Alyeska Port Facility in Valdez.



A sea otter floats in Valdez Harbor. In background an oil tanker sits in port.



A tanker finishes loading North Slope crude stored at Alyeska.

TANKERS: Fleet shows the wear

Continued from Page A-9

cane-force winds are common, and the Navy has measured seas up to 40 feet high, says Gary Hufford, chief regional scientist for the National Weather Service.

Geographic and oceanographic conditions also combine to produce long, rolling swells, 12 feet high in winter, eight feet in summer. "That's a phenomenal height," Hufford says.

Across this environment sails the oil tanker, unable to venture too far off course to avoid the weather. The tankers "are taking all those big waves right on the beam," notes Hufford. "They're always getting pounded from the side."

Tanker operators describe a process called "hogging and sagging" to explain what happens to the long, heavy tankers when a wave passes under. As the wave lifts the ship, bow and stern "hog" — go down in the water. When the wave passes, the middle "sags" as the bow and stern come back up.

Tankers are designed to be flexed over and over again without failing, but the repetition of stress or concentration of stresses in one area seems to be causing cracks to appear more frequently than anticipated, much as in the wire coat hanger analogy, according to tanker operators, the Coast Guard and others.

"The trouble with any trade route that is basically north to south," says Roger Gale, BP Oil Co.'s manager of marine operations, "is how do you dodge something

that is crossing over you? You either have to stop and wait until it passes or go like hell. And most of the ships don't have that kind of speed."

The key to lessening stress on a tanker is the skill of the ship's master in steering through the rough seas. "The real issue here is do the people on board the ship know when to slow down a little bit, change the course a little bit," says Gale. "It's amazing how a few degrees change in course to shift the wind can make the ship ride a little bit easier."

About 75 tankers a month call at Alyeska's pipeline terminal in Port Valdez. The two largest — the ARCO Independence and the ARCO Spirit — are as long as an aircraft carrier and twice as heavy when loaded. At 282,000 deadweight tons each — the sum of cargo and fuel — those two are medium-sized in terms of today's supertankers; the biggest now runs more than 500,000 tons.

Each of the two ARCO ships can carry 2 million barrels, or 84 million gallons, of crude oil. The 21 cargo tanks on each ship are so big that the crew sometimes paddles around in rafts to inspect the tanks.

The Coast Guard requires tankers to be dry-docked and inspected about every two years. A Coast Guard inspector as well as an American Bureau of Shipping surveyor examines each tanker while it's out of the water.

The big tanker operators

— Arco, Exxon Corp. and BP — say catching small cracks before they become big ones is the best way to prevent oil spills. The companies spend millions of dollars a year on inspection and maintenance, and have staffs of marine engineers and inspectors to keep their fleets in good shape.

BP is Alaska's largest oil producer and its biggest shipper. Arco and Exxon each own about 10 tankers that sail to Valdez; BP, which is prohibited from owning ships under the Jones Act because it's a British company, charters 22 tankers that move its Alaska crude to the West Coast and Panama.

BP keeps abreast of its rented fleet through its port captains, former tanker officers who check the ships at most ports they enter. A staff of marine superintendents and engineers inspect the tankers about once a year to look for cracks and pits and other potential problems, according to Gale and Fred Garibaldi, vice president of transportation for BP Oil.

They point out that no oil company wants to see its oil spilled into the ocean — the loss of the cargo as well as cleanup costs run into the millions of dollars before it's settled.

Several independent tanker companies own ships regularly hired under short-term or one-time charters for the Valdez trade. And some operators and of-



Dan Lawn, district office supervisor for the Department of Env

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is hard on the hulls

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Officials are concerned that the smaller companies, with less money to spend on expensive inspection and maintenance programs, may need more of a push from regulators like the Coast Guard to maintain sound ships.

A check of state Department of Environmental Conservation records shows the state issued more than 150 "notices of violation" to tanker operators in the past five years for oil spills caused by general sloppiness in operations as well as hull fractures. But in that time, the state has only once — in August 1984 — followed through with its threat to seek monetary penalties for oil spills. That case involved a 2,500-gallon spill from the ARCO Anchorage and the state collected its costs of \$3,495.

