

SCOMM

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**Notice of Public Meeting for the
Task Force on Motorized Oil Transport –
Response Planning Standard Work Group Meeting**

The Alaska Department of Environmental Conservation (ADEC), Division of Spill Prevention and Response announces that a public meeting of the Response Planning Standard Work Group of the Task Force on Motorized Oil Transport will be held on October 17, 2000 in the Legislative Information Office, 71st West 4th Avenue, 2nd Floor, suite 200, Anchorage, Alaska 99501 from 9:30 a.m. to noon and 1:00 p.m. to 4:30 p.m. This meeting will be a continuation of the work group's August 23 and September 6 meetings.

This is one of a series of Task Force on Motorized Oil Transport work group meetings to determine how to implement response planning standards for a railroad tank car contingency plan and for a nontank vessel contingency plan as set out in Senate Bill 273 regarding oil discharge prevention and contingency plans for all self-propelled nontank vessels exceeding 400 gross registered tonnage and railroad cars carrying bulk oil and authorizing the inspection of nontank vessels and trains.

The agenda for the work group will be posted to the Task Force website at: <http://www.state.ak.us/dec/nontank>. Any person interested in further information is encouraged to review the website or contact Judith Erickson of Capital Information Group at (907) 586-3118, email at jerickso@pobox.alaska.net or Nancy Lowe, Information Insights, at (907) 452-2461, email at nancy@infoinsights.com.

If you are a person with a disability who may need special assistance to participate in the process on the proposed regulations, please contact Joel Casto at (907) 465-5041 as soon as possible to make necessary arrangements.

RESPONSE PLANNING STANDARD WORK GROUP

Co-chairs: Gene Burden, Lee Egland, John Hansen

Meeting on October 17, 2000

Anchorage Legislative Information Office

9:30 a.m. to noon and 1:00 p.m. to 4:30 p.m.

DRAFT AGENDA

GOAL: Determine how to achieve the response planning standard for
(a) affected nontank vessels and
(b) trains carrying oil.

Primary/Secondary Response Hubs

Discussion of strawman proposal: criteria for placement of
primary/secondary hubs

Examine equipment list for primary and secondary hubs

Timeframe for positioning hub equipment

Co-op equipment

Alternative compliance

Recommendation to Task Force

Response Planning Standard Work Group

October 17, 2000 Meeting Summary
Nontank Vessel Issues
Anchorage Legislative Information Office
9:30 - 12:00, 1:15 - 3:15

Task Force members present: RPS Work Group Co-chairs Gene Burden and Lee Eglund; and members Rick Harris, Doug Lentsch, Charlotte MacCay, Stephanie Madsen, Jeff Thompson, Lurilla Lee (for Kris Mullan), and Terry Murphy (for Bob Heavilin).

Task Force members on teleconference: Jim Carter and Heather McCarty

Department of Environmental Conservation staff present: Larry Dietrick, Susan Harvey, Holly Hill

Task Force Facilitation: Brian Rogers, Judith Erickson

Task Force Technical Assistance: Paul Fuhs

Members of the public also attended

Response Planning Standard Work Group Recommendations:

1. The Response Planning Standard Work Group recommends that control and containment equipment required to meet the response planning standard (RPS) for a nontank vessel be stationed within the subarea of operation. The control and containment equipment required for a nontank vessel to meet its RPS is containment boom sufficient to extend three times the length of the vessel and an appropriate means for deploying the containment boom.

To meet the RPS requirement of "cleanup of the discharge within the shortest possible time consistent with minimizing damage to the environment," nontank vessels must either:

- position the required skimming and storage capacity within their subarea of operation; or
- reasonably demonstrate to the Dept. of Environmental Conservation the ability to position equipment in the subarea of operation within 24 hours.

The cleanup equipment required for nontank vessels to meet their RPS includes skimming capacity capable of cleaning up 15 percent of the maximum capacity of the vessel within five days and storage capacity that equals the daily recovery capacity of the chosen skimmer. For example, if the nontank vessel carries 10,000 barrels of fuel, the RPS quantity is 1500 barrels. To meet the RPS, a nontank vessel must have skimming capacity capable of cleaning up 300 barrels of spilled fuel per day. With a skimmer that recovers 80 percent fuel and 20 percent water, temporary storage capacity must be provided that will hold 360 barrels of liquid per day (300 barrels of fuel and 60 barrels of water). The skimmer chosen must be appropriate for the type of oil carried by the vessel.

2. Response Planning Standard Work Group recommends that nontank vessels be allowed two years from the adoption of regulations implementing SB 273 to have in place the skimmer(s) and associated storage capacity described in their contingency plan.

3. The RPS Work Group recommends that nontank vessel contingency plans be due to DEC within 180 days of adoption of the contingency plan regulations. DEC will give conditional approval to all plans submitted on time. Conditional approval will remain in effect until DEC has completed review of a plan. Nontank vessel contingency plans will be reviewed by DEC every three years. DEC will stagger the initial review process so that all nontank vessel contingency plans do not come up for review in the same year. This is the same recommendation adopted by the Contingency Plan Work Group.

Discussion:

The RPS Work Group dropped their original proposal to locate primary and secondary response hubs throughout Alaska. Instead, the location of equipment caches within each subarea will be determined by the nontank vessel owners, spill cooperatives and other RACs that service nontank vessels. Also changed was the amount of storage required. The work group's original proposal called for temporary storage equal to the effective daily recovery capacity of the skimmer, which would only be capable of holding the recovered fuel. The revised recommendation calls for storage capacity capable of storing the recovered fuel and associated water.

The costs for a nontank vessel to meet the statutory RPS will depend on many factors—the size of the vessel, the amount of fuel it may carry, the number of vessels covered under one contingency plan, co-op membership fees, costs for alternative compliance, etc.—but most knowledgeable observers say they expect that costs will be determined by market forces

At the RPS Work Group meeting, DEC's Larry Dietrick acknowledged the difficulty of predicting the costs. But with clear criteria in the regulations establishing the equipment required to meet the RPS, he said, each individual vessel or fleet owner can start adding up the costs of the items they will be required to have, and start figuring out what their individual costs will be.

Work group members discussed rough cost estimates for the equipment identified to meet a nontank vessel RPS.

Terry Murphy with Chadux Corporation roughly estimated the cost of for a co-op to establish a subarea hub for control and containment equipment at \$250,000. The hub would include boom, two boats to deploy the boom and sorbents. If a spill cooperative set up such an equipment hub, the costs would presumably be spread over several members. The cost for nontank vessels pursuing alternative compliance to meet their RPS would vary depending on the size of the nontank vessel, the number of vessels covered by a plan and the equipment purchased.

Costs for a cleanup equipment starter kit will vary depending on the skimmer chosen and its daily effective recovery rate (EDRC). The EDRC is the amount of spilled fuel the skimmer can recover in a 24-hour period. Task Force members estimated the costs for a cleanup equipment starter kit based on a vessel with maximum fuel capacity of 10,000 barrels. The RPS, 15 percent of 10,000 barrels, would be 1,500 barrels. To meet this RPS, a nontank vessel must have skimming capacity capable of cleaning up 300 barrels of spilled fuel per day. The cleanup starter kit would consist of a skimmer and storage capacity that equals one day recovery capacity of the chosen skimmer (includes spilled fuel and water). Additional skimming equipment and storage capacity would be cascaded to the spill site as needed. The estimated costs in the table below are based on three brands of skimmers. Task Force members noted that a more efficient and costly skimmer, such as the Lori or Lamor, will be more cost-effective in the long run as they will require fewer storage bladders.

Costs of cleanup starter kit capable of recovering 300 barrels of spilled fuel

Skimmer	Fuel-water ratio	Liquid recovered to skim 300 bbls spilled fuel per day	Storage capacity needed to meet RPS	Cost of skimmer	Cost of Storage capacity	Cost of cleanup starter kit
Weir	20 % fuel, 80 % water	1500 bbls	1500 bpd	\$50,000	\$300,000	\$350,000
Lori or Lamor	80 % fuel, 20 % water	360 bbls	360 bpd	\$60,000	\$100,000	\$160,000

RPS Work Group members discussed the use of state equipment by a nontank vessels to reduce costs in meeting the RPS. Specific discussion focused on the state's persistent skimmer in Dutch Harbor, an area where nontank vessels carrying persistent fuel will be required to position a skimmer. DEC staff said the persistent skimmer at Dutch Harbor would be accessible to nontank vessel owners in the event of a spill but could not be used to meet their RPS.

