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Out-of-Region Response Equipment Survey

Final Report

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Submitted to:

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Executive Summary

This study evaluates the quantity and type of “out-of-region” equipment that could be realistically transferred to Prince William Sound during a major oil spill by those organizations identified by vessel operators (Plan Holders) using Valdez terminal. Data were collected during summer 2000 based on Plan Holder submittals at that time. Results are compared to those obtained in 1996 and are reviewed in terms of outfitting a total of 14 Task Forces having a total of 154,000 ft boom, 84 skimmers and 168 storage units. In addition to response organizations identified by Plan Holders, this survey also includes equipment available from U.S. Coast Guard and the U.S. Navy Superintendent of Salvage (SupSalv). Equipment from ACS is selected for special review because Alyeska and the sister corporations of two Plan Holders are members, but Plan Holders are not direct members.

Results below are discussed in terms of changes in boom, skimmer and storage capacity from the previous survey conducted in 1996. If no government sources of equipment are included, there is an 18% increase of boom to 784,000 ft (Table A2-1), a 21% increase in the number of skimmers to 548 (Table A2-2), and an 11% loss in the number of primary storage units (transportable barges and bladders) as illustrated in Table A2-4 (loss of 32 units to a total of 262). Including government sources, there is a 35% increase in the number of boom feet, a 44% increase in the number of skimmers, and a 29% increase in the number of primary storage units. The type of boom available from all sources is differentiated in Table A2-9; ocean boom (>42”) = 146,000 ft, nearshore boom (18”-42”) = 325,000 ft, harbor/river boom (<18”) = 400,000 ft, and fire boom = 25,000 ft.

Although data from 1996 are somewhat incomplete, skimmer capacity (barrels/day) is more than double that of 1996, to a total of 734,000 b/day including government sources. Without government sources, skimmer capacity still shows a substantial increase (169%). Total primary on-water storage nearly doubles to 153,000 b if government sources are included. However, without government sources, there is a 43,000 b decrease in capacity, largely due to differences between the surveys. In the 1996 survey, MSRC alone accounted for 29,750 barrel capacity based on 50% of the entire MSRC stock, while in this survey considers only MSRC equipment specifically stockpiled for transference (7,000 barrel total). See page 17 for specific details.

If all government and Plan Holder sources are included, the equipment necessary to outfit 14 Task Forces is available (Table A-5). However equipment shortfalls exist if only those sources designated by the Plan Holder and readily releasable are included. During major emergencies it would be expected that several sources (MSRC and NRC in particular) would be able to release more equipment than is currently listed here.

As shown in Tables A2-6 to A2-8a, without release of additional equipment, the material available from ACS enables all Plan Holders to have sufficient boom and skimmers. Without ACS, three Plan Holders fall short in the quantity of boom (Alaska Tanker, Chevron and SR/M) and one Plan Holder (Chevron) shows a shortage of skimmers. The number of storage units is less than the 168 units needed for all Plan Holders but one (Tesoro) when ACS equipment is included, and all fall short when ACS is not.

To ensure consistency between future evaluations, it is recommended that Plan Holders specifically identify the sources and type of equipment to fulfill the Alaska requirement to show capability of providing “out-of-region” response capability to contain and control the realistic maximum discharge in excess of the 500,000 barrel, 72-hour requirement currently being met by the Valdez Terminal. Official notification should be made when changes occur in response organization membership. Future surveys should also include evaluations of skimmer capacity and storage capacity in addition to the numbers of each.

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1.0 Introduction

Alaska statutes at AS 4604.030 require that crude oil tank vessels carrying more than 500,000 barrels (b) show equipment and other resources sufficient to contain or control, and cleanup a 500,000 b discharge within 72 hours. Additionally, the plan holder shall maintain additional equipment, personnel and resources sufficient to contain, control and cleanup a maximum discharge within the shortest possible time. This study evaluates these “out-of-region” equipment resources including a comparison to 1996 data to determine changes that have occurred over the last four years. There are two facets of concern regarding designated “out-of region” responders:

- Do they truly have the equipment available to respond?
- How much of the equipment can be transferred to Prince William Sound (PWS) in view of local government and other contractual obligations?

Specific objectives of this survey include:

- Determine if there has been a net loss or gain in available equipment since 1996.
- Identify membership / contract changes of shippers in identified Oil Spill Response Organizations (OSROs).
- Confirm the current status of OSROs listed in current PWS vessel contingency plans.
- Survey available response equipment from non-OSRO stockpiles, specifically U.S. Coast Guard and U.S. Navy SupSalv and potentially available through the States / BC Task Force 1997 Mutual Aid Agreement.
- Determine and evaluate changes in domestic and foreign regulatory requirements that might impact the OSRO’s ability to provide shippers with the identified resources.
- Determine and evaluate the impact that Geographic Response Plans outside of Alaska might have on cascading in resources.
- Update the list of regulators outside of Alaska with authority to release equipment from their region.
- Identify changes in mutual aid agreements that have been rescinded, modified or developed since the 1996 survey.

2.0 Survey Methods

After determining the OSROs designated by each Plan Holder (as of summer 2000), we directly contacted each organization. Equipment lists and related information was obtained from each, specifically focussing on the type and quantity of boom, skimmers, and on-water storage. Land-based Fastanks, Frac tanks and similar tankage was excluded. The previous 1996 equipment survey (Gilpatrick and Jones, 1997, "Field Monitoring and Out of Region Equipment Survey") was used as a basis to determine changes in equipment type and quantity.

OSRO managers and the relevant state / federal representatives were questioned regarding the requirements for transferring equipment from their stockpile or region to Prince William Sound. Specific questions included:

- The readiness of the listed equipment.
- Their contractual obligation to respond if called to PWS by a client ship owner.
- The quantity of equipment that could realistically be sent.
- Legal and other restrictions on moving equipment out of the region.

Site visits were conducted at the major U.S. OSROs identified as responders in the Prince William Sound Vessel Response Plans. Photographs were taken of the major equipment depots.

Equipment is divided into the following categories:

- Booms (four types: ocean, nearshore, river, and fire),
- Skimmers (type, number, and d-rated capacity), and
- On-water storage (barges, small (portable) barges and bladders).

The d-rated (effective daily rate) capacity was determined by the following:

- Accepting the OSRO's d-rated capacity if provided, assuming therefore that the equipment was tested or otherwise confirmed as to its actual ability to pick up oil.
- Calculating from the equipment's hourly capacity using $R = T \times 24 \text{ hours} \times E$, where R=effective daily recovery rate, T=throughput rate in barrels per hour (nameplate capacity) and E=20% efficiency factor (from Federal Register Vol. 58, No. 30, Appendix F to Part 112, Guidelines for Determining and Evaluating Required Response Resources for Facility Response Plans).

Conversions used in this report include: 7 barrels = 1 ton, and 42 gallons = 1 barrel. The letter 'b' is used as the abbreviation for barrels.

The tables provided in Appendices 1 and 2 are linked. Changes to the OSRO sheets in Appendix 1 will be then reflected in the analysis tables in Appendix 2.

3.0 Results – Designated OSROs

The OSROs designated by each Prince William Sound Plan Holder are provided in Table 1. Equipment available through the U.S. Coast Guard and U.S. Navy are subdivided in this survey as to locations within and outside of Alaska (Table 2).

Table 1. Oil Spill Response Organizations (OSROs) for Valdez / Prince William Sound Plan Holders. SR/M = Sea River Maritime.

OSRO	Alaska Tanker ¹	Polar Tankers	Chevron	SR/M	Tesoro
ACS (Alaska Clean Seas)	Membership via Alyeska membership in ACS ²				
Alaska Pollution Control Center		X ³			X
Burrard Clean					X
CISPRI		³	X		X
Clean Bay	X	X		X	X
Clean Coastal Waters	X	X		X	
Clean Pacific Alliance		X			X
Clean Rivers		X ³			X
Clean Seas				X	X
Clean Sound Coop	X	X			X
EARL	X				
Foss Environmental		X			X
IT (OHM)			X		
MSRC	X		X	X	X
NRC		X			X
OSRL, UK	X	X		X	X
SeaPro					X
Unitech of Alaska		X			
Veco		X			

¹As listed in BP PRAC registration = Clean Bay, Clean Sound, Clean Coastal Waters, EARL, OSRL, MSRC, SERVS, MSRC. Application to Alaska Dept. of Environmental Conservation, Oil Spill Primary Response Action Contractor, received: 8 Dec 1999.

²No Plan Holder shipping company is ACS member. BP Exploration (sister company of Alaska Tanker), and Phillips (owner of Polar) are members.

³After the survey was completed, in January 2001 Polar Tankers reported the following changes: dropped Alaska Pollution Control Center, is able to access CISPRI via Phillips, uses Clean Rivers only when their tanker goes to Portland shipyard, and can access EARL via contract with OSRL.

Table 2. Other potential sources for “out-of-region” response equipment for Prince William Sound which were surveyed as part of this Study.

OTHER EQUIPMENT SOURCES (2000 Survey)
US Coast Guard Alaska
US Coast Guard Marine Safety Offices / Strike Teams
US Navy SupSalv Anchorage
US Navy SupSalv Outside Alaska

The OSROs designated in Table 1 represent a significant modification from those of the 1996 Survey. A comparison of OSROs designated in 1996 and 2000 are compared in Table 3. Note OSROs designated in 1996 only are included at the bottom of Table 3.

Table 3. Comparison of OSROs designated in 1996 and 2000.

OSRO	1996 Survey	2000 Survey
ACS (Alaska Clean Seas)	X	X
Alaska Pollution Control Center		X
Burrard Clean		X
CISPRI	X	X
Clean Bay	X	X
Clean Coastal Waters	X	X
Clean Pacific Alliance	X	X
Clean Rivers		X
Clean Seas	X	X
Clean Sound Coop	X	X
EARL	X	X
Foss Environmental	X	X
IT (OHM)	X	X
MSRC	X	X
NRC	*	X
OSRL, UK	X	X
SeaPro	X	X
Unitech of Alaska		X

Veco		X
ANCON	X	
Clean Channel (Houston)	X	
Delaware Bay & River	X	
IMS	X	
Industrial Cleanup, Inc.	X	
Marine Pollution Control	X	

*in 1996, NRC West Coast only included as part of Clean Pacific Alliance.

OSROs listed for each Plan Holder are indicated in Table 4. Not all designated OSROs have contracts with the company that designates them. For instance, Tesoro does not currently have a contract with Foss Environmental. Is a contractual linkage critical? E.g., would Foss not respond if requested by Tesoro? In most cases, particularly among independent contractors such as Foss, they would fully respond if requested and therefore a contract is not necessary for their inclusion in this evaluation.

Table 4. OSROs designated by each PWS Plan Holder. Each Primary Respondent is included in this evaluation. Those organizations that are listed under "Others" are referenced by the Plan Holder but are not included in this evaluation.

Primary Respondent	Others
Alaska Tanker	
(under charter to BP) BP Primary Response Contractor (PRAC) registration = Clean Bay, Clean Sound, Clean Coastal Waters, EARL, OSRL, MSRC, SERVS, MSRC; 8 Dec 1999.	Refers to assistance from lower 48, U.K, Singapore and the Caribbean
Polar Tankers, Inc. (Phillips/Polar Tankers Inc)	
Alaska Pollution Control Center Clean Bay Clean Coastal Waters Clean Pacific Alliance Clean Rivers Clean Sound Foss Environmental Services National Response Corporation OSRL Unitech of Alaska Veco, Inc. *Note: Phillips is member of ACS.	(See note (3) in Table 1 regarding Jan. 2001 changes)

Chevron Shipping Co. LLC	
IT Corp (formerly OHM) MSRC CISPRI	Listed as area of Coverage "US" MSRC Refers to assistance from lower 48, U.K, Singapore and the Caribbean
SeaRiver Maritime Inc.	
ACS (<i>assumed via Alyeska membership SR/M is not member</i>) Clean Bay Inc. Clean Seas, LLC. Clean Coastal Waters, Inc. Clean Sound Cooperative, Inc. MSRC Oil Spill Response Ltd., UK	"has access to response equipment of several major cooperatives on the West Coast of the U.S. which may provide response resources consistent with the cooperative understandings developed by the States / British Columbia Oil Spill Task Force and in accordance with the state laws."
Tesoro	
Defined in "Tesoro Prince William Sound Vessel Discharge Prevention and Contingency Plan, Section 3.81. 'Alaska Oil Spill Cooperatives (OSRO's)' and Table 3-5, approved November 2, 1999; and page 1.6-2.	
Burrard Clean CISPRI Clean Bay Clean Pacific Alliance Clean Rivers Clean Seas Clean Sound Foss MSRC NRC SEAPRO *Clean Bay membership not active (8 Nov 00)	ACS (listed as source "...Through SERVS will seek to obtain additional booms and skimmers if needed" p. 1.6-2. Others: Listed as "...may be contacted to request additional equipment." BC Environment, Victoria, BC 604-356-7721 Bluewater Clean, Corunna, Ontario 519-862-2281 Beaufort Sea Coop, Calgary, Canada 403-233-5486 Canadian Coast Guard, W. Vancouver, BC 604-666-6011 Canadian Coast Guard, Ottawa 613-990-7012 Clean Coastal Waters, Long Beach, CA 310-432-1415 Clean Caribbean, Ft. Lauderdale, FL 305-983-9980 Clean Bay Cooperative, Concord, CA 510-685-2800 Clean Casco Bay, Inc., S. Portland, ME 207-828-4511 Clean Channel Assoc., Inc. Houston, TX 713-676-2571 Clean Gulf Assoc., New Orleans, LA, 504-593-6724 Clean Harbors Cooperative, Edison, NJ 908-225-2301 Clean Islands Council, Honolulu, HI, 808-845-8465 Clean Rivers Cooperative, Portland, OR 503-220-2040 Clean Seas, Carpenter, CA 805-684-0970 Clean Sound, Edmonds, WA 206-744-0948 Cooperative Prevention Intervention Marine, Levis, Quebec 418-833-8989 Corpus Christi Oil Spill Control, 302-645-7861 Delaware Bay and River Cooperative 302-645-7861 Eastcoast Spill Response, Inc. 709-576-1380 Environment Canada, N. Vancouver, 604-666-5900 Humbolt Bay Oil Spill, Eureka, CA 707-445-3002 LOOP, New Orleans, LA 504-368-5667 MSRC, Everett, WA 06-252-1300 National Response Center, Washington DC 800-424-8802 Petroleum Industry Marine Environmental Coop., Willowdale, Ontario 416-492-5677 Pier Atlantic, Ltd., Dartmouth, NS, Canada 902-461-9170 USCG Strike Team, CA 415-883-3311 USCG Anchorage 907-271-6721 US Navy SupSalv, DC 703-607-2758

4.0 Results – Equipment

4.1 Ability to Release Equipment

OSROs and equipment available to be transferred are presented in Appendix 1. The list of primary contacts for equipment release (state agency representatives) is presented in Table 5. Other states do not have control over equipment release. Almost all the equipment referenced by Plan Holders resides in Alaska and on the West Coast. Equipment that may come from outside these areas (e.g. MSRC) is only equipment that is surplus to MSRC response requirements and therefore local approval is not necessary, although both the local state and Coast Guard offices would be notified.

Table 5. Agencies and contacted representatives that have influence over the release of equipment from their respective state.

