



Bureau of Safety and Environmental Enforcement

Arctic Oil Spill Response Equipment Database

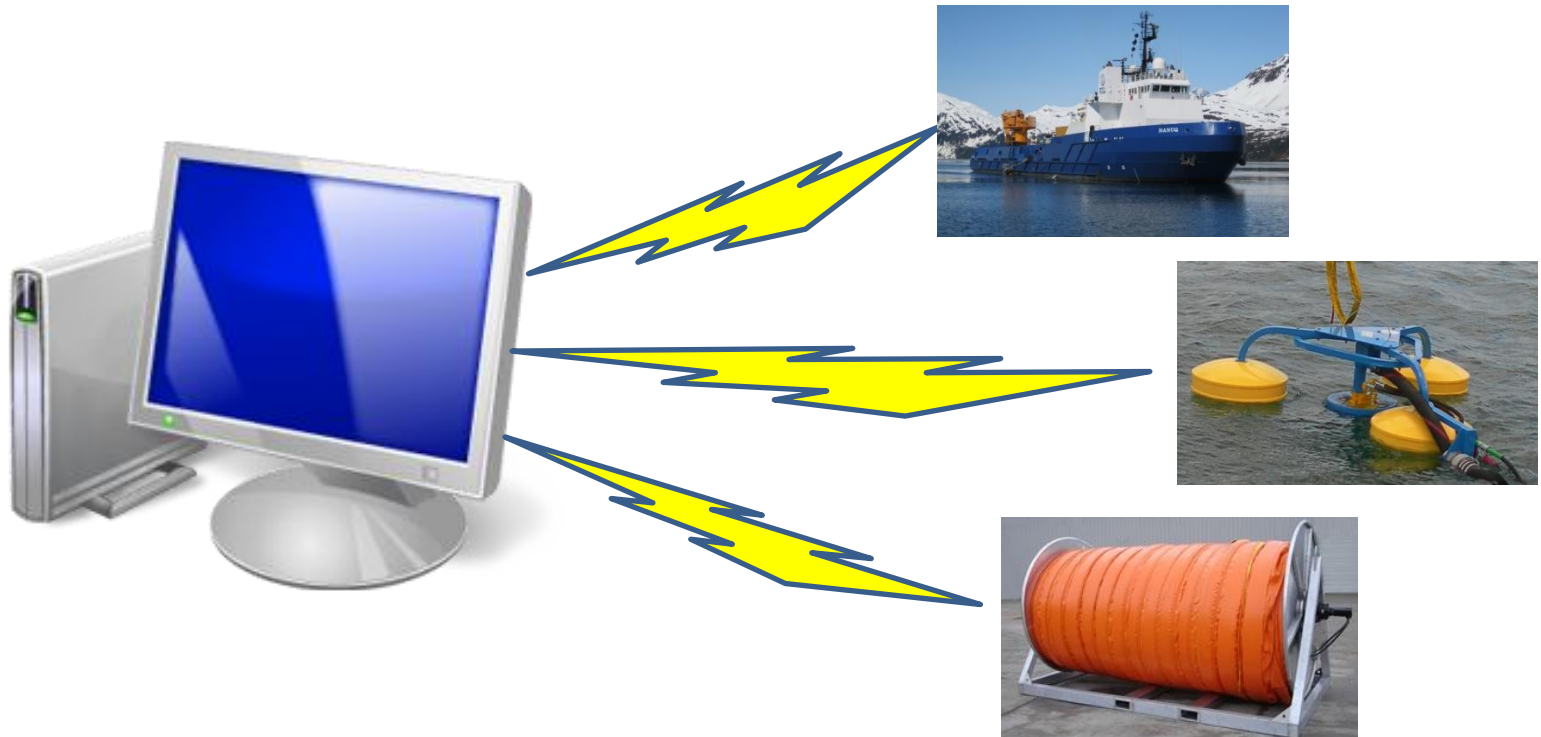
Steve Pearson

October 12, 2017

“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”

Purpose

Develop a stand-alone, spatially searchable database using off-the-shelf software that would contain all Arctic specific oil spill response equipment, vessels, and resources located in each Arctic nation. The database should be easily uploaded to GIS-enabled applications.