Ultimately, according to Dietrick, costs will depend on the deals that are cut, and may or may not be a burden, "depending on how the market forces drive us."

"With the 24-hour clock rule, just by way of illustration, it's theoretically possible ... that the entire nontank vessel fleet in the State of Alaska could be served with one nonpersistent skimmer out of Anchorage," Dietrick said. He noted that the this same theory could apply to the nontank vessels requiring a persistent skimmer.

The work group agreed on a recommendation to give nontank vessel owners with predominantly persistent fuel two years from the adoption of regulations implementing SB 273 to have the persistent-capable skimmers and associated storage capacity in place. Until that time, the state's persistent skimmer in Dutch Harbor could be used to respond to a spill in that subarea. It was pointed out that there are persistent skimmers owned by oil spill cooperatives that could also be contracted for in the event of a spill.



LEGISLATIVE TELECONFERENCE NETWORK SIGN-IN SHEET

SPONSOR: Motorized Oil Transport Task Force

SUBJECT: RPS Work Group

START/END TIME: 9:30 a.m. DATE: 10-17-2000

PLEASE PRINT

	Name/Representing	Address	Zip	Phone No.	Testify	Observe	Bill No.
1.	DOUG LENTSCH CISPRI	Box 713 7314 NIKISKI AK	99635	776-5129			
2.	LEEGLAND w/CRAWLEY REP. APDIT	PO BOX 2287 SEATTLE, WA	98111	²⁰⁶ 340-2941			
3.	Lurilla Lee Trident Seafoods Corp	5303 Shilshole Ave NW, Seattle, WA	98107	²⁰⁶ 783-3818			
4.	JERRY MURPHY	721 W 1ST AVE ANCH. AK	99501	278-3301			
5.	PAUL AXELSON NORTH PACIFIC MARINE	Box 8080, KIN, AK 995	99901	225-2200			
6.	Joe LeBeau Valley Alaska Lumber Environment	642 S. Alaska St 51201 Palmer -	99645	745-8223			
7.	Tom Kuster NORTH STAR	790 Ocean Dock Rd Anch AK	99501	272-7537			
8.	HOLLY HILL DEC	555 CORDOVA ANCH AK	99501	269-7540			
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10.							
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14.							
15.							

Modified 10/16/00

Hub Requirements for Non-tank vessels

Requirements for response equipment in hubs

Response Requirement	Location of Response items	Other alternatives
Boom in an amount 3 times the length of the vessel.	Secondary hub, and/or primary hub if a primary hub is warranted	
Skimmer with a nameplate capacity equal to the daily recovery of 15% of the volume of the vessel. The skimmer must be appropriate for the type of oil carried by the vessel.	Primary hub	
Storage capacity for a volume of recovered oil equal to 15% of the capacity of the vessel.	Primary hub	
Two skiffs of suitable size and power to tow boom	Secondary hub and/or primary hub if a primary hub is warranted.	May be vessel of opportunity contracts in local community

*Equipment which is in a primary hub and relied upon by a secondary hub, must be capable of arriving in region within 24 hours.

Modified 10/16/00
Response Factors with weighting for persistent fuels.

Factors to determine whether a particular vessel must have equipment in or out of region in any given region. (Multiple the number in each column to come up with the ultimate Result.)

Capacity (BBL)	X	% of year spent in region	X	Factor of 1 (for Non-persistent fuels)	X	Factor of 5 (persistent fuels 0-15,000 BBL)	X	Factor of 10 (persistent fuels 15,000 - 30,000 BBL)	X	Factor of 15 (persistent fuels 30,000 BBL & up)	=	Result
Example												
21,400 cruise ship		5 trips = 35 days = 9.5%						10				20,330
Example												
10,800 refrig tramper		1 trip = 60 days = 16.4%		1								1,771
Example												
15,081 cargo		52 trips = 104 day = 28.5%		1								4,298

Factors less than 5,000 are allowed to have a secondary hub.

Factors greater than or equal to 5,000 must have a primary hub, but may be able to demonstrate to the Department that it is faster to station that equipment in Anchorage or a central location in Southeast than store it in region. Some vessels may carry both persistent and non-persistent product and may qualify for a secondary hub for one type of product and a primary hub for another type of product. Their hubs must contain the appropriate type skimmer for their products.

(These are sample factors and sample vessels. The workgroup and the Department can jointly work out what the cutoff would be. Then when new vessels are added there is an objective standard to determine how much and what type of equipment is needed and where.)

Modified 10/16/00

Factors with weighting for volume of fuel.

Factors to determine whether a particular vessel must have equipment in or out of any given region (Multiple the number in each column to come up with the ultimate Result.) This scenario would be worked out for each of the 9 regions. Use a cutoff Result, like 20,000 to determine which vessel must store their equipment in region. I.e. All results greater than 20,000 would have to have their skimmers and storage capability in region or else demonstrate to the Department that they could deliver the equipment to the region within 24 hours of a spill.

Capacity X (BBL) Total fuel capacity	Region	% of year X spent in region	Factor of 1 X (0-10,000 BBLs)	Factor of 2 X (10,001-20,000 BBLs)	Factor of 3 X (20,001- 30,000 BBLs)	Factor of 4 = (30,001 BBL & up)	Result
132013 Cargo-LNG	3	1 trip = 3 days = 0.8%				4	4340
62783 Tanker	3	6 trips=42 days = 11.5%				4	28897
34716 Cargo-LNG	3	20 trips = 60 days =16.4%				4	22773
42436 Container ship	5	52 trips = 104 days = 28.5%				4	48377
32430 Cargo Reefer	7	1 trips = 60 days = 16.4%				4	21274
23151 Cruise Ship	1	20 trips = 140 days = 38.3%			3		26639
22640 Cargo-LNG	3	2 trips = 6 days =			3		1116
15374 Cargo-bulk	3	52 trips = 104 days = 28.5%		2			8763
11188 Cargo-bulk	2	1 trip = 7 days = 1.9%		2			429
11615 Catcher	6	2 trips = 20 days = 5.5%		2			1272
5083 Catcher	7	1 trip = 90 days = 24.7%	1				1253
4427 Catcher- Factory		1 trip = 90 days =24.7%	1				1093
3636 Processor	6	1 trip = 90 days = 24.7%	1				898
1124 Catcher		1 trip = 270 days = 73.9%	1				831
315 Cargo		365 trips = 365 days = 100%	1				315

(These are sample factors and sample vessels. The workgroup and the Department can jointly work out what the cutoff would be. Then when new vessels are added there is an objective standard to determine how much and what type of equipment is needed and where.)

Factors to determine whether a co-op must have primary or secondary hub in any given region (Multiple the number in each column to come up with the ultimate Result.) This analysis must be done for each region. (Having all equipment in region means you are a primary hub. If some of your basic equipment comes from out of region, then the in-region hub is a secondary hub.)

Region	Capacity X (BBL) of all vessels that spend time in region in (in thousands)	No. vessel days X spent in region of all vessels in region (yearly) (in thousands)	Number of X months per year the region is ice free divided by 12 (% of time ice-free)	Number of X MESAs in the region	Divide the number achieved so far by 1000 =	If there is a short term, high-density fishery in the area, multiply by 2	Result
1 SE				11		2	
2 PWS				6		2	
3 CI	¹ 5,000	1.4	100%	14	98		98
4 Kod				7			
5 Aleu				15		2	
6 BB	² 2,000	2.0	58%	8	18.56	2	37.12
7 W. AK				6		2	
8 NW Arc	³ 2,000	0.15	25%	4	0.3		0.3
9 N. Slope	⁴ 30	0.014	8.3%	7	.00024		0.00024

The above numbers are estimates only. We must obtain the data, work the numbers and then set cutoff factors for those regions that will require a secondary vs. primary hub.

¹ Estimate 200 vessels with an average of 25,000 barrels of fuel = 5,000,000. Divide by 1,000 to get a factor of 5000. Average vessel days = 200 vessels with an average of 7 days per vessel = 1400 days. Divide by 1000 to get a factor of 1.4. Ice free months (or months that vessels enter the region) are 12.