<p style="text-align: center;">Alaska Department of Environmental Conservation Brad Hahn 555 Cordova Street Anchorage, AK 99501 907-269-7548</p>	<p style="text-align: center;">Oregon Department of Environmental Quality Mike Collzitch 811 Southwest 6th Avenue Portland, OR 97204 502-229-6931</p>
<p style="text-align: center;">California Office of Spill Prevention and Response Jack Geck 1700 K Street Sacramento, CA 95814 P.O. Box 944209 Sacramento CA 94244-2090 916-323-4664</p>	<p style="text-align: center;">Washington State Department of Ecology Roy Robertson P.O. Box 47600 Olympia, WA 98504-7600 360-407-7202</p>

Requirements for the release of equipment are described below by state or region.

Alaska – Equipment movement by private entities from one region to another in Alaska has to be approved by the Alaska Department of Environmental Conservation. The Coast Guard would also be asked to concur. The base document regarding equipment transfers is entitled: “ADEC Approval Guidance for Industry Spill Response Equipment Transfer” (Draft 3/97, 2 pages). Key elements of the procedure are a request to the State that specific resources be moved, an estimated time period, and a description of Plan Holders affected by the transfer. The State On-Scene Coordinator (SOSC) will review the request and determine whether to approve part or all of the request, and whether additional prevention measures will be required.

The approval period is for 30 days after which extensions may be requested. Equipment not expected to be returned (e.g. sorbents) should be replaced as soon as transferred. Other equipment not returned should be replaced as soon as the condition is known. An interview with the SOSC indicated that during a major spill emergency in Prince William Sound, there would be no hesitation to approve / order all necessary transfers.

In addition to private entities, both the U.S. Coast Guard and U.S. Navy SupSalv maintain substantial stockpiles of equipment in various locations inside Alaska. The Anchorage depot houses equipment for both organizations. All equipment is prepared for immediate shipment by truck and air. Requests for equipment would come from the Coast Guard Federal On-Scene Coordinator. Approval for Coast Guard equipment would essentially be automatic from the District Office or Marine Safety Office. Similarly, SupSalv would approve the release of equipment requested at part of the National Contingency Plan. SupSalv would response directly (without Coast Guard requests) in cases involving the Navy. In cases involving a massive spill in PWS, interviews indicate that there is no doubt that this material would be released as needed during the response.

West Coast (Private OSROs) – The OSROs located in the U.S. West Coast present some of the most likely sources of equipment to be accessed. The procedures for obtaining this equipment are guided by the States / British Columbia Oil Spill Task Force Mutual Aid Agreement, approved in 1996. The Mutual Aid Agreement requires “resident” equipment in each Captain of the Port area. By meeting these criteria, state and Geographic Response Plan requirements are met. These criteria and procedures are summarized below.

Washington and Oregon – As indicated in the Mutual Aid Agreement, coops and private OSROs designated by Plan Holders must keep a minimum level of equipment in the area to meet 12 hour and lower hourly response standards (e.g. 1, 2 and 6 hours). The 12-hour response standard is designated at the “resident” response capability, which must be maintained until additional resources are cascaded into the area. Decisions on mutual aid will be made for 30 days, beyond which it will be on case-by-case basis. Plan Holders must notify their respective state agencies (i.e. Washington Department of Ecology and Office of Marine Safety, or Oregon Department of Environmental Quality) within 24 hours of changes to their response capabilities. Equipment required to remain in Washington / Oregon’s Captain of the Port (COTP) zones is listed in Table 6.

Table 6. “Resident” response capability required to remain in each COTP area in Washington / Oregon (from States / British Columbia Oil Spill Task Force Mutual Aid Agreement).

<i>COTP Zone Puget Sound</i>	<i>Equipment Requirement</i>
Boom (ft)	40,000
Recovery (d-rated b/day)	36,000
Storage (b)	54,000
<i>COTP Zone Portland</i>	
Boom (ft)	40,000
Recovery (d-rated b/day)	15,000
Storage (b)	22,500

The Washington State representative indicates that most of this requirement is met by the Coop in each COTP area, enabling other OSROs to provide their more-readily transferable equipment to PWS (e.g. Foss and MSRC). In Oregon, the State agency indicates that unless support can be verified from other sources, it would be difficult for the State to allow all non-Coop equipment to leave. The values in Appendix 1 for each Coop take into account maintenance of the minimum level, but note not all equipment, particularly storage capability, is indicated. Although Foss has indicated that all equipment could be transferred during an emergency, we have used a value of 80% here to reflect the desire of the State agency to be assured that “resident” equipment requirements would still be met.

California – California is also part of the States / British Columbia Oil Spill Task Force Mutual Aid Agreement. As indicated in the State Specific Standards of the Agreement, the equipment that must remain in the local area is the lesser of the (1) the Response Planning Volume for that owner / operator, or (2) the regulatory non-cascadable equipment listed for that area (Table 7). As the Mutual Aid agreement is among governments, the request for equipment must come from a signatory state agency. Requests from the Plan Holder or another cleanup contractor, therefore, would have to be approved by California (Office of Pollution Prevention and Response – OSPR) as well as the local Coast Guard office.

Once approved, daily recovery rates as set by regulation are granted necessary waivers from this obligation. Because the response organizations are private entities, OSPR has no control over whether they would respond as requested. As with the other states of the Agreement, approval is for a period of 30 days, after which decisions on mutual aid will be made on a case-by-case basis. Transferred equipment from California will be returned before equipment from other states, unless the equipment required is only from California.

As in Washington, some private groups (Foss) have indicated that they would be able to move all their equipment. OSPR may assist negotiations between the Coop and the private entity to mutually determine which equipment should remain in the state. As with Washington and Oregon, a more conservative 80% is used for Foss regarding the quantity of equipment that would be transferred.

Table 7. Non-cascadable equipment requirements (b/day) COTP areas in California. The level recovery required includes appropriate levels of boom, interim storage, personnel and support equipment in d-rated capacity (from States / British Columbia Oil Spill Task Force Mutual Aid Agreement).

<i>COTP Zone Alameda</i>	<i>Equipment Requirement (b/day)</i>
Humbolt Bay	2,500
San Francisco Bay area	10,000
Subtotal	12,500
<i>COTP Zone Los Angeles/Long Beach</i>	
Estero Bay	2,500

Santa Barbara Channel	10,000
Los Angeles / Long Beach Harbor	10,000
Subtotal	22, 500
<i>COTP Zone San Diego</i>	
Carlsbad / Encina	2,500
San Diego Harbor	2,500
Subtotal	5,000
<i>Statewide Equipment Requirement</i>	40,000

Non-West Coast (Private OSROs) – For those designated OSROs that may be located outside the West Coast (e.g. National Response Corporation (NRC) and the Marine Spill Response Corporation (MSRC), the equipment list provided in Appendix 1 reflects only those materials that can be transferred while still maintaining conformance to local response requirements. This is a change from the 1996 study that used 50% of MSRC’s total equipment (resulting in a decline from 150,000 ft of boom in 1996 to 13,000 in 2000). Approvals from the local state agency and Coast Guard Marine Safety Office are therefore not necessary, although each would be notified.

Outside Alaska / U.S. Government – The U.S. Coast Guard and U.S. Navy SupSalv maintain equipment in various stockpiles throughout the continental U.S., territories and Hawaii. Equipment can be accessed for transfer to PWS upon request of the U.S. Coast Guard Federal On-Scene Coordinator. In most cases, Coast Guard equipment would be requested to the National Strike Force Coordination Center (NSFCC) which would determine the type, location, and quantity of equipment to be transferred. In some cases, requests may be made of the Coast Guard District Office (which in turn would likely confer with the NSFCC). Therefore, the NSFCC is given as the source for Coast Guard listed as outside of Alaska. Navy SupSalv equipment also needs to be requested by the Coast Guard. To obtain SupSalv equipment outside of Alaska, the central office in Arlington VA is indicated in Appendix 1, with phone reference provided to other offices surveyed for this study. Importantly, all the equipment from both Coast Guard and SupSalv can be acquired via contact to the central offices indicated for each.

Outside Alaska / International – Three OSROs outside the U.S. are designated by Plan Holders: Burrard Clean in British Columbia, East Asia Response Limited (EARL) in Singapore, and Oil Spill Response Limited (OSRL) in the United Kingdom.

The possible transfer of equipment from British Columbia falls under the States / British Columbia Oil Spill Task Force Mutual Aid Agreement which states that above the Canadian government-mandated 10,000 ton recovery standard, that “it is a matter for industry and the Canadian Coast Guard to decide”. In discussions with Burrard Clean it was indicated that they would respond as able to a request from the Canadian Coast Guard which would act if requested by the U.S. Coast Guard. There was an indication that Customs and other issues would likely interfere with the transfer, and that their impression was that a transfer request to them would be highly unlikely. Additionally, only Tesoro designates this responder, and membership could not be confirmed. For

this reason, only a 10 percent value was given as to the amount of equipment likely to be able to be transferred.

In contrast, both EARL and OSRL are entirely geared toward responding to an incident outside their national borders. Equipment is packaged and ready for immediate transport. Both groups would respond in entirety to all equipment requested.

4.2 Changes in Equipment Available 1996 to 2000

Data from this 2000 survey are compared to 1996 values in Appendix 2 Tables A2-1 to A2-4. Note that in 1996 equipment from U.S. agencies was not included in the survey.

Boom – As shown in Appendix 2 Table A2-1 more than 900,000 ft of boom is available in 2000, representing a gain of >35% from the 667,000 ft available in 1996. A total of 116,000 ft of the gain is provided by Navy SupSalv and Coast Guard sources.

Skimmers – The quantity of skimmers has increased by over 40% since 1996 to almost 650 in 2000 (Table A2-2). The capacity of available skimmers has increased substantially (over 200% to over 1 million b/day), although part of this gain is artificial because the 1996 survey did not provide the capacities of many of the skimmers. A gain of 101 skimmers and 200,000 b/day capacity is represented by U.S. federal agencies.

On-Water Storage – “Out-of-region” on-water storage was a shortfall identified in the 1996 study. Table A2-3 shows the comparison to 1996 data for all (primary and secondary) storage capacity identified by this survey. There is a gain of nearly 30% in the number of on-water storage devices and a gain of >450% in capacity. As with skimmers, part of the gain is artificial because capacities were not always provided in 1996. In addition, this year 2000 survey includes large barges and vessel-related capacity as part of the totals provided in Table A2-3. Therefore, vessels and large barges (“secondary” storage) are removed in Table A2-4. Table A2-4 shows 342 available primary (portable barges and bladders) storage units, which is comparable to the 294 units found in 1996 (a gain of 48%). However, a major portion of new storage resides with U.S. agencies (98 in total). Without the gain from government sources, the number of storage units shows a 17% decline to 50 units and a 48% decline in capacity (Table A2-4).

4.3 Analysis of Task Force Capability

In addition to 500 vessels (not included in this survey), out-of region equipment requirements have been defined by the 1996 Study as needing 14 Task Forces having the following:

- 154,000 ft boom
- 84 skimmers
- 168 storage devices (not counting secondary storage)

Table A2-5 in Appendix 2 evaluates the ability to meet these values by the designated OSROs combined with U.S. agency stockpiles, and reviews the results of the 1996 survey. Results of the analysis are discussed below.

Boom – The requirement for 154,000 ft of boom was met in 1996 and continues to be met in 2000. In this review, 1996 showed a surplus of over 500,000 ft, which increased even further in 2000, to a surplus of over 750,000 ft.

Skimmers – A total of 84 skimmers are required. Because 1996 data regarding skimmers is not complete, this study re-calculated the number of skimmers available in 1996 based on the total number available (1996 report, Appendix 6) multiplied by the percentage that could be transferred (Appendix 8). Unfortunately some values are not given and the percentage is sometimes shown as a range. In any case, it is our best judgement that in 1996 there was a surplus of over 350 skimmers in 1996 which has increased to a surplus of over 500 skimmers in 2000 (Table A2-5).

The 1996 Study further differentiated skimmers into “desirable” and “suitable”, of which the Study reports in the text as a surplus of 122 and 347 respectively. The 1996 Study further subtracts non-West Coast resources and equipment that may not be released, thereby indicating a lesser surplus of 33 and 195 skimmers, respectively for desirable and suitable. This 2000 survey does not differentiate potential skimmers into suitable or desirable, but leaves the full arsenal available for selection dependent on oil type (e.g. crude and/or bunker oils) and environmental conditions, but has eliminated equipment that was uncertain to be transferred. As surpluses existed for both suitable and desirable skimmers in 1996 with over 350 skimmers identified, it is clear that surpluses will continue in 2000.

Storage – A storage capacity of 168 units is required to fill 14 Task Forces. It is our best estimate using 1996 data (based on the 1996 Study’s number of storage units of all types as indicated in Appendix 6 multiplied by the percentage able to be transported) is that there was an excess of over 125 units in 1996, which has increased to a surplus of over 200 units in 2000 (Table A2-5).

However, the textual description in the 1996 Study decreases the number of surplus storage units downward to a total of only 41 units. This value could not be duplicated but is considered as comparable to the 174 surplus storage units noted in this year 2000 study after elimination of secondary units and on-board skimming storage (Table A2-5).

The 1996 study further reduces the number of available storage units by first counting only those having a capacity of 95 barrels and above, and then by eliminating non-West Coast and units that would not be transferred. The 1996 textual description describes a shortfall of 35 units once non-West Coast/non-transferable units are eliminated, which increases to a shortfall of 88 units when only units equal to or greater than 95 barrels are considered. This survey, in contrast, still finds a surplus of 38 units when similar restrictions are placed on the equipment to be transferred. There are also 35 potential secondary (large barge) storage units under control of the designated OSROs.

4.4 Analysis of Plan Holder Capability

The analysis above considered the total of all designated and governmental resources that could be brought to bear on a major spill in PWS. The evaluation below considers only those resources designated by each Plan Holder, and reviews those resources against their ability to outfit 14 Task Forces.

The material from ACS is highlighted in the analysis below to enable reviewers to decide how strict membership in ACS should be in order to be included. Plan Holders, by strict definition, are not members of ACS. But Alyeska is a member which is may be considered to provide coverage to the Plan Holder. Additionally, sister companies of Alaska Tanker (BP Exploration) and Polar Tankers (Phillips) are members. In any case, there is no doubt that ACS would respond to a major incident in Prince William Sound.

Boom – The quantity of boom available that is available from the OSROs designated by each Plan Holder is listed in Appendix 2 Table A2-6. By this analysis, with the presence of ACS equipment all companies meet the 154,000 ft of boom criteria. If ACS material is excluded, then three companies (Alaska Tanker, Chevron and SR/M) do not meet the criteria.

The type of boom available from all sources is presented in Table A2-9. Results indicate that over 400,000 ft of <18” harbor boom, more than 325,000 ft of nearshore boom (18”-42”), 145,000 ft of ocean boom (>42”), and 25,000 ft fire boom are available.

Skimmers – The analysis of skimmer number and capacity listed by each Plan Holder is presented in Appendix 2 Table A2-7. With ACS material, all Plan Holders have access to the 84 skimmers needed to outfit 14 Task Forces. Without ACS, Chevron (65 skimmers) does not meet the criterion.

Storage Capacity – A total of 168 primary storage units are required to complete 14 Task Forces. As illustrated in Appendix 2 Table A2-8a, with ACS only one Plan Holder (Tesoro with 184 units) shows more than 168 total storage units (including those <95 b).

If only storage units equal to or larger than 95 b are considered (Appendix 2 Table A2-8b), no Plan Holder meets the criterion.

