PERSGA

الهيئة الإقليمية للمحافظة على بيئة البحر الأحمر وخليج عدن
Regional Organization for the Conservation of Environment of the Red Sea and Gulf of Aden

Requests for Assistance GUIDELINES

A GUIDE TO REQUESTING ASSISTANCE IN THE EVENT OF AN OIL OR HNS SPILL

September 2024

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تأسست الهيئة الإقليمية رسميًا في سبتمبر 1995 بموجب إعلان القاهرة ومنذ أنشائها تستضيف المملكة العربية السعودية المقر الرئيسي للهيئة في مدينة جدة.

إن جميع التسميات والرموز والاشكال المستخدمة في هذا المنشور وطريقة عرض المواد فيه عن أي رأي من جانب الهيئة بشأن الوضع القانوني لأي دولة أو إقليم أو مدينة أو منطقة أو سلطاتها أو بشأن ترسيم حدودها أو تخومها. وعلى الرغم من أن الهيئة تبذل قصارى جهدها لضمان دقة المعلومات المقدمة، إلا أنها لا تتحمل أي مسؤولية عن أي أخطاء أو اقتباسات أو بيانات غير صحيحة قد ترد في هذا المنشور.

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1. Introduction

This guide has been produced to describe the method for managing requests for assistance from the international community in the event of an oil or HNS spill within the waters of the PERSGA member States.

This guide has been based on an internationally recognised system of raising and handling requests for assistance in the event of a major oil pollution incident developed by the IMO.

2. Information & Requests for Assistance

A system of alerting of regional neighbours and the international community is already in place though PERSGA's Regional Spill Contingency Plan (RSCP) and relevant international protocols.

In addition, guidelines on an internationally recognised system of raising and handling requests for assistance in the event of a major oil pollution incident have been developed by the IMO .

These guidelines can be used to assist in managing requests for spill response resources and offers of assistance from other countries and organizations when confronted with large, complex or significant oil spill incidents.

These guidelines have been adapted to PERGA's needs from the Guidelines on International Offers of Assistance in Response to a Marine Oil Pollution Incident published by IMO in 2016.

Copies of the IMO Guidelines can be obtained from IMO Publishing (slaes@imo.org) Reference I558E, ISBN : 978-92-801-1651-9 (see Appendix 8.)

A series of forms, taken from the guidelines, can be found in the accompanying appendices. These are shown in Table 1.

Appendix Number	Appendix Title
1	Notification and Request for Assistance from Requesting Party
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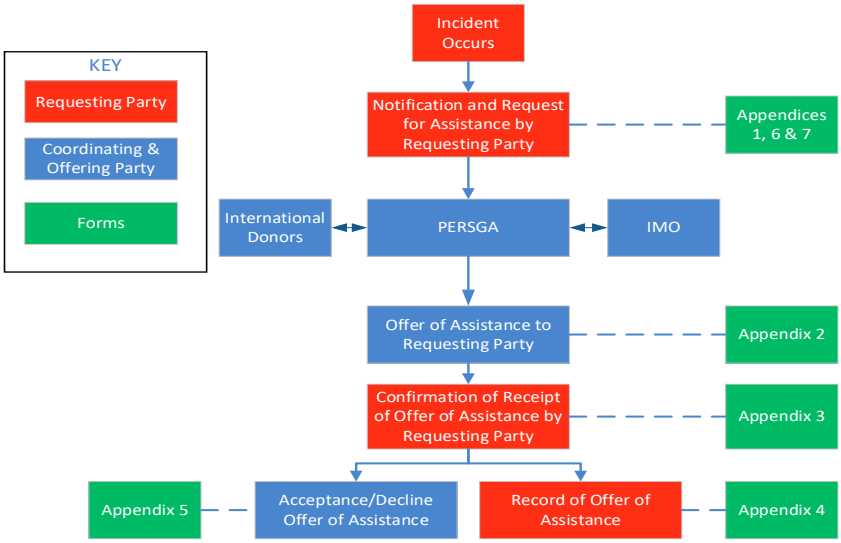
7	Equipment and Personnel Lexicon Glossary

(table 1) : Table 1. Request for Assistance Forms

The sequence of events when notifying and requesting or offering assistance is shown in Figure 1.



(Figure1) : Sequence of Events in Notifying and Requesting or Offering Assistance

A comprehensive system of recording requests and offers has been found to be very helpful when coordinating requests for assistance during major pollution responses.

3. Appendix

Appendix 1

Notification and Request for Assistance from Requesting Party

URGENT

NOTIFICATION AND ASSISTANCE REQUEST REPORT

Serial/reference number .....

Incident name.....

Location.....

Date/time ..... / ..... (UTC) .....

Number of pages (including cover page).....

From (authorized requesting representative)		To (point of contact/equipment source)	
Name:		Name:	
Position:		Position:	
Telephone:		Telephone:	
Fax:		Fax:	
Email:		Email:	

INCIDENT SPECIFICS

Incident specifics	**Information to date**	**Confirmed**
Type of incident:		
Estimated volume spilled/spilling:		
Type of product(s):		
Location of release (LAT and LONG):		
Is source controlled?		
Complicating factors (fire, etc.)		
Other:		

ASSISTANCE REQUESTED	
Is assistance currently required in this response?	
NO (above information intended for notification only)	❑
YES (identify needs below)	❑
*Attach spreadsheet and use the Common Lexicon (appendix 7) to provide as much detail as necessary **for each resource line item.***	
The requesting organization will be responsible for all the in-kind assistance/goods from all customs duties, taxes, tariffs, fees and from all export and import restrictions:	YES / NO

RESOURCE DELIVERY POINTS		
Type (land, air or maritime transport)	**Name of Delivery point**	**Location of delivery point (address or coordinates)**

LOGISTICS	
In-country warehousing provided by the requestor?	YES / NO
Distribution provided by the requestor?	YES / NO

CONSIGNEE CONTACT DETAILS	
Name:	
Position:	
Address:	
Telephone:	
Fax:	
Email:	

Authorized Official's Signature: **Authorized Official's Name:** **Title:** **Organization:**	**Date:**

Appendix 2

Offer of Assistance to Requesting Party

ASSISTANCE OFFER REPORT

Serial/reference number.....

Incident name.....

Location .....

Date/time..... / ..... (UTC).....

Number of pages (including cover page) .....

From (authorized requesting representative)		To (point of contact/equipment source)	
Name:		Name:	
Position:		Position:	
Telephone:		Telephone:	
Fax:		Fax:	
Email:		Email:	

INCIDENT SPECIFICS

Type (equipment, personnel, technology, chemical agent)*	**Number or amount**	**Current location of resource**	**Means of transport (land, air, maritime)**

Attach spreadsheet and use the Common Lexicon (appendix 7) to provide as much detail as possible for each resource line item.

RESOURCE DELIVERY POINTS

Type (land, air, maritime transport)	**Name of delivery point**	**Location of delivery point (address or coordinates)**

* This would include a listing of all system components need to operate the primary item listed

LOGISTICAL INFORMATION	
In-country warehousing required?	YES / NO
Does equipment require trained personnel to accompany/operate? If "yes", make appropriate immigration arrangements.	YES / NO
Does release of equipment from current location create compliance problems with minimum standards of equipment for response?	YES / NO
How should equipment be transported? Will Assisting Party provide transport?	
Any specific power supply, pumps, or other technical needs to operate this equipment/asset?	
Who will provide distribution of resource if needed?	
Other considerations?	