² Estimate 100 vessels with an average of 2,000 barrels of fuel = 200,000. Divide by 1,000 to get a factor of 200. Average vessel days = 100 vessels with an average of 20 days per vessel = 2000 days. Divide by 1000 to get a factor of 2.0. Ice free months are 7/12 or 58%.

³ Estimate 50 vessels with an average of 40,000 barrels of fuel = 2,000,000. Divide by 1,000 to get a factor of 2,000. Average vessel days = 50 vessels with an average of 3 days per vessel = 150 days. Divide by 1000 to get a factor of 0.15. Ice free months are 3/12 or 25%.

⁴ Estimate 2 vessels with an average of 15,000 barrels of fuel = 30,000. Divide by 1,000 to get a factor of 30. Average vessels days = 2 vessels with an average of 7 days per vessel = 14 vessel days. Divide by 1000 to get a factor of 0.014. Ice free months are 1/12 or 8.3%.

IMPLEMENTATION SCHEDULE FOR EQUIPMENT REQUIREMENTS TO MEET RPS FOR SB 273:

Current deployment schedule for tank vessel (APD&T) program:

2001 - Dillingham and Dutch Harbor

2002 - Nome and Bethel

2003 - Barrow

Proposed deployment schedule for non tank vessel response equipment:

If the legislation passes by May and the regs take affect later in the year (e.g. six months later to give time for vessel owners to negotiate membership in a PRAC, then the PRAC's wouldn't have the money to work with until near the end of the year, so it seems reasonable that the earliest purchase and deployment of equipment would be 2002. I talked with Terry Murphy of Chadux on the practicalities of a proposed schedule. He also mentioned that they had just finished a complete plan to establish a secondary hub in Dillingham and the total cost was approximately \$500,000.

2002 - Anchorage as primary hub for persistent oil, Seward as secondary hub and Dutch Harbor as primary hub for persistent oil.

2003 - St Paul and Adak as secondary hubs.

2004 - Akutan and Atka as secondary hubs if traffic warrants.

I have new information on Atka. They have had a dramatic reduction of vessel traffic into the port from previous years. Here is the current status which I got from Bill Berikoff who manages the CDQ group in Atka: They get 1 fuel barge a year when the Delta Western barge stops enroute to Adak and sells them 17,000 gallons of fuel. The fuel is sold to their halibut fleet which uses skiffs. They also get four sailings a year from the Coastal Trader, a small domestic trumper (I'm pretty sure its over 400 tons) to pick up their processed fish. Only 80 people live in Atka. They don't get any foreign trampers anymore and the only other vessels they see is when there is a large storm and some vessels come in to hide from the weather. Atka is 35 miles away from Adak and apparently there is a large cache of control and containment equipment on Adak which was left by the Navy and is currently under the control of the Adak Reuse Corporation.

I am also checking on the current status of Akutan

Costs of cleanup starter kit capable of recovering 300 barrels of spilled fuel

<u>Skimmer</u>	<u>Fuel-water ratio</u>	<u>Liquid recovered to skim 300 bbls spilled fuel per day</u>	<u>Storage capacity needed to meet RPS</u>	<u>Cost of skimmer</u>	<u>Cost of Storage capacity</u>	<u>Cost of cleanup starter kit</u>
Weir	20 % fuel, 80 % water	1500 bbls	1500 bpd	\$50,000	\$300,000	\$350,000
Lori or LaMoore	80 % fuel, 20 % water	360 bbls	360 bpd	\$60,000	\$100,000	\$160,000

Notice of Public Meeting for the Task Force on Motorized Oil Transport

The Alaska Department of Environmental Conservation (ADEC), Division of Spill Prevention and Response announces that a public meeting of the Task Force on Motorized Oil Transport will be held on September 20, 2000 in the Legislative Information Office, 716 West 4th Avenue, 2nd Floor, suite 200, Anchorage, Alaska 99501 from 8:30 a.m to noon and 1:00 p.m to 4:30 p.m. This meeting will include reports from the Task Force's work groups on Prevention and Response Planning Standard.

This is the second meeting of the Task Force on Motorized Oil Transport. Its purpose is to determine how to implement response planning standards for a railroad tank car contingency plan and for a nontank vessel contingency plan as set out in Senate Bill 273 regarding oil discharge prevention and contingency plans for all self-propelled nontank vessels exceeding 400 gross registered tonnage and railroad cars carrying bulk oil and authorizing the inspection of nontank vessels and trains.

The agenda for the meeting will be posted to the Task Force website at: <http://www.state.ak.us/local/akpages/ENV.CONSERV/nontank/home.htm>. Any person interested in further information is encouraged to review the website or contact Task Force facilitator Brian Rogers at (907) 452-2461, email at: brogers@infoinsights.com. You may also contact Judith Erickson of Capital Information Group at (907) 586-3118, email at jerickso@pobox.alaska.net.

If you are a person with a disability who may need special assistance to participate in the process on the proposed regulations, please contact Joel Casto at (907) 465-5041 as soon as possible to make necessary arrangements.

TASK FORCE ON MOTORIZED OIL TRANSPORT

September 20, 2000

Anchorage Legislative Information Office

716 West Fourth Avenue

8:30 a.m.- 12:00 p.m., 5th floor conference room

1:00 p.m. - 5:00 p.m., 2nd floor conference room

DRAFT AGENDA

1. Welcome from Task Force Chair, DEC Commissioner Michele Brown
2. Presentation by Brian Rogers, facilitator
 - A. Task Force decision-making process
 - B. Update on activities since 7/11/00 Task Force meeting
 - C. Presentation/discussion contractor report outline
3. Response Planning Standard (RPS) Work Group
 - A. Presentation of recommendations
 1. RPS for nontank vessels
 2. RPS/Prevention measures for Alaska Railroad
4. Task Force action on RPS Work Group recommendations
 - A. RPS for nontank vessels
 - B. RPS/prevention measures for Alaska Railroad
5. Prevention Work Group
 - A. Update on work group progress
 1. mandatory and recommended prevention measures
 2. report on research underway on prevention credits
6. Task Force action on Prevention Work Group recommendations
 - A. Mandatory and recommended prevention measures
 - B. Authorization of further work group action
7. Contingency Plan Work Group
 - A. Preliminary subcommittee report
 - B. Task Force discussion/direction
8. Task Force schedule
 - A. October meeting
 - B. Approval of final report
9. Public comment



LEGISLATIVE TELECONFERENCE NETWORK SIGN-IN SHEET

SPONSOR: Motorized Oil Transport Task Force

SUBJECT: Motorized Oil Transport

START/END TIME: 8:30 am DATE: 9/20/00

PLEASE PRINT

	Name/Representing	Address	Zip	Phone No.	Testify	Observe	Bill No.
1.	JOHN CARTER	A.N.P. - KENAI	99611	776-5280			
2.	ERIC BRITTEN / CSX LINES	ON FILE					
3.	Kris Mullan - Fishing Industry	" "					
4.	Jeff Gindras AERC	ON FILE	99501	265-2535			
5.	HOLLY HILL DEC-IPP	550 CORDOVA	99501	269-7546			
6.	Heather McCarty APA JUNEAU	319 SUMMIT #3, JUNEAU	99801	586-4268			
7.	DAVID OWINGS. SEAPRO	KTN					
8.	Susan Harvey DEC	555 Cordova Anch		269-3054			
9.	Doug Jentsch CISPRI	Box 7314 NIKISKI AK	99611	776-5129			
10.	PAUL AXELSON NPWJ	Box 8080, WAIN AK	99901	225-8110			
11.	Tom Kneiter NORTH STAR	Box 102019 ANCH AK	99510	272-7537			
12.	Mike Ottum SWAPA	BOX 977 Homer AK	99603	235-8783			
13.	Dennis Henderson Parkhill						
14.	DANIEL JORGENSEN	300 HERMIT ST. JUNEAU	99801	463-5657			
15.	John Bauer	ADEC		269-7522			



LEGISLATIVE TELECONFERENCE NETWORK SIGN-IN SHEET

SPONSOR: Motorized Oil Transport Task Force

SUBJECT: Motorized Oil Transport

START/END TIME: 8:30 am DATE: 9/20/00

PLEASE PRINT

	Name/Representing	Address	Zip	Phone No.	Testify	Observe	Bill No.
1.	Case ED PAGE, U.S. C.G.	U.S. COAST GUARD 17th DIST. - JUNEAU		463-2083			
2.	LURILLA LEE / Trident Seafoods	5303 Skilshole Ave NW, Seattle WA	98107	(206) 783-3818			
3.							
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**Task Force on Motorized Oil Transport
Outline of Draft Report**