5.0 Recommendations

To determine the amount of equipment available from these sources is in many cases difficult to precisely pin down and will make consistency between evaluations difficult to obtain (e.g. whether all or part of MSRC resources are counted). As the Plan Holder does not define specifically what quantities are expected from where, this is likely to result in discrepancies between surveys and will increase the difficulty in determining if shortfalls truly exist. As illustrated here, several Plan Holders show shortfalls in several response categories, but it is likely (although undefined) that additional materials can be brought in using other stockpiles and contractors. Therefore, it is a recommendation that the Plan Holder assist in making this evaluation fully realistic by designating the type and source of “out-of-region” equipment, as currently required under Alaska regulation 18 AAC 75.425(e)(3)(F).

In terms of guidelines for the next survey, this review exceeded the 1996 survey by providing d-rated skimmer capability as well as storage capacity for all equipment. It can be argued that knowing these capabilities and capacities is more important for spill planning than knowing the sheer number of skimmers or storage units. We believe that the next survey should also seek these values.

APPENDIX 1. OIL SPILL RESPONSE ORGANIZATIONS.

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OIL SPILL RESPONSE ORGANIZATIONS

Name	Alaska Clean Seas		
Address	Pouch 340022		
City	Prudhoe Bay		
State	AK	Zip	99734

Phone	907-659-2405	Fax	907-659-2616	
Other	direct line 907-659-3220			
Contact	Jim McHale, General Manager		Previous Survey	1996

Members	Capability to respond in PWS provided by Alyeska membership.		
BP Exploration (same owner as Alaska Tanker) and Phillips (Polar Tankers) are members.			

Comments

Received latest equipment list, June 2000.
 Almost all equipment is available after freeze-up; equipment transfer dependent on approval of members and State of Alaska. A figure of 100% is used, same as in 1996.
 Material can be expected to arrive in Valdez by air within 12 hours and a few days by road.
 The State of Alaska may require all resources be sent. The period of State approval to move resources is for 30 days and is renewable.

Equipment

<i>Boom</i>		<i>Feet</i>	<i>Characteristics</i>	
	Ocean	9,800	>42"	
	Nearshore	73,441	18-42"	6x12, 11x15, 14x24, ShoreSeal and others
	Harbor/River	212,025	<18"	Delta 4x6 and 8x6, etc; Fast River
	Fire boom	19,102		
		314,368	Total	
Boom	ACS	314,368	100	% estimate of availability for PWS.

<i>Skimmers</i>	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>
	907	10	9,072	Disc 30K (189 b/hr)
	480	9	4,320	Disc 12K MK11 (100 b/hr)
	139	7	974	Disc M1-11/24 (29 b/hr)
	432	1	432	Disc M2 12 volt (9 b/hr)
	686	6	4,118	Disc MI 30 (143 b/hr)
	1512	1	1,512	Disc Ocean (315 b/hr) SeaSkimmer 50
	1632	3	4,896	Disc T-54 (340 b/hr)
	662	3	1,987	Drum or Brush (138 b/hr)
	480	14	6,720	Drum or Brush, Mini (100 b/hr)
	158	4	634	TDS 118 (33 b/hr)
	331	3	994	TDS 136 (60 b/hr)
	3427	3	10,282	Trans-Vac (714 b/hr)
	3427	8	27,418	Lori Side (27 b/hr)
	1152	1	1,152	Skimmer Foxtail (240 b/hr)
	67	38	2,554	Rope Mop various (14 b/hr)
	139	3	418	Rope Mop (29 b/hr)
	547	1	547	Rope Mop (114 b/hr) Foxden 2-9 (Foxtail)
	163	64	10,445	Manta Ray (34 b/hr)
	686	2	1372.8	Alum (143 b/hr)
	2534	1	2534.4	Desmi 250 Ocean (528 b/hr)

2112	3	6,336	Desmi Harbor (440 b/hr)		
754	2	1,507	Destroil (157 b/hr)		
34	1	34	Electric Weir (7 b/hr)		
2333	2	4,666	FastFlow (486 b/hr)		
686	4	2,746	Mini FastFlow (143 b/hr)		
288	10	2,880	Slurp (approx 60 b/hr)		
230	1	230	Weir SkimPak (48 b/hr)		
7536	1	7,536	Transrec 250 (1570 b/hr)		
1200	1	1,200	Walosep W1 (250 b/hr)		
2813	1	2,813	Walosep W4 (586 b/hr)		
	208	122,328	Total		
Skimmers	ACS	208	122,328	100	% available for PWS.

On-water Storage		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Barges		10	249	2,490	Mini's
		2	125	250	Mini's 47
Bladders		20	54	1,071	Tank Bladder 2250 gal
		3	60	179	Tank Bladder 2500 gal
		3	29	86	T. Bl. Tow 1200 gal
		4	48	190	T. Bl. Tow 2000 gal
		1	12	12	T. Bl. Towlift 500 gal
		10	63	629	T. Bl. Towlift 2640 gal
		2	6	12	T. Bl. Towable 250 gal
		1	60	60	T. Bl. Towable 2500 gal
		6	119	714	T. Bl. Towable 5000 gal
		2	595	1,190	T. Bl. 25000 gal (towable)
		2	238	476	T. Bl. Towlift 10000 gal
	66		7,359		
Storage	ACS	66		7,359	100 % available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Secondary (barges)		12	374	2,740	
Total:		12		2,740	100 % available
Primary (bladders >94b)		10		2,381	
Total:		10		2,381	100 % available
Primary (bladders <95b)		44		2,238	
Total:		44		2,238	100 % available
Vessels					
Total:		0		0	100 % available
	66			7,359	
Storage	ACS	66		7,359	100 % available

Comparison to Previous Survey

ACS

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		155,851	100	155,851	
2000	Boom (ft)		314,368	100	314,368	158,517
1996	Skimmers (b/d)	146	23,714	100	23,714	
2000	Skimmers (b/d)	208	122,328	100	122,328	98,614
1996	Storage (b)	26	8,849	100	8,849	
2000	Storage (b)	66	7,359	100	7,359	-1,490

OIL SPILL RESPONSE ORGANIZATIONS

Name	Alaska Pollution Control Center		
Address	8040 Hartzell Road		
City	Anchorage		
State	Alaska	Zip	99507
Phone	907-344-5036	Fax	907-349-6925
Other			
Contact	Jeff Steenhoven	Previous Survey	None
Members	Tesoro	Polar Tankers	

Comments

Company handles petroleum recycling and tank cleaning. No longer provides water-based response.

Equipment

Boom		Feet	Characteristics
	Ocean	0	>42"
	Nearshore	0	18-42"
	Harbor/river	0	<18"
	Fire boom	0	
		0	Total
Boom	AK Poll. Contr.	0	100 % estimate of availability for PWS.

Skimmers	<i>d-rated b/d</i>	No.	Total b/d	Type
		0	0	Total
Skimmers	AK Poll. Contr.	0	0	100 % available for PWS.

On-water Storage		No.	Capacity (b)	Total (b)	Comment
		0		0	
Storage	AK Poll. Contr.	0		0	100 % available

Storage Breakdown		No.	Capacity (b)	Total (b)	Comment
Secondary (barges)					
Total:		0		0	100 % available
Primary (bladders >94b)					
Total:		0		0	100 % available
Primary (bladders <95b)					
Total:		0		0	100 % available
Vessels					
Total:		0		0	100 % available
		0		0	
Storage	AK Poll. Contr.	0		0	100 % available

Comparison to Previous Survey **AK Poll. Contr.**

Year	Item	No. Avail.	Length / Capacity	% est. Available	PWS Avail.	Gain/Loss
None	Boom (ft)				0	
2000	Boom (ft)		0	100	0	0
None	Skimmers (b/d)				0	
2000	Skimmers (b/d)	0	0	100	0	0
None	Storage (b)				0	
2000	Storage (b)	0	0	100	0	0

OIL SPILL RESPONSE ORGANIZATIONS

Name	Burrard Clean		
Address	201 Kensington Avenue		
City	Burnaby		
Province	BC	Code	V5C 5P2

Phone	604-294-6001	Fax	604-294-6003	
Other	www.burrardclean.com; 24 hour 604-294-9116; Martyn Green, Manager			
Contact	Craig Duggans, Operations Manager		Previous Survey	None

Members	Tesoro		
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Comments

Provides response support in BC as required by Canada Shipping Act.
Can only be invoked for PWS response if requested by Canadian Coast Guard which needs request of US Coast Guard as invoking the US / Canadian Spill Response Plan.
Equipment is stored at various sites throughout BC.

Equipment

<i>Boom</i>		<i>Feet</i>	<i>Characteristics</i>	
	Ocean	6,000	>42"	Ro-Boom, Kepner
	Nearshore	76,000	18-42"	39" pressure inflatable, shore sealing
	Harbor/river		<18"	12"self inflating, foam flotation
	Fire boom			
		82,000	Total	
Boom	Burrard	8,200	10	% estimate of availability for PWS.

<i>Skimmers</i>	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>	
	84	1	84	T-Disk, 2-3 tons/hr	
	84	1	84	Oleophilic disk, 2-3 tons/hr	
	134.4	1	134	Weir, 3-5 tons/hr	
	50.4	1	50	Rop mop, 1-2 tons/hr	
	50.4	1	50	VOSS inclined plane 1-2tons/hr	
	1368	2	2,736	GT-185 on barge	
	4336	1	4,336	Lori Brush on skimmer vessel	
	3200	1	3,200	Conveyor vessel (capacity estimated only)	
	3200	1	3,200	Marco conveyor (capacity estimated only)	
		10	13,875	Total	
Skimmers	Burrard	1	1,388	10	% available for PWS.

<i>On-water Storage</i>		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
(total storage = 3587 tons)	Barges	1	14,966	14,966	Barge No. 10
		1	7,161	7,161	Barge No. 17
		1	112	112	16 ton barge
	Bladder, Small Barge	7	140	980	20 ton (# approx.)
		58	35	2,030	4-10 tons
	Vessels	3	256	768	Nos. 1,2 and 9
		71		26,017	
Storage	Burrard	7		2,602	10 % available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
Secondary (barges)		3		22,239		
Total:		0		2,224	10	% available
Primary (bladders >94b)		7		980		
Total:		1		98	10	% available
Primary (bladders <95b)		58		2,030		
Total:		6		203	10	% available
Vessels		3		768		
Total:		0		77	10	% available
		71		26,017		
Storage	Burrard	7		2,602	10	% available

Comparison to Previous Survey

Burrard

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
None	Boom (ft)				0	
2000	Boom (ft)		82,000	10	8,200	8,200
None	Skimmers (b/d)				0	
2000	Skimmers (b/d)	1	1,388	10	139	139
None	Storage (b)				0	
2000	Storage (b)	7	26,017	10	2,602	2,602

OIL SPILL RESPONSE ORGANIZATIONS

Name	Cook Inlet Spill Prevention & Response Inc. (CISPRI)		
Address	Box 7314		
City	Nikiski		
State	AK	Zip	99635

Phone	907-776-5129	Fax	907-776-2190	
Other	Pager: 907-262-3406			
Contact	Doug Lentsch, General Manager		Previous Survey	1996

Members	Chevron	Tesoro	

Comments

Visited 13 July 2000 during which reviewed inventory and toured facilities.
Equipment is located onshore Nikiski, on offshore barges and in Anchorage.
Can release as much equipment as approved by Board of Directors and State of Alaska.
Has agreement to support Alyeska. Negotiations regarding compensation are continuing.
Material can be transported by air, road or by boat to PWS within hours to days.
100% is considered available to PWS depending on Board of Directors. State of Alaska may require all available resources be sent. Period of State approval to move resources is for 30 days (renewable).

Equipment

Boom		Feet	Characteristics	
	Ocean	30,650	>42"	
	Nearshore	32,700	18-42"	
	Harbor/river	11,900	<18"	
	Fire boom	6,000		
		81,250	Total	
Boom	CISPRI	81,250	100	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type
		1	0	Action Petroleum
	384	3	1,152	Komara Mini Skimmers (80b/hr)
	1368	5	6,840	Manta Ray Skimmers (285 b/hr)
	288	11	3,168	Rope Mop Machines (60 b/hr)
	288	3	864	Skim Pacs (60 b/hr)
	4032	1	4,032	Transvac 3310 (840 b/hr)
	2016	2	4,032	Transvac 3310 (420 b/hr)
	1440	1	1,440	LPI Skimmer (300 b/hr)
	1714	4	6,854	Odd Skimmer (357 b/hr)
	195	3	585	Foxtail - 4 Rope
	2059	2	4,118	Desmi 250 (429 b/hr)
	2563	4	10,253	Foxtail VAB 8-14 (534 b/hr)
	4336	3	13,008	Lori Brush System (371 b/hr; 4336 b/d)
	2914	3	8,741	Desmi 250 Ocean (607 b/hr)
	6034	1	6,034	Transrec 200 (1257 b/hr)
	7546	1	7,546	Transrec 250 (1572 b/hr)
		48	78,667	Total
Skimmers	CISPRI	48	78,667	100 % available for PWS.

On-water Storage		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
	Barges	4	100	400		
		1	12,200	12,200		
	Bladder, Small Barge		4	23	92	
			7	47	329	
			1	50	50	Noyle
			6	59	354	
			4	95	380	towable flotation
			1	3,262	3,262	Dunlop bag
			1	3,145	3,145	Unitor bag
			1	250	250	Uniroyal
		30		20,462		
Storage	CISPRI	30		20,462	100 % available	

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Secondary (barges)		5		12,600	
Total:		5		12,600	100 % available
Primary (bladders >94b)		7		7,037	
Total:		7		7,037	100 % available
Primary (bladders <94b)		18		825	
Total:		18		825	100 % available
Vessels					
Total:		0		0	100 % available
		30		20,462	
Storage	CISPRI	30		20,462	100 % available

Comparison to Previous Survey

CISPRI

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		77,577	50	38,789	
2000	Boom (ft)		81,250	100	81,250	42,462
1996	Skimmers* (b/d)	18.5	46,456	50	23,228	
2000	Skimmers (b/d)	48	78,667	100	78,667	55,439
1996	Storage (b)	13	8,849	50	4,425	
2000	Storage (b)	30	20,462	100	20,462	16,038

*1996 study lists % 25-50% and 100% release by statute.

OIL SPILL RESPONSE ORGANIZATIONS

Name	Clean Bay, Inc.		
Address	2070 Commerce Avenue		
City	Concord		
State	California	Zip	94520

Phone	925-685-2800	Fax	925-825-2203	
Other	cleanbay1@aol.com			
Contact	Stephen D. Ricks, President		Previous Survey	1996

Members	Alaska Tanker	Sea River Maritime	
	Polar Tankers	Tesoro	

Comments

Visited office / warehouse on 10 August 2000. Equipment is located at various locations in Monterey and San Francisco Bay, and is tracked using computer-based maintenance system. Inspected equipment appears in good condition. They reserve 66% of their equipment as non-cascadeable. USCG and State of CA would be notified for concurrence. Other equipment may be available with concurrence of Board of Directors, CA and USCG. 5 people can be provided for out-of -area response. Via air transport, material can be expected to arrive within 36 to 48 hours in PWS.

Equipment

Boom		Feet	Characteristics	
	Ocean	4,850	>42"	
	Nearshore	9,600	18-42"	
	Harbor/river	6,000	<18"	
	Fire boom			
		20,450	Total	
Boom	Clean Bay	6,749	33	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type
	3,288	1	3,288	OSRV CB 1 or 2
	445	1	445	Marco Class 1
	3,562	1	3,562	Walosep W-4
	1,368	1	1,368	GT-185
	3,000	1	3,000	GT-260
	2,328	2	4,656	Desmi 250
	34	4	136	SMI 4" Rope Mop
		11	16,455	Total
Skimmers	Clean Bay	4	5,430	33 % available for PWS.

