

PRINCE WILLIAM SOUND OUT-OF-REGION EQUIPMENT SURVEY

FINAL REPORT PRESENTATION TO BOARD OF DIRECTORS

September 23, 2022



Purpose

 Inventory available out-ofregion (OOR) equipment to support spill response in PWS

 Evaluate feasibility of outfitting 14 Nearshore Task Forces with OOR equipment

• Evaluate PWS shippers' contractual access to OOR equipment

Background

- Alaska requires PWS shippers to have sufficient equipment for realistic maximum discharge (546,147 bbl) in shortest time possible
- Periodic OOR equipment surveys since 1995 by PWS shippers and PWSRCAC
- Information on OOR equipment and sources in PWS core plan and shippers' individual C-plans



Equipment Access Agreements

- <u>Direct agreements</u> between a tanker operator and a spill response organization
- Equipment-sharing <u>arrangements</u> to access to global equipment networks
- <u>Ad hoc access</u> to private or government-controlled spill response stockpiles

Direct Agreements

- Contracts or agreements in place with certified PRAC/OSRO to assure access
- In-region and out-of-region equipment
- Equipment listed in contingency plans

PRAC = Primary Response Action Contractor (ADEC) OSRO = Oil Spill Removal Organization (USCG)





Equipment-Sharing Arrangements

- Mutual Aid/MOUs
 - APICOM MOU
 - Alaska OSRO MOU
 - Global Response Network
- Non-binding
 - Parties are entitled to inquire about equipment availability and cost, but are not guaranteed access
 - Parties cannot rely upon agreements to meet oil spill response standards

Ad Hoc Access

- Government stockpiles
- Non-contracted commercial vendors
- No pre-arrangements and no guaranteed access

Equipment Access Matrix

Key: EXAMPLE Direct Contract	ual Acces	s, likely mee	ets 18 AAC	75.445(i) s	tandard.					
= Possible Access	, listed in	plan but no	evidence	of contrac	tual obliga	ation.				
= Commercial or	Governm	ent, no cont	ractual ob	ligation.						
APICOM APICOM MOU AK Alaska OSRO MOU GRN Global Response Network										
	DIRE	CT AGREEM	NTS	1	,	1				
Agreement Between:	Polar Tanker	Andeavor	Crowley	Alaska Tanker	Hilcorp	APSC/ SERVS				
APSC/SERVS ^{AK}						N/A				
ABS Rapid Response										
Alaska Clean Seas APICOM, AK, GRN										
Alaska Ventures										
Ardent America										
ASRC Energy Services										
Alaska Chadux Network APICOM, AK										
Cook Inlet Spill Prevention &										
Response, Inc. АРІСОМ, АК										
Clean Channel Association APICOM										
Clean Gulf Associates APICOM, GRN										
Clean Harbors Co-op APICOM										
Clean Island Council APICOM										
Clean Rivers Co-op APICOM										
Clean Seas APICOM										
Cordova District Fishermen United										
Crowley Maritime Corporation										
СТЕН										
Delaware Bay Co-op APICOM										
Donjon-SMIT										
Edison Chouest Offshore										

Key: = Direct Contractual Access, likely meets 18 AAC 75.445(i) standard.									
= Possible Access, listed in plan but no evidence of contractual obligation.									
= Commercial or Government, no contractual obligation. APICOM APICOM MOU AK Alaska OSRO MOU GRN Global Response Network									
Agreement Between:	Polar	Andeavor	Crowley	Alaska	Hilcorp	APSC/			
Cellecter Maria e Custores	Tanker			Tanker		SERVS			
Gallagner Marine Systems									
Global Diving									
International Bird Rescue									
International Wildlife Research									
J&S Maritime									
Lounik, Inc.									
Marine Pollution Control									
Marine Spill Response									
Corporation GRN									
North Star Terminal and									
Stevedore Co.									
Northern Land Use Research									
Alaska, LLC									
National Response Corporation									
O'Briens Response Management									
OII Spill Response USA/OII Spill									
Response Limited Press, and									
Company									
Company Polaris Applied Sciences									
Oualitach Environmental									
SEAPRO ····									
Stericycle									
SWS Environmental Services									
T&T Salvage									
The Deserver Crewe									
Ine Kesponse Group									
U.S. NAVSUPSALV									
Unitech of Alaska									
Univar									
U.S. Coast Guard (various)									
Valdez Fisheries Development									
Association									
Western Canada Marine									
Response Corporation GRN									