- I. Executive Summary
 - i. Task Force and work group process
 - ii. Summary of recommendations for marine vessels
 - iii. Summary of recommendations for Alaska Railroad
- II. Recommendations
 - i. Achievement of the Response Planning Standard
 - 1. Pre-emption by federal law
 - 2. Practical and cost-effective measures
 - ii. Practical measures to implement the Response Planning Standard in waters west of 157 degrees West Longitude or north of 62 degrees North Latitude
 - iii. Means of achieving the response planning standard
 - 1. Use of fleet plans
 - 2. Use of vessel agents
 - 3. Generic contingency plan contents
 - 4. Streamlined contingency plans
 - 5. Primary response action contractors
 - 6. Spill prevention measures
 - iv. Inspection measures
- III. Proposed legislation
- IV. Draft memorandum describing regulations
- V. Appendices
 - i. Sub-area supporting data
 - 1. Vessel size and maximum size spill
 - 2. Response equipment currently available
 - 3. Schedule of new response equipment
 - 4. Schedule of new response hubs
 - 5. Oil spill scenarios
 - ii. Alaska Railroad supporting data
 - 1. System risk assessment
 - 2. RPS and C-Plan plan and schedule
 - iii. Bibliography of supporting information

Response Planning Work Group

Draft Report

EXECUTIVE SUMMARY

Background

Financial responsibility and oil spill response planning requirements have long been in place for vessels carrying petroleum as their principal cargo. Senate Bill 273 enacted by the 2000 Alaska Legislature established similar requirements for nontank vessels of more than 400 gross tons, and for railroad tank cars. The new law establishes a response planning standard (RPS) for "containment and control of 15 percent of the maximum oil capacity" of the nontank vessel or railroad train within 48 hours. Cleanup is required "within the shortest possible time consistent with minimizing damage to the environment." The bill established the Task Force on Motorized Oil Transport and charged the task force with determining how to implement the response planning standard. The task force is to report its recommendations to the Legislature on or before the first day of the 2001 session. The task force decided to finalize its report by December 1, 2000.

Also approved by the 2000 Legislature was SCR 1, a resolution directing the task force to address several specific issues in its report. SB 273 and SCR 1 are found in Appendix A.

At its first meeting, on July 10, 2000, the Task Force decided to facilitate its work by establishing several committees, including the Response Planning Work Group. Recommendations of the work group are forwarded to the Task Force, which decides on recommendations to the Legislature.

Nontank Vessel Recommendations

The RPS Work Group reached consensus on the following recommendations for how nontank vessels will meet the response planning standard established in SB 273.

Recommendation 1-Relationship to tank-vessel program

In virtually all cases, tank vessels carry more petroleum and petroleum products than non-tank vessels. The RPS Work Group does not believe additional control and containment equipment is necessary in areas where there is good geographic distribution of equipment stockpiled under the tank vessel program. Southeast Alaska, Cook Inlet, Prince William Sound and Kodiak either have or are phasing in adequate equipment for non-persistent and persistent fuels. New equipment, however, will be required in "gap areas," where a) non-tank vessels operate but tank vessels do not operate, or b) where persistent oil is being carried by non-tank vessels and tank vessels carry only non-persistent fuels.

Recommendation 2-Gap areas

At its August 23 meeting, after reviewing the distribution of existing equipment and the capacity of the largest persistent fuel carrying vessels operating various areas, the RPS Work Group determined that there are two gap areas: Western Alaska and Seward.

Recommendation 3-Cascading response system

The RPS Work Group recommends that primary and secondary response hubs be established in a cascading response system. Primary hubs will have control, containment and portable recovery

equipment such as skimmers; secondary hubs will have a starter kit of control and containment equipment. Control and containment equipment will be deployed from primary hubs to the secondary hub and/or the spill site as needed.

Recommendation 4-Containment equipment

Secondary response hubs will maintain containment boom sufficient to extend three times the length of the largest vessel operating in the area. Appropriate means will be provided for deploying the containment boom.

Recommendation 5-Cleanup equipment

Cleanup equipment maintained at primary hubs will be appropriate to the type of oil to be recovered, persistent or non-persistent. Cleanup equipment maintained at primary hubs shall be mobile and designed to fit in a type of aircraft that is usually available, probably a DC-6. The Work Group adopted a planning-standard wave height of 3 feet or less. The Work Group recommends that skimmers have a daily nameplate recovery capacity equal to 15 percent of the capacity of the largest vessel in the area. For example, if the largest vessel carries 30,000 barrels of fuel, then skimming equipment with a nameplate capacity of 4500 barrels per day is required. Temporary storage capacity must be provided equal to the expected EDRC (effective daily recovery capacity) of the chosen skimmer.

Recommendation 6-Primary and secondary response hubs

The Work Group recommends that Anchorage and Dutch Harbor be the designated primary response hubs for Western Alaska, and that secondary response hubs be established for Western Alaska at Adak, Atka, Akutan, St. Paul, Bethel, Dillingham and Nome. The Work Group recommends that a secondary response hub be established at Seward.

Recommendation 7-Schedule for acquiring and placing new equipment in service

The RPS Work Group believes that schedules established under the tank vessel program for acquiring new equipment and placing it in service are sufficiently rapid for the additional equipment required to implement the non-tank program.

Alaska Railroad Recommendations and Request

The RPS Work Group recognized that the issues relating to the Railroad were significantly different from the issues relating to vessels. As a result, the Work Group met separately to discuss these issues. At this meeting, representatives of the Alaska Railroad described in some detail an ongoing risk assessment process the Railroad had undertaken beginning in 1999. The Work Group concluded that the risk assessment process would provide the basis for further work including development of a plan to meet the response planning standard as set out in SB 273, prevention planning, and contingency planning, and that further work by the Work Group at this time would be redundant. The Work Group reached consensus on the following recommendations.

Recommendation 1-Risk assessment process

The Work Group endorses the Alaska Railroad Risk Assessment process, and recommends that the process be followed through to completion. The Railroad expects that the first information should be available from the contractor in October, and that a final report will be available in December.

Recommendation 2- Response Planning Standard

The Work Group recommends the Alaska Railroad follow the Response Planning Standard methodology being developed by the work group, designed to meet the RPS of fuel carries. The Risk Assessment process will provide the basis for developing that plan.

Recommendation 3- Contingency Plan

The Work Group recommends the Alaska Railroad undergo a Contingency and Prevention Plan review under the rigor of existing law for currently regulated industry. Again, the Risk Assessment plan will provide the basis for prevention measures and contingency planning.

Request for follow-up briefing

The Work Group requests the Alaska Railroad to brief the full Task Force in late October on (a) progress on the Risk Assessment process; (b) plans to meet the Response Planning Standard; and (c) a proposed timetable for Contingency and Prevention Plan review.

RPS WORK GROUP

Task Force Origins

Financial responsibility and oil spill response planning requirements have been in place for vessels carrying petroleum as their principal cargo since shortly after the *T/V Exxon Valdez* accident in 1989. Senate Bill 273 enacted by the 2000 Alaska Legislature established similar requirements for nontank vessels and railroad tank cars.

Except for tank vessels, oil barges, and public vessels, the new law applies to all self-propelled watercraft of more than 400 gross registered tons, including cargo vessels, commercial fishing vessels, commercial fish processor vessels, and passenger vessels. Public vessels are defined as vessels not engaged in commerce *and* owned, operated or bareboat chartered by the foreign government, the United States, a state or a political subdivision.

SB 273 established the Task Force on Motorized Oil Transport and charged it with determining how to implement the new response planning standards for nontank vessel and railroad tank care contingency plans. The task force is to report its recommendations to the Legislature on or before the first day of the 2001 session. The task force decided to finalize its report before the holiday season, and set a target date of December 1, 2000, for completion of all task force activities.