On-water Storage	No.	Capacity (b)	Total (b)	Comment
Barges				
Bladder, Small Barge	6	60	360	Dracone Floating Bag
	6	100	600	
	12		960	Rigid Dracone
Storage	Clean Bay	3.96	317	33 % available

Storage Breakdown	No.	Capacity (b)	Total (b)	Comment
Secondary (barges)	0		0	

Total:	0		0	33	% available
Primary (bladders >94b)	6		600		
Total:	2		198	33	% available
Primary (bladders <94b)	6		360		
Total:	2		119	33	% available
Vessels					
Total:	0		0	33	% available
	12		960		
Storage	Clean Bay	4	317	33	% available

Comparison to Previous Survey Clean Bay

<i>Year</i>	<i>Item</i>	<i>No.Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		20,450	20	4,090	
2000	Boom (ft)		20,450	33	6,749	2,659
1996	Skimmers (b/d)	2	19,743	20	3,949	
2000	Skimmers (b/d)	4	5,430	33	1,792	-2,157
1996	Storage (b)*	2	760	20	152	
2000	Storage (b)**	3.96	960	33	317	165

*reduced by 3 Fast tanks for 171 b to be consistent with 2000 survey.

OIL SPILL RESPONSE ORGANIZATIONS

Name	Clean Coastal Waters, Inc.		
Address	190 South Pico Avenue		
City	Long Beach		
State	CA	Zip	90802-6247

Phone	562-432-1415	Fax	562-437-1510	
Other	ccwraynott@aol.com			
Contact	Ray Nottingham, President		Previous Survey	1996

Members	Alaska Tanker	Sea River Maritime	
	Polar Tankers		

Comments

Visited office / warehouse on 7 August 2000. An extensive inventory is stored in various locations in the LA / Long Beach area. Equipment is tracked / maintained using computer-based system and inspected equipment appears in excellent condition. With Clean Bay and Clean Seas coops, they have developed pre-approved list of cascadeable equipment for members outside their area. Board approval is needed for non-members. The list below represents the actual list estimated that could be released without jeopardizing existing client agreements. The Coast Guard, State of CA, and the Board would be notified for concurrence on all transfers out of the area. 6 people are available as well. Material can be expected to arrive in PWS within 36 to 48 hours.

Equipment

Boom		Feet	Characteristics	
	Ocean	7,950	>42"	
	Nearshore	21,052	18-42"	
	Harbor/river		<18"	
	Fire boom			
		29,002	Total	
Boom	Clean Coastal W.	14,501	50	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type	
	9,907	1	9,907	OSRV Clean Water 1	
	3,109	1	3,109	Desmi Terminator (VOSS)	
	1,354	2	2,708	GT-185 (VOSS)	
	1,354	2	2,708	GT-185	
		6	18,432	Total	
Skimmers	Clean Coastal W.	5	14,746	80	% available for PWS.

On-water Storage	No.	Capacity (b)	Total (b)	Comment
Barges				
Bladder, Small Barge	3	28	84	Dracone Floating Bag
	2	28	56	Kepner Floating Stor. Bag
	5		140	
Storage	Clean Coastal W.	5	140	100 % available

Storage Breakdown	No.	Capacity (b)	Total (b)	Comment
Secondary (barges)	0		0	
Total:	0		0	100 % available
Primary (bladders >94b)				

Total:	0		0	100	% available
Primary (bladders <94b)	5		140		
Total:	5		140	100	% available
Vessels					
Total:	0		0	100	% available
	5		140		
Storage Clean Coastal W.	5		140	100	% available

Comparison to Previous Survey Clean Coastal W.

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		26,102	40	10,441	
2000	Boom (ft)		29,002	50	14,501	4,060
1996	Skimmers (b/day)	4	6,234	40	2,494	
2000	Skimmers (b/day)	5	14,746	80	11,796	9,303
1996	Storage (b)	2	143	40	57	
2000	Storage (b)	5	140	100	140	83

OIL SPILL RESPONSE ORGANIZATIONS

Name	Clean Pacific		
Address	2401 Fourth Avenue		
City	Seattle		
State	WA	Zip	98121

Phone	206-340-2772	Fax	206-340-2771	
Other				
Contact	Jim Reidel, General Manager		Previous Survey	1996

Members	Polar Tankers	Tesoro	

Comments

Visited office on 23 June 2000; visited Richmond, CA Independent Contractor Network equipment storage site on 9 August. They maintain a large inventory of pollution response equipment, staged at various locations in CA, OR and WA. Equipment is trained / maintained in accordance with National Response Corp's. computer-based preventive maintenance program. Inspected equipment appears in good condition. All equipment would be available for PWS, as equipment removed from West Coast would be backfilled from NRC depots on East and Gulf Coasts. Transit time is 36 to 48 hours for air transportable equipment and 10-12 days for vessels and barges. NOTE: Only Clean Pacific and their West Coast Independent Contractor Network resources are included in the summary below.

Equipment

Boom		Feet	Characteristics	
	Ocean	9,000	>42"	
	Nearshore	16,000	18-42"	
	Harbor/river		<18"	
	Fire boom			
		25,000	Total	
Boom	Clean Pacific	25,000	100	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type
	6,875	2	13,750	VTU Petro
	3,154	1	3,154	FASFLO
	5,465	3	16,395	Cascade
	24,000	1	24,000	Belt/Weir, Marco X
	1,954	1	1,954	Drum Skimmer
	4,114	2	8,228	Drum Skimmer
	12,379	1	12,379	OSRV Columbia
		11	79,860	Total
Skimmers	Clean Pacific	11	79,860	100 % available for PWS.

On-water Storage	No.	Capacity (b)	Total (b)	Comment
Barges	1	52,878	52,878	OSRB Sacramento
Bladder, Small Barge	10	100	1,000	Canflex Bladder
	2	238	476	Portable barge
Vessels	1	600	600	OSRV Columbia
	14		54,954	
Storage	Clean Pacific	14	54,954	100 % available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
Secondary (barges)		1		52,878		
Total:		1		52,878	100	% available
Primary (bladders >94b)		12		1,476		
Total:		12		1,476	100	% available
Primary (bladders <94b)						
Total:		0		0	100	% available
Vessels		1		600		
Total:		1		600	100	% available
		14		54,954		
Storage	Clean Pacific	14		54,954	100	% available

Comparison to Previous Survey Clean Pacific

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)*		27,100	75	20,325	
2000	Boom (ft)		25,000	100	25,000	4,675
1996	Skimmers (b/d)**	8	5,500	75	4,125	
2000	Skimmers (b/d)	11	79,860	100	79,860	75,735
1996	Storage (b)	42	6,664	75	4,998	
2000	Storage (b)	14	54,954	100	54,954	49,956

*includes 23,100 ft outside of NW.

**capacities not indicated for 9 of 10 skimmers.

OIL SPILL RESPONSE ORGANIZATIONS

Name	Clean Rivers Cooperative		
Address	200 S.W. Market Street, #190		
City	Portland		
State	OR	Zip	97201

Phone	503-220-2040	Fax	503-295-3660		
Other	way@pdxmex.com				
Contact	Brent Way, Manager		Previous Survey	None	

Members	Polar Tankers		
	Tesoro		

Comments

Visited on 19 June 2000. Clean Rivers is allowed to release some equipment to other regions while still meeting WA, OR and Federal requirements for their members. The list below shows equipment available for cascading. The Coop uses a scheduled maintenance program and inspected equipment appears in good condition. Equipment is staged at several locations on the Columbia River and would be pulled as needed, and transported by road or air. Several airports capable of handling large aircraft are within 150 miles. For a member, equipment release needs concurrence of the Board of Directors; for non-members the USCG also has to approve. For the quantities indicated, USCG and State approval is not needed as "resident" capabilities are maintained, although they would be notified. Time to transfer material by air is approximately 36 to 48 hours.

Equipment

Boom		<i>Feet</i>	<i>Characteristics</i>	
	Ocean		>42"	
	Nearshore	50,300	18-42"	
	Harbor/river	5,000	<18"	
	Fire boom			
		55,300	Total	
Boom	Clean Rivers	19,908	36	% estimate of availability for PWS.

Skimmers	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>
	4,457	3	13,371	Countervac 3315
	3,720	4	14,880	34ft FRB with Lori
	2,476	6	14,856	Lori Brush
	2,057	1	2,057	Phoenix
	3,017	2	6,034	Terminator
	2,057	12	24,684	3" pump w/ skimmer head and hose
	1,800	2	3,600	A.P. Devm Skimmer
	457	7	3,199	2" pump w/ skimmer head and hose
		37	82,681	Total
Skimmers	Clean Rivers	24	53,743	65 % available for PWS.

On-water Storage	<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Barges				
Bladder, Small Barge	2	60	120	32 ft aluminum barge
	11	100	1,100	
	13		1,220	
Storage	Clean Rivers	13	1,220	100 % available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
Secondary (barges)		0		0		
Total:		0		0	100	% available
Primary (bladders >94b)		13		1,220		
Total:		13		1,220	100	% available
Primary (bladders <94b)						
Total:		0		0	100	% available
Vessels						
Total:		0		0	100	% available
		13		1,220		
Storage	Clean Rivers	13		1,220	100	% available

Comparison to Previous Survey Clean Rivers

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
None	Boom (ft)				0	
2000	Boom (ft)		55,300	36	19,908	19,908
None	Skimmers (b/d)				0	
2000	Skimmers (b/d)	24	53,743	65	34,933	34,933
None	Storage (b)				0	
2000	Storage (b)	13	1,220	100	1,220	1,220

*no values listed in 1996.

OIL SPILL RESPONSE ORGANIZATIONS

Name	Clean Seas		
Address	1180 Eugenia Place, Suite 204		
City	Carpinteria		
State	CA	Zip	93013

Phone	805-684-3838	Fax	805-684-2650	
Other	dwaldron@cleanseas.com			
Contact	Darryle Waldron, General Manager		Previous Survey	1996

Members	Sea River Maritime		
	Tesoro		

Comments

Visited office / warehouse on 8 August 2000. An extensive inventory is maintained in the Ventura and Santa Barbara area, and is tracked using a computer-based system. Inspected equipment appears in excellent condition. With Clean Bay and Clean Coastal Waters, they have a pre-approved list of equipment available to members outside their respective areas. This includes transfer to PWS. The Board needs to approve release to non-members. Additional equipment may be available with consent of the Board, USCG and State of CA. Clean Seas can provide 6 persons for out-of-area response. Time to transport material by air is approximately 36 to 48 hours.

Equipment

Boom		Feet	Characteristics	
	Ocean	7,730	>42"	
	Nearshore	16,500	18-42"	
	Harbor/river		<18"	
	Fire boom			
		24,230	Total	
Boom	Clean Seas	24,230	100	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type	
	1,900	2	3,800	Acme 51T	
	5,140	2	10,280	ODI	
	1,350	4	5,400	GT-185 w/out power packs	
	3,000	1	3,000	GT-260 w/out power pack	
	2,500	4	10,000	Lori 2 w/out power packs	
	3,000	1	3,000	Roto 30 w/out power pack	
		14	35,480	Total	
Skimmers	Clean Seas	14	35,480	100	% available for PWS.

On-water Storage		No.	Capacity (b)	Total (b)	Comment
	Barges	1	7,840	7,840	
	Bladder, Small Barge	6	100	600	Rigid Dracone
		1	140	140	Dracone Floating Bag
		2	120	240	Kepner Floating Stor. Bag
		2	28	56	Kepner Floating Stor. Bag
		12		8,876	
Storage	Clean Seas	12		8,876	100 % available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
Secondary (barges)		1		7,840		
Total:		1		7,840	100	% available
Primary (bladders >94b)		9		980		
Total:		9		980	100	% available
Primary (bladders <94b)		2		56		
Total:		2		56	100	% available
Vessels						
Total:		0		0	100	% available
		12		8,876		
Storage	Clean Seas	12		8,876	100	% available

Comparison to Previous Survey Clean Seas

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		29,230	25	7,308	
2000	Boom (ft)		24,230	100	24,230	16,923
1996	Skimmers (b/d)	4	27,770	25	6,943	
2000	Skimmers (b/d)	14	35,480	100	35,480	28,538
1996	Storage (b)*	3	1,036	25	259	
2000	Storage (b)	12	8,876	100	8,876	8,617

*6 Fastanks from '96 subtracted to be consistent with 2000 survey.

OIL SPILL RESPONSE ORGANIZATIONS

Name	Clean Sound Cooperative, Inc.		
Address	1105 13th Street, Suite 100		
City	Everett		
State	WA	Zip	98201-1679

Phone	425-783-0908	Fax	425-783-0939	
Other				
Contact	Roland Miller		Previous Survey	1996

Members	Alaska Tanker	Tesoro	
	Polar Tankers		

Comments

Visited office 23 June 2000. An extensive inventory is located throughout Puget Sound and the Strait of Juan de Fuca. Skimming equipment is mostly integrated within the spill response vessel program. Equipment is tracked / maintained using a computer-based system. Inspected equipment appears in excellent condition. A member company can obtain 25% of equipment for use outside-of-area without Board approval. With approval, the Board can release up to 50% and approve release to non-members. 5-6 persons could be provided to assist an out-of-area response. Time to arrive by air in PWS is approximately 36 - 48 hours, by sea it is approximately 10 days.

Equipment

Boom		Feet	Characteristics	
	Ocean		>42"	
	Nearshore	78,200	18-42"	
	Harbor/river		<18"	
	Fire boom			
		78,200	Total	
Boom	Clean Sound	39,100	50	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type
	21,540	1	21,540	Marco Belt 4ft OSRV
	12,000	1	12,000	JBF 6001 OSRV
	10,764	3	32,292	Marco Belt 2ft OSRV
	6,000	3	18,000	JBF 5001 OSRV
	4,896	1	4,896	Lori LBC-4 OSRV
	3,662	1	3,662	Lori LBC-3
	3,588	4	14,352	Marco Belt 1ft OSRV
	2,914	1	2,914	Desmi 250 OSRV
	2,592	1	2,592	Lori LBC-2 OSRV
	2,057	1	2,057	Desmi 250 OSRV
	754	1	754	Desmi 150
	754	1	754	Poscon 150
	55	2	110	Slickbar Slurp
	48	2	96	OMI 14E
		23	116,019	Total
Skimmers	Clean Sound	12	58,010	50 % available for PWS.

On-water Storage		No.	Capacity (b)	Total (b)	Comment
	Barges	1	23,000	23,000	

		1	12,000	12,000	
		1	1,960	1,960	
Bladder, Small Barge		1	100	100	Dracone
		3	110	330	Dracone

		7		37,390	
Storage	Clean Sound	4		18,695	50 % available

Storage Breakdown	<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
Secondary (barges)	3		36,960		
Total:	2		18,480	50	% available
Primary (bladders >95b)	4		430		
Total:	2		215	50	% available
Primary (bladders <95b)			0		
Total:	0		0	50	% available
Vessels					
Total:	0		0	50	% available

		7		37,390	
Storage	Clean Sound	4		18,695	50 % available

Comparison to Previous Survey Clean Sound

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		66,300	25	16,575	
2000	Boom (ft)		78,200	50	39,100	22,525
1996	Skimmers (b/d)	5	*	25		
2000	Skimmers (b/d)	12	58,010	50	29,005	29,005
1996	Storage (b)	1	460	25	115	
2000	Storage (b)	4	37,390	50	18,695	18,580

*skimmer capacity not listed in 1996.

