



**CLEAN  
CARIBBEAN &  
AMERICAS**



KEEPING THE CARIBBEAN AND THE AMERICAS CLEAN SINCE 1977

**OIL SPILL RESPONSE EQUIPMENT**

**2010 CATALOG**



# CLEAN CARIBBEAN & AMERICAS

**To notify CCA of a spill or potential spill, call  
(954) 983-9880**

**Do not attempt to initiate contact with staff via e-mail, fax, or the CCA website.**

During business hours, a CCA Technical Advisor will guide you through the protocol to ensure an efficient response.

During non-business hours, your call will be handled the by the CCA answering service.

1. State that you have an “Urgent Situation” or an “Emergency”
2. Provide:
  - a. Your Name
  - b. Title/Position
  - c. Company
  - d. Telephone Number (Include Country and City code)
  - e. Location of Incident
3. Request to be connected to the CCA “On call” Technical Advisor

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# Activation Protocol

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2. Provide:
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  - b. Title/Position
  - c. Company
  - d. Telephone Number (Include Country and City code)
  - e. Location of Incident
3. Request to be connected to the CCA “On call” Technical Advisor

If you have not made contact with the “On-call” Technical Advisor within 15 minutes, please call back and notify the answering service of the delay.

We encourage notifying CCA at the earliest possible opportunity during an incident, even if it has not been determined that CCA equipment and/or resources are required

## READINESS LEVELS

Activation of CCA equipment and/or resources consists of three escalating readiness levels:

### 1. NOTIFICATION

CCA staff will request basic contact and incident information. CCA can assist the Requesting Party in assessing the situation and suggest appropriate response strategies, as well as a recommending a preliminary equipment selection. All information is treated as CONFIDENTIAL. The staff will notify local mobilization resource providers, including cargo aircraft brokers, of a possible need of services. There is no cost to the Requesting Party for “Notification.” Early Notification provides staff a "heads-up" to prepare for possible activation.

### 2. STAND-BY

CCA staff will activate local mobilization personnel and resources. CCA equipment may be staged and loaded on trucks. Other resources, such as Lynden Air Cargo Hercules aircraft may be put on standby. There is a nominal cost for activating mobilization resources (i.e., CCA staff time, contract personnel, trucking, etc.) paid by the Requesting Party. Standby may be cancelled at any time.

### 3. ACTIVATION

#### CCA Members:

Activation can be verbally initiated by “Authorized Initiators” of Members. “Authorized Initiators” are identified by our Members in advance through a *Power of Attorney – Initiator* which is on record with CCA. The verbal authorization must be followed up by a signed *Authorization to Mobilize CCA Resources Form* prior to dispatch of equipment. Execution of the *CCA Sale or Lease Agreement* and appropriate Exhibits are also required prior to the release of CCA equipment and resources. Other documents may also be required prior to release of resources, depending on services requested (i.e. *ADDS Lease Agreement, Lynden Air Cargo Assignment Agreement, etc.*). The Member is responsible for all costs associated with mobilization of CCA resources.

#### CCA Non-Members:

Activation for Non-Members cannot be verbally initiated as CCA does not have a list of “Authorized Initiators”. Prior to the dispatch of CCA equipment and resources, CCA must receive a *Power of Attorney* (POA) signed by an officer of the Requesting Party, or a duly qualified representative of an insurance/P&I club. In addition, the *Authorization to Mobilize CCA Resources Form* must be signed and returned to CCA prior to dispatch of equipment. Execution of the *CCA Sale or Lease Agreement* and appropriate Exhibits are also required prior to the dispatch of equipment. Other documents may also be required prior to the dispatch of resources, depending on services requested (i.e. *ADDS Lease Agreement, Lynden Air Cargo Assignment Agreement, etc.*). The Non-Member is responsible for all costs associated with mobilization of CCA resources.

#### CCA Members and Non-Members:

Additionally, all Member and Non-Members must provide and satisfy a Guarantee of Funds acceptable to CCA, and empowered to commit their company financially by a POA signed by an Officer of the company prior to the dispatch of CCA equipment and resources. These forms of Guarantee of Funds are contained in the *CCA Sale and Lease Agreements*.