Also approved by the 2000 Legislature was SCR 1, a resolution directing the task force to address several specific issues in its report, including:

- changes, if any, needed to statutes and regulations necessary to achieve the response planning standard for nontank vessels in a practical and cost-efficient manner,
- measures, if any, needed to implement the response planning standard in waters west of Kodiak and in the Arctic;
- use of "fleet plans, vessel agents, generic contingency plan contents established by regulations, streamlined contingency plans with membership in a nonprofit corporation that is a primary response action contractor, and spill prevention measures as means of achieving the response planning standard; and
- inspection measures to be included in the regulations.

SB 273 and SCR 1 are found in Appendix A.

RPS Work Group Origins, Process And Goals

The Response Planning Work Group was established by the Task Force at its first meeting, on July 11. Membership in the work group was open to all Task Force members. Gene Burden (Tesoro Petroleum), Lee Egland (Crowley Maritime) and John Hansen (Northwest Cruiseship Association) agreed to serve as co-chairs.

Interests and individuals not directly represented on the task force were permitted to participate, and many did so, with significant benefit to the RPS Work Group's recommendations. After members discussed an agenda item, the facilitator was directed to solicit comments from public participants on that item before moving on. The work group agreed that it would attempt to achieve consensus on issues rather than conduct formal votes.

The work group met on August 23, August 30, and September 6 (summaries of these meetings are found on the project website). At its first meeting, the group reached consensus that it would task itself to recommend *realistic, effective, economically feasible* and *flexible* response strategies to achieve the response planning standard required by SB 273.

- I. *Realistic* means capable of being implemented with available technology and expertise within a reasonable timeframe.
- II. *Effective* means providing real protection to the environment at the level required by the law, not just the appearance of protection.
- III. *Economically feasible* means capable of being implemented without bankrupting shippers or imposing unreasonable cost increases on their customers.
- IV. *Flexible* means providing for improvements and changes in methods and requirements to reflect changes in technology, the volume of vessel or tankcar trade, expertise, and other parameters.

RAILROAD TRANSPORTATION

Railroad Issues Differ From Vessel Issues

For railroad tank cars the planning requirement is similar to that for non-tank vessels:

“(A) containment and control of 15 percent of the maximum oil capacity of a train on the railroad within 48 hours; and

“(B) cleanup of the discharge within the shortest possible time consistent with minimizing damage to the environment.”

Notwithstanding this similarity, the RPS Work Group recognized that railroad issues are different from the issues relating to vessels for a number of reasons. Obviously, the operations are on land not on sea, leading to significant differences in control and containment methods. Freshwater streams and lakes may be implicated. Access to spill sites presents different issues. While the railroad right-of-way may not be as remote as some areas in northern or western Alaska, much of it is accessible only by train or helicopter; access would be very limited should an accident prevent access by rail. Finally, the Alaska Railroad (ARR) is engaged in the transportation of petroleum products as cargo while the non-tank vessels carry product only as fuel. (The Alaska Railroad is the only railroad operating in Alaska that carries oil by tank car, and thus is the only railroad impacted by SB 273). In light of these differences, the Response Planning Standard work group met August 30, 2000 specifically to address issues relating to the Alaska Railroad.

Risks Associated With Rail Operations

Tank cars

The work group discussed various issues related to the risks associated with operating the Alaska Railroad. The Railroad does not own all, or even most, of the tank cars that travel the track. Of approximately 386 cars, the Railroad owns 40 to 60. The Railroad provides the maintenance on most cars. Some spur lines are not owned by the Railroad. Once cars are dropped off to a customer, the Railroad's responsibility ends. DEC pointed out that Alaska's spill laws impose strict liability on every party that contributes to a spill. Derailment presents the greatest risk of spill, rather than tank car construction or maintenance. Cars must meet federal standards issued by the federal DOT as well as the American Association of Railroad Standards.

Risk Assessment

Alaska Railroad representatives described an ongoing risk assessment process that they are undertaking with Rail Sciences System. A substantial part of the work to be undertaken relates to track safety and derailment issues; however, the assessment is not entirely for environmental purposes. It will also look at such things as occupational safety, passenger safety and costs. The ARR distributed a list of deliverables in their agreement with Rail Sciences. (See Appendix).

The work group concluded that many of these items will provide the basis for further work. For example, Rail Sciences will “[I]nk derailment risk probabilities to sensitive area ... information to aid development of new, state-mandated oil spill prevention and response plan.” Rail Sciences will audit the

condition of the tank car fleet, repair maintenance and inspection programs, and current operating procedures. A substantial portion of the risk assessment will address engineering issues relating to potential derailment. The first part of the risk assessment work should be completed in October; the assessment should be complete by December.

The RPS Work Group endorsed the ongoing risk assessment process, and recommended that the process be followed to completion.

The work group recognized that the ongoing risk assessment process would provide the basis for much of the information needed for developing a response plan and a contingency plan. While the DEC has not identified "most environmentally sensitive areas" (MESA's) along the rail line, the risk assessment will help identify those areas. The study will provide the ground work for prevention measures and a basis for contingency planning.

The RPS Work Group recommends that the Alaska Railroad follow the response planning standard methodology to meet the response planning standard of 15 percent of maximum oil capacity of a train on the railroad within 48 hours and cleanup of the discharge within the shortest time possible consistent with minimizing damage to the environment. The financial responsibility information filed by ARR with DEC states that the ARR has a maximum hauling capability of 75 cars, each carrying up to 550 bbls. Thus, the total maximum capacity is 42,100 bbls; 15 per cent of that amount is 6300 bbls. The risk assessment study will identify the locations presenting the greatest risk of a spill and provide the basis for developing the methodology for meeting the RPS. The work group recognized that the ongoing risk assessment process would provide much of the information necessary to develop this plan.

Contingency and Prevention Plan Review

The work group recommends that the Alaska Railroad undergo a contingency and prevention plan review under the rigor of existing law for currently regulated industry. The Alaska Railroad has an ongoing spill response dialogue with DEC. The Railroad has intended to develop a contingency plan that mirrors those for regulated industries. SB 273 identified for the RR the response planning standard that needs to be met in the plan. The work group recognized that the ongoing risk assessment study would provide the basis for future contingency plan work. That assessment will identify, in more detail than is generally available, the prevention measures that can be undertaken by the railroad to reduce risk of a spill.

The work group requested the Alaska Railroad brief the full Task Force at its meeting in late October on (a) progress on the risk assessment process; (b) plans to meet the response planning standard; and (c) its proposed timetable for contingency plan development and review.

NONTANK VESSEL TRANSPORTATION

Methodology

Nontank vessels are ships and barges whose principal cargo is *not* petroleum. Nontank vessels do, however, have tanks in which they carry fuel and lubricants for their own operations, and, occasionally other incidental purposes. For nontank vessels of over 400 gross tons, SB 273 established the following response planning requirement:

“(A) containment and control of 15 percent of the maximum oil capacity of the nontank vessel within 48 hours; and

“(B) cleanup of the discharge within the shortest possible time consistent with minimizing damage to the environment.” Chapter 128 SLA 2000 (AS 46.04.055).

One of the RPS Work Group’s first steps was to compare this new planning requirement with the established planning requirements for tank vessels, i.e., ships and barges carrying petroleum as their principal cargo. (See Appendix D, Response Planning Standard Comparison table.) The new planning standard in SB 273 is essentially identical to the standard for vessels carrying petroleum products as their principal cargo. Vessels carrying crude must meet more stringent planning standards in terms of volume or percentages of capacity that must be cleaned up and the time frame for doing so. In virtually all cases, of course, tank vessels carry more petroleum and petroleum products than non-tank vessels.

The work group reached consensus early in its deliberations that the most effective way to implement the new non-tank vessel standard would be to target additional response resources to areas that do not already have adequate resources under the tank vessel programs. The work group’s main task then became one of identifying the areas where coverage gaps exist and the additional response resources and capabilities needed to close those gaps. The methodology it employed to do this involved five steps:

1. For each geographic area, identify the non-tank vessel with the largest fuel capacity.
2. Identify existing response equipment and capabilities by location and area served.
3. Establish standards for containment, control and clean-up equipment in relation to the non-tank vessels likely to be in an area.
4. Determine the areas where existing equipment identified in (2) doesn’t meet the planning standard identified in (3) for the maximum vessel fuel capacity identified in (1).
5. Identify the additional equipment needed, and its costs.