Usually, DEC sends the notice to the tanker operator, waits for an explanation of why the spill occurred, then suspends the case, threatening to reopen cases should similar incidents occur.

Although similar incidents involving the same tanker have occurred, according to DEC's records, the DEC has never reopened a case.

For instance, the Thompson Pass, which in January was responsible for the largest oil spill in Port Valdez history, had received nine notices of violation from DEC prior to the most recent spill. Four of those were for hull cracks — the same problem that occurred in January and allowed 70,000 gallons of crude oil to spill. In 1981, according to a letter in DEC's files, the Coast Guard was especially concerned because similar fractures were found in all six sister ships to the Thompson Pass.

DEC records show the state used to collect at least its costs for investigating an oil spill, but hasn't routinely attempted to do even that since the early 1980s.

De Lawn, head of the DEC's Valdez office, says he doesn't have the staff, money or time to pursue cases

against companies when most spills are so small. He thinks the tanker companies pay attention to the notices and are bothered by them, even though the state takes no follow-up action.

Larry Dietrick, the DEC's director of environmental quality, says even though state law allows for hundreds of thousands of dollars in penalties, the DEC's oil spill regulations have limited fines to a "dollars-per-barrel" penalty rate, with \$63 per barrel about the most the state can assess. So, he says, the state wouldn't have been able to collect much money from the tanker spills, unless it could prove negligence or some serious disregard for the environment.

The DEC had not been aware of the recent Coast Guard report on hull cracks in the TAPS tankers until the Coast Guard supplied it to the Daily News.

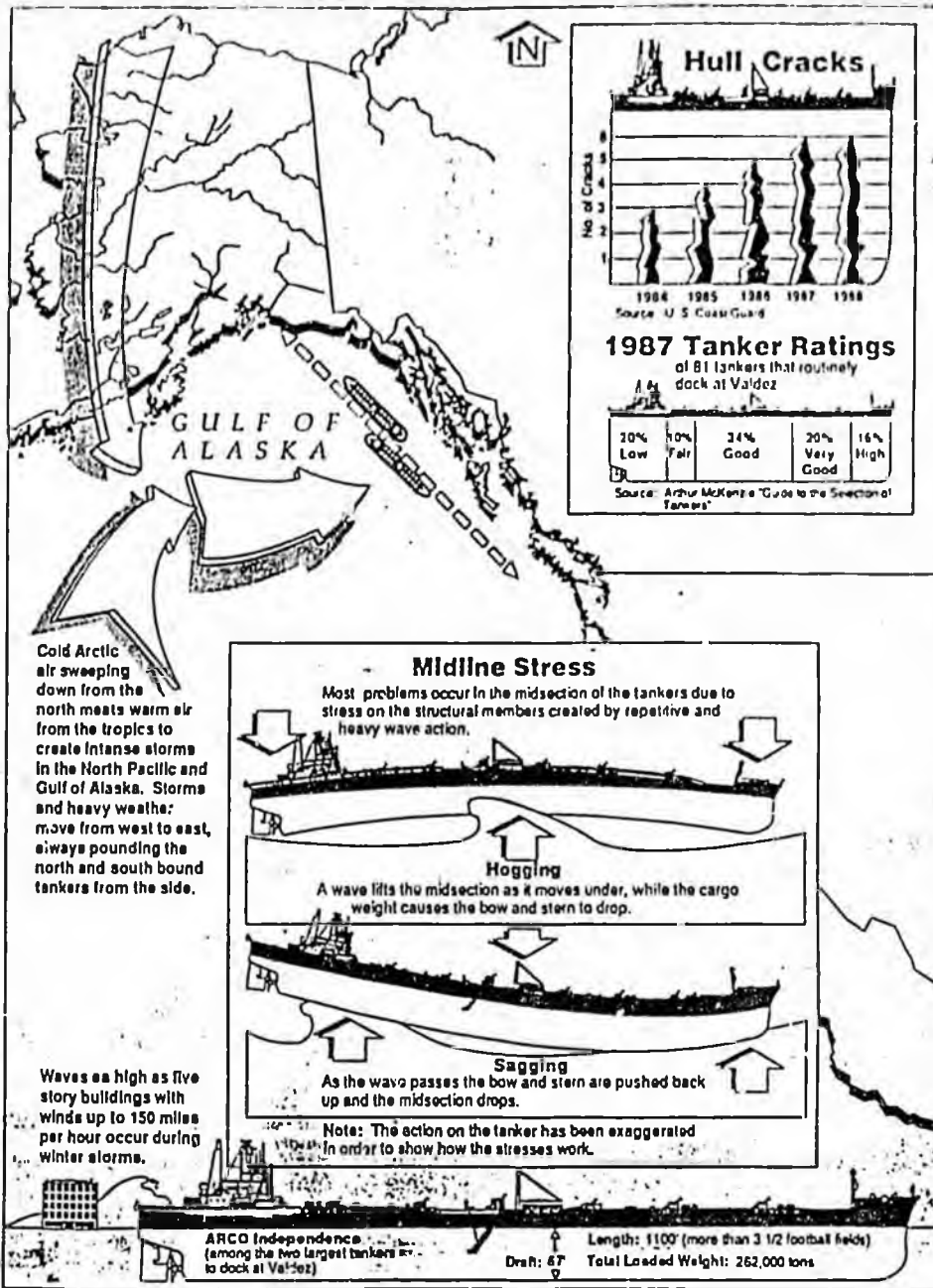
Dietrick says the DEC will review the report and likely pay more attention to tankers that sustain hull cracks. However, no increase in staff or funding is planned for the Valdez office, he says.