## ACTIVATION PROTOCOL

The CCA Activation Protocol includes:

1. Notification, Stand-By, Activation
2. Review of Incident Information
3. Assessment of Situation
4. Response Options
5. Equipment Selection (to support response strategies)
6. Aviation & Logistics Support
7. Contractor Support
8. CCA Technical Advisor Support
9. Legal Agreements/Contracts
10. Shipping/Customs Documentation & Government Liaison
11. Finance
12. Demobilization & Return of Equipment (if applicable)

1. NOTIFICATION, STAND-BY, ACTIVATION

CCA will first obtain critical contact information from the Requesting Party.

<b>CONTACT INFORMATION</b>	
Date of Report (MM/DD/YR)	
Time of Report (00:00 hrs)	
Name	
Title/Position	
Telephone Number	Country Code _____ City Code _____ # _____
Cell Number	
Fax Number	
E-Mail Address	

2. REVIEW OF SPILL/INCIDENT INFORMATION

CCA will also request the following information from the Requesting Party as soon as possible. This information is helpful in identifying appropriate response options.

<b>BACKGROUND</b>				
Name of Vessel/Facility/Area				
Source/Type of Incident				
Source Control Measures				
Location of Spill				
Land/River/Nearshore/Offshore				
Shoreline Threatened				
Estimated Impact				
Time of Incident (00:00 hrs)				
Date of Incident (MM/DD/YR)				
<b>OIL</b>				
Type(s) Spilled or at Risk	Quantity	API Gravity	Viscosity	Pour Point
<b>WEATHER</b>				
Air Temperature (°F or °C)				
Tide Times (00:00 hrs)				
Prevailing Current Direction / Speed (knots)				
Wind Direction / Speed (knots)				
Sea State				

### 3. ASSESSMENT OF SITUATION

CCA may assist in determining the fates and effects of spilled/potentially spilled oils utilizing a variety of software applications and environmental sensitivity information when available. Applications include:

- OILMAP™ (Oil Spill Model and Response System)
- ADIOS®2 (Automated Data Inquiry of Oil Spills)
- QMOS® (Quantifying Marine Oil Spills)

### 4. RESPONSE STRATEGY SELECTION

CCA Technical Advisors may assist in selecting response strategies or options for the situation based on the fates and effects of spilled oil(s) and Net Environmental Benefit Analysis (NEBA). This is a consultative process between CCA and the Requesting Party.

Response options include:

- Monitor, Track, and/or Observe only
- Chemical Dispersants
- In-Situ Burn
- Containment, Protection and Mechanical Recovery
- Shoreline Clean-up

Additional Support Offered:

- Command, Control and Communications
- Wildlife Rehabilitation
- Technical Advisors
- Trajectory Modeling

### 5. EQUIPMENT SELECTION

Once appropriate response strategies are identified, CCA Technical Advisors can assist in selecting CCA equipment and resources to support those strategies. The web-based Equipment Directory & Selection Guide (ESG, Figure 1) ([www.cleancaribbean.org](http://www.cleancaribbean.org)) allows users to develop a list of equipment, summarize response capabilities, air cargo requirements, and estimated costs.

The purpose of the ESG is to:

1. Select Equipment
2. Provide documentation for briefings to:
  - Management
  - Government
  - Response Teams
  - Public
  - Media