Equipment Access Matrix

FUNCTIONAL ANALYSIS OF OUT-OF-REGION TASK FORCES



TYPICAL NEARSHORE STRIKE TEAM FREE-OIL RECOVERY

- 4 Enhanced Recovery Systems
- 8 Boom Towing Vessels
- 8 Skimming Tender Vessels
- 8 Mini Barges (249 bbl capacity)
- 4 Skimmers (Coated/Fuzzy Disc)



Nearshore Task Forces

- 5 In-region
- 14 Out-of-region
- Functional units that require all elements to be present and functioning in order to respond

Table 12.3-8. Out of Region Nearshore Task Forces

Nearshore Task Force	Equipment Per Task Force	
TF 6, 7, and 8	6 ea. GT185/DESMI 250 skimmers or equivalent 7,500 ft boom appropriate for assigned tasks 12 ea. suitable storage devices or equivalent (100 bbl per device)	

OOR Inventory



A Home	Air & Climate	Water & Shorelines	Waste & Toxics	Spills & Clea			
gulations & Permits > Pl	ans & Policies > Contingenc	y planning for oil industry > Worldv	vide Response Resource List				
	World	wide Response	e Resource Li	st			
lans & Policies	The Worldwig	de Response Resource List (WRRL) (contains data on various types	of oil spill response			
Contingency planning for oil industryequipment in the Pacific Northwest. We participate in a steering committee that meets regularly to ensure the list continues to be an effective oil spill response tool.							
Approved contingency p	olan						
noiders		unt to					
Oil chille							

We took OOR Inventory at face value – it is possible that some equipment is over- or underrepresented

🜔 Go to the WRRL database 🕑

 $\mathbf{\Sigma}$

Rule implementation

for oil spills

Geographic response plans

See a map of response equipment in Washington 😋

Regulations & Permits

Research & Data

Blog

Contact L

Using the WRRL to Assemble OOR Task Forces

- 1.2 million feet of boom (Type B-2)
- 564 skimmers (Type S-3)
- 550 marine storage devices (PS-2, PS-3, PS-4)

Assumed 25% or 50% of inventory available to support PWS response

WRRL Database

Welcome to the Worldwide Response Resource List (WRRL). This is an oil spill response equipment database maintained by regional equipment owners and hosted by Genwest Systems, Inc. This list serves as a directory of oil spill response equipment ownership and steady-state location. Its purpose is to provide the response community and regulators with a current listing of response equipment. No guarantees are made or implied regarding actual equipment availability.



Boom Availability

• 105,000 feet boom required for 14 NSTF

- Adequate boom at both 50% and 25% assumptions
- At 25%, Chadux (ACN) noncontracted boom is required

Table 3-2. Availability of Boom (B-2, 18"-42") to outfit 14 Nearshore Task Forces

Source	Feet of B-2 Boom	% of total	Feet of B-2 Boom	%
	(Max Withdrawal		(Max Withdrawal	total
	50%)		25%)	
CISPRI	9,294	9%	4,647	4%
MSRC-CA	53,200	51%	26,600	25%
MSRC-NW	37,330	36%	18,665	18%
ACS	20,129	19%	10,065	10%
MSRC-GULF			4,075	4%
MSRC-ATL			7,498	7%
MSRC-HI			5,835	6%
ACN			31,178	30%
Total Boom Needed	105,000		105,000	
(feet)				
Total Boom Acquired	119,953	114%	108,562	103%
(feet)				