The Coast Guard is required by law to assess a fine for an oil spill. Coast Guard records show that for the past four years the fines have averaged only a few hundred dollars per incident, and none has been more than \$1,000.

In fact, tanker operators pay as big a penalty for hydraulic fluid being washed overboard in a heavy rain as they do for a hull crack. Coast Guard officials say they are limited to a \$5,000 penalty under the federal Water Pollution Control Act.

Cmdr. Craig Eisenbeiss, a Coast Guard hearing officer who spent four years as head of the Valdez office, says structural problems historically may have been viewed as something beyond the control of the operator.

McCall, the Coast Guard's current Valdez commander, notes that companies pay a heavy price to clean up spills, a penalty in itself.



Major oil spill here would stump pros

Experts cite lack of united plan, gear

By John de Yonge

PI Reporter

No coordinated contingency plan exists to fight an Exxon Valdez-sized oil spill in Puget Sound, even in treacherous Rosario Strait, where a giant spill would foul the beaches of the San Juan and other islands.

Under its own detailed plan for responding to oil spills, the Coast Guard will take charge of containment and clean-up efforts unless the spiller of the oil refuses to do the work, dithers too long starting the work or is unknown.

Coast Guard officials say their preferred role is to oversee rather than direct cleanup work by private contractors.

Containment and cleanup here would fall largely into the hands of an oil-company-dominated consortium, Clean Sound Cooperative, whose manager says that Clean Sound's "response manual" is not open to public scrutiny.

Washington state's thick contingency plan for oil spills contains no step-by-step plan for answering an oil-spill emergency.

The lines of authority and communication between all the agencies empowered to deal with oil spills here seem as fuzzy as those that have frustrated efforts to fight the spill in Alaska's Prince William Sound.

There, the U.S. Coast Guard wanted three weeks before deciding to assume authority over Exxon's cleanup efforts, which have been bitterly criticized by

■ **Cleanup plan:** The Coast Guard says Exxon's proposal might take three weeks to get under way. Page A3