Desired Outcomes

- Develop a tool that could support and enhance:
 - Contingency planning,
 - Environmental risk assessments,
 - Response exercises,
 - Resource allocation analysis, and
 - International requests for assistance.

Workgroup



Canada

Lynn Denis



Denmark

Nils Westergaard



Finland

Heli Haapasaari



Greenland

Nils Westergaard



Iceland

Olafur A. Jonsson



Norway

Ole-Kristian Bjerkemo



Sweden

Bernt Stedt



United States

Steve Pearson (Project Lead)

Equipment Categories* for Tier 3 Spills

- Aircraft
- Vessels (skimming)
- Vessels (non-skimming)
- Temporary storage
- Boom
- *In situ* burning
- Pumps
- Dispersant
- Subsea response



*Database used IMO's **Draft Guidelines on International Offers of Assistance in Response to a Marine Oil Pollution Incident** to establish lexicon of terms used and categories of equipment listed.

Project Timeline

DEC 2014

- EPPR approved project

MAR - SEP 2015

- Award Contract

OCT - DEC 2015

- Equipment Surveys

JUL 2016

- Prototype Database

SEP 2016

- Final database

DEC 2016

- EPPR approved database

May 2017

- Arctic Council Ministerial approved

Project Deliverables

- Arctic Response Equipment Database
- Query Tool and User Guide
- Integrate into a Common Operating Picture (Arctic ERMA)

Database - Welcome Screen


EPPR Emergency Prevention Preparedness and Response

Search:


- COUNTRY
 - Canada
 - Denmark
 - Finland
 - Greenland
 - Iceland
 - Norway
 - Russia
 - Sweden
 - United States (Alaska)
- EQUIPMENT TYPE
 - Aircraft
 - Boom
 - Communication Equipment
 - Dispersant
 - In Situ Burn
 - Oily Water Separator
 - Personnel
 - Pump
 - Remote Sensing and Tracking
 - Shoreline Cleaner
 - Skimmer
 - Sorbent Type
 - Specialist Vehicle
 - Subsea Equipment
 - Temporary Storage
 - Vessel (Non-Skimming)
 - Vessel (Skimming)
- MANUFACTURER
- OWNER
- RESPONSE TYPE

- Aircraft (8)
- Boom (502)
- Communication Equipment (0)
- Dispersant (4)
- In Situ Burn (0)
- Oily Water Separator (2)
- Personnel (45)
- Pump (124)
- Remote Sensing and Tracking (0)
- Shoreline Cleaner (69)
- Skimmer (433)
- Sorbent Type (204)
- Specialist Vehicle (28)
- Subsea Equipment (0)
- Temporary Storage (288)
- Vessel (Non-Skimming) (171)
- Vessel (Skimming) (56)

Arctic Spill Response Database Query Tool



ARCTIC COUNCIL



The database was developed under the direction of the Arctic Spill Response Database Working Group whose members are:

- Ole-Kristian Bjerkemo**, Senior Advisor, Norwegian Coastal Administration
- Lynn Denis**, National Asset Class Manager, Environmental Response, Canadian Coast Guard
- George Graettinger**, National Oceanic and Atmospheric Administration, USA
- Heli Haapasalo**, Senior Advisor, Pollution Response Unit, Finnish Environment Institute
- Olafur A. Jonsson**, Director, Environment Agency of Iceland
- Steve Pearson**, Bureau of Safety and Environmental Enforcement, USA
- Bernt Stedt**, Swedish Coast Guard (Kustbevakningen)
- Nils Westergaard**, Joint Arctic Command Denmark