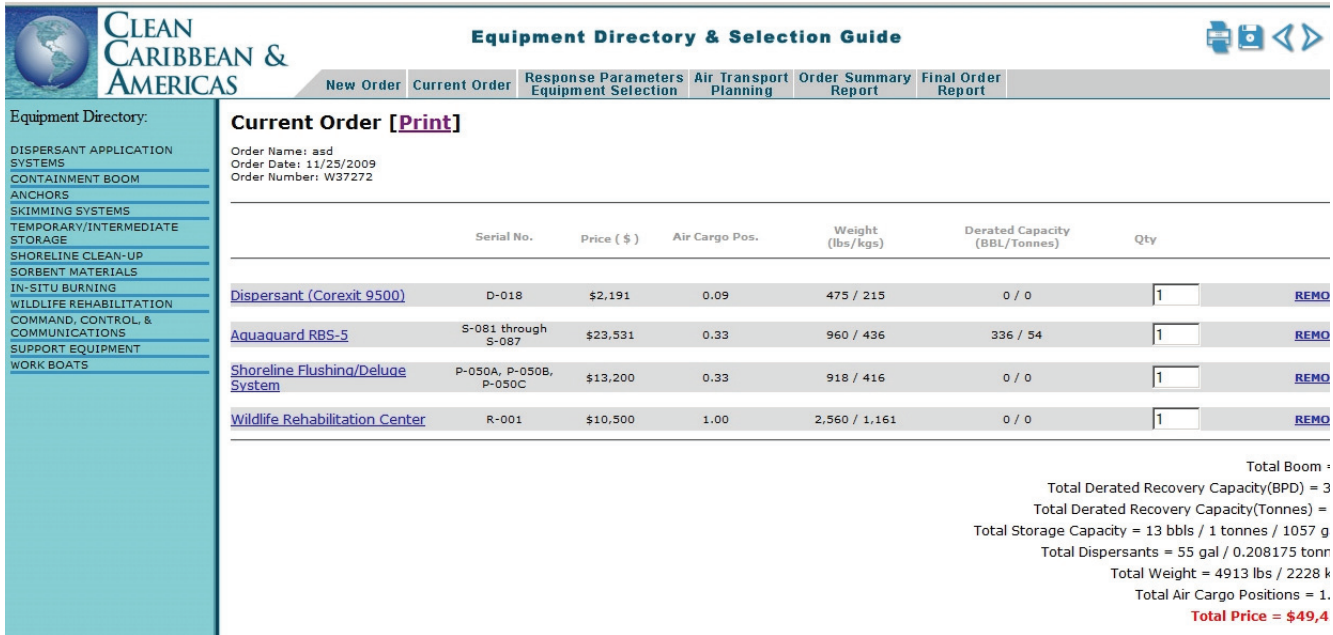


Figure 1. CCA Equipment Selection Guide

## 6. AVIATION & LOGISTICS SUPPORT

### Aircraft & Air Cargo Broker

CCA will facilitate identifying available jet cargo aircraft to transport equipment to a suitable airport nearest to the incident site. CCA utilizes a Miami-based aircraft broker. In most cases, the Requesting Party must sign a charter agreement and guarantee payment with the aviation broker to secure the aircraft. The broker will provide a list of available aircraft and their specifications as depicted below.

Type	Operator	Cargo Positions	Time Available For Duration of Charter	Cost
B-727	Cargo Airways	12	48 hours	\$48,000
B-757	Caribbean Sky	15	24 hours	\$72,000
DC-8	Latin Airways	18	48 hours	\$65,000

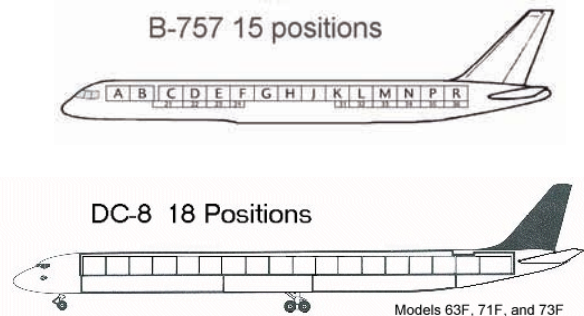
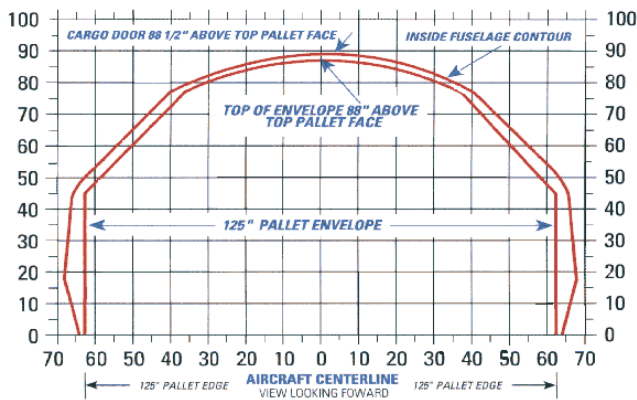


Figure 2. Aircraft Interior Dimensions and B-757/DC-8 Cargo Positions

### C-130/L-382 Hercules Aircraft

CCA will also facilitate mobilization of the Lynden Air Cargo Hercules aircraft to support the Airborne Dispersant Delivery System (ADDS). CCA's contract with Lynden allows CCA clients to recall a Hercules from a charter in progress and redirect it to a suitable south Florida airport.

This recall is available for the CCA Area of Interest only. The cost of the recall is borne by the requesting Party and is executed via the *Lynden Air Cargo Assignment Agreement*. CCA may also assist in accessing US Coast Guard Hercules aircraft.