Vessel and Voyage Data

Data required

In order to determine the size of the largest potential spill from a non-tank vessel, it is necessary to determine the vessel with the largest fuel tank calling or transiting each area of the state. The first step in developing this information was to adopt the regional divisions established by the Department of Environmental Conservation for administering the existing tank vessel program. DEC divides the state into ten regions, called “subareas.” A map of the subareas is found in Appendix E.

What the work group needed to know was the maximum tank capacity of any “nontank” vessel calling or transiting each of these subareas. As a practical matter, the group decided that it would be sufficient to know and plan for the largest vessel (measured by tank capacity) to have transited or called during the past year.

Sources of Data

Members of the work group represent virtually all interests operating non-tank vessels in Alaska waters. Members collectively and individually have extensive knowledge of the types of vessels trading in Alaska waters. It became apparent, however, that no database existed from which the group could reliably determine the maximum tank capacity of any vessel calling or transiting any particular region.

In addition to information from its own members, the work group used 1999 marine pilotage reports submitted by three pilotage associations—Alaska Coastwise Pilots, Alaska Marine Pilots, and the Southwest Alaska Pilots Association—to make initial estimates of the planning standard volume for each subarea. The reports do not contain information on the “maximum oil capacity” of each vessel, so this initially was estimated using the expertise of work group members. Not all covered non-tank vessel movements result in a pilotage report, however.

Additional information was obtained from “proof of financial responsibility” forms submitted to DEC by nontank vessel operators. The submissions are required under SB 273, and were to be submitted by September 1. Using the facilities and personnel of Information Insights, the Task Force’s facilitation contractor, data on vessel tank size and other information was extracted from the 1031 financial responsibility forms made available by DEC.

Unfortunately, the financial responsibility forms do not contain information on where the vessels trade. Information Insights was able to generate this data for about three-fourths of the vessels by cross-matching marine pilotage data with the financial responsibility data. From this data Information Insights generated a table showing the RPS volumes for each of the subareas.

The work group believes that this is a reasonably reliable and comprehensive summary, but recognizes that additional work is underway with work group members and technical consultants to determine where the vessels without subarea information travel. Updating some of the planning volumes could be required once the work is completed.

Containment and Clean-up Equipment

Primary response action contractor & DEC equipment inventories

The work group asked DEC and three primary response action contractors—Alaska Chadux Corp., Cook Inlet Spill Prevention and Response, Inc., and SEAPRO, Inc.—to help determine what is available in containment and cleanup equipment inventories in each subarea for persistent and nonpersistent oil—skimmers, boom, boats, storage equipment, and the like.

The three contractors are cooperative organizations formed by vessel operators to provide contingency planning, training and spill response services. Alaska Chadux Corp. was formed by petroleum products distributors. It holds the required contingency plans (C-plans) for these distributors. Air-freight-ready equipment is stockpiled at Anchorage. Other spill response resources are stockpiled at Kenai, Kodiak, Unalaska, Valdez and Cordova.

Cook Inlet Spill Prevention and Response, Inc. (CISPRI) is funded by oil companies with interests in Cook Inlet, but its board of directors include representatives from the U.S. Coast Guard, DEC, the

Municipality of Anchorage and the Kenai Peninsula Borough. CISPRI has stockpiled response equipment at Anchorage, Homer, and Nikiski.

SEAPRO was formed by noncrude tank vessel operators in Southeast Alaska, but also offers services to other Southeast vessel operators. SEAPRO has divided Southeast into nine zones, with response equipment stockpiles at Ketchikan and Metlakatla (zone 1), Craig and Klawock (zone 2), Wrangell and Petersburg (zone 3), Kake (zone 4), Sitka (zone 5), Elfin Cove, Gustavus/Glacier Bay, and Pelican (zone 6), Juneau (zone 7), Haines and Skagway (zone 8), and Yakutat (zone 9).

SEAPRO signed a contract with the Northwest Cruise Association (NWCA) in June, to provide the association's vessels with oil spill equipment, personnel and cleanup. The NWCA has purchased \$1.3 million in response barges and associated spill response and has positioned the equipment in Glacier Bay, Juneau, Ketchikan and Lynn Canal.

DEC has stockpiled equipment at many of the locations served by the primary response action contractors, and at numerous other locations around the state, including Aniak, Bethel, Dillingham, Fairbanks, Galena, Hoonah, Hyder, Iliamna, Mountain Village, Nome, Seldovia, and Thorne Bay.

Currently Scheduled Additions to Equipment Inventory

SEAPRO has scheduled to have operational by this month, additional boom, skimmers and other response equipment at Ketchikan and other locations in Southeast. That equipment was financed with a \$2.1 million donation from Royal Caribbean Cruise Lines. The donation came as a result of a settlement negotiated between the state and the company.

Chadux has scheduled, under arrangements between Alaska Petroleum Distributors and Transporters (APD&T), DEC and the U.S. Coast Guard, additional equipment for new response hubs to be established at Dillingham (July 2001), Bethel (July 2002), Nome (July 2002), and the North Slope (July 2003). APD&T represents the major oil barge operators in Alaska that transport non-persistent fuel oil to locations throughout Alaska. The APD&T agreement provides for alternative compliance to the planning standards set forth in regulations under the federal Oil Pollution Act of 1990.

Planning Standards

Meaning of standards established in SB 273

DEC's Spill Prevention and Response Division Director Larry Dietrick called the work group's attention to the important distinction between a "planning standard" and a "performance standard." The requirement in SB 273 for "containment and control of 15 percent of the maximum oil capacity of the nontank vessel within 48 hours; and ... cleanup of the discharge within the shortest possible time" is a planning standard. The operator must implement plans to meet the standard under approved assumptions concerning the conditions under which the response will be implemented. There is no requirement that an operator meet the standard under impossible conditions.

"You define the realistic maximum operating limitation, and if you determine that you can only contain and control oil up to a three-foot sea state, then that's what you plan your response to." Dietrick said.

The assumptions obviously are important factors in determining whether a response planning standard has been met. The work group considered the following issues related to planning assumptions, and resolved them as discussed below. In all cases the planning assumptions used here are identical or closely similar to those already approved for plans filed under the non-tank vessel programs.

Recommended planning assumptions

Sea state

The state of the sea is an important variable in the technical feasibility of containment and recovery operations. As wave heights increase, recovery becomes problematic, and eventually impossible. The work group adopted a 3 foot or less wave height planning standard, the same standard as was approved by DEC for tank vessel planning by the Alaska Petroleum Distributors and Transporters.

Simultaneous spills

Based on information from DEC and the department's practice under the tank vessel programs, the work group assumed that simultaneous spills from vessels each carrying the maximum quantities of fuel would be a highly rare event. Response planning is to be defined by the largest tankage capacity on a single vessel.

Cascaded deployment

The RPS Work Group recommends that primary and secondary response hubs be established in a cascading response system, similar to that approved by DEC for Alaska Petroleum Distributors and Transporters. (See APT&D Compliance Agreement, Appendix J.) Under this system an initial response would be implemented with a starter kit of control and containment equipment stockpiled at secondary hubs. Further control and containment equipment would be deployed from primary hubs to the secondary hub and/or the spill site as needed. In addition to containment and control equipment, primary hubs would stockpile portable recovery equipment such as skimmers which to be cascaded to the spill site as needed.

A key criterion for equipment stockpiled at primary hubs is portability. The equipment must be mobile and designed to fit in aircraft that are typically available for deployment. Because there are only two Hercules-type aircraft available for civilian use in Alaska, as a practical matter, this probably means equipment must fit in a DC-6 aircraft.

Containment equipment requirement standards

Secondary response hubs will maintain containment boom sufficient to extend three times the length of the longest non-tank vessel operating in the area. Appropriate means will be provided for deploying the containment boom, usually a skiff. The work group determined that stockpiled boom could be used for either persistent or nonpersistent spills.

Clean-up equipment requirement standards

The work group considered various approaches to meeting the clean-up requirement, including placing skimmers at secondary hubs, but determined that strategy would not be cost-effective, particularly in light of the work group's conclusion that different skimmers will be needed for persistent and nonpersistent oil.

Basing skimmers at dispersed locations could provide somewhat faster cleanup at those locations, but not necessarily at other sites within that region. For example a skimmer based at Nome rather than Anchorage would allow faster recovery of spilled fuel at Nome. On the other hand, basing the clean-up equipment at Nome might easily mean delayed recovery of spilled fuel at Unalakleet. If based at Nome, a DC 6 to transport it to Unalakleet would likely need to be dispatched from Anchorage to pick up the equipment in Nome, then fly it to Unalakleet. A skimmer in Anchorage, however, could be dispatched directly to Unalakleet in a single flight.