Database - Main Screen

EPPR Emergency Prevention Preparedness and Response

A Working Group of the Arctic Council

Search:

- COUNTRY**
 - Canada
 - Denmark
 - Finland
 - Greenland
 - Iceland
 - Norway
 - Russia
 - Sweden
 - United States (Alaska)
- EQUIPMENT TYPE**
 - Aircraft (8)
 - Boom (502)
 - Communication Equipment (3)
 - Dispensant (4)
 - In Situ Burn (0)
 - Oily Water Separator (2)
 - Personnel (45)
 - Pump (124)
 - Remote Sensing and Tracking (0)
 - Shoreline Cleaner (89)
 - Skimmer (433)
 - Sorbent Type (204)
 - Specialist Vehicle (28)
 - Subsea Equipment (0)
 - Temporary Storage (288)
 - Vessel (Non-Skimming) (171)
 - Vessel (Skimming) (56)
- MANUFACTURER**
- OWNER**
- RESPONSE TYPE**

(1934) records found

Clear Filters

Export Data

Query – Finland/Boom

EPPR Emergency Prevention Preparedness and Response A Workin

Search:

COUNTRY

- Canada
- Denmark
- Finland
- Greenland
- Iceland
- Norway
- Russia
- Sweden
- United States (Alaska)

EQUIPMENT TYPE

- Aircraft (2)
- Boom (22)
- Boom
- Communication Equipment
- Dispersant
- In Situ Burn
- Oily Water Separator
- Personnel
- Pump
- Remote Sensing and Tracking
- Shoreline Cleaner
- Skimmer
- Sorbent Type
- Specialist Vehicle
- Subsea Equipment
- Temporary Storage
- Vessel (Non-Skimming)
- Vessel (Skimming)

MANUFACTURER

- Dispersant (0)
- In Situ Burn (0)
- Oily Water Separator (0)

Name	Description	Equipment Sub Type Name	Equipment Tasking Description	Boom Height Centimeters	Boom Height Inches	Manufacturer
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	51.18	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Desmi
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Desmi
Highseaboom 2000	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Lamor
Highseaboom 1500	Inflatable	Inflatable	Offshore/near-shore/inland	150.00	59.06	Desmi
Highseaboom 2000	Inflatable	Inflatable	Offshore/near-shore/inland	200.00	78.74	Lamor
Highseaboom 2000	Inflatable	Inflatable	Offshore/near-shore/inland	200.00	78.74	Desmi
Highseaboom 2000	Inflatable	Inflatable	Offshore/near-shore/inland	200.00	78.74	Lamor
Highseaboom 2000	Inflatable	Inflatable	Offshore/near-shore/inland	200.00	78.74	Lamor
HalfRO-Boom 2000	Heavy Duty Oil Containment Boom	Inflatable	Ocean	200.00	78.74	DESME
HalfRO-Boom 1500	Heavy Duty Oil Containment Boom	Inflatable	Ocean	150.00	59.05	DESME
HyJetRO-Boom 2000	Heavy Duty Oil Containment Boom	Inflatable	Ocean	200.00	78.74	DESME
LeftRO-Boom 1500	Heavy Duty Oil Containment Boom	Inflatable	Ocean	150.00	59.05	DESME
MenkarhusLamor FOB 1500	Foam Filled Oil Boom	Inflatable	Ocean	150.00	59.05	Lamor

Query – Download

****FOR OFFICIAL USE ONLY****

SKIMMER (Filtered export provided by the Arctic Spill Response Database Query Tool v1.01)

Filter Criteria: Country - United States (Alaska)

This draft report has not been reviewed by BSEE, nor has it been approved for publication. Approval, when given, does not signify that the contents necessarily reflect the views and policies of the Bureau, nor does mention