FINANCIAL INFORMATION	
The Assisting Party offers its assistance free of charge:	YES / NO
If "NO" state in detail the cost to be reimbursed:	Approximate total cost of this deployment for which reimbursement will be requested: ..... (US$/EURO/Other) Total costs from Home Base to Staging Area: ..... (US$/EURO/Other)
Authorized Official's Signature: **Authorized Official's Name:** **Title:** **Organization:**	**Date:**

Appendix 3

Confirmation of Receipt of Offer of Assistance

INCIDENT NAME & LOCATION	DATE	TIME (WITH TIME ZONE)
OFFER RECEIVED BY	DATE	TIME (WITH TIME ZONE)
PROPOSED DATE OF ACCEPTANCE COMMUNICATION		
Other:		

Appendix 4

Record of Offer of Assistance Receipt

OFFER OF ASSISTANCE RECEIPT RECORD		
INCIDENT INFORMATION		
INCIDENT NAME & LOCATION		**DATE OF INCIDENT**
OFFER INFORMATION		
DATE OFFER WAS RECEIVED	**TIME OFFER WAS RECEIVED**	**METHOD OF TRANSIMISSION**
OFFER SUBMITTED BY:		
Assisting Country or organization:		
Point of contact name and position:		
Telephone number:		
Fax number:		
Email address:		
DETAILS OF OFFER (as much as provided):		

Appendix 5

Acceptance / Decline Offer of Assistance

ACCEPTANCE / DELINE OF OFFER OF ASSISSTANCE

Serial/reference number.....

Incident name .....

Location .....

Date/time..... / ..... (UTC).....

Number of pages (including cover page) .....

OFFER DECISION		
ASSISTING PARTY (Government / Organisation)	**OFFER**	**OFFER STATUS**
		ACCEPTED / DECLINED / ON HOLD
		ACCEPTED / DECLINED / ON HOLD
		ACCEPTED / DECLINED / ON HOLD

ACCEPTED OFFERS			
Offer	**Date Required**	**Location**	**Transportation Specifics**

DECLINED OFFERS	
Offer	**Rationale**

Additional Information:
000

Authorized Official's Signature: **Authorized Official's Name:** **Title:** **Organization:**	**Time of Signature:** **Date:**

Appendix 6

Common Lexicon of Significant Equipment and Personnel Types

A EQUIPMENT TYPE	B TASK OPTIONS	C EQUIPMENT SUB-TYPE	RESPONSE OPTION				D CAPABILITY OPTIONS
			Dispersant	Containment	Recovery	Support	
Aircraft	(Choose one)	(Choose One)					(Choose One)
	☐ Cargo transport ☐ Observation platform ☐ Personnel transport ☐ Specialised equipment for detection and remote sensing	Blimp					☐ Jet ☐ Multi-engine ☐ Single0-engine ☐ Other
		Unmanned aircraft system					
		Fixed Wing					
		Helicopter					
Boom	(Choose one)	(Choose One)					(Choose One)
	☐ Ocean ☐ Offshore/Nearshore/inland ☐ Rivers/Canals	Curtain boom					☐ > 41 inches (> 104 cm) ☐ > 18 to 41 inches (> 46 to 104 cm) ☐ 6 to 18 inches (14 to 46 cm)
		External tension boom					
		Fence boom					
		Fire-resistant boom					
		High speed containment system					
		Inflatable					
		Tidal seal boom					
		Other					

Communication Equipment		(Choose One)					(Provide Quantity)
		Aviation low frequency (LFi) radio					
		Communications suite/system/custom package/kit					
		Handheld mobile satellite service					
		High bandwidth Ku-band satellite					
		High frequency (HF) radio (includes aviation hands)					
		International Maritime Satellite (INMARSAT)					
		Line-of-sight microwave transmission					
		Marine very high frequency (VHF) radio					
		Phone					
		Portable radio repeater					
		Ultra-high frequency (UHF) radio					
		Very high frequency (VHF) radio					
		Other					
Dispersants		(Choose One)					
		Ground support transfer system					
		Personnel ground support team					
		Product					
		Special Monitoring of Applied Response Technologies (SMART) package					
		Spray equipment aircraft					
		Spray equipment shoreline					
		Spray equipment vessel					
		Other					

In-Situ Burn		(Choose One)					
		Ad-hoc igniter					
		Fire-resistant boom					
		Handheld igniter					
		Heli-torch					
		Ignition promoter					
		Plastic sphere dispenser					
		Other					
Oily Water Separators	(Provide Specifications)	(Choose One)					(Provide Volume)
	Length/width/height/dry weight	Filter					Gallons per minute (gpm) or cubic metres (m^3) per minute
		Gravity coalescing separator					
		Gravity parallel plate separator					
		Simple gravity separator					
		Stove pipe separator					
		Other					
Pumps	(Choose One)	(Choose One)					(Provide Volume)
		Bladeless					Gallons per minute (gpm) or cubic metres (m^3) per minute
		Centrifugal					
		Diaphragm					
		Gear/lobe					
		Peristaltic or hose					
		Piston					
		Progressive cavity/Archimedean screw					
		Sliding shoe					
		Vane					
		Other					

Remote Sensing / Surveillance / Tracking / Detection		(Choose One)					
		Airborne Automatic Identification System (Airborne AIS)					
		Airborne laser fluorosensor					
		Autonomous underwater vehicle (AUV)					
		Electro optical/infrared (EOM) camera system					
		EO/IR video					
		Fixed and floating oil spill detection buoy					
		Fixed oil detection sensor					
		Global positioning system (GPS) tracking device					
		High-resolution digital photography camera					
		Line scanner: infrared/ultraviolet (IR/UV)					
		Microwave radiometer					
		Multi-spectral camera					
		Oil spill detection by satellite remote sensing					
		Satellite imagery					
		Side-looking airborne radar (SLAR)					
		Specialized software					
		Synthetic Aperture Radar (SAR)					
		Thermal imaging (infrared (IR)) camera					
		Video system for visual documentation					
		Other					

Shoreline Cleaners	(Provide Specifications)	(Choose One)					On-Board Storage (Provide Capacity)
	Length/width/height/dry weight	Manual cleaners					Barrels (bbl) or cubic metres (m^3)
		Mechanical cleaners					
		Mechanical/hydraulic					
		Paddle belt					
		Screening belt					
		Sorbent					
		Vacuum washer					
		Washing					
		Other					
Skimmers (portable)	(Provide specifications)						(Provide Volume)
	Length / height/ dry weight	Boom skimmer					Barrels per hour (bbl/hr) or cubic metres per hour (m^3/hr)
		Brush skimmer					
		Disc skimmer					
		Drum skimmer					
		Rope mop skimmer					
		Sorbent belt skimmer					
		Suction skimmer					
		Weir skimmer					
		Other					
Sorbent Types	(Recommended Use)	(Choose One)					(Provide Capacity)
	☐ L - Spills on land ☐ W - Spills on water ☐ L/W - Spills on land or water ☐ I - Industrial Use	Type I (roll, sheet, pad, blanket, web)					Grams (g) of oil per gram of sorbent
		Type II (loose)					
		Type III (enclosed)					
		Type IIIa (pillows and socks)					
		Type IIIb (sorbent booms)					
		Type IIIc (sorbent sweeps)					
		Type IV (agglomeration unit (ribbons, strips, pom-poms and open netting))					

Specialist Vehicles		(Choose One)					(Provide Quantity)
		All-terrain vehicle (ATV)					
		Hovercraft					
		Vacuum truck (vac truck)					
		Vacuum trailer					
		Trailer					
		4x4 c/w towing capability					
		Forklift					
		Truck c/w crane					
		Other					
Subsea Equipment		(Choose One)					(Provide working pressure if applicable)
		2D sonar “Blue View”					
		3D sonar “Blue View”					
		Autonomous underwater vehicle (AUV) (untethered/ unmanned)					
		Capping stack (toolbox)					
		Debris clearing equipment					
		Deepwater well capping up to 3,000 m					10,000 pounds per square inch (psi)
		Deepwater well capping up to 3,000 m					15,000 psi
		High pressure/high volume (HP/HV) accumulator					
		Manned submarines					
		Remotely operated underwater vehicle (ROV)					
		Subsea dispersant hardware toolbox					
		Other					