Centralizing the cleanup equipment at primary hubs will also provide operators with more experience in deploying and operating the equipment.

The Work Group recommends that skimmers have a daily nameplate recovery capacity equal to 15 percent of the capacity of the largest vessel in the area. For example, if the largest vessel carries 30,000 barrels of fuel, then skimming equipment with a nameplate capacity of 4500 barrels per day is required. Temporary storage capacity must be provided equal to the expected EDRC (effective daily recovery capacity) of the chosen skimmer.

Schedule determined to be adequate

The work group reviewed the areas covered by the APD&T agreement (see Appendix J) and found that nonpersistent spills in those areas would be covered under the APD&T agreement. Some equipment is to be placed in service in the 2001-2003 period, in accordance with a schedule approved by DEC and the Coast Guard under the tank vessel program (see discussion above under "Currently Scheduled Additions to Equipment Inventory"). The RPS Work Group believes that schedules established under the tank vessel program for acquiring new equipment and placing it in service are sufficiently rapid for the equipment to implement the non-tank program in those areas. The group notes that the potential spill volumes under the non-crude tank vessel program and the APD&T agreement are generally larger than the likely spill amounts under the non-tank program. Moreover, it would be manifestly unfair to require non-tank vessels brought under regulation only this year to meet schedules faster than those approved for vessels that have been regulated under the non-crude regime since 1990.

Special conditions in western and northern Alaska

The work group did not find that the special conditions in the waters of Alaska west of 157 degrees West Longitude or north of 62 degrees North Latitude require any special treatment in law or regulations. Decisions on positioning of equipment to serve these waters will need to take into account the vessel size and frequency and the costs and logistics of equipment movement.

Regional Response Capabilities Compared With Requirements

Areas with adequate coverage

Southeast Alaska, Cook Inlet, Prince William Sound and Kodiak either have or are phasing in adequate equipment for non-persistent and persistent fuels, including spills from non-tank vessels. Much of this infrastructure has been put in place by the PRACs to assure adequate spill response for tank-vessels carrying crude and noncrude petroleum. Because the PRACs generally already respond to spills from non-tank vessels, the extension of pre-arranged coverage to those non-tank operators who do not already have it is unlikely to cause a significant cost burden to operators. Rather, it is likely that the unit

cost of coverage will decline as slightly increased operating costs are more than offset by the additional vessels that will share in those costs.

Areas with coverage gaps

New equipment, however, will be required in "gap areas," where a) non-tank vessels operate but tank vessels do not operate, b) where persistent oil is being carried by non-tank vessels and tank vessels carry only non-persistent fuels, or c) where response equipment carried on fuel barges provides adequate coverage for the barges, but does not afford adequate response when the barges are elsewhere.

In Western Alaska it is clear that there are several locations where one or more of these conditions exist. The Work Group recommends that Anchorage and Dutch Harbor be the designated primary response hubs for Western Alaska, and that secondary response hubs be established for Western Alaska at Adak, Atka, Akutan, and St. Paul. In addition the work group recommends that Nome, Dillingham and Bethel be designated as additional secondary hubs. The Work Group will develop criteria that would determine when a secondary hub needs to be upgraded to a primary hub.

The Work Group recommends that a secondary response hub be established at Seward, where current inventories do not provide any readily available containment boom.

Closing the gaps

Costs

Figuring how much

The list of tentatively required additional secondary response hubs has been distributed to the co-ops, and cost for the additional equipment required is being analyzed.

Figuring the burden

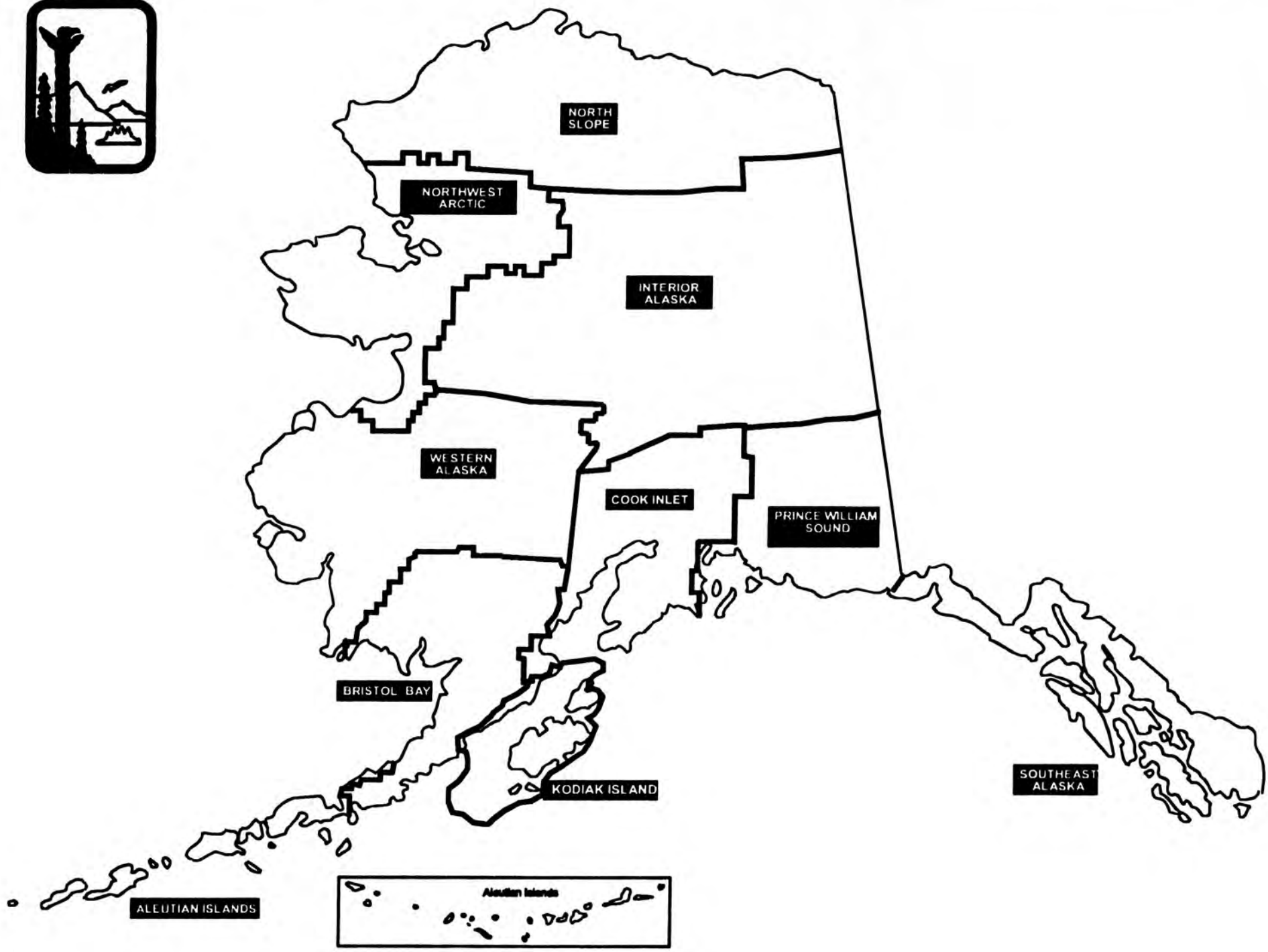
The costs of participating in the cooperatives will be market driven. Upon completion of the equipment cost analysis and vessel database the PRACs will know how many potential members the nontank program will cover and can begin developing cost models.

Future issues

What determines when a secondary response hub is needed? What determines when a secondary response hub is upgraded to a primary response hub? In making these determination, the RPS work group will consider vessel traffic, operating season, and number of port calls.

As new vessel data accumulates, what will be the process for insuring that coverage is adequate?

What will be the process for showing a party meets the RPS if the party is not a co-op member?