Equipment Sub Type Name	Owner	Manufacturer	Skimmer Manufacturer URL	Skimmer Model Name Number	Skimmer Capacity Barrels Per Hr	Skimmer
Brush skimmer	ASRC Energy Services	LAMOR	http://www.lamor.com	HK 2 Lomor Brush Skimmer	220	35
Brush skimmer	Alyeska Pipeline Service	DESMI	http://www.desmi.com	Helix	131	21
Brush skimmer	SEAPRO	Action Petroleum	http://www.actionpetroleum.com	Multi Skimmer Model 24	100	16
Brush skimmer	SEAPRO	Action Petroleum	http://www.actionpetroleum.com	Multi Skimmer Model 24	100	16
Brush skimmer	SEAPRO	Action Petroleum	http://www.actionpetroleum.com	Multi Skimmer Model 24	100	16
Brush skimmer	SEAPRO	Aqua-Guard	http://www.seapro.com	Aquaguard RBS 10/2	150	24
Brush skimmer	SEAPRO	LORI (LUNDIN OIL RECOVERY INC. AB)	http://www.seapro.com	LORI Brush Skimmer HK 3-3.5	775	124
Brush skimmer	SEAPRO	Action Petroleum	http://www.actionpetroleum.com	Multi Skimmer Model 24	100	16
Brush skimmer	SEAPRO	LORI (LUNDIN OIL RECOVERY INC. AB)	http://www.seapro.com	LORI Brush Skimmer HK 3-3.5	775	124
Brush skimmer	SEAPRO	LORI (LUNDIN OIL RECOVERY INC. AB)	http://www.seapro.com	LORI Brush Skimmer HK 3-3.5	775	124
Brush skimmer	SEAPRO	LORI (LUNDIN OIL RECOVERY INC. AB)	http://www.seapro.com	LORI Brush Skimmer HK 2-2.5	516	82
Brush skimmer	SEAPRO	LORI (LUNDIN OIL RECOVERY INC. AB)	http://www.seapro.com	LORI Brush Skimmer HK 3-3.5	775	124
Brush skimmer	SEAPRO	LORI (LUNDIN OIL RECOVERY INC. AB)	http://www.seapro.com	LORI Brush Skimmer HK 2-2.5	516	82
Brush skimmer	SEAPRO	LAMOR	http://www.seapro.com	LORI HK2.25 Brush Pack	516	82.03729
Disc skimmer	SEAPRO	LORI (LUNDIN OIL RECOVERY INC. AB)	http://www.seapro.com	LORI Brush Skimmer HK 3-3.5	775	124
Disc skimmer	National Response Corporation	Aqua-Guard	http://www.aquaguard.com		238	38
Disc skimmer	National Response Corporation	ELASTECH, INC.	http://www.elastec.com	X150 Disc Skimmer	958	153
Disc skimmer	UIC Arctic Response Services	ELASTECH, INC.	http://www.elastec.com	TDS-118	300	0
Disc skimmer	SEAPRO	VIKOMA INTERNATIONAL LTD	http://www.seapro.com	Komara 12K Mk2 Skimmer	113	18
Disc skimmer	ASRC Energy Services	VIKOMA INTERNATIONAL LTD	http://www.vikoma.com	DUPLEX	38	7
Disc skimmer	Alaska Chadux Corporation	Aqua-Guard	http://www.aquaguard.com	Aquaguard RBS35b	140	23
Disc skimmer	Alaska Chadux Corporation	CONTAINMENT SYSTEMS	http://www.chadux.com	MW-41 rope mop	10	2
Disc skimmer	Alaska Chadux Corporation	CONTAINMENT SYSTEMS	http://www.chadux.com	MW-41 rope mop	10	2
Disc skimmer	Alaska Chadux Corporation	Aqua-Guard	http://www.aquaguard.com	Aquaguard RBS35b	140	23
Disc skimmer	Alaska Chadux Corporation	CONTAINMENT SYSTEMS	http://www.chadux.com	MW-41 rope mop	10	2
Disc skimmer	Alaska Chadux Corporation	CRUCIAL, INC	http://www.crucial.com	Crucial fuzzy drum 1CD18H-24	73	12
Disc skimmer	Alaska Chadux Corporation	ELASTECH, INC.	http://www.elastec.com		28	5