Temporary Storage	(Choose One)	(Choose One)					(Provide Volume)
		Barges (heated/not heated)					Barrels (bbl) or cubic metres (m^3)
		Fixed facility tank (heated/not heated)					
		Portable tanks					
		Stationary tanks (heated/not heated)					
		Tank ship					
		Tank truck (heated/not heated)					
		Towable tanks (e.g. bladders, dracones)					
		Other					
Vessels (Non-Skimming)	(Choose One)	(Choose One)					(Provide Volume)
	Gross tons/length/width	Crane barge					☐ Up to 30 bhp ☐ Between 51 & 100 bhp ☐ Between 101 & 500 bhp ☐ Between 501 & 1000 bhp ☐ Between 1001 & 5000 bhp ☐ Between 5,001 & 12,000 bhp ☐ Between 12,001 & 20,000 bhp ☐ Over 20,000 bhp
		Deck barge					
		Hotel barge					
		Aluminium work boat (Jon boat)					
		Landing craft					
		Offshore supply vessel (rig tender/anchor handling)					
		Trawler					
		Tugboat					
		Utility work boat					
		Utility work platform					
		Rigid Inflatable Boat (RIB)					
		Inflatable Boat					
		Other					

Vessels (Skimming)	(Choose One)	(Choose One)					(Provide Volume)
	☐Self-contained (dedicated) oil recovery vessel (SORV) ☐Standalone Vessel of ☐Opportunity Skimming System (VOSS) ☐Near-shore	Advancing weir skimmer					Barrels (bbl) or cubic metres (m^3)
		Boom skimmer					
		Brush skimmer					
		Disc skimmer					
		Drum skimmer					
		Fixed or flexible sweeping arms					
		Fixed submersion plane skimmer					
		Induced flow (water jet) weir skimmer					
		Paddle belt skimmer					
		Rope mop skimmer					
		Sorbent belt skimmer					
		Submersion moving plane skimmer					
		Suction skimmer					
		Weir skimmer					
		Other					

Hand Tools	(Choose One)	(Choose One)					(Choose One)
		Rake					
		Spade					
		Long-handled Shovel					
		Heavy-duty bucket					
		Heavy-duty bag (1m^3)					
		Heavy duty bag					
		Impermeable liner sheeting					
		Other					

Support Equipment	(Choose One)	(Choose One)					(Choose One)
		Tent (Medium)					
		Tent (Large)					
		Portable Canteen					
		Portable First-Aid Centre					
		Other					

Personnel	(Choose One)	(Choose One)					(Choose One)
	☐ Private ☐Government ☐Non-profit ☐Non-governmental organisation (NGO) ☐Other	Aerial Observer					
		Aircraft Pilot					
		Assistant Salvage Officer/Engineer					
		Communications Specialist					
		Dispersant Ground Support Team					
		Diving Supervisor					
		Health and Safety Executive (HSE) Qualified Diver					
		HSE Safety Officer					
		Incident Management Team (IMT)					
		Labourer					
		Marine Pilot					
		Naval Architect/Engineer					
		Office Administration					
		On-Scene Coordinator (OSC)					
		Operator/Technician					
		Rigger, Fitter, Equipment Operator					
		Salvage Foreman					
		Salvage Master					
		Salvage Officer/Engineer					
		Shoreline Clean-up and Assessment Technique (SCAT) Team Member					
		Specialist Advisor: ☐Firefighter ☐Chemical Advisor ☐Pollution Control Advisor ☐De-mining Advisor					
		Supervisor					
		Mine clearance specialist					
		Other					

Appendix 7

Equipment and Personnel Lexicon Glossary

Note: The information provided below complements the equipment lexicon in appendix 6 by providing descriptions of equipment and personnel types. It has been taken from the Guidelines on International Offers of Assistance in Response to a Marine Oil Pollution Incident issued by the IMO in 2016.

Aircraft (A)	A machine that counters the force of gravity by using either static lift or the dynamic lift of an airfoil or, in a few cases, the downward thrust from jet engines. Aircraft (A) or Helicopter (H).
Cargo Transport (AC):	A cargo aircraft (also known as freight aircraft, freighter, airlifter, or cargo jet: is a fixed-wing aircraft that is designed or converted for the carriage of goods, rather than passengers. - Capability 1: ACT1 (> 264,600 lb. or 120 tonne max. payload) - Capability 2: ACT2 (> 55,135 lb. or 25 tonne < 264,600 lb. or 120 tonne max. payload) - Capability 3: ACTS (> 22,050 lb. or 10 tonne < 55,135 lb. or 25 tonne max. payload) - Capability 4: ACT4 (< 22,050 lb. or 10 tonne max. payload)
Observation Platform (AOP)	A surveillance aircraft is an aircraft used for collecting information over time. A surveillance aircraft does not necessarily require high-performance capability. — Capability 1: AOP1 (a platform fully equipped with aerial sensor technology) - Capability 2: AOP2 (a platform that allows for human observation without enhanced technology)
Personnel Transport (APT)	An aircraft used to transport passengers. — Capability 1: APT1 (> 300 passengers) — Capability 2: APT2 (> 200 passengers) — Capability 3: APT3(> 100 passengers) — Capability 4: APT4 (< 50 passengers)
Spray Platform (ADD)	An aircraft used to apply dispersants while airborne. - Capability 1: ADD1 (> 1,000 U.S. gallons or > 200 cubic metres (m^3) air delivery) - Capability 2: ADD2 (< 1,000 U.S. gallons or < 200 cubic metres (m') air delivery)
Blimp i A8)	A blimp, or non-rigid airship, is an airship without an internal structural framework or a keel. — Capability 1: AB (Not Tethered) — Capability 2: AB (Aerostat Tethered)
Unmanned aircraft system (UAS)	An unmanned aircraft system (UAS), commonly known as a drone and a subtype of which is referred to as a Remotely Piloted Aircraft System (RPAS) by the International Civil Aviation Organization (ICAO), is an aircraft without a human pilot aboard. - Capability 1: AUAS1 (Military) - Capability 2: AUAS2 (Police) - Capability 3: AUAS3 (Civilian) - Capability 4: AUAS4 (Hobby)
Fixed Wing (AFW)	A fixed-wing aircraft is an aircraft capable of flight using wings that generate lift caused by the vehicle's forward airspeed and the shape of the wings. — Capability 1: AFW1 (Jet) - Capability 2: AFW 2 (Multiple Engine) - Capability 3: AFW 3 (Single Engine)
Helicopter (H)	A helicopter is a type of rotorcraft in which lift and thrust are supplied by rotors. — Capability 1: H1 (16 passengers/5,000 lb. or 2.3 tonne cargo cap.) - Capability 2: H2 (8 passengers/1,500 lb. or 0.7 tonne cargo cap.) - Capability 3: H3 (5 passengers/750 lb. or 0.3 tonne cargo cap.) — Capability 4: H4 (2 passengers/750 lb. or 0.3 tonne cargo cap.)