OIL SPILL RESPONSE ORGANIZATIONS

Name	East Asia Response Limited (EARL)		
Address	2 Jalan Samulan		
City	Singapore		
Country	Singapore	Code	629120

Phone	011-65-266-1566	Fax	011-65-266-2312	
Other	www.earl.com.sg			
Contact	Ms. Alicia Ching	admin@earl.com.sg	Previous Survey	1996

Members	Alaska Tanker		

Comments

Equipment list received August 2000. Equipment is packaged for immediate transport.
 A C-130 is on 24-hour standby and can carry 15 ton payload. Including stops, flight to Valdez is estimated at 39 hours. Client needs to sign formal agreement before resources will be released.
 EARL has agreement with OSRL, and primarily covers East Asia area.

Equipment

<i>Boom</i>		<i>Feet</i>	<i>Characteristics</i>	
	Ocean	6,200	>42"	10x200m sectionsRo-Boom 1500 (50")
	Ocean	2,976	>42"	16x60m Troil Boom Concave 1500 HD (60")
	Nearshore	2,325	18-42"	3x250m Hi Sprint 950 Rapid (38")
	Nearshore	6,200	18-42"	40x50m Sea Curtain foam filled (41")
	Nearshore	4,960	18-42"	8x200m SeaSentinel Inshore (29")
	Nearshore	4,960	18-42"	96 SeaSentinel inflatable 10,20m lengths
	Harbor/river	2,170	<18"	Shoreguardian Beach Sealing 10,20,25 m
	Fire boom			
		29,791	Total	
Boom	EARL	29,791	100	% estimate of availability for PWS.

<i>Skimmers</i>	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>
	4850	2	9,700	Ro Skim with Ro-Boom (485 b/hr)
	25000	2	50,000	Marflex sweeping arm (2500 b/hr)
	3150	5	15,750	Pharos Marine GT-185 weir hopper (315 b/hr)
	3500	2	7,000	Vikoma Seaskimmer 50 disc (350 b/hr)
	1800	2	3,600	Vikoma Seawolf MK2 disc (180 b/hr)
	780	4	3,120	Vikoma T18 disc (78 b/hr)
	780	8	6,240	Vikoma T12 disc (78 b/hr)
	4210	1	4,210	Vikoma SeaDevil viscous (421 b/hr)
	3570	1	3,570	ORS AB WP 1-30 heavy oil (137 b/hr)
	650	2	1,300	Oil Mop Unit (65 b/hr)
	403	6	2,419	Delta Skimmer (12ton/hr)
		35	106,909	Total
Skimmers	EARL	35	106,909	100 % available for PWS.

<i>On-water Storage</i>	<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Barges				
Bladder, Small Barge	1	3,500	3,500	Unitor Oil Bay (500 m3)

		2	1,400	2,800	Unitor (200 m3)	
		3	700	2,100	Unitor (100 m3)	
		12	12	143	Dunlop Pillow (500 gal)	
		18		8,543		
Storage	EARL	18		8,543	100	% available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
Secondary (barges)		0		0		
Total:		0		0	100	% available
Primary (bladders >94b)		6		8,400		
Total:		6		8,400	100	% available
Primary (bladders <94b)		12		143		
Total:		12		143	100	% available
Vessels						
Total:		0		0	100	% available
		18		8,543		
Storage	EARL	18		8,543	100	% available

Comparison to Previous Survey EARL

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		32,857	50	16,429	
2000	Boom (ft)		29,791	100	29,791	13,363
1996	Skimmers (b/d)	23	51,980	50	25,990	
2000	Skimmers (b/d)	35	106,909	100	106,909	80,919
1996	Storage (b)	12	8,849	50	4,425	
2000	Storage (b)*	18	8,543	100	8,543	4,118

* Ro Tank system is not included in 2000 survey (63 b capacity).

OIL SPILL RESPONSE ORGANIZATIONS

Name	Foss Environmental Services		
Address	7440 West Marginal Way South		
City	Seattle		
State	WA	Zip	98108

Phone	206-768-1458	Fax	
Other	Emergency Line: 1-800-337-7455		
Contact	Paul Gallagher	Stephanie Barton	Previous Survey 1996

Members	Polar Tankers		
	Tesoro		

Comments

Foss Environmental maintains equipment in various locations throughout the West Coast, including Seattle, Tacoma, Portland, San Francisco, San Diego, Bellingham, Anacortes, Neah Bay, Port Angeles, and others. Some equipment is stored by contractors.
Because of agreements in place, 100% of equipment could be transported to PWS if needed.
Equipment is palletized and ready for air transport, estimated at 36 to 48 hours to get to Valdez.
Transport of barges and vessels by sea would take and estimated 10 days.

Equipment

<i>Boom</i>		<i>Feet</i>	<i>Characteristics</i>
	Ocean		>42"
	Nearshore	1,000	18-42" Seattle
	Nearshore	12,500	18-42" Fence, Slikbar 24", Alameda
	Harbor/river	39,100	<18" In Puget Sound area.
	Harbor/river	31,050	<18" In Portland area
	Harbor/river	28,000	<18" In San Francisco area
	Harbor/river	6,000	<18" San Diego
	Fire boom		
		117,650	Total
Boom	Foss Environ.	94,120	80 % estimate of availability for PWS.

<i>Skimmers</i>	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>
	3679	2	7,358	Belt - vessel, Marco / 1C, Seattle
	2400	1	2,400	Brush, Lamor/OPC2, Seattle
	981	3	2,943	Disk, Morris/MI-30, Seattle
	96	2	192	Disk, Omni/MKII-4, Seattle
	311	1	311	Rop mop, Omni/MKII-9C, Seattle
	1200	1	1,200	Vacuum, Marco/VS50, Seattle
	411	5	2,055	Vacuum, Vac-U-Max, Seattle
	3786	2	7,572	Weir, Desmi 250, Port Angeles
	514	2	1,028	Weir, Douglas 2" Pt. Townsend & Seattle
	514	2	1,028	Weir, Douglas 3" Oelo, Seattle
	3679	2	7,358	Belt - vessel, Marco / 1C, Portland, Astoria
	2400	1	2,400	Brush, Lamor/OPC2, Aberdeen
	3600	2	7,200	Brush-weir, AquaGuard RBS-10, Portland, Ast.
	2280	2	4,560	Disc, Vikoma/12K, Portland
	48	2	96	Rope mop, Omni/MKI-4E, Portland
	288	1	288	Rope mop, CSI II-A3, Portland

96	1	96	Rope mop, Omni/MKII-4VE, Portland
48	1	48	Rope mop, Abasco-14G, Astoria
411	2	822	Vacuum, Vac-U-Max, Portland
719	5	3,595	Weir, Douglas SkimPak, Portland
3679	1	3,679	Belt - vessel, Marco / 1C, Alameda
3223	1	3,223	Belt - vessel, JBF Dip 3001, Alameda
2280	1	2,280	Disc, Vikoma/12K, Alameda
1056	1	1,056	Foilex, TDS-150, Alameda
411	3	1,233	Vacuum, Vac-U-Max, Alameda
719	1	719	Weir, 2" OLEO, Alameda
719	4	2,876	Weir, 2" Skimpak, Alameda
1458	3	4,374	Weir, 3" Skimpak, Alameda
274	1	274	Disc, Vikoma Kebab 600, San Diego
981	1	981	Disc, Morris MI-30, San Diego
96	1	96	Rope mop, Omi MKII-4, San Diego
1458	2	2,916	Weir, Skimpak 18000, San Diego
719	1	719	Weir, Skimpak 4200, San Diego

	61	76,976	Total	
Skimmers	Foss Environ.	49	61,581	80 % available for PWS.

On-water Storage		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Barges	1	14,999	14,999	BMC-10, Puget Sound	
	2	11,900	23,800	Foss185, Puget Sound	
	1	26,100	26,100	Foss248, Puget Sound	
	1	45,500	45,500	Foss286, Puget Sound	
	1	19,000	19,000	BMC-3, Portland	
	1	5,580	5,580	BMC-4 Portland	
	1	10,000	10,000	BMC-7, Portland	
	1	11,900	11,900	Foss 185-P1, Portland	
	1	5,000	5,000	Trident, Alameda	
	1	25,000	25,000	Dusk, Richmond	
	1	21,100	21,100	Oiler, Richmond	
	1	17,254	17,254	San Pedro, Richmond	
	1	21,403	21,403	Foss 111, Richmond	
Bladder, Small Barge	1	476	476	CanflexDLE, Port Angeles	
	12	24	288	CanflexDLE-4, Puget Snd.	
	9	24	216	CanflexDLE-4, Portland	
	3	24	72	CanflexDLE-4, Alameda	

	39		247,688	
Storage	Foss Environ.	31.2	198,151	80 % available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Secondary (barges)		14		246,636	
Total:		11		197,309	80 % available
Primary (bladders >94b)		1		476	
Total:		1		381	80 % available
Primary (bladders <94b)		24		576	
Total:		19		461	80 % available
Vessels					
Total:		0		0	80 % available

	39		247,688	
Storage	Foss Environ.	31	198,151	80 % available

Comparison to Previous Survey Foss Environ.

<i>Year</i>	<i>Item</i>	<i>No. Avail.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		103,000	100	103,000	
2000	Boom (ft)		117,650	80	94,120	-8,880
1996	Skimmers (b/d)*	51	4,699	100	4,699	
2000	Skimmers (b/d)	49	61,581	80	49,265	44,566
1996	Storage (b)	28	**	100		
2000	Storage (b)	31	247,688	80	198,151	198,151

**not provided in 1996.

OIL SPILL RESPONSE ORGANIZATIONS

Name	IT Corporation		
Address	P.O. 551		
City	Findlay		
State	OH	Zip	45840

Phone	419-425-6097	Fax	419-425-6373		
Other	rweber@theitgroup.com; 419-425-6100				
Contact	Rob Weber / John Sifort		Previous Survey	1996	

Members	Chevron		

Comments

IT has storage facilities throughout the continent U.S. containing boom (200 to a maximum of almost 6000 ft) and skimmers.
Locations are Findlay OH, St. Paul MN, Pittsburg, Houston, New York, Windsor NJ, Pleasanton CA Covington GA, Clemont FL, Hopkinton MA, Glen Allen VA and Miami FL.
They report that they have over \$100 million worth of pollution-response equipment and are able to mobilize a substantial work force.
An estimated 80% of equipment could be transferred and arrive within 72 hours.

Equipment

Boom		<i>Feet</i>	<i>Characteristics</i>	
	Ocean		>42"	
	Nearshore	14,500	18-42"	Various locations
	Harbor/river		<18"	
	Fire boom			
		14,500	Total	
Boom	IT Corp	11,600	80	% estimate of availability for PWS.

Skimmers	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>	
	50	11	550	Type not provided, 50 b/day assumed.	
		11	550	Total	
Skimmers	IT Corp	9	440	80	% available for PWS.

On-water Storage		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
	Barges	0			
	Bladders	0			
		0		0	
Storage	IT Corp	0		0	80 % available

Storage Breakdown	<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
Secondary (barges)	0		0		
Total:	0		0	80	% available
Primary (bladders >94b)	0		0		
Total:	0		0	80	% available
Primary (bladders <94b)	0		0		

Total:	0		0	80	% available
Vessels					
Total:	0		0	80	% available
	0		0		
Storage	IT Corp	0	0	80	% available

Comparison to Previous Survey

IT Corp

<i>Year</i>	<i>Item</i>	<i>No.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)		4,000	100	4,000	
2000	Boom (ft)		14,500	80	11,600	7,600
1996	Skimmers (b/d)	7	3,566	100	3,566	
2000	Skimmers (b/d)	9	440	80	352	-3,214
1996	Storage (b)	6	144	100	144	
2000	Storage (b)	0	0	80	0	-144

OIL SPILL RESPONSE ORGANIZATIONS

Name	Marine Spill Response Corporation (MSRC)		
Address	455 Spring Park Place, Suite 200		
City	Herndon		
State	VA	Zip	20170

Phone	703-326-5611	Fax	703-326-5660	
Other	do'donovan@msrc.org			
Contact	Doug O'Donovan, Technical Services Manager		Previous Survey	1996

Members	Alaska Tanker	Sea River Maritime	
	Chevron	Tesoro	

Comments

Office / warehouse visits: 22 June - NW, 3 July - NE, SW 8 August; headquarters: 6 July.
 MSRC has sufficient inventory to enable large equipment release to PWS. Equipment is available to members of Marine Preservation Assoc (MPA); non-members and USCG must contract individually.
 Responses to PWS incident will be in accordance with applicable law and not result in invalidating customers response plan within an operational area. The equipment list below is pre-identified by MSRC as immediately available for fly-away. Equipment is tracked using sophisticated maintenance program and appears in excellent condition. Equipment is stored ready for transport and is available from numerous sites in the continental US including Hawaii and the US Virgin Islands.
 MSRC has agreements with air transport and trucking companies for equipment movement, some of which was transported to Valdez for a 1999 exercise; the estimated time to arrive is 48 hours.

Equipment

<i>Boom</i>		<i>Feet</i>	<i>Characteristics</i>	
	Ocean		>42"	
	Nearshore	13,000	18-42"	
	Harbor/river		<18"	
	Fire boom			
		13,000	Total	
Boom	MSRC	13,000	100	% estimate of availability for PWS.

<i>Skimmers</i>	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>	
	3,017	4	12,068	Desmi	
	15,840	3	47,520	Stress	
	1,371	1	1,371	GT-185	
		8	60,959	Total	
Skimmers	MSRC	8	60,959	100	% available for PWS.

<i>On-water Storage</i>	<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Barges				
Bladders	14	500	7,000	Towable storage bladder
	14		7,000	
Storage	MSRC	14	7,000	100 % available

<i>Storage Breakdown</i>	<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Secondary (barges)	0		0	
Total:	0		0	100 % available

Primary (bladders >94b)	14		7,000		
Total:	14		7,000	100	% available
Primary (bladders <94b)	0		0		
Total:	0		0	100	% available
Vessels					
Total:	0		0	100	% available
	14		7,000		
Storage	MSRC	14	7,000	100	% available

Comparison to Previous Survey

MSRC

Year	Item	No.	Length / Capacity	% est. Available	PWS Avail.	Gain/Loss
1996	Boom (ft)		300,000	50	150,000	
2000	Boom (ft)		13,000	100	13,000	-137,000
1996	Skimmers (b/d)	57	414,860	50	207,430	
2000	Skimmers (b/d)	8	60,959	100	60,959	-146,471
1996	Storage (b)	42	59,500	50	29,750	
2000	Storage (b)	14	7,000	100	7,000	-22,750

Note: 1996 values include 100% of other regions as well as West Coast.

OIL SPILL RESPONSE ORGANIZATIONS

Name	Oil Spill Response, Ltd. (OSRL)		
Address	Lower William Street		
City	Northam, South Hampton F01 1Qe		
Country	England		

Phone	011-44-23-8033-1551	Fax	011-44-23-8033-1972
Other	dneilson@osrl.co.uk; website: www.osrl.co.uk		
Contact	David Neilson	Previous Survey	1996

Members	Alaska Tanker	Sea River Maritime	

Comments

All members can call on OSRL services. Equipment is loaded on trailers and ready for immediate dispatch. Response time is approximately 72 hours and has been tested in previous SONS drill.