Boom Dispersant Oily Water Separator Personnel Pump Skimmer Sorbent Type Specialist Vehicle Temporary Storage Vessel Non Skimming Vessel Skimming

Query – Download

****FOR OFFICIAL USE ONLY****

BOOM (Filtered export provided by the Arctic Spill Response Database Query Tool v1.01)

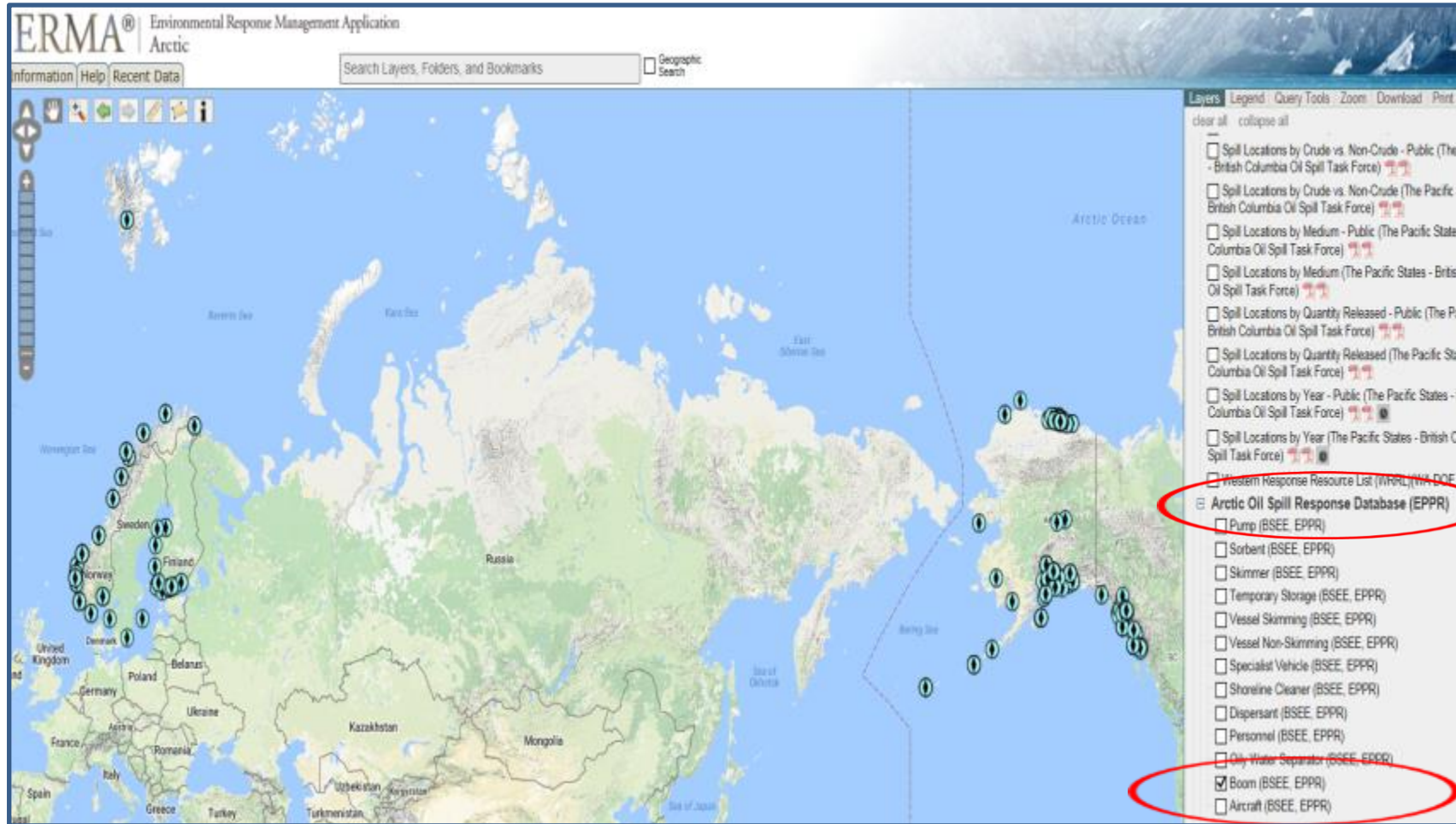
Filter Criteria: Country - Greenland;