Boom (8)	A temporary floating barrier used to contain, divert, or deflect free floating oil on the water. — Capability 1: B1 (> 41 in. (> 104 cm)) — Capability 2: B2 (> 18 to 41 in. (> 46 to 104 cm)) - Capability 3: B3 (6 to 18 in. (15 to 46 cm))
Ocean (8)	A boom that can operate in large waves, foam crests and some spray, typically greater than 41 in. (> 1 m).
Offshore/near-shore/ inland (B)	A boom that can operate in moderate waves and frequent whitecaps, typically >18 to 41 in. (> 0.5 to 1 m).
River and Canals (B)	A boom that can operate in small non-breaking waves, typically 6 to 18 in. (15 to 50 cm).
Curtain Boom il-l( )	Boom that has a centreline flotation that may be internal foam, external foam, self-inflated or pressure inflated. They have flexible skirts that are free to move independently of the floats.
External tension boom (BE)	Boom that generally uses flexible, light PVC or polyurethane-coated fabric to cover flexible flotation. The radiofrequency or hot air "welded" fabric encloses the flotation and often the ballast chain and top cable.
Fence Boom (BF)	Boom that is rigid or nearly rigid in the vertical plane, a condition that is achieved either by using vertical stiffeners in flexible boom material or by using heavy fabric that is stiff vertically but free to bend in the horizontal plane to conform to water movement.
Fire-resistant boom (B-Fire)	Boom that includes both fence and curtain type designed to withstand the heat and stress of in situ burning.
High speed containment system (B-HS)	Specialized containment system that allows for collection and concentration of oil when towed at higher speed than conventional boom.
Ice (B-Ice)	Specialized spill containment barriers that are generally designed for specific customer use.
Inflatable (BI)	Boom whose buoyancy depends on air chambers which are either self-inflated or pressure inflated.
Tidal Seal (BTS)	Booms that use air or foam for buoyancy and water for ballast. They are free-floating at high tide and seal to the mud or sand at low tide.
Communication Equipment (COM)	The hardware used for the purposes of telecommunications.
Aviation low frequency (LF) radio	Part of the natural spectrum of electromagnetic radiation lying between the frequency limits of 200 kHz to 415 kHz with some internal gaps assigned to other services.
Communications suite/ system/ custom package (COM)	A collection of telecommunications equipment that allows for communication on multiple platforms, not limited to satellite, radios, phones, computers and is contained in a single deployable package. - Capacity 1 COM1 (satellite capability to support secure communications that bridge the gap between federal agencies, emergency first responders, state, and local response personnel for at least 100 personnel) — Capacity 2 COM2 (satellite capability to support voice, data, and videoconferencing for at least 100 personnel) - Capacity 3 COM3 (portable Internet, phones, radios to support voice and data for up to 30 personnel)
Handheld mobile satellite service (MS)	A satellite telephone/satellite phone/satphone is a type of mobile phone that connects to orbiting satellites instead of terrestrial cell sites.
High bandwidth Ku-band satellite (KuS)	The Ku-band is the 12-18 GHz portion of the electromagnetic spectrum in the microwave range of frequencies. Primarily used for satellite communications.
High frequency (HF) radio	Part of the natural spectrum of electromagnetic radiation lying between the frequency limits of 3,000 kHz to 30,000 kHz.
International Maritime Satellite (INMARSAT)	A British satellite telecommunications company, offering global mobile services. It provides telephone and data services to users worldwide.
Line-of-sight microwave transmission (LOS)	Refers to the technology of transmitting information or energy using electromagnetic waves whose wavelengths are conveniently measured in small numbers of centimetres; these are called microwaves. This part of the radio spectrum ranges across frequencies of roughly 1.0 gig hertz (GHz) to 30 GHz.

Marine very high frequency i VHFM) radio	Part of the natural spectrum of electromagnetic radiation lying between the frequency limits of 156 and 162.025 MHz
Phone (PH)	A device that can make and receive telephone calls over a radio link or fixed hard wire line.
Portable radio repeater (PR)	A combination of a radio receiver and a radio transmitter that receives a weak or low-level signal and retransmits it at a higher level or higher power, so that the signal can cover longer distances without degradation.
Ultra-high frequency (UHF) radio	Part of the natural spectrum of electromagnetic radiation lying between the frequency limits of 300,000 kHz to 3,000,000 kHz.
Very high frequency (VHF) radio	Part of the natural spectrum of electromagnetic radiation lying between the frequency limits of 30,000 kHz to 300,000 kHz
Dispersants (D)	Chemical agent designed to enable the formation of tiny neutrally buoyant droplets of oil in the water column, facilitating natural processes of dilution and biodegradation.
Ground support transfer system i DC)	The hose, prime mover, pumps, and fittings used to pump dispersant product into a tank(s) on a dispersant platform.
Personnel ground support team (DGS)	The trained personnel that operate the ground support transfer system.
Product (DT	The chemical dispersant used to facilitate dispersal of oil into the water column.
Special Monitoring of Applied Response Technologies (DM) package	A monitoring system for rapid collection of real-time scientifically based information to assist with the decision-making process during dispersant and in-situ burning operations. - Capability 1: DM1 provides information about where the dispersed oil goes and what happens to it. Two instruments are used on the same vessel to monitor at two water depths. - Monitoring is conducted in the centre of the treated slick at several water depths, from 1 to 10 metres. A portable water laboratory provides data on water temperature, pH, conductivity, dissolved oxygen, and turbidity. - Capability 2: DM2 provides real-time data from the treated slick. A sampling team on a boat uses a monitoring instrument to continuously monitor for dispersed oil 1 metre under the dispersant-treated slick. The team records and conveys the data to the Scientific Support Team, which forwards it, with recommendations, to the Unified Command. Water samples are also taken for later analysis at a laboratory. — Capability 3: DM3 a trained observer, flying over the oil slick and using photographic job aids or advanced remote sensing instruments, assesses dispersant efficacy and reports back to the Unified Command.
Spray equipment (DD) aircraft	Application equipment composed of tank(s), pumps and spray arms designed to be permanently or temporarily installed into an airframe to apply dispersant by air delivery. — Capability 1: DD1 (> 1,000 US gallons or > 200 cubic metres (m^3) air delivery) — Capability 2: DD2 (< 1,000 US gallons or < 200 cubic metres (m^3) air delivery)
Spray equipment shoreline (DDS)	Application equipment composed of tank(s), pumps and spray mechanisms designed to apply treating agents from ground level on beach areas. — Capability 1: DIDS1 (> 1,000 US gallons or > 200 cubic metres (m^3) shoreline delivery) - Capability 2: DDS2 (< 1,000 US gallons or < 200 cubic metres (m^3) shoreline delivery)
Spray equipment vessel (DDV)	Application equipment composed of tank(s), pumps and spray arm designed to apply dispersants from vessels onto open water. - Capability 1: DDV1 (> 1,000 US gallons or >200 cubic metres (m^3) vessel delivery) - Capability *2: 11DV 2 (*< 1,000 US gallons or < 200 cubic metres (m^3) vessel delivery)
In Situ Burn (Fire)	A technique that involves the controlled burning of oil that has spilled from a vessel or a facility, at the location of the spill. Rapid removal of oil from the water surface; requirement for less equipment and labour than many other techniques; significant reduction in the amount of material requiring disposal; significant removal of volatile oil components; and may be the only solution possible, such as in oil-in-ice situations and in wetlands. There are burning by-products that should be considered such as dense smoke in the burn vicinity.
Ad-hoc igniter (FireAI)	Home-made improvised ignition devices such as a marine safety flare, a plastic jar of diesel fuel wrapped with duct tape and floats.
Handheld igniter (FireHI)	Equipment consisting of propane tank, hoses, burner head fitted with a burning nozzle.