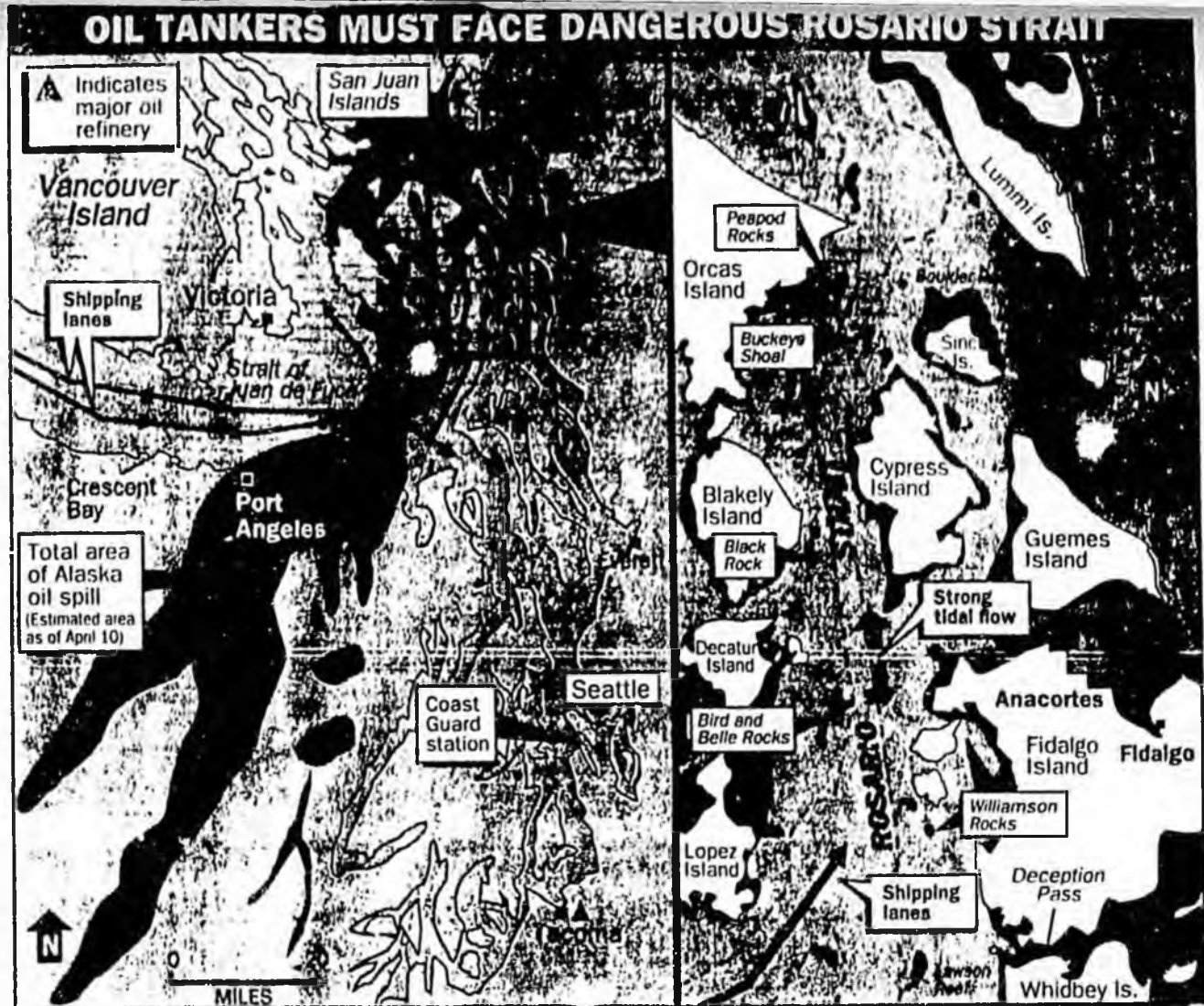
Alaska state officials. Coast Guard Commandant Paul Yost is now reviewing an Exxon cleanup plan he ordered the company to produce last week.

Even with clear, precise response plans detailing who is in charge of what, it's unlikely any available gear or group on Puget Sound could contain or clean up a Valdez-sized oil spill here, experts say, especially if it happened in Rosario Strait.

Oil tankers, many laden with Alaskan crude picked up at Valdez, daily run the narrow, rock-strewn strait through the San Juan Islands. Because of its narrowness and the heavy currents pouring through it on most tides, mariners consider it to be the most dangerous passage in these parts, a place where tankers and other great ships that need a mile to turn and two miles to stop don't want to lose power and steering.

"The currents move through Rosario Strait so rapidly that it would be virtually impossible to set up a defensive position there against moving oil," says Cmdr. Greg Yaroch, who would be the Coast Guard commander called to the scene should a tanker go on the rocks in the heavily used passage less than a mile wide. "The oil

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HEN GARRISON/PI

Congressmen say Alaska spill is a 'warning'

By Larry Lange

PI Reporter

Puget Sound isn't any better prepared for a major oil spill today than Alaska was a month ago when a huge tanker ran aground and spilled more than 10 million gallons of crude oil, two Washington state congressmen said yesterday.