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Name	Description	Equipment Sub Type Name	Equipment Tasking Description	Manufacturer	Boom Model Name Number	Boom Manufacturer URL	Boom Height Centimeters	Boom Length Meters	Boom Connector Type
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	200.00	
RO-BOOM COAST	Curtain boom	Curtain Boom	Rivers and canals	Desmi	RO-BOOM COAST	http://www.desm	80.00	160.00	
RO-BOOM RIVER	Curtain boom	Curtain Boom	Rivers and canals	Desmi	RO-BOOM RIVER	http://www.desm		200.00	
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	200.00	
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	300.00	
RO-BOOM RIVER	Curtain boom	Curtain Boom	Rivers and canals	Desmi	RO-BOOM RIVER	http://www.desm		360.00	
RO-BOOM COAST	Curtain boom	Curtain Boom	Rivers and canals	Desmi	RO-BOOM COAST	http://www.desm	80.00	160.00	
RO-BOOM 1000	Curtain boom	Curtain Boom	Offshore/near-shore/inlan	Desmi	RO-BOOM 1000	http://www.desm	100.00	300.00	
Troilboom AFPU 750	Curtain boom	Curtain Boom	Rivers and canals	Desmi	Troilboom AFPU 750	http://www.desm	75.00	200.00	
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	200.00	
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	200.00	
RO-BOOM 1000	Curtain boom	Curtain Boom	Rivers and canals	Desmi	RO-BOOM 1000	http://www.desm	100.00	200.00	
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	200.00	
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	200.00	
RO-BOOM 1000	Curtain boom	Curtain Boom	Offshore/near-shore/inlan	Desmi	RO-BOOM 1000	http://www.desm	100.00	200.00	
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	200.00	
F-1000	Curtain boom	Curtain Boom	Rivers and canals	VIUF Trading	F-1000		100.00	200.00	

Ready

Arctic ERMA – GIS integration



Arctic ERMA – GIS integration

Environmental Response Management Application

Search Layers, Folders, and Bookmarks Geographic Search

Layers Legend

- Pre-Au
- Spill Lc - British C
- Spill Lc British Col
- Spill Lc Columbia
- Spill Lc Oil Spill T
- Spill Lc British Col
- Spill Lc Columbia
- Spill Lc Spill Task
- Wester
- Arctic C
 - Pump
 - Sorb
 - Skims
 - Temp
 - Vess
 - Vess
 - Spec
 - Shore
 - Dispe
 - Persc
 - Oily V
 - Boor
 - Aircr
- Regulat
- DMARA
- Restorati
- Weather,

ID location (lat,lon): 64.54076,-165.51624 - Internet Explorer

<https://erma.noaa.gov/erma/locations/identify/identify.html>

ID location (lat,lon): 64.54076,-165.51624

Add Selected Features To Query Tab (Polygons Only)

Boom (BSEE, EPPR)

gid	name	descrip	equiptype	taskingdes	ht_inches	manufac	modelnum	man_url	lengthft	connectype	ow
286		Curtain	Curtain Boom	Ocean	20.0000000000	OIL STOP, INC.	SFB-18	http://www.chadux.com/wp-content/uploads/boomhbr1.pdf	3000.000000000		Alask Chad Corp
287		Curtain	Curtain Boom	Rivers and canals	10.0000000000	OIL STOP, INC.	SFB-10	http://www.chadux.com/wp-content/uploads/FWboom1.pdf	330.000000000		Alask Chad Corp