Equipment

Boom		Feet	Characteristics	
	Offshore	8,680	>42"	Roboom Ocean and Vikoma Ocean
	Bay	6,820	18-42"	Roboom Bay 11 sections x 200 m
	Inshore	29,822	<18"	Seasentinal and Shoregardian
	Fire boom			
		45,322	Total	
Boom	OSRL	45,322	100	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type
	6048	2	12,096	Vikoma Weir Boom System (1260 b/hr)
	1680	7	11,760	Vikoma Seaskimmer 50 (350 b/hr)
	403	25	10,080	Vikoma Komara 12K disc (84 b/hr)
	2016	2	4,032	Roskim 60 tons/hr
	336	19	6,384	Vikoma Powervacs (70 b/hr)
	17	1	17	Vikoma Kebab 600 disc (3.5 b/hr)
	403	2	806	OMI Mark II - 9DP Mop Wringer (84 b/hr)
	58	2	115	OMI Mark II - 4D Mop Unit (12 b/hr)
	29	2	58	ORI Jaws 552 - Mop Unit (6 b/hr)
	3427	4	13,709	Trans-Vac 500D (714 b/hr)
	1512	6	9,072	Desmi DS 250 (315 b/hr)
	48	2	96	Scavenger light (10b/hr assumed)
	1512	2	3,024	Walosep W-2 weir hopper (315 b/hr)
	1512	6	9,072	Pharos Marine GT-185 weir hopper 315 b/hr
	96	2	192	Termite weir skimmer (20b/hr assumed)
	336	2	672	Molex Vacuum Unit (70 b/hr)
	1507	2	3,014	Egmopol belt unit (314 b/hr)
	48	1	48	Rotodrum (10b/hr assumed)
	1008	2	2,016	ORSAB WP-1-30 drum type (210 b/hr)
	3019	3	9,058	Sea Devil disc (629 b/hr)
		94	95,321	Total
Skimmers	OSRL	94	95,321	100 % available for PWS.

On-water Storage		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Small Barge, Bladder		4	157	628	Lancer Barge (157 b)
		4	314	1,256	Lancer (314 b)
		1	700	700	Dunlop Dracone 1D5
		1	210	210	Dunlop Dracone 1E
		3	157	471	Pillow Tank (157 b)
		2	81	162	Pillow Tank (81 b)
		3	12	36	Pillow Tank (500 gal)
		18		3,463	
Storage	OSRL	18		3,463	100 % available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Secondary (barges)					
Total:		0		0	100 % available
Primary (bladders >94b)		13		3,265	
Total:		13		3,265	100 % available
Primary (bladders <94b)		5		198	
Total:		5		198	100 % available
Vessels					
Total:		0		0	100 % available
		18		3,463	
Storage	OSRL	18		3,463	100 % available

Comparison to Previous Survey		OSRL				
<i>Year</i>	<i>Item</i>	<i>No.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
1996	Boom (ft)*		45,818	50	22,909	
2000	Boom (ft)		45,322	100	45,322	22,413
1996	Skimmers (b/d)	63	**	50		
2000	Skimmers (b/d)	94	95,321	100	95,321	95,321
1996	Storage (b)***	13	1,497	50	749	
2000	Storage (b)	18	3,463	100	3,463	2,714

***added wrong in 1966, should be 1497 b, not incl. Fast Tanks

OIL SPILL RESPONSE ORGANIZATIONS

Name	National Response Corporation (NRC)		
Address	446 Edwards Avenue		
City	Calverton		
State	NY	Zip	11933

Phone	631-369-8644	Fax	631-369-4908	
Other	mreese@nrcxchange.nrc.com			
Contact	Michael Reese, Vice President Support Services		Previous Survey	

Members	Alaska Tanker	Tesoro	

Comments

Visited home office on 5 July 2000. NRC maintains very large equipment inventory located at various locations through the continental US, Hawaii and the Caribbean. A computer-based system is used to track and maintain equipment. Maintenance is performed by NRC regional mechanics and supervised for quality assurance by regional managers. Equipment appears to be in good condition. NRC maintains a contingency augmentation package of equipment primarily to support West Coast incidents, but would be available if needed by a member or non-member in PWS. This equipment is summarized below. Requests for additional equipment would require approval by NRC, and where applicable, approval of USCG and State authorities. NRC equipment on the West Coast is not included here as it is included under Clean Pacific's equipment.

Equipment

Boom		Feet	Characteristics	
	Ocean		>42"	
	Nearshore	23,100	18-42"	
	Harbor/river		<18"	
	Fire boom			
		23,100	Total	
Boom	NRC	23,100	100	% estimate of availability for PWS.

Skimmers	<i>d-rated b/d</i>	No.	Total b/d	Type	
	24,000	3	72,000	Marco	
	6,857	3	20,571	Guzzler Vacuum Unit	
	5,465	3	16,395	Vikoma Cascade	
		9	108,966	Total	
Skimmers	NRC	9	108,966	100	% available for PWS.

On-water Storage		No.	Capacity (b)	Total (b)	Comment
	Barges				
	Bladders			0	Towable storage bladder
		0		0	
Storage	NRC	0		0	100 % available

Storage Breakdown		No.	Capacity (b)	Total (b)	Comment
	Secondary (barges)				
	Total:	0		0	100 % available
	Primary (bladders >94b)				

Total:	0		0	100	% available
Primary (bladders <94b)					
Total:	0		0	100	% available
Vessels					
Total:	0		0	100	% available
	0		0		
Storage	NRC	0	0	100	% available

Comparison to Previous Survey

NRC

Year	Item	No.	Length / Capacity	% est. Available	PWS Avail.	Gain/Loss
none	Boom (ft)			100	0	
2000	Boom (ft)		23,100	100	23,100	23,100
none	Skimmers (b/d)			100	0	
2000	Skimmers (b/d)	9	108,966	100	108,966	108,966
none	Storage (b)			100	0	
2000	Storage (b)	0	0	100	0	0

OIL SPILL RESPONSE ORGANIZATIONS

Name	SeaPro		
Address	540 Water Street, Suite 201		
City	Ketchikan		
State	AK	Zip	99901

Phone	907-225-7002	Fax	907-247-1117	
Other	brian@seapro.org Toll Free in Alaska: 1-888-225-7676, website: www.seapro.org			
Contact	Brian A. Green		Previous Survey	1996

Members	Tesoro		
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Comments

Seapro maintains equipment stockpiles in Ketchikan / Metlakatla, Craig / Klawock, Wrangel / Petersburg, Kake, Sitka, Juneau, Haines / Skagway and Yakutat.
Equipment is available to members and is mobilized for transport. Arrival time to PWS is approx. 24 to 48 hours.

Equipment

<i>Boom</i>	<i>Feet</i>	<i>Characteristics</i>	
Ocean	600	>42"	Oil Stop Ocean, Ketchikan & Metlakatla
Nearshore	0	18-42"	
Harbor/river	4,820	<18"	Ketchikan & Metlakatla
Harbor/river	4,000	<18"	Craig & Klawock, Wrangel & Petersburg
Harbor/river	9,820	<18"	Kake and Sitka
Harbor/river	3,000	<18"	Pelican / Elfin Cove (1000ft), Gustavus
Harbor/river	6,520	<18"	Juneau
Harbor/river	4,000	<18"	Haines & Skagway, Yakutat
Fire boom	0		
	32,760	Total	
Boom	SeaPro	32,760	100 % estimate of availability for PWS.

<i>Skimmers</i>	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>
	3,710	4	14,842	Lori Bursh (Ketch.Gust., Jun., Haines)
	720	2	1,440	Aguaguard RBS 10/2 (Ketch. Sitka)
	3,984	3	11,952	Foilex TDS-250 (Ketch., Sitka)
	120	4	480	Crucial C-13e Rop Mop (4 locations)
	480	4	1,920	Action Petrol. Multi-Skim 24 (4 locations)
	1,371	1	1,371	GT-185
		18	32,005	Total
Skimmers	SeaPro	18	32,005	100 % available for PWS.

<i>On-water Storage</i>	<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Barges	3	7,000	21,000	Unitor 1000m3 (Ketch.Sitka)
Small Barges, Bladder	8	249	1,992	4 locations
Bladders	3	700	2,100	Unitor 100m3 (Ketch.Sitka)
(in 3 locations)	3	143	429	Canflex Sea Slug 6000gal
(in 5 locations)	5	100	500	Canflex Sea Slug 4200gal
(in 4 locations)	4	79	316	Vikoma towable (78.6b)

OIL SPILL RESPONSE ORGANIZATIONS

Name	U.S. Navy Supervisor of Salvage, ESSM Base Anchorage		
Address	Box 5685		
City	Fort Richardson		
State	AK	Zip	99635-5685

Phone	907-384-2968	Fax	907-384-2969	
Other	email: gstock@essmanc.com			
Contact	Gary Stock, Base Manager		Previous Survey	None

Members	Activated by U.S. Coast Guard		

Comments

Visited 14 July 2000 during which reviewed inventory and toured storage hangers.
Equipment is staged and ready to be moved by road or air.
Can release as much equipment as requested by U.S. Coast Guard.
U.S. Coast Guard equipment is stored in adjacent location.
100% of equipment is calculated for release to PWS.
Most equipment is in Anchorage; small amount is at Kodiak.

Equipment

<i>Boom</i>		<i>Feet</i>	<i>Characteristics</i>	
	Ocean	3,600	>42"	stored in two 8ft x 8ft x 20ft boom vans
	Nearshore	12,800	18-42"	includes 2400ft stored at Eielson AFB.
	Harbor/river	11,900	<18"	
	Fire boom			
		28,300	Total	
Boom	SupSalv ANC	28,300	100	% estimate of availability for PWS.

<i>Skimmers</i>	<i>d-rated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Type</i>
	1371	3	4,113	Marco Class V, 36ft vessel
	1371	1	1,371	Class XI VOSS
	1371	1	1,371	Destroil, Weir Type VOSS
	1920	2	3,840	36" Oil Mop
	211	1	211	Harbor, DESMI MiniMax (44 b/hr)
	466	3	1,398	SkimPak 2" model 4200
	259	1	259	SkimPak 1.5" model 2200
	48	1	48	Oil Mop (10 b/hr)
	466	2	932	Inland System, 2" Skim Pacs 4200
	259	2	518	Inland System, 1.5" Skim Pacs 2200
	211	1	211	Inland System, DESMI MiniMax (44 b/hr)
	480	1	480	Inland System, Drum with Power Unit
	58	1	58	6" Rope Mop, CSI MW-41
		20	14,810	Total
Skimmers	SupSalv ANC	20	14,810	100 % available for PWS.

<i>On-water Storage</i>		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
	Bladders	5	12	60	500 gal. towable flotation
		1	24	24	1000 gal.
		1	36	36	Part of inland system.

		1	1,190	1,190	50,000 gal.
		6	3,238	19,429	136,000 gal. Kodiak
		14		20,738	
Storage	SupSalv ANC	14		20,738	100 % available

Storage Breakdown		<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>	
Secondary (barges)		0		0		
Total:		0		0	100	% available
Primary (bladders >94b)		7		20,619		
Total:		7		20,619	100	% available
Primary (bladders <94b)		7		119		
Total:		7		119	100	% available
Vessels						
Total:		0		0	100	% available
		14		20,738		
Storage	SupSalv ANC	14		20,738	100	% available

Comparison to Previous Survey SupSalv ANC

<i>Year</i>	<i>Item</i>	<i>No.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
none	Boom (ft)				0	
2000	Boom (ft)		28,300	100	28,300	28,300
none	Skimmers (b/d)				0	
2000	Skimmers (b/d)	20	14,810	100	14,810	14,810
none	Storage (b)				0	
2000	Storage (b)	14	20,738	100	20,738	20,738

OIL SPILL RESPONSE ORGANIZATIONS

Name	U.S. Navy Supervisor of Salvage, Outside of Alaska		
Address	2531 Jefferson Davis Highway, Code 00C25		
City	Arlington		
State	VA	Zip	22242-5160

Phone	703-607-2758	Fax	703-607-2757	
Other	healywp@navsea.navy.mil			
Contact	Will Healy	Previous Survey	None	
Others	L. Saner, Williamsburg, VA 757-888-0278			
Others	R.Brochinni, 805-9824463, Pt. Hueneme, CA			

Members	Activated by U.S. Coast Guard		

Comments

Visited: Williamsburg, 7 July, Port Hueneme, 8 August 2000. An extensive inventory is staged and ready for immediate transport, primarily intended to respond to US Navy spill incidents. Equipment release must be requested through and funded by USCG. In the past, 50-100% of equipment has been released during significant incidents. In addition to Anchorage, material is stored in Williamsburg, VA; Port Hueneme and San Diego, CA; and Pearl Harbor, HA. All equipment is air transportable by military heavy lift aircraft. The equipment list below includes all areas except Anchorage which has a separate file in this report.

Equipment

Boom		Feet	Characteristics	
	Ocean	40,000	>42"	stored in two 8ft x 8ft x 20ft boom vans
	Nearshore		18-42"	includes 2400ft stored at Eielson AFB.
	Harbor/river		<18"	
	Fire	350		
		40,350	Total	
Boom	SupSalv Outside	40,350	100	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type	
	1371	20	27,420	Marco Class V, 36ft vessel	
	1371	1	1,371	Class XI VOSS	
	1371	3	4,113	Destroil, Weir Type VOSS	
	1920	1	1,920	36" Oil Mop	
		25	34,824	Total	
Skimmers	SupSalv Outside	25	34,824	100	% available for PWS.

On-water Storage		No.	Capacity (b)	Total (b)	Comment
	Bladders	8	619	4,952	26k Dracone
		5	3,238	16,190	136k Dracone
		3	6,094	18,282	290k Dracone
		6	1,190	7,140	50k (gal) Dracone
		22		46,564	
Storage	SupSalv Outside	22		46,564	100 % available

Storage Breakdown	No.	Capacity (b)	Total (b)	Comment
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Secondary (barges)					
Total:	0		0	100	% available
Primary (bladders >94b)	22		46,564		
Total:	22		46,564	100	% available
Primary (bladders <94b)					
Total:	0		0	100	% available
Vessels					
Total:	0		0	100	% available
			46,564		
Storage	SupSalv Outside	22	46,564	100	% available

Comparison to Previous Survey SupSalv Outside

<i>Year</i>	<i>Item</i>	<i>No.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
none	Boom (ft)				0	
2000	Boom (ft)		40,350	100	40,350	40,350
none	Skimmers (b/d)				0	
2000	Skimmers (b/d)	25	34,824	100	34,824	34,824
none	Storage (b)				0	
2000	Storage (b)	22	46,564	100	46,564	46,564

OIL SPILL RESPONSE ORGANIZATIONS

Name	Unitech of Alaska		
Address	2401 Cinnabar Loop		
City	Anchorage		
State	AK	Zip	99507

Phone	907-949-5142	Fax	907-349-2733	In Alaska	800-649-5859
Other	email: unitech@alaska.net; website: www.alaska.net/-unitech				
Contact	Dave Herrel (George Lorenz, President)			Previous Survey	None

Members	Polar Tankers		
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Comments

Conducted review of office and storage depot on 19 July 2000.
 Primarily Unitech provides man-power and equipment for smaller and inland spills.
 Equipment inventory will vary depending on call-out.
 Attempt is made to have approximately 10,000 ft. river boom available, with associated pumps, land-based portable tanks, and mop machines.
 20% of equipment is considered available for Prince William Sound because of day-to-day response requirements.

Equipment

Boom		Feet	Characteristics	
	Ocean		>42"	
	Nearshore		18-42"	
	Harbor/river	8,000	6-18"	Often working and may not be available.
	Fire boom			
		8,000	Total	
Boom	Unitech	1,600	20	% estimate of availability for PWS.

Skimmers	<i>d-rated b/d</i>	No.	Total b/d	Name
	58	4	232	M41 Rope Mops
		4	232	Total
Skimmers	Unitech	0.8	46.4	20 % available for PWS.