Accessible through contracted organizations

Accessible through listed organizations

Accessible through governmental or commercial organizations

Skimmer Availability

• 84 skimmer units required for 14 NSTF

Adequate skimmers at 50% assumption

• At 25%, require CAN, OSRL, NRC (non-contracted) access

\pm Table 3-3. Availability of Skimmers (PS-3) to outlit 14 Nearshore	iask Force	ces
---	------------	-----

Source	Units	% <u>of</u> total	Units	% <u>of</u> total
	(Max Withdrawal 50%)		(Max Withdrawal 25%)	
CISPRI	12	14%	6	7%
MSRC-CA	17	20%	9	10%
MSRC-NW	5	5%	2	3%
ACS	18	21%	9	11%
MSRC-GULF	9	11%	14	17%
MSRC-ATL	14	17%	7	8%
MSRC-HI	15	17%	7	9%
ACN	28	33%	14	17%
OSRL-USA			9	10%
NRC-NW			3	4%
NRC-CA			5	6%
NRC-HI			1	1%
Total Needed	84 units		84 units	
Total Acquired	89 units	105%	84 units	100%

Accessible through contracted organizations Accessible through listed organizations Accessible through governmental and commercial organizations

Marine Storage Availability

- 168 units (168,000 bbl storage) required for 14 NSTF
- Adequate storage at 50% assumption with noncontracted equipment
- Inadequate storage (56% of total need) at 25% assumption
- Secondary storage may be limiting factor

Table 3-4. Availability (of Storage	(PS-2, F	PS-3,	and PS-4)	to outfit	14 Nearshore	Task Forces
---------------------------	------------	----------	-------	-----------	-----------	--------------	-------------

Source	Units	% <u>of</u>	Barrels	Ĺ	Units	%	Barrels
	(Max	total	(bbl)		(Max	total	(bbl)
	Withdrawal				Withdrawal		
	50%)				25%)		
CISPRI	14	8%	2,851		7	4%	1,426
MSRC-CA	12	7%	4,752		6	3%	2,376
MSRC-NW	8	4%	3,551		4	2%	1,776
ACS	11	7%	5,500		6	3%	2,750
MSRC-GULF	10	6%	1,991		5	3%	996
MSRC-ATL	16	10%	1,111		8	5%	555
MSRC-HI	9	5%	2,043		5	3%	1,021
ACN	13	8%	3,612		7	4%	1,806
SEAPRO	2	1%	115		1	1%	57
NRC-CA	15	9%	1,458		7	4%	729
NRC-HI	1	1%	100		1	1%	50
NRC-NW	20	12%	1,605		10	6%	803
WCMRC	15	9%	425		7	4%	212
OSRL-USA	13	8%	314		7	4%	157
OSRL-UK	8	4%	2,408		4	2%	1,204
OSRL-Singapore	14	8%	2,401		7	4%	1,201
OSRL-Baharan					1	1%	314
Navy-SUPSALV					1	1%	619
Navy-WA					4	2%	2,019
Total Needed	168 units		16,800 bbl		168 units		16,800 bbl
Total Acquired	178 units	106%	34,216 bbl		94 units	56%	20,060 bbl

Accessible through contracted organizations Accessible through listed organizations Accessible through governmental and commercial organizations

Other Considerations

- Ancillary equipment
- Compatibility of NSTF elements from different vendors/sources
- Trained responders
- Logistical support
- Offloading storage devices/down time

Key Take-aways

- There is a lot of OOR equipment to support PWS response
- However, there are uncertainties and limitations
 - Access to non-contracted equipment
 - Constraints to releasing full inventory (regulatory, other)
 - Need hundreds of vessels and thousands of responders
 - Not enough primary storage





Recommendations

- Additional research into contractual relationships and access for networks, MOUs, government and vendors
 - Incorporate into C-plan reviews
- Tabletop exercise focused on OOR equipment access and assemblage of NSTF
- Evaluate logistical and operational support components to equip 14 NSTF



Questions and Discussion