C-Plan Contents (Proposed SB273 Vessels)

PART 1

Response Action Plan (RAP)

- ⇒ **Initial Notification (e.g. SOPEP)**
- ⇒ **Membership in Co-op (or equivalent capability)**
- ⇒ **Spill Management Capability**

PART 2

Prevention Plan by Rule

BAT

**potentially handle by updating RAP and
Prevention Rules every 3-5 years**

+ Financial Responsibility

ARRC/Rail Sciences System Risk Assessment

Summary

The ARRC and Rail Sciences will conduct a systemwide safety audit designed to identify operating, maintenance, and static conditions that contribute to elevated levels of derailment risk. The results of the audit will include recommended actions to measurably reduce risk. Other work products and principal tasks include:

- ▶ Synthesize digital track information and physical inspection to audit current track repair, maintenance, inspection, and capital investment plans to determine priorities for risk reduction, improved operating efficiency, and reduction in long-term maintenance costs.
- ▶ Audit car and locomotive repair, inspection, and maintenance programs for quality and risk reduction;
- ▶ Audit ARRC documentation of FRA or AAR reporting requirements;
- ▶ Audit condition of ARRC and leased petroleum tank car fleet;
- ▶ Audit mechanical condition of ARRC and contractor passenger cars;
- ▶ Audit contractor documentation and quality assurance plans for their passenger equipment;
- ▶ Audit operating procedures related to hazardous material transport and passenger service;
- ▶ Recommend rule changes, process changes, and "best practices" into operating system safety manual for the ARRC;
- ▶ Link derailment risk probabilities to sensitive area and community information to aid development of new, state-mandated oil spill prevention and response plan.

1. Track/engineering issues

- ▶ Tie and fastener condition in curves
- ▶ Differential plate cutting
- ▶ Rail lubrication patterns (low and high rail lubrication)
- ▶ Rail weights and wear conditions (amount of gauge face wear/head loss)
- ▶ Rail flaw detection schedule and testing
- ▶ Track geometry car inspection frequency
- ▶ Rail grinding practices along route
- ▶ Turnout conditions
 - Switch points
 - Heel blocks
 - Frog condition
 - Switch machine/head block ties
 - Switch geometry
- ▶ Track drainage issues (including vegetation management)
- ▶ bridges and trestle inspections
- ▶ Tunnel conditions and clearances
- ▶ Detector locations

5. Perform simulations on any possible adverse track geometry locations

- ▶ Determine critical locations containing yellow-flag defect levels
- ▶ Bunched spiral (entry/exit, loaded/empty)
- ▶ Rock and roll areas (combinations of cross-level and speed)
- ▶ Track twists and warp

✓ 6. Review highway crossing protection issues

(This module needs to be customized for our route. Many of the issues confronting railroads in the Lower 48 do not exist here).

7. Review derailment and operating safety incidents for the past five years

- ▶ Develop trend lines and statistical analysis
- ▶ Determine high frequency/high cost failures
- ▶ Upgrade database content, integrate with ARRC Information Services

8. Review rule and efficiency testing data for past 3 years

- ▶ Determine quality of current efficiency testing
- ▶ Develop statistical analysis of testing failures

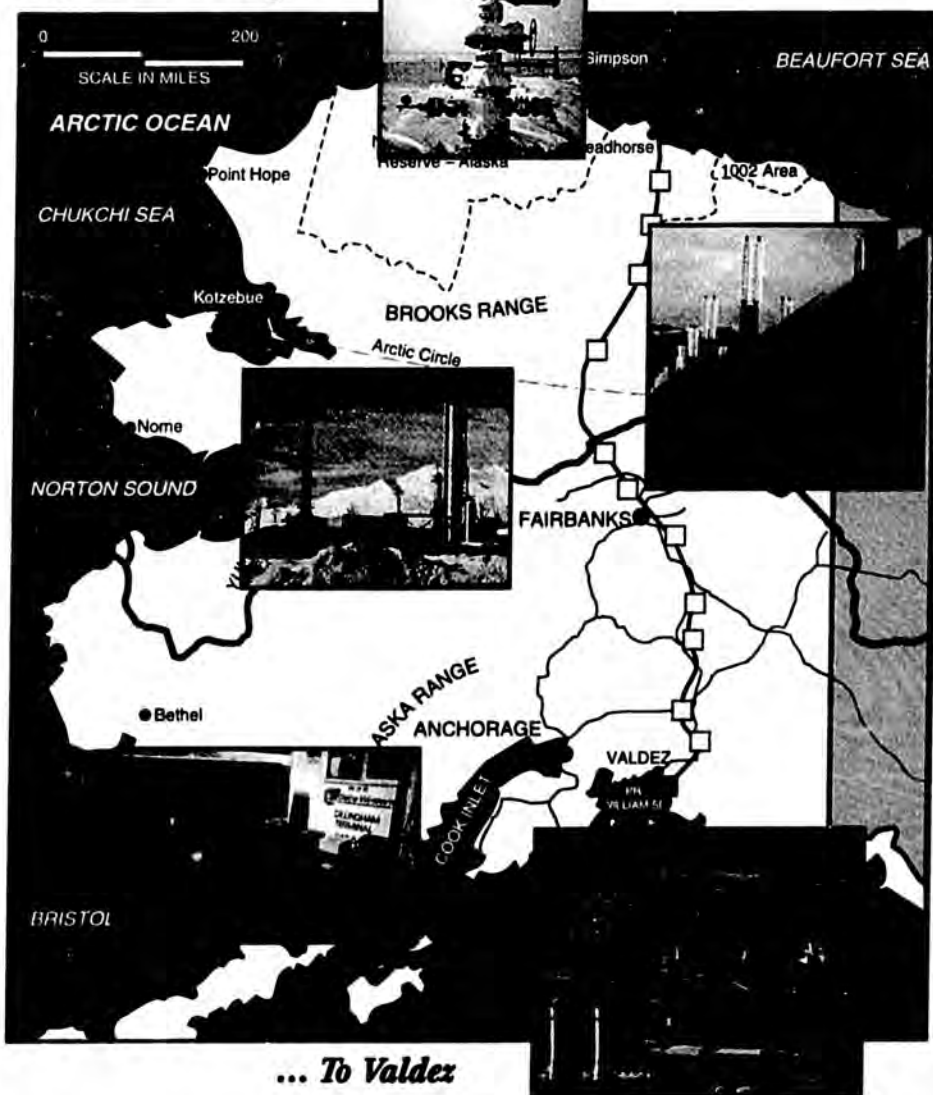
9. Evaluate susceptibility to L/V derailments

OIL INDUSTRY PREPARING AN PIPELINE PROGRAM

Assisting Industry to **KEEP the OIL in the CONTAINER**

- ◆ Oil Field Operations
- ◆ Crude Oil Pipelines
- ◆ Refineries
- ◆ Terminals and Tank Farms
- ◆ Marine Tankers and Fuel Barges

From Prudhoe Bay ...



OUR MISSION

is to prevent and mitigate oil releases by encouraging industry to initiate prevention measures, ensuring that industry response plans are effective, and ensuring that industry has adequate response resources for rapid response

STOP SPILLS BEFORE THEY HAPPEN

It Makes Sense For Everyone



WHAT ARE PREVENTION & CONTINGENCY PLANS?

A LIVING DOCUMENT TO
PREVENT SPILLS

A LIVING DOCUMENT FOR
RESPONSE READINESS

- ◆ Use and maintain good engineering practices and industry trade standards for equipment and operations maintenance focused on preventing spills
- ◆ Train operations personnel to minimize human errors that lead to spills
- ◆ Frequent inspections of equipment and processes by operators, periodic inspection by ADEC to catch problems and assure equipment integrity

CONTINGENCY PLANS CAN BE EFFECTIVE

Continued Business Success Relies
Upon Solid Environmental
Stewardship

Neither Our Environment, Nor
Our Business Can
Prosper With Spills

- ◆ An emergency action plan for rapid call-out
- ◆ Response action contractors provide equipment and trained personnel
- ◆ Scenarios of worst case spill events used to design level of response capability
- ◆ Preset plans to protect nearby environmentally sensitive areas.
- ◆ Inspections of response equipment to assure readiness
- ◆ Spill drills to make sure it works

THE PROGRAM IS ORGANIZED WITH THE CUSTOMER IN MIND

Assistance and expertise for various industry operations

Oil exploration, production & refineries section

Trans Alaska Pipeline/Joint Pipeline office

Oil terminals and tank farm section

Marine vessel section for tankers and fuel barges