In a news conference at Seattle-Tacoma International Airport after a tour of the giant Alaska spill, Rep. John Miller, R-Seattle, and Rep. Norm Dicks, D-Tacoma, said they want better planning,

more equipment and more money set aside to adequately battle an Alaska-size Puget Sound oil spill.

"The planning and equipment that is ready in Puget Sound is no better than the planning and equipment that was ready — or not ready — up in Alaska," Miller said. "I think we have to look at this spill as a warning, as a lesson."

Dicks and Miller, returning to Washington, D.C., last night, said hearings on the spill will be held in Seattle. Both said they'll try to get federal legislation to quicken response to spills and require oil

companies to set money aside for cleanup work and equipment, possibly from a per-barrel oil tax ultimately paid by oil company stockholders and consumers.

They said there wasn't enough cleanup equipment to handle the March 24 Alaska spill. Cleanup was bogged down by bickering between Exxon, the Coast Guard and the state of Alaska over removal of oil by use of "dispersants" versus burning it in the water, they said.

That delayed cleanup work until the first weekend after the spill, when a storm made it

impossible to use either technique and spread the oil further into Prince William Sound.

Even now, with the Coast Guard placed in command by President Bush, the system is weakened by the fact that Exxon is paying for the cleanup and must approve expenses, they said.

"You've got command and equipment problems," Miller said. "You've got too many cooks stirring the broth."

Miller and Dicks said they'll work for legislation placing the

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Oil spill: 'Prevention is the best response'

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would go where it wants to go."

In all, the Coast Guard says tanker movements in and out of the Sound average 1,500 a year. By law, no tanker larger than 125,000 dead-weight tons — with a capacity of up to 42 million gallons of oil — may enter the Sound. About half of the tanker trips are by vessels of 40,000 tons or less.

One of the oil-spill fighters Yaroch would call, Jon Neel, Washington state's oil-spill coordinator, agrees that not much can be done to stop a great spill: "As far as the adequacy of our response to an event as large as the Exxon Valdez spill is concerned, I'm not sure anybody is prepared. Prevention is the best response."

On March 24, the 211,000-dead-weight-ton Exxon Valdez, under the command of a skipper accused of being drunk, impaired itself on Bligh Reef just outside Valdez Arm and gushed more than 10 million gallons of thick, poisonous, black Prudhoe Bay crude into the pristine waters of Prince William Sound. Since then, in the worst oil disaster in North America, the still-spreading oil has covered an island-filled area larger than Delaware.

Yost, who was once Coast Guard commander on Puget Sound, told Congress that "there isn't a contingency plan in the world to deal with a spill of this size." Equipment available around Puget Sound for fighting such a large spill amounts to a "Band-Aid," he said.

The main "Band-Aid" — \$9 million worth of containment booms, skimmer vessels, response boats, communications and storage trailers and other gear — is in the hands of Clean Sound. The consortium is primarily financed by oil companies with refineries at Cherry Point, Ferndale, Anacortes and Tacoma.

Clean Sound's manager, John Wiechert, a former Coast Guard officer, exudes confidence that

equipment stored at various refineries and other sites around the Sound can reach a spill site in four to six hours, depending on the weather. The gear would be put into operation by a contractor, Foss Maritime Co., which agrees to begin responding to a spill within an hour after a call from Clean Sound, Wiechert says.

Also responding would be refinery and oil-company personnel trained to handle some of the gear. Clean Sound itself, with a \$750,000-a-year budget, has four employees: Wiechert, a secretary and two maintenance people.

"In the case of a major spill," says Wiechert, "we are the only act in town, because we have the major pieces of equipment."

Would that be enough to handle a Valdez-size spill?

No, says Wiechert. "With that much oil . . . the prospect of containing it before it hits land is quite slim."

Equipment and manpower would have to be called in from all over the West Coast, including British Columbia, he said. "And that takes time."

Since Clean Sound is the main line of defense against a Puget Sound oil spill, does it have a contingency plan known by all players for responding to an oil spill when the call comes?