Heli-torch (FireHT)	A lightweight unit designed to be operated with any helicopter equipped with a cargo hook. The unit consists of a lightweight aluminium frame, a high strength steel bail, a single point suspension system, fuel barrels and a pump and motor with an ignition tip assembly.
Ignition promoter (FireIP)	Burning agent that can be used to enhance oil spill cleanup, removal, treatment, or mitigation.
Plastic Sphere Dispenser (PSD)	Machine, commonly called the 'Ping-Pong Ball System.' The PSD, generally mounted in a helicopter, feeds Ping Pong-like balls through a chute leading out of the helicopter. The balls, which contain a chemical oxidizing agent, are injected with a water-glycol solution as they are shot out of the PSD. The chemicals react thermally and ignite in 25 to 30 seconds out of the chute as they fall to the ground.
Oily Water Separators (OWS)	This is equipment used to separate oil and water mixtures into their separate components. Note: The OWS for spill response is not equivalent to OWS for normal vessel operation use under other IMO conventions and guidance. - Capability 1: OWS1 (> 1,429 bbl/hr or 225 m^3/h) - Capability 2: OWS2 (> 1,070 bbl/hr or 170 m^3/h < 1429 bbl/hr or 225 m^3/h) - Capability 3: OWS3 (> 714 bbl/hr or 114 m^3/h < 1,070 bbl/hr or 170 m^3/h) - Capability 4: OWS4 (> 357 bbl/hr or 57 m^3/h < 714 bbl/hr or 114 m^3/h) - Capability 5: OWS5 (< 357 bbl/hr or < 57m^3/h)
Filter separator (SF)	Uses replaceable absorbents and gravity for easy separation. They are passive, physical separation systems designed for removal of oils, fuels, and hydraulic fluids products from water.
Gravity coalescing separator (SGC)	The water/oil mixture enters the separator and is spread out horizontally, distributed through an energy and turbulence diffusing device. The mixture enters the media where laminar and sinusoidal flow is established and the oils impinge on the media surface. As oils accumulate, they coalesce into larger droplets, rising upwards through the pack corrugations until they reach the top of the pack, where they detach and rise to the water's surface. At the same time solids encounter the media and slide down the corrugations, falling into a hopper.
Gravity parallel plate separator (SPP)	Tilted plate packs are used in separators to improve the size and economy of the separator system. As corrugated plate packs are predominantly used, the tilted plate pack type separators are widely known as Corrugated plate interceptor or simply as CPI separators.
Simple gravity separator (SGS)	Water that has been contaminated with light fluids is kept in the separator for a certain period. Due to the lower specific weight, oil droplets rise to the surface. Treated water drains from the oil separator through a run-off. When a limited number of light fluids is accumulated in the trap, the fluids are pumped through the entry shaft.
Stove pipe separator (SPS)	Features a pipe segment of standard pipe code dimension that acts as a long, slender separator. The pipe separator is especially suited for efficient oil-water separation in subsea applications. This innovative technology does much the same job as a conventional separator vessel for separating oil and water, but since the smaller pipe size withstands the external water pressure far better than a large vessel, it can also be used in very deep waters.
Pumps (I')	A device that moves fluids by mechanical action. Pumps can be classified into three major groups according to the method they use to move the fluid: direct lift, displacement and gravity pumps. — Capability (gallons per minute (gpm) or cubic metres (m^3)/minute) — Capability 1: P1 (> 10,000 gpm or > 38 cubic metres per minute) — Capability 2: P2 (> 5,000 gpm/19 cubic metres per minute or < 10,000 gpm/38 cubic metres per minute) - Capability 3: P3 (> 2,000 gpm/7.5 cubic metres per minute or < 5,000 gpm/19 cubic metres per minute) - Capability 4: P4 (> 400 gpm/1.5 cubic metres per minute or < 2,000 gpm/7.5 cubic metres per minute) - Capability 5: P5 (< 400 gpm or < 1.5 cubic metres per minute)
Bladeless (PI3)	A pump that is bladeless and uses a substantially cylindrical outer cylinder to rotate inside a ridged inner chamber creating a boundary layer effect to move fluid.
Centrifugal (PC)	Fluid enters the pump impeller along or near the rotating axis and is accelerated by the impeller, flowing radially outward into a diffuser or volute chamber (casing), from where it exits.

Diaphragm (PD)	(Also known as a Membrane pump, Air Operated Double Diaphragm Pump or Pneumatic Diaphragm Pump) is a positive displacement pump that uses a combination of the reciprocating action of a rubber, thermoplastic or Teflon diaphragm and suitable valves either side of the diaphragm (check valve, butterfly valves, flap valves, or any other form of shut-off valves) to pump a fluid.
Gear/Lobe (PG)	Uses the meshing of gears or lobes to pump fluid by displacement.
Peristaltic or hose (PPI It	A type of positive displacement pump used for pumping a variety of fluids. The fluid is contained within a flexible tube fitted inside a circular pump casing. A rotor with several "rollers", "shoes", "wipers", or "lobes" attached to the external circumference of the rotor compresses the flexible tube. As the rotor turns, the part of the tube under compression is pinched closed thus forcing the fluid to be pumped to move through the tube.
Piston (PP)	Positive displacement pump that consists of a cylinder in which a piston moves back and forth.
Progressive cavity/ Archimedean screw (PS)	Positive displacement Archimedes design, hydraulically driven. They feature a rotating sealing plate wheel with replaceable sleeves.
Sliding shoe (PSS)	Self-priming positive displacement sliding-shoe pump provides exceptional suction performance, versatility and constant capacity at varying heads, the ability to cope with rough conditions and to handle a great variety of liquids, viscous or free flowing, clean or dirty. It can run without harm during dry suction, is self-compensating for wear, and has a simple design with few working parts.
Vane (PV)	Used for liquid transfer applications from chemicals to liquefied gases. Vanes extend from slots in the rotor, sweeping liquid through a cam-shaped cavity. The vanes provide very low slip and high volumetric efficiency.
Remote Sensing (RS)	This generally refers to the use of aerial sensor technologies to detect and classify objects on Earth by means of propagated signals.
Airborne Automatic Identification System	An automatic tracking system used onboard aircraft to interact with ships or other maritime aircraft. It can be utilized for identifying and locating vessels by electronically exchanging data with other nearby ships, AIS base stations, aircraft and satellites.
Airborne laser fluorosensor (ALF)	Relies on the tendency of oil to fluoresce under ultraviolet light. The system, carried on an aircraft, fires a laser that illuminates the sea surface with UV. Fluorescence is detected by a telescope and high efficiency sensors said to be about 1,000 times more sensitive than the human eye. The returning light is separated into a spectrum, converted into electrical signals, and fed into a data logging computer system along with position information. By analysing the spectra, one can distinguish between light and heavy oils.
Autonomous underwater vehicle (AUV)	A robot that travels underwater without requiring input from an operator. AUVs constitute part of a larger group of undersea systems known as unmanned underwater vehicles, a classification that includes non-autonomous remotely operated underwater vehicles (ROVs) - controlled and powered from the surface by an operator/pilot via an umbilical or using remote control.
Electro optical/infrared camera (EOC)	This system generates information on phenomena that emit, absorb, or reflect electromagnetic energy in the infrared, visible light, or the ultraviolet spectra.
EO/IR video t EOVI	Provides the ability to transmit real-time, live data and meta-data (geo-referenced and time-stamped information) via satellite to anywhere on Earth and to record this data for later retrieval for analysis and evidentiary.
Fixed and floating oil spill detection buoys (OSI3)	Provide real time initial oil spill detection so that resources can be immediately directed to sensitive areas for cleanup and containment operations.
Fixed oil detection sensor (MS)	A device that detects the presence of oil within an area, often as part of an alert system.
Global positioning system IGPS)	This tracking device uses a space-based satellite navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites.
High-resolution digital photography camera (HRC)	Provides the capability of the sensor to observe or measure the smallest object clearly with distinct boundaries. Resolution depends upon the size of the pixel. With a given lens setting, the smaller the size of the pixel, the higher the resolution will be and the clearer the object in the image will be.