On-water Storage		No.	Capacity (b)	Total
Only land tanks available.			0	
Storage	Unitech	0	0	0 20 % available

Storage Breakdown		No.	Capacity (b)	Total (b)	Comment
Secondary (barges)					
	Total:	0		0	20 % available
Primary (bladders >94b)					
	Total:	0		0	20 % available
Primary (bladders <94b)					
	Total:	0		0	20 % available
Vessels					
	Total:	0		0	20 % available
Storage	Unitech	0		0	20 % available

Comparison to Previous Survey**Unitech**

<i>Year</i>	<i>Item</i>	<i>No.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
none	Boom (ft)				0	
2000	Boom (ft)		8,000	20	1,600	1,600
none	Skimmers (b/d)				0	
2000	Skimmers (b/d)	1	46	20	9	9
none	Storage (b)				0	
2000	Storage (b)	0	0	20	0	0

OIL SPILL RESPONSE ORGANIZATIONS

Name	U.S. Coast Guard, Alaska		
Address	Marine Safety Office, 510 L., St., Suite 100		
City	Anchorage		
State	AK	Zip	99501

Phone	907-271-6700	Fax	907-271-6751	
Other	Rick Janelle (DRAT): Rjanelle@CGAlaska.USCG.mil			
Contact	Captain of the Port		Previous Survey	None

Members			
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Comments

Visited 14 July 2000 during which reviewed inventory and toured storage hangers.
Equipment is stored in depots around the State and is released through MSO Anchorage, MSO Valdez, ISC Kodiak Environmental, MSO Juneau or MSD Ketchikan, ISD Sitka, depending on location.
100% is considered available to PWS.
Material can be transported by air, road or by boat to PWS within hours to days.

Equipment

Boom		Feet	Characteristics	
	Ocean	5,000	>42"	Anchorage; with Univ. Slide Connector
	Nearshore	12,000	18-42"	Kodiak, various sizes and manufacturers
	Harbor/river	3,000	<18"	Valdez, Cordova, Whittier; Kepner Sea Curt.
	Harbor/river	4,400	<18"	Dutch Hbr, Homer, Kodiak
	Harbor/river	7,600	<18"	Juneau, Sitka, Ketchikan, Petersburg
	Fire boom			
		32,000	Total	
Boom	USCG AK	32,000	100	% estimate of availability for PWS.

Skimmers	d-rated b/d	No.	Total b/d	Type
Anch.		1	0	VOSS (Vessof of Opport. Skimming System)
Homer	288	1	288	SkimPac 4200 with 2" pump
Kodiak	288	1	288	SkimPac 4200 with 2" pump
Juneau	288	1	288	SkimPac 4200 with 2" pump
Sitka	288	1	288	SkimPac 4200 with 2" pump
Plate	288	1	288	SkimPac 4200 with 2" pump
		6	1,440	Total
Skimmers	USCG AK	6	1,440	100 % available for PWS.

On-water Storage	No.	Capacity (b)	Total (b)	Comment
Small Barge, Bladder	1	666	666	Lancer Inflatable
	12	24	286	Distributed across AK
	13		952	
Storage	USCG AK	13	952	100 % available

Storage Breakdown	No.	Capacity (b)	Total (b)	Comment
Secondary (barges)				

Total:	0		0	100	% available
Primary (bladders >94b)	1		666		
Total:	1		666	100	% available
Primary (bladders <94b)	12		286		
Total:	12		286	100	% available
Vessels					
Total:	0		0	100	% available
	13		952		
Storage	USCG AK	13	952	100	% available

Comparison to Previous Survey

USCG AK

Year	Item	No.	Length / Capacity	% est. Available	PWS Avail.	Gain/Loss
none	Boom (ft)				0	
2000	Boom (ft)		32,000	100	32,000	32,000
none	Skimmers (b/d)				0	
2000	Skimmers (b/d)	6	1,440	100	1,440	1,440
none	Storage (b)				0	
2000	Storage (b)	13	952	100	952	952

OIL SPILL RESPONSE ORGANIZATIONS

Name	U.S. Coast Guard, Outside Alaska		
Address	Commanding Officer, U.S. Coast Guard National Strike Force Coordination Center		
	1461 North Road Street		
City	Elizabeth City		
State	NC	Zip	27909

Phone	252-331-6000	Fax	252-331-6012	
Other	hhenderson@nsfcc.uscg.mil			
Contact	Harlen Henerson, Mike Crickard		Previous Survey	None

Members	Available upon Request of Federal On-Scene Coordinator.		

Comments

Visited: USCG 13th District DRAT- 20 June; NSTCC- 7 July; Marine Safety Office (MSO) LA/LB- 7 Aug. Pacific Strike Team- 10 August; MSO San Francisco- 11 August 2000.

USCG has an extensive equipment inventory staged throughout the U.S. and territories. Equipment is managed day-to-day by the District or Strike Team to which it is assigned. Overall management of these resources is through the NSFCC to whom the Strike Teams report and who manage maintenance contracts for equipment at Districts and Strike Teams. It is likely that all equipment would be made available to PWS as needed. All equipment is ready for air transport by C-130 or larger aircraft.

The equipment listed below is available from locations *outside* of Alaska, and would take 36 to 48 hours to reach PWS.

Equipment

Boom		Feet	Characteristics
	Ocean	15,536	>42"
	Nearshore		18-42"
	Harbor/river		<18"
	Fire boom		
		15,536	Total

Boom	USCG Outside	15,536	100	% estimate of availability for PWS.
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Skimmers	d-rated b/d	No.	Total b/d	Type
	3017	44	132,748	Desmi Skimmer system
	3017	6	18,102	High speed skimmer
		50	150,850	Total

Skimmers	USCG Outside	50	150,850	100	% available for PWS.
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On-water Storage	No.	Capacity (b)	Total (b)	Comment
Small Barge, Bladder	62	666	41,292	Lancer Inflatable
	6	240	1,440	CANFLEX Sea Slug
			42,732	

Storage	USCG Outside	68	42,732	100	% available
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Storage Breakdown	No.	Capacity (b)	Total (b)	Comment
Secondary (barges)				
Total:	0		0	100 % available
Primary (bladders >94b)	68		42,732	
Total:	68		42,732	100 % available

Primary (bladders <94b)					
Total:		0		0	100 % available
Vessels					
Total:		0		0	100 % available
		68		42,732	
Storage	USCG Outside	68		42,732	100 % available

Comparison to Previous Survey

USCG Outside

<i>Year</i>	<i>Item</i>	<i>No.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
none	Boom (ft)				0	
2000	Boom (ft)		15,536	100	15,536	15,536
none	Skimmers (b/d)				0	
2000	Skimmers (b/d)	50	150,850	100	150,850	150,850
none	Storage (b)				0	
2000	Storage (b)	68	42,732	100	42,732	42,732

OIL SPILL RESPONSE ORGANIZATIONS

Name	VECO Alaska, Inc.		
Address	949 East 36th Avenue	Corporate: 6411 A Street	
City	Anchorage		
State	AK	Zip	99508

Phone	907-762-1500	Fax	907-762-1600	
Other	website: www.VECO.com			
Contact		Previous Survey	None	

Members	Polar Tankers		
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Comments

VECO provides man-power, machinery, management and engineering services.
No booms, skimmers or on-water oil storage are available.

Equipment

Boom	<i>Feet</i>	<i>Characteristics</i>
Ocean		>42"
Nearshore		18-42"
Harbor/river		<18"
Fire boom		
	0	
	0	Total

Boom	VECO	0	100	% estimate of availability for PWS.
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Skimmers	<i>derated b/d</i>	<i>No.</i>	<i>Total b/d</i>	<i>Name</i>
	None	0		
		0		Total
Skimmers	VECO	0	0	100
				% available for PWS.

On-water Storage	<i>No.</i>	<i>Capacity (b)</i>	<i>Total</i>
	None		
	0	0	
Storage	VECO	0	0
			100
			% available

Storage Breakdown	<i>No.</i>	<i>Capacity (b)</i>	<i>Total (b)</i>	<i>Comment</i>
Secondary (barges)				
Total:	0		0	100
Primary (bladders >94b)				
Total:	0		0	100
Primary (bladders <94b)				
Total:	0		0	100
Vessels				
Total:	0		0	100
	0		0	
Storage	VECO	0	0	100
				% available

Comparison to Previous Survey

VECO

<i>Year</i>	<i>Item</i>	<i>No.</i>	<i>Length / Capacity</i>	<i>% est. Available</i>	<i>PWS Avail.</i>	<i>Gain/Loss</i>
none	Boom (ft)				0	

2000	Boom (ft)		0	100	0	0
none	Skimmers (b/d)				0	
2000	Skimmers (b/d)	0	0	100	0	0
none	Storage (b)				0	
2000	Storage (b)	0	0	100	0	0

APPENDIX 2. ANALYSIS OF DATA AND COMPARISONS BETWEEN 1996 AND 2000.

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Table A2-1. Boom (ft), 1996 and 2000 Data.

Year	Organization	No.	Length (ft)	% est. Available	PWS Avail.	Gain/Loss
1996	ACS		155,851	100	155,851	
2000			314,368	100	314,368	158,517
*	AK Poll. Contr.					
2000			0	100	0	0
*	Burrard					
2000			82,000	10	8,200	8,200
1996	CISPRI		77,577	50	38,789	
2000			81,250	100	81,250	42,462
1996	Clean Bay		20,450	20	4,090	
2000			20,450	33	6,749	2,659
1996	Clean Coastal W.		26,102	40	10,441	
2000			29,002	50	14,501	4,060
1996	Clean Pacific		27,100	75	20,325	
2000			25,000	100	25,000	4,675
*	Clean Rivers					
2000			55,300	36	19,908	19,908
1996	Clean Seas		29,230	25	7,308	
2000			24,230	100	24,230	16,923
1996	Clean Sound		66,300	25	16,575	
2000			78,200	50	39,100	22,525
1996	EARL		32,857	50	16,429	
2000			29,791	100	29,791	13,363
1996	Foss Environ.		103,000	100	103,000	
2000			117,650	80	94,120	-8,880
1996	IT Corp		4,000	100	4,000	
2000			14,500	80	11,600	7,600
1996	MSRC		300,000	50	150,000	
2000			13,000	100	13,000	-137,000
1996	OSRL		45,818	50	22,909	
2000			45,322	100	45,322	22,413
*	NRC					
2000			23,100	100	23,100	23,100
1996	SeaPro		300	80	240	
2000			32,760	100	32,760	32,520
*	SupSalv ANC					
2000			28,300	100	28,300	28,300
*	SupSalv Outside					
2000			40,350	100	40,350	40,350
*	Unitech					
2000			8,000	20	1,600	1,600
*	USCG AK					
2000			32,000	100	32,000	32,000
*	USCG Outside					
2000			15,536	100	15,536	15,536
*	VECO					
2000			0	100	0	0

*not included in 1996 report

Subtotal: Available in 1996

549,955

Subtotal: Available in 2000

900,785

Equipment listed in 1996 but not in 2000

1996	ANCON		12,000	50	6,000	
1996	Clean Channel		47,750	50	23,875	
1996	Delaware Bay & River		11,000	10	1,100	
1996	IMS		38,450	60	23,070	
1996	Industrial Cleanup, Inc.		81,000	70	56,700	
1996	Marine Pollution Control		13,000	100	13,000	

Subtotal: Additional Available in 1996 but not in 2000:

117,745

Total Available in 1996:

667,700

Total Available in 2000:

900,785

Loss (-) / Gain from 1996 to 2000:

233,084

% Loss (-) or Gain:

35

Total Available in 2000 (non Governmental):

784,599

Loss (-) / Gain from 1996 to 2000:

116,898

% Loss (-) or Gain:

18

Table A2-2. Skimmer Number & Capacity (b/day), 1996 and 2000 data.

Year	Organization	No. Avail.	Capacity (b/day)	% est. Available	PWS Avail.	Gain/Loss
1996	ACS	146	23,714	100	23,714	
2000		208	122,328	100	122,328	98,614
*	AK Poll. Contr.					
2000		0	0	100	0	0
*	Burrard					
2000		1	1,388	10	139	139
1996	CISPRI	19	46,456	50	23,228	
2000		48	78,667	100	78,667	55,439
1996	Clean Bay	2	19,743	20	3,949	
2000		4	5,430	33	1,792	-2,157
1996	Clean Coastal W	4	6,234	40	2,494	
2000		5	14,746	80	11,796	9,303
1996	Clean Pacific	8	5,500	75	4,125	
2000		11	79,860	100	79,860	75,735
*	Clean Rivers					
2000		24	53,743	65	34,933	34,933
1996	Clean Seas	4	27,770	25	6,943	
2000		14	35,480	100	35,480	28,538
1996	Clean Sound	5	*	25	0	
2000		12	58,010	50	29,005	29,005
1996	EARL	23	51,980	50	25,990	
2000		35	106,909	100	106,909	80,919
1996	Foss Environ.	51	4,699	100	4,699	
2000		49	61,581	80	49,265	44,566
1996	IT Corp	7	3,566	100	3,566	
2000		9	440	80	352	-3,214
1996	MSRC	57	414,860	50	207,430	
2000		8	60,959	100	60,959	-146,471
1996	OSRL	63	**	50	0	
2000		94	95,321	100	95,321	95,321
*	NRC					
2000		9	108,966	100	108,966	108,966
1996	SeaPro	2	5,964	80	4,771	
2000		18	32,005	100	32,005	27,233
*	SupSalv ANC					
2000		20	14,810	100	14,810	14,810
*	SupSalv Outside					
2000		25	34,824	100	34,824	34,824
*	Unitech					
2000		1	46	20	9	9
*	USCG AK					
2000		6	1,440	100	1,440	1,440
*	USCG Outside					
2000		50	150,850	100	150,850	150,850
*	VECO					
2000		0	0	100	0	0

*not included in 1996 report.

Subtotal Available in 1996 389 310,908
Total Available in 2000: 649 1,049,709

Equipment listed in 1996 but not in 2000

no. avail.

1996	ANCON	4	5,652	50	2,826	2
1996	Clean Channel	18	*	50		9
1996	Delaware Bay	3	*	10		0
1996	IMS	7	5,075	60	3,045	4
1996	Indust.Cleanup	60	2,337	70	1,636	42
1996	Mar.Pollut.Contr.	7	38	100	38	7

*not provided in 1996 report.

Subtot. available only '96 4,719 63
Total Available in 1996: 452 315,627
Total Available in 2000: 649 1,049,709

Loss (-) / Gain 1996 to 2000 197 734,082
% Loss (-) or Gain: 44 233

Total Non-Gov. in 2000: 548 847,785
Loss (-) / Gain Non-Gov.: 96 532,158
% Loss (-) or Gain: 21 169

Table A2-3. On-Water Storage (Barrels), 1996 and 2000 data (incl. Secondary Storage).