No, says Wiechert. "Our experience has been that people don't read the plan until a spill occurs."

Clean Sound, he says, has a written "Spill Response Manual" that he refuses to let anyone outside of Clean Sound possess or read, because the document is always out of date. Furthermore, he says, since Clean Sound is a private organization, its plans are not subject to public review. He says the organization now keeps its response information updated and detailed in a computer system available to its members.

The Coast Guard, according to

Yaroch, is not hooked up to Clean Sound's computer. And because the Coast Guard has no authority over Clean Sound, it has not approved the response manual.

Under federal law the Coast Guard has the overall responsibility for ensuring that marine oil spills are cleaned up.

But even that responsibility is clouded in the fog of bureaucracy that manifested itself in Valdez after the oil spill.

By federal law an oil spiller has the responsibility to contain, clean up and pay for the spill and its results. But the Coast Guard prefers to oversee what the spiller does, rather than issue orders.

The Coast Guard's Puget Sound response plan instructs the officer sent to the spill scene to "advise and assist the responsible party, but under no circumstances is he to order and direct."

"We will order and direct if we must, if a spiller is not responding satisfactorily," says Yaroch, but he points out that if the Coast Guard begins issuing orders, that "federalizes" the cleanup and puts the operations burden on the Coast Guard, with its limited personnel and gear and budget.

The state, too, has a thick oil-spill contingency plan, issued in May 1988 and written in bureaucratic jargon that makes it more difficult to read than the Coast Guard plan. Furthermore, the state manual lacks a specific plan of action for spill response.

"That section is under preparation right now," says Neel, adding that the delay stems from trying to incorporate into the plan what the state learned from last winter's oil spill off Grays Harbor.

Preventing tanker accidents here is the main responsibility of

there is little radar coverage in the south Sound once ships head for Tacoma past Three Tree Point near Des Moines.

Dr. Alyn Duxbury, a University of Washington oceanographer with many days at sea, predicts that chances are good of a tanker losing power and going on the rocks in Rosario Strait.

"The best we can say," he says, "is that we've been lucky."

the Coast Guard's radar-operated Puget Sound Vessel Traffic Service, which tracks tankers after they enter the Strait of Juan de Fuca and enter charted zones to keep them apart.

The service consults with skippers as ships proceed along the system, particularly as they enter Rosario Strait, where the Coast Guard wants only one tanker at a time in the rocky passage.

Tankers are required to have a federally licensed pilot on board once they pass Port Angeles. Most of them stop there to pick up

a state pilot — but not all.

A ship's master possessing a federal piloting license for Puget Sound may decide to go in without another pilot, no matter how long it's been since the master has been into Puget Sound and no matter how tired he might be.

Having a state pilot on board is no guarantee of safe passage. In December 1985 the Arco Anchorage grounded inside Port Angeles harbor under the direction of a state pilot, Capt. Raymond Leson, who was charged with pilot error and had his federal license sus-

pending for several months.

Having a ship on the traffic service's scopes does not guarantee radar operators can warn a ship of danger. Last year a Japanese tanker, with its second mate alone and asleep on the bridge, ran hard aground near Crescent Bay west of Port Angeles.

In that area, as in Rosario Strait, there are blind spots in the Coast Guard radar coverage. And

Warning: Tracking of tankers urged

From Page 1

Coast Guard directly in command of all spill cleanups and arming them with cash from a federal cleanup fund.

Dicks, a member of the House Appropriations Committee, pledged to get money for upgrading the Coast Guard Vessel Traffic Control Centers, particularly to eliminate a weak spot in the Puget Sound control system south of

Normandy Park.

"Because oil tankers go into Tacoma, we need to have coverage from Vashon Island into Tacoma and even possibly down to Olympia," Dicks said.

Tracking of tankers by radar-equipped centers could help prevent accidents, Dicks said.

The Exxon Valdez, for example, was out of range of the control center in Valdez when it ran aground.

"If someone had picked up the phone that night and called the tanker, that accident could have been avoided," Dicks said.

Dicks, who spent two years fishing in Alaska waters, said he was "stunned" by the prospect that it may take several years to clean up the spill there.

"If there's one lesson to be learned from this tragedy . . . that is prevention, prevention, prevention," he said.