Line scanner: infrared/ ultraviolet (LSI)	Operates in the 8.5-12.5pm region (IR) and in the 0.32-0.38 pm region (UV), provides high resolution imagery of oil spills and other features on the surface. IR data can be obtained both day and night providing information on the spreading of oil and also indicating the relative oil thickness within the oil slick.
Microwave radiometer (MWR)	A radiometer that measures energy emitted at sub-millimetre to-centimetre wavelengths (at frequencies of 1-1000 GHz) known as microwaves. Their primary application has been onboard spacecraft measuring atmospheric and terrestrial radiation, and they are mostly used for meteorological or oceanographic remote sensing.
Multi-spectral camera (MSC)	Involves capturing images of a scene or object over multiple discrete wavelength bands and extracting spectral content from that data.
Oil spill detection by satellite (OSS)	Uses sensors mounted on a satellite to identify an oil spill under varying conditions.
Satellite imagery (SI)	Has many applications including oil spills. Images can be in visible colours and in other spectra. There are elevation maps, usually made by radar images.
Side-looking airborne radar (SLAR)	An aircraft- or satellite-mounted imaging radar pointing perpendicular to the direction of flight.
Specialized software (SS)	This software uses raw sensor information to create reports necessary to document any spill, response and cleanup efforts.
Synthetic Aperture Radar (SAR)	A form of radar which is used to create images of an object, such as a landscape. SAR is typically mounted on a moving platform such as an aircraft or spacecraft.
Thermal imaging (IR)	Also called an infrared camera, a device that forms an image using infrared radiation, similar to a common camera that forms an image using visible light.
Video systems (VS)	For visual documentation known as visual presenters, digital overheads, or docucams, are real-time image capture devices for displaying an object to a large. Like an opaque projector, a document camera is able to magnify and project the images of actual, three-dimensional objects, as well as transparencies. They are, in essence, high resolution web cams, mounted on arms so as to facilitate their placement over a page.
Shoreline Cleaners (SC)	The equipment used to remove oil from contaminated shorelines.
Manual cleaners (MAC)	The use of shovels, rakes, sorbents and hand pickup to clean areas of a beach and are used in areas where mechanical cleaning is impractical or would damage the environment.
Mechanical cleaners (MEC)	Include construction equipment such as graders and front end loaders. Also includes specialized equipment that is self-propelled or attached to tractors. — Capability 1: MEC1 (graders/front end loaders) — Capability 2: MEC2 (upper beach layer processor) — Capability 3: MEC3 (beach rakes) — Capability 4: MEC4 (oleophilic devices)
Oleophilic	Describes the affinity of a substance for oil.
Paddle belt conveyor (SCPC)	This design is capable of running at high angles greatly decreasing the conveyor system footprint.
Screening belt (SCS)	Used on dry sand *and* soft surfaces. The sand and waste are collected onto a vibrating screening belt, which leaves the sand behind. The size of the materials removed is governed by the size of the holes in the installed screen.
Sorbents rollers (SCR)	Hand-operated oleophilic mechanical cleaners developed for beach cleaning. A rolling drum collects oil from the beach.
Vacuum washers (SCV)	Systems that use vacuum and pressure washers for beach cleaning operations.
Washing (SCW)	A low-pressure high-volume water flushing technique that is used to remobilize and lift oil off a beach and back into containment boom at the water's edge. The oil is recovered inside the boom with a skimmer.

Sorbent Types (AB)	The materials that soak up liquids. Sorbent materials may be organic, inorganic, synthetic or a blend. They are oil attractive and water repellent. - Capability 1: AB1 (roll, sheet, pad, blanket, web) - Capability 2: AB2 (loose) - Capability 3: AB3 (enclosed) - Capability 3a: AB3a (pillows and socks) - Capability 3b: AB3b (sorbent booms) - Capability 3c: AB3c (sorbent sweeps) - Capability 4: AB4 (ribbons, strips, pom-poms and open netting)
Specialist Vehicles (SV)	A diverse range of vehicles designed to operate in unique environments such as off-road, arctic ice, swamps, subsea or provide a unique capability such as a mobile command post.
All-terrain vehicle (ATV)	Also known as a quad, quad bike, three-wheeler, or four-wheeler, is defined by the American National Standards Institute (ANSI) as a vehicle that travels on low pressure tires, with a seat that is straddled by the operator.
Hovercraft, an air-cushion vehicle (ACV)	A craft capable of travelling over land, water, mud or ice and other surfaces. Hovercrafts are hybrid vessels operated by a pilot as an aircraft rather than a captain as with a marine vessel.
Remotely operated underwater vehicle (ROV)	Vehicles that are controlled by an operator who is not in the vehicle. These can be operated by radio signals, or through a cable or line connecting the vehicle to the operator's location.
Bombardier snowcat (BS)	An enclosed-cab, truck-sized, fully tracked vehicle designed to move on snow.
Snowmobile (SNO)	Also known as a sled or a snow machine, a snowmobile is a land vehicle designed for winter travel on snow. It is designed to be operated on snow and ice.
Vacuum truck (VT)	A tank truck with a heavy-duty vacuum designed to pneumatically load solids, liquids, sludge or slurry through suction lines typically 2-4" in diameter with 3" being the norm. The typical pump used in the industry is the rotary vane vacuum pump. - Capability 1: VT1 (> 120 bbl or > 14 m^3) - Capability 2: VT2 (> 70bh1 or 8m^3 < 120 bbl or 14 m5 - Capability 3: VT3 (< 70 bbl or 8 m5
Subsea equipment (SE)	The focus is on subsea capping stacks that are part of the oil and gas industry's emergency preparedness toolbox in the event of a subsea spill at a wellhead.
2D sonar "Blue View" (2D)	Delivers crisp, real-time high-resolution sonar imagery for underwater navigation, monitoring, target tracking, and more.
3D sonar "Blue View" (3D)	Mechanical scanning sonar that creates high resolution imagery of underwater areas, structures and objects. The compact, lightweight units are easily deployed on a tripod or an ROV.
Capping stack (toolbox) (CST)	These are the "tools" associated with readying and deploying the capping stack that include running tools, subsea dispersant hardware, subsea hydraulic power units and the copping stack.
Debris clearing equipment packages (DCE)	Include subsea shears that provide the cutting capability of tubular and structural members. The shears can be used for activities like cutting bent or broken riser, shearing pipe or clearing an area to prepare for capping stack activities. In addition to the shears, ROV utility cutting tools are used for light debris removal and site preparation for the capping stack installation.
Deep-water well capping stacks (CS)	Designed to handle deep, higher-pressure wells and would be used in the event a blowout preventer is ineffective. — Capability 1: CS1 (working pressure 15,000 psi) — Capability 2: CS1 (working pressure 10,000 psi
High pressure/high volume ttiPA) accumulator	Provide localized hydraulic power to function the equipment that may be employed during the response operations. Multiple options for subsea hydraulic power may be provided. This tooling may also he used to conduct secondary operation of the primary BOP. - Capability 1: HPA1 (working pressure 15,000 psi) — Capability 2: HPA2 (working pressure 10,000 psi)