Year	Organization	No. Avail.	Capacity (b)	% est. Available	PWS Avail.	Gain/Loss
1996	ACS	26	8,849	100	8,849	
2000		66	7,359	100	7,359	-1,490
*	AK Poll. Contr.					
2000		0	0	100	0	0
*	Burrard					
2000		7	26,017	10	2,602	2,602
1996	CISPRI	13	8,849	50	4,425	
2000		30	20,462	100	20,462	16,038
1996	Clean Bay	2	760	20	152	
2000		4	960	33	317	165
1996	Clean Coastal W	2	143	40	57	
2000		5	140	100	140	83
1996	Clean Pacific	42	6,664	75	4,998	
2000		14	54,954	100	54,954	49,956
*	Clean Rivers					
2000		13	1,220	100	1,220	1,220
1996	Clean Seas	3	1,036	25	259	
2000		12	8,876	100	8,876	8,617
1996	Clean Sound	1	460	25	115	
2000		4	37,390	50	18,695	18,580
1996	EARL	12	8,849	50	4,425	
2000		18	8,543	100	8,543	4,118
1996	Foss Environ.	28	**	100	0	
2000		31	247,688	80	198,151	198,151
1996	IT Corp	6	144	100	144	
2000		0	0	80	0	-144
1996	MSRC	42	59,500	50	29,750	
2000		14	7,000	100	7,000	-22,750
1996	OSRL	13	1,497	50	749	
2000		18	3,463	100	3,463	2,714
*	NRC					
2000		0	0	100	0	0
1996	SeaPro	6	20,790	99	20,582	
2000		26	26,337	100	26,337	5,754
*	SupSalv ANC					
2000		14	20,738	100	20,738	20,738
*	SupSalv Outside					
2000		22	46,564	100	46,564	46,564
*	Unitech					
2000		0	0	20	0	0
*	USCG AK					
2000		13	952	100	952	952
*	USCG Outside					
2000		68	42,732	100	42,732	42,732
*	VECO					
2000		0	0	100	0	0

*not included in 1996 report.

Subtotal Available in 1996	195	74,504
Total Available in 2000	379	469,103

Equipment listed in 1996 but not in 2000

1996	ANCON	4	5,652	50	2,826
1996	Clean Channel	18	*	50	
1996	Delaware Bay	3	*	10	
1996	IMS	7	5,075	60	3,045
1996	Indust.Cleanup	60	2,337	70	1,636
1996	Mar.Pollut.Contr.	7	38	100	38

*not provided in 1996 report.

Subtotal only 1996:	99	7,545
Total Available in 1996:	294	82,049
Total Available in 2000:	379	469,103
Loss (-) / Gain to 2000:	85	387,055
% Loss (-) or Gain:	29	472
Total Non-Gov. in 2000:	262	358,117
Loss (-) / Gain to 2000:	-32	276,069
% Loss (-) or Gain:	-11	336

Table A2-4. Details of On-Water Storage (Capacity in Barrels), 2000 data.

Organization	Prim.(>94 b)		Prim(<95 b)		Second.Barge		In Vessel		Total		Verification	
	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity
ACS	10	2,381	44	2,238	12	2,740	0	0	66	7,359	66	7,359
AK Poll. Contr.	0	0	0	0	0	0	0	0	0	0	0	0
Burrard	1	98	6	203	0.3	2,224	0.3	77	7.1	2,602	7	2,602
CISPRI	7	7,037	18	825	5	12,600	0	0	30	20,462	30	20,462
Clean Bay	2	198	2	119	0	0	0	0	3.96	317	4	317
Clean Coastal W.	0	0	5	140	0	0	0	0	5	140	5	140
Clean Pacific	12	1,476	0	0	1	52,878	1	600	14	54,954	14	54,954
Clean Rivers	13	1,220	0	0	0	0	0	0	13	1,220	13	1,220
Clean Seas	9	980	2	56	1	7,840	0	0	12	8,876	12	8,876
Clean Sound	2	215	0	0	2	18,480	0	0	4	18,695	4	18,695
EARL	6	8,400	12	143	0	0	0	0	18	8,543	18	8,543
Foss Environ.	1	381	19	461	11	197,309	0	0	31	198,151	31	198,151
IT Corp									0	0		
MSRC	14	7,000	0	0	0	0	0	0	14	7,000	14	7,000
OSRL	13	3,265	5	198	0	0	0	0	18	3,463	18	3,463
NRC	0	0	0	0	0	0	0	0	0	0	0	0
SeaPro	19	5,021	4	316	3	21,000	0	0	26	26,337	26	26,337
SupSalv ANC	7	20,619	7	119	0	0	0	0	14	20,738	14	20,738
SupSalv Outside	22	46,564	0	0	0	0	0	0	22	46,564	22	46,564
Unitech	0	0	0	0	0	0	0	0	0	0	0	0
USCG AK	1	666	12	286	0	0	0	0	13	952	13	952
USCG Outside	68	42,732	0	0	0	0	0	0	68	42,732	68	42,732
VECO	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal:	206	148,253	136	5,103	35	315,071	1	677	379	469,103	379	469,103

Primary All:	342	153,356
Primary non- Gov.	244	42,775
	<i>No.</i>	<i>Capacity</i>
Available in 1996:	294	82,049

Gain/Loss 1996 to 2000

	<i>No.</i>	<i>Capacity</i>
Primary All:	48	71,307
Primary non- Gov.	-50	-39,274

% Gain/Loss 1996 to 2000

	<i>%</i>	<i>%</i>
Primary All:	16	87
Primary non- Gov.	-17	-48

Prim = Primary Storage Capacity
 Second. = Secondary Storage Capacity (large barges)
 In Vessel = Storage capacity internal to the response vessel.
 Verification = Sum of individual values to confirm Total based on individual worksheets.

Table A2-5. Equipment Needs Based on Outfitting 14 Task Forces.

	<i>Required</i>	<i>Available from Identified Sources</i>		<i>Excess or (-) Shortfall</i>	
		1996	2000	1996	2000
Boom (ft)					
	154,000	667,700	900,785	513,700	746,785
Skimmers (number)					
TOTAL Skimmers (1996 Study, values of Append.6 x Append. 8)					
	84	452	649	368	565
DESIRABLE Skimmers (1996 data provided in text of 1996 Study)					
	84	206		122	
SUITABLE Skimmers (1996 data provided in text of 1996 Study)					
	84	431		347	
DESIRABLE ADJUSTED (% release/ elimination of non-West Coast Skimmers (1996 Study text)					
	84	117		33	
SUITABLE ADJUSTED (% release/ elimination of non-West Coast Skimmers (1996 Study text)					
	84	279		195	
Storage (number)					
TOTAL Storage (1996 Study, values of Append.6 x Append. 8)					
	168	294	379	126	211
PRIMARY INCL. <95b Portable Storage (1996 values listed in Study text).					
	168	209	342	41	174
PRIMARY >95b Portable Storage (1996 values listed in Study text).					
	168	193	206	-25	38
PRIMARYADJUSTED INCL.<95b (% release/ elimination of non-West Coast (1996 values=Study text).					
	168	133	342	-35	174
PRIMARYADJUSTED >95b (% release/ elimination of non-West Coast (1996 values from Study text).					
	168	80	206	-88	38
SECONDARY					
					35

Table A2-6. Boom - Summary by Company.

Organization	Available		Alaska Tanker		Polar Tankers		Chevron		SR/M		Tesoro	
	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity
ACS		314,368		314,368		314,368		314,368		314,368		314,368
AK Poll. Contr.		0				0						0
Burrard		8,200										8,200
CISPRI		81,250						81,250				81,250
Clean Bay		6,749		6,749		6,749				6,749		6,749
Clean Coastal W.		14,501		14,501		14,501				14,501		
Clean Pacific		25,000				25,000						25,000
Clean Rivers		19,908				19,908						19,908
Clean Seas		24,230								24,230		24,230
Clean Sound		39,100		39,100		39,100						39,100
EARL		29,791		29,791								
Foss Environ.		94,120				94,120						94,120
IT Corp		11,600						11,600				
MSRC		13,000		13,000				13,000		13,000		13,000
NRC		23,100				23,100						23,100
OSRL		45,322		45,322		45,322				45,322		
SeaPro		32,760										32,760
SupSalv ANC		28,300										
SupSalv Outside		40,350										
Unitech		1,600				1,600						
USCG AK		32,000										
USCG Outside		15,536										
VECO		0				0						
Subtotal:		900,785		462,831		583,768		420,218		418,170		681,785
Without ACS:		586,417		148,463		269,400		105,850		103,802		367,417

Table A2-7. Skimmer - Summary by Company.

Organization	Available		Alaska Tanker		Polar Tankers		Chevron		SR/M		Tesoro	
	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity
ACS	208	122,328	208	122,328	208	122,328	208	122,328	208	122,328	208	122,328
AK Poll. Contr.	0	0			0	0					0	0
Burrard	1	139									1	139
CISPRI	48	78,667					48	78,667			48	78,667
Clean Bay	4	1,792	4	1,792	4	1,792			4	1,792	4	1,792
Clean Coastal W.	5	11,796	5	11,796	5	11,796			5	11,796		
Clean Pacific	11	79,860			11	79,860					11	79,860
Clean Rivers	24	34,933			24	34,933					24	34,933
Clean Seas	14	35,480							14	35,480	14	35,480
Clean Sound	12	29,005	12	29,005	12	29,005					12	29,005
EARL	35	106,909	35	106,909								
Foss Environ.	49	49,265			49	49,265					49	49,265
IT Corp	9	352					9	352				
MSRC	8	60,959	8	60,959			8	60,959	8	60,959	8	60,959
NRC	9	108,966			9	108,966					9	108,966
OSRL	94	95,321	94	95,321	94	95,321			94	95,321		
SeaPro	18	32,005									18	32,005
SupSalv ANC	20	14,810										
SupSalv Outside	25	34,824										
Unitech	1	9			1	9						
USCG AK	6	1,440										
USCG Outside	50	150,850										
VECO	0	0			0	0						
Subtotal:	649	1,049,709	365	428,110	416	533,275	273	262,306	332	327,676	405	633,397
Without ACS:	441	927,381	157	305,782	208	410,947	65	139,978	124	205,348	197	511,069

Table A2-8a. All Primary Storage Units (less and greater than 95 barrels) - Summary by Company.

Organization	Available		AlaskaTanker		Polar Tankers		Chevron		SR/M		Tesoro	
	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity
ACS	54	4,619	54	4,619	54	4,619	54	4,619	54	4,619	54	4,619
AK Poll. Contr.	0	0			0	0					0	0
Burrard	7	301									7	301
CISPRI	25	7,862					25	7,862			25	7,862
Clean Bay	4	317	4	317	4	317			4	317	4	317
Clean Coastal W.	5	140	5	140	5	140			5	140		
Clean Pacific	12	1,476			12	1,476					12	1,476
Clean Rivers	13	1,220			13	1,220					13	1,220
Clean Seas	11	1,036							11	1,036	11	1,036
Clean Sound	2	215	2	215	2	215					2	215
EARL	18	8,543	18	8,543								
Foss Environ.	20	842			20	842					20	842
IT Corp	0	0					0	0				
MSRC	14	7,000	14	7,000			14	7,000	14	7,000	14	7,000
NRC	0	0			0	0					0	0
OSRL	18	3,463	18	3,463	18	3,463						
SeaPro	23	5,337							23	5,337	23	5,337
SupSalv ANC	14	20,738										
SupSalv Outside	22	46,564										
Unitech	0	0			0	0						
USCG AK	13	952										
USCG Outside	68	42,732										
VECO	0	0			0	0						
Subtotal:	342	153,356	115	24,296	128	12,291	93	19,481	111	18,448	184	30,224
Without ACS:	288	148,737	61	19,677	74	7,672	39	14,862	57	13,829	130	25,605

Table A2-8b. Primary Storage (>94 barrels) - Summary by Company.

Organization	Available		AlaskaTanker		Polar Tankers		Chevron		SR/M		Tesoro	
	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity
ACS	10	2,381	10	2,381	10	2,381	10	2,381	10	2,381	10	2,381
AK Poll. Contr.	0	0									0	0
Burrard	1	98									1	98
CISPRI	7	7,037					7	7,037			7	7,037
Clean Bay	2	198	2	198	2	198			2	198	2	198
Clean Coastal W.	0	0	0	0	0	0			0	0		
Clean Pacific	12	1,476			12	1,476					12	1,476
Clean Rivers	13	1,220			13	1,220					13	1,220
Clean Seas	9	980							9	980	9	980
Clean Sound	2	215	2	215	2	215					2	215
EARL	6	8,400	6	8,400								
Foss Environ.	1	381			1	381					1	381
IT Corp	0	0					0	0				
MSRC	14	7,000	14	7,000			14	7,000	14	7,000	14	7,000
NRC	0	0			0	0					0	0
OSRL	13	3,265	13	3,265	13	3,265			13	3,265		
SeaPro	19	5,021							19	5,021	19	5,021
SupSalv ANC	7	20,619										
SupSalv Outside	22	46,564										
Unitech	0	0			0	0						
USCG AK	1	666										
USCG Outside	68	42,732										
VECO	0	0			0	0						
Subtotal:	206	148,253	47	21,459	53	9,136	31	16,418	67	18,845	89	26,006
Without ACS:	196	145,872	37	19,078	43	6,755	21	14,037	57	16,464	79	23,626

Table A2-8c. Primary Storage (<95 barrels) - Summary by Company.

Organization	Available		AlaskaTanker		Polar		Chevron		SR/M		Tesoro	
	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity
ACS	44	2,238	44	2,238	44	2,238	44	2,238	44	2,238	44	2,238
AK Poll. Contr.	0	0									0	0
Burrard	6	203									6	203
CISPRI	18	825					18	825			18	825
Clean Bay	2	119	2	119	2	119			2	119	2	119
Clean Coastal W.	5	140	5	140	5	140			5	140		
Clean Pacific	0	0			0	0					0	0
Clean Rivers	0	0			0	0					0	0
Clean Seas	2	56							2	56	2	56
Clean Sound	0	0	0	0	0	0					0	0
EARL	12	143	12	143								
Foss Environ.	19	461			19	461					19	461
IT Corp	0	0					0	0				
MSRC	0	0	0	0			0	0	0	0	0	0
NRC	0	0			0	0					0	0
OSRL	5	198	5	198	5	198			5	198		
SeaPro	4	316							4	316	4	316
SupSalv ANC	7	119										
SupSalv Outside	0	0										
Unitech	0	0			0	0						
USCG AK	12	286										
USCG Outside	0	0										
VECO	0	0			0	0						
Subtotal:	136	5,103	68	2,837	75	3,155	62	3,063	62	3,067	95	4,218
Without ACS:	92	2,865	24	599	31	917	18	825	18	829	51	1,980

Table A2-9. Available Booms - Summary by Type.

<i>Organization</i>	% Avail.	Ocean Boom	Nearshore	Harbor/River	Fire Boom	Total
		(>42") <i>Feet</i>	(18-42") <i>Feet</i>	(<18") <i>Feet</i>	<i>Feet</i>	<i>Feet</i>
ACS	100	9,800	73,441	212,025	19,102	314,368
AK Poll. Contr.	100	0	0	0	0	0
Burrard	10	600	7,600	0	0	8,200
CISPRI	100	30,650	32,700	11,900	6,000	81,250
Clean Bay	33	1,601	3,168	1,980	0	6,749
Clean Coastal W.	50	3,975	10,526	0	0	14,501
Clean Pacific	100	9,000	16,000	0	0	25,000
Clean Rivers	36	0	18,108	1,800	0	19,908
Clean Seas	100	7,730	16,500	0	0	24,230
Clean Sound	50	0	39,100	0	0	39,100
EARL	100	9,176	18,445	2,170	0	29,791
Foss Environ.	80	0	10,800	83,320	0	94,120
IT Corp	80	0	11,600	0	0	11,600
MSRC	100	0	13,000	0	0	13,000
OSRL	100	8,680	6,820	29,822	0	45,322
NRC	100	0	23,100	0	0	23,100
SeaPro	100	600	0	32,160	0	32,760
SupSalv ANC	100	3,600	12,800	11,900	0	28,300
SupSalv Outside	100	40,000	0	0	350	40,350
Unitech	20	0	0	1,600	0	1,600
USCG AK	100	5,000	12,000	15,000	0	32,000
USCG Outside	100	15,536	0	0	0	15,536
VECO	100	0	0	0	0	0
Subtotal:		145,948	325,708	403,677	25,452	900,785