Database - Main Screen – User Guide

EPPR Emergency Prevention Preparedness and Response

A Working Group of the Arctic Council

Search:

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 - Sweden
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- EQUIPMENT TYPE**
 - Aircraft (8)
 - Boom (502)
 - Communication Equipment (3)
 - Dispensant (4)
 - In Situ Burn (0)
 - Oil Water Separator (2)
 - Personnel (45)
 - Pump (124)
 - Remote Sensing and Tracking (0)
 - Shoreline Cleaner (89)
 - Skimmer (433)
 - Sorbent Type (204)
 - Specialist Vehicle (28)
 - Subsea Equipment (0)
 - Temporary Storage (288)
 - Vessel (Non-Skimming) (171)
 - Vessel (Skimming) (56)
- MANUFACTURER**
- OWNER**
- RESPONSE TYPE**

(1934) records found

User Guide

Arctic Spill Response Database Query Tool User Guide

Version 1.03

EPPR

Emergency Prevention
Preparedness and Response



A Working Group of the Arctic Council





What We Do / Oil Spill Preparedness

- Administrative Services ▶
- Budget, Planning & Performance ▶
- Safety Enforcement ▶
- Environmental Focuses ▶
- Incident Investigations ▶
- International Engagement ▶
- Oil Spill Preparedness ▼
 - Ohmsett
 - Oil Spill Response
 - Oil Spill Response Research
 - Preparedness Activities ▶
- Offshore Regulatory Programs ▶
- Research ▶

Oil Spill Preparedness Division

Share



The Bureau of Safety and Environmental Enforcement (BSEE) oversees oil spill planning and preparedness for oil and gas exploration, development, and production facilities in both state and Federal offshore waters of the U.S. This authority is granted through the Oil Pollution Act of 1990 (OPA 90), subsequent Executive Orders, and the Outer Continental Shelf Lands Act (OCSLA). All functions related to BSEE authorities in oil spill planning and preparedness are administered by the Oil Spill Preparedness Division (OSPD), which is headquartered in Sterling, Virginia, with offices in Anchorage, Alaska, Camarillo, California, and New Orleans, Louisiana.

OSPD primary functions include:

- Reviewing and approving [oil spill response plans](#)
- Executing government initiated [unannounced exercises](#)
- [Inspecting oil spill response equipment](#) and resources
- Auditing responder and management team [training and exercises](#)
- Providing subject matter expertise during [responses to offshore oil spills](#)
- Conducting, funding, and disseminating [oil spill response research](#)
- Managing [Ohmsett](#) – the National Oil Spill Response Research Test Facility
- Supporting the National Response Team, Regional Response Team, Area Committees, and the Interagency Coordinating Committee on Oil Pollution Research.

Announcements and Upcoming Events

During the recent United States Chairmanship of the Arctic Council, BSEE funded and supported two important oil spill preparedness projects. The first project that is now available is the [Circumpolar Oil Spill Response Viability Analysis Technical Report](#). The second project that is now available is the [Arctic Spill Response Database](#) with an accompanying [User Guide](#).

BSEE and the U.S. Coast Guard signed Memorandum of Agreement (MOA) OCS, eg, Oil Discharge Planning, Preparedness, and Response on January 18, 2017.

The BSEE-sponsored study on [Worst Case Discharge Scenarios for Oil and Gas Offshore Facilities and Oil Spill Response Equipment Capabilities](#) is now available for viewing and download.

[Response System Planning Calculators](#) are now available to help estimate the capacity of mechanical recovery



BSEE Website: www.bsee.gov



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Bureau of Safety and
Environmental Enforcement



BSEEGov

“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”