Manned submarine (MS)	A small vehicle designed to operate underwater. The term submersible is often used to differentiate Iron, other underwater vehicles known as submarines in that a submarine is a fully autonomous craft, capable of renewing its own power and breathing air, whereas a submersible is usually supported by a surface vessel, platform, shore team or sometimes a larger submarine.
Remotely operated underwater vehicle (ROV)	A tethered underwater vehicle. They are common in deep water industries such as with offshore hydrocarbon extraction. ROVs are unoccupied, highly manoeuvrable, and operated by a crew aboard a vessel.
Subsea dispersant hardware toolboxes (SDT)	Include all required hardware to facilitate the application of dispersants subsea. Key components include the coiled tubing routing manifold, subsea distribution manifold and subsea hose deployment reel with application and routing hose.
Autonomous underwater vehicle (AIN)	Also known as unmanned underwater vehicles, AUVs can be used to perform underwater survey missions such as detecting and mapping submerged wrecks, rocks and obstructions that pose a hazard to navigation for commercial and recreational vessels.
Temporary Storage (TSC)	This is additional oil storage that is in reserve in the event that the skimming vessel's onboard storage tank has reached capacity.
Barges (TB) (heated/not heated)	Used for the carriage of recovered oil from a spill. Oil spill recovery barges are constructed of steel or aluminium with multiple tanks. - Capability 1: TB1 (> 50,000 bbl or 5,780 m^3) — Capability 2: TB2 (> 10,000 bbl or 1,156 M^3 < 50,000 bbl or 5,780 m^3) — Capability 3: TB3 (> 1,000 bbl or 116 m^3 < 10,000 bbl or 1,156 m - Capability 4: TB4 (< 1,000 bbl or 116 nn^3)
Fixed facility tank (FT) (heater)/not heated)	Containers that hold liquids, compressed gases or mediums used for short- or long-term storage. — Capability 1: FT1 (> 24,000 bbl or 2,775 m^3) - Capability 2: FT2 (> 12,000 bbl or 1,388 < 24,000 bbl or 2,775 m^3) - Capability 3: FT3 (> 6,000 bbl or 694 m^3 < 12,000 bbl or 1,388 m^3) - Capability 4: FT4 (> 3,000 bbl or 347 m^3 < 6,000 bbl or 694 m - Capability 5: FT5 (< 3000 bbl or 347 nn^3)
Stationary tanks (ST) (heated/not heated)	Can be used onshore or on the decks of response vessels. They include open pools, open, inflatable pools and pillow tanks. They are lightweight and compact. — Capability 1: PS1 (> 2,000 bbl or 231 m^3) -• Capability 2: PS2 (> 500 bbl or 58 m^3 < 2,000 bbl or 231 m^3) - Capability 3: PS3 (> 200 bbl or 23 m^3 < 500 bbl or 58m^3) - Capability 4: PS4 (< 200 bbl or 23 m^3)
Tank ship (TS)	A merchant vessel designed to transport liquids or gases in bulk. Major types of tank ship include the oil tanker, the chemical tanker and gas carrier. - Capability 1: TS1 (> 24,000 bbl or 2,775 m^3) - Capability 2: TS2 (> 12,000 bbl or 1,388 < 24,000 bbl or 2,775 m^3) - Capability 3: TS3 (> 6,000 bbl or 694 m; < 12,000 bbl or 1,388 m^3) — Capability 4: TS4 (> 3,000 bbl or 347 m^3 < 6,000 bbl or 694 m^3) - Capability 5: TS5 (< 3000 bbl or 347 $n\text{-}i^3$)
Tank truck (TT) (heated/not heated)	Tanker truck or petrol tanker is a motor vehicle designed to carry liquefied loads, dry bulk cargo or gases on roads. The largest such vehicles are similar to railroad tank cars that are also designed to carry liquefied loads. — Capability 1: TT1 (> 120 bbl or 14 m^3) - Capability 2: TT2 (> 70 bbl or 8 m^3 < 120 bbl or 14 m^3) - Capability .3: TT3 (< 70 bbl or 8 m^3)
Towable tanks (TOW) (e.g.bladders, dracones)	Normally used for oil spill recovery and temporary storage of oil on water. , Capability 1: TOW1 (> 2,000 bbl or 231m^3) •• Capability 2: TOW2 (> 500 bbl or 58 m^3 < 2,000 bbl or 231 m) - Capability 3: TOW3 (> 200 bbl or 23 m^3 < 500 bbl or 58m^3) - Capability 4: TOW4 (< 200 bbl or 23 m^3)

Portable tanks (PS)	Containers that can hold liquids. Designed primarily to be loaded onto, or on, or temporarily attached to a transport vehicle or ship and equipped with skids, mountings, or accessories to facilitate handling of the tank by mechanical means. — Capability 1: PS1 (> 2,000 bbl or 231m^3) - Capability 2: PS2 (> 500 bbl or 58 m^3 < 2,000 bbl or 231 m^3) - Capability 3: PS3 (> 200 bbl or 23 m^3 < 500 bbl or 58m^3) - Capability 4: PS4 (< 200 bbl or 23 m^3)
Vessels (non-skimming) (VSL)	The category represents the entire range of vessels that may be engaged in supporting spill activities but these vessels are not equipped with oil removal capability. — Capability 1: VSL1 (> 12,001 brake horsepower (bhp)) - Capability 2: VSL2 (> 1,001 bhp, < 12,000 bhp) — Capability 3: VSL3 (> 101 bhp, < 1,000 bhp) - Capability 4: VSL4 (< 100 bhp)
Crane barge (CB)	A crane vessel, crane ship or floating crane is a ship with a crane specialized in lifting heavy loads. The largest crane vessels are used for offshore construction.
Deck barge (DB)	Used to transport heavy or oversize cargoes mounted to its top deck instead of inside a hold. Machinery, appliances, project cargoes and even recreational vehicles move on deck barges.
Hotel barge (HB)	A floating vessel equipped with accommodations.
Ion boat (SKF)	A flat-bottomed boat constructed of aluminium, fibreglass, or wood with one, two, or three bench seats.
Landing craft (LC)	A boat with a flat bottom that opens at one end and is used to transport personnel and/or equipment onto/off beaches.
Offshore supply vessel *(OSV) (rig tender/anchor handling)*	A ship specially designed to supply offshore oil platforms. These ships range from 20 to 100 metres in length and accomplish a variety of tasks. The primary function for most of these vessels is transportation of goods and personnel to and from offshore oil platforms and anchors handling.
Trawler (TR)	Any of various types of vessels used in fishing with *a* trawl net.
Tugboat (TUG)	A boat that manoeuvres vessels by pushing or towing them. Tugs move vessels that either should not move themselves, such as ships in a crowded harbour or a narrow canal, or those that cannot move by themselves, such as barges, disabled ships, log rafts, or oil platforms.
Utility workboat (WB)	A boat used for work purposes (as commercial fishing and ferrying supplies) rather than for sport or for passenger or naval service.
Utility work platform (WP)	A boat with a flat deck used work purposes.
Vessels (OSRVNOSS) (skimming)	This category represents the entire cross section of vessels that are equipped with tools to collect, recover and store oil onboard, including purpose-built vessels with skimming equipment that is permanently installed into the hull. These are called Oil Spill Response Vessels (OSRVs). Additionally, complete skimming systems called Vessel of Opportunity Skimming Systems (VOSS) are included in this category. The VOSS can turn a wide range of vessels, such as fishing boats and offshore supply vessels, to name two, into oil recovery platforms. There is a broad range of skimming technology that can be used to recover oil. See those listed below. Portable skimming systems (SK) are predominately used when working onshore or near-shore environments where a vessel is not required. Vessel capabilities — Capability 1: OSRV/VOSS1 (Vessel> 100 feet or 30 metres) — Capability 2: OSRV2/VOSS2 (Vessel > 50 feet or 15 metres < 100 feet or 30 metres) — Capability 3: OSRV3/VOSS3 (Vessel > 30 feet or 9 metres < 50 feet or 15 metres) — Capability 4: OSRV4/VOSS4 (Vessel < 30 feet or 9 metres) Portable skimming system capabilities - Capability 1: SK1 (> 417 bbl/hr or 66 cubic metres (m^3)/hr pump capacity) - Capability 2: SK2 (> 120 bbl/hr or 19 m^3/hr, < 417 bbl/hr or 66 m^3/hr pump capacity) - Capability 3: SK3 (> 20 bbl/hr or 3 m^3/hr, < 120 bbl/hr or 19 m^3/hr pump capacity) - Capability 4: SK4 (< 20 bbl/hr or 3 m^3/hr pump capacity)

Advancing weir skimmer (AWS)	A variation of the weir skimmer in that forward motion provides flow into the skimmer.
Boom skimmer (BOS)	Includes any device that has the skimmer incorporated in the face of the containment boom, regardless of the skimmer type.
Brush skimmers (BRS)	Oleophilic skimmers that pick-up oil on the bristles of a brush.
Disc skimmers (DIS)	Rely on adhesion of oil to the surface of discs rotated through oil/water interface. The oil adheres to the surface and is removed by scrapers mounted on both sides of each disc.
Drum skimmer (DRS)	Uses adhesion of oil to the surface of a cylindrical drum for recovery. As the skimmer drum is rotated through the slick, oil adheres to the surface of the drum and is scraped off.
Fixed or flexible sweeping arms (FIS)	Make up a skimming system consisting of rigid framed arms deployed on each side of a vessel that consists of pontoon to provide buoyancy, a smooth face and a hydraulically adjustable mounted weir skimmer. The movement of the vessel forwards draws the arm against the hull to create a collection point for free oil directed to the weir by the arm face.
Fixed submersion plane skimmer (FPS)	Presents a fixed angled plane to the oil/water interface as the skimmer is advancing through the slick. The angled plane causes the oil/water mixture to be submerged and the buoyant oil floats up into a collection well.
Induced flow (water jet) weir skimmer (IWS)	Uses a series of water jets positioned just below the water surface to create a current that induces the flow of oil to the weir.
Paddle belt skimmer (PBS)	Uses a series of paddles, attached to a belt, to lift oil out of the water. The basic concept includes a series of paddles that draw a wedge of oil and water up a ramp. The paddles move the fluid over the top of the incline and into a sump where it is pumped off.
Rope mop skimmer (RMS)	Employs long, continuous loops of oleophilic material that float on water. A roller/wringer mechanism wrings the oil into a sump.
Sorbent belt skimmer (SBS)	Uses an oleophilic belt to recover oil. The belt is positioned at an angle to the water, and passes through a set of rollers where the oil is removed by scraping and/or squeezing.
Submersion moving plane skimmer (MPS)	A moving plane, typically a conveyor-belt like material. The angle plane causes the oil/water mixture to be submerged and the buoyant oil floats up into a collection well.
Suction skimmer (SUS)	Includes any simple suction head used on a vacuum truck hose or portable pump.
Weir skimmer (WS)	Includes any weir device that uses gravity to drain oil off the surface of the water.
Personnel (O)	The body of persons employed by or active in an organization, business, or service as it relates to an oil spill.
Aerial Observer (AO)	Should be trained in the protocols of oil spill reporting and assessment, including estimation of slick size, thickness and quantity. Observation personnel should be trained in the use of assessment techniques in ASTM F1779-08, and familiar with the use of pertinent guides.
Aircraft Pilot (APL)	A licensed aviator who actively and directly operates the directional flight controls of an aircraft while in flight.
Assistant Salvage Officer/ Engineer (ASOE)	Supervises and coordinates activities of workers engaged in marine salvage in carrying out the salvage plan.
Communications Specialist (COS)	Is responsible for assessing overall needs and developing the Communications Plan, obtaining frequencies, installation, operation and maintenance of the communications system during incident operations.
Dispersant Ground Support Team (DGS)	The trained personnel who operate the ground support transfer system.
Diving Supervisor (DIS)	The professional diving team member who is directly responsible for the diving operation's safety and the management of any incidents or accidents that may occur during the operation; the supervisor is required to be available at the control point of the diving operation for the diving operation's duration.
Diver (DI)	A professional diver requires specific training that satisfies any regulatory agencies which have local authority, such as US Occupational Safety and Health Administration, United Kingdom Health and Safety Executive or South African Department of Labor. Due to the dangerous nature of some professional diving operations, specialized equipment such as an on-site hyperbaric chamber and diver-to-surface communication system is often required by law.
Safety Officer (SO)	Participates in the design, implementation and maintenance of health, safety and environmental programmes and associated quality assurance policies and regulations.

Incident Management Team (IMT)	A term used in the United States of America to refer to a group that responds to an emergency. Although the primary purpose of an Incident Management Team is for wildfire response, an IMT can respond to a wide range of emergencies, including fires, floods, earthquakes, hurricanes, tornadoes, tsunami, riots, spilling of hazardous materials and other natural or human-caused incidents. - Capability 1: IMT1 (Highly Complex National or Int'l Interest) - Capability 2: IMT2 (Very Complex Regional to National Interest) - Capability 3: IMT3 (Non-Routine Local Interest)
Labourer (LAR)	Responsible for the majority of the physical labour performed on the job. - Capability 1: HC1 (>40 hour HAZWOPER Cert.) — Capability 2: HC2 (40 hour HAZWOPER Cert.) - Capability 3: HC3 (24 hour HAZWOPER Cert.) - Capability 4: HC4 (8 hour HAZWOPER Cert.) - Capability 5: HC5 (no safety training)
Marine Pilot (MAP)	A mariner who manoeuvres ships through dangerous or congested waters, such as harbours or river mouths, and completes the berthing/unberthing operation of the ships by controlling the ship's manoeuvrability directly and the tug's and shore linesmen through a radio.
Naval Architect/ Engineer (NAE)	An engineer discipline dealing with the design, construction, maintenance and operation of marine vessels and structures.
Office Administration (OAD)	Deals with activities related to financial planning, billing and recordkeeping, personnel, and physical distribution and logistics within an organization.
On-Scene Coordinator/ Commander (OSC)	Responsible for providing access to federal resources and technical assistance. Coordinates all federal containment, removal and disposal efforts, and resources during an oil or HAZMAT incident.
Operators/ Technicians (OPR)	Install, set up and operate equipment. They are responsible for the safekeeping of the equipment and maintenance of equipment so that it is always in good working condition.
Rigger, Fitter, Equipment Operators (RIG)	Represent specialized labour that operate, repair and place equipment in order to conduct service jobs following accepted procedures according to company safety standards.
Salvage Foreman (SF)	Reports to the Salvage Master. Responsible to ensure that Salvage Operations are executed according to established plans, by providing feedback in the planning processes, by ensuring that Operators are trained and understand operational requirements, and by ensuring that safety rules and engineered plans are followed in Operations.
Salvage Master (SAM)	Positions require experience in naval architecture and project management, as well as extensive experience at sea due to the complex nature of the work. Becoming a Master Mariner is attained by a combination of sea-time and study, progressing through the officer ranks. Experience in handling dangerous goods is also required.
Salvage Officer/Engineer (SOE)	Provide the technical leadership in Diving and Salvage and are responsible for all aspects of ocean engineering, including salvage, underwater ship repair, towing and diving/salvage equipment development and procurement.
Shoreline Cleanup and Assessment Technique (SCAT) Team	Trained in techniques, procedures and terminology of shoreline assessment. Team members have a thorough understanding of the response goals and objectives and will consider safety concerns in cleanup recommendations.
Specialist Advisor: Technical Specialist (THSP) or Subject Matter Expert (SME)	Technical specialists in dealing with their subject matter such as firefighter, chemical advisor, pollution control advisor. They provide advice based on their education and experience backgrounds.
Supervisor (SUP)	A person who directs a person or an activity.

Appendix 8

References

These guidelines have been adapted to PERGA's needs from the Guidelines on International Offers of Assistance in Response to a Marine Oil Pollution Incident published by IMO in 2016.

Copies of the IMO Guidelines can be obtained from IMO Publishing (sales@imo.org) Reference I558E, ISBN : 978-92-801-1651-9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