### On-site Logistics

CCA will provide general information regarding logistical support services required to unload, transport, assemble, and deploy CCA equipment and resources, such as:

- forklifts
- trucking
- support vessels
- aircraft

It is the Requesting Party's responsibility to secure these services with the local vendors.

### Support Equipment Typically Required to Support Destination Airport

- High Loaders (also called "K Loaders") (Figure 3)
- Large forklift 10,000 pounds (4.5 tonnes) capacity or greater with long forks 72 to 82 inches (2 meters) preferred)(Figure 4)
- Cargo Slave Pallet (if high loader is not available; this may be shipped by CCA as first-off cargo) (Figure 5)
- Flatbed trailers and trucks



Figure 3. High "K" Loader



Figure 4. 10K Lbs. Forklift



Figure 5. Cargo Slave Pallet

### Support Equipment Typically Required to Support Staging Site and Deployment Site

- Large forklift 10,000 pounds (4.5 tonnes) capacity or greater with long forks 72 to 82 inches (2 meters) is preferred
- Smaller forklift to move equipment components
- Crane 10,000 pounds capacity at a reach of 12-15 feet (4-5 meters)

### 7. CONTRACTOR & CONSULTANT SUPPORT

With the exception of CCA Technical Advisors, response personnel and specialized expertise are provided through CCA's *Contractor and Resource Network*. This network can support all functions required in a response operation. A CCA developed *Pro Forma Spill Response Contract* can be used to contract these services. CCA facilitates the mobilization of these resources but the contract is between the Requesting Party and the service provider. Services include:

- Equipment Operators and Supervisors
- Spill Management Team
- Aircraft Brokers
- Marine Salvage
- Dispersant Operations Consultant
- ADDS-Pack Operators
- In-Situ Burn Consultants & Technicians
- Equipment Maintenance Management and Technical Support
- Pit Liner/Storage Tank Installation
- Telecommunications Support and Maintenance
- Spill Trajectory & Fate Modeling
- Environmental and Natural Resource Consultants
- Public Relations/Government Liaison
- Remote Sensing and Spill Tracking Services
- Wildlife Rehabilitation

### 8. CCA TECHNICAL ADVISOR SUPPORT

CCA Technical Advisors will typically travel to the incident site to provide assistance and advice on the documentation, operation, maintenance, logistics support, and deployment of equipment provided by CCA. Prior to dispatch, the Requesting Party must execute the *CCA Staff Assistance Agreement*.

### 9. LEGAL AGREEMENTS/CONTRACTS

CCA has developed a number of legal agreements and contracts for conveying equipment and services. Our business and legal strategy seeks to keep CCA's day-to-day costs as low as possible while the cost of response is borne by the spiller.

Government Access: Access to CCA equipment and resources by governments is possible on a case-by-case basis. Governments must also meet CCA Guarantee of Funds provisions.

#### Options for Conveying Equipment

Sale Agreement: CCA equipment can be purchased via the *CCA Sale Agreement*, conveying title and risk of loss to the Requesting Party. Members should pre-execute the

*Sale Agreement* to help expedite the process at the time of a spill, since all the terms and conditions of the contract have already been reviewed and accepted. At the time of activation, the Requesting Party must execute “Exhibit A”, which provides the list and price of equipment.

Lease Agreement: CCA equipment can be leased via the *CCA Lease Agreement*. Members should pre-execute the *CCA Lease Agreement* to help expedite the process at the time of a spill, since all the terms and conditions of the contract have already been reviewed and accepted.

Power of Attorney – Initiators: Each Member provides CCA a *Power of Attorney* listing the Member’s (& declared affiliates’) personnel who are authorized to activate CCA, execute documents, and commit funds on behalf of the Member. For Non-Members and Members that have not pre-executed the *Power of Attorney*, activation can only be authorized by a corporate officer.

Power of Attorney – Export: This *Power of Attorney* authorizes CCA to execute shipping documents on behalf of the Member or Requesting Party.

ADDS Lease Agreement and Lynden Air Cargo Assignment Agreement: The Airborne Dispersant Delivery System (ADDS) is accessed via the *ADDS Lease Agreement*. This must be executed between CCA and the Requesting Party at the time of activation. The ADDS requires a C-130/L-382 Hercules aircraft for deployment. CCA has contracted with Lynden Air Cargo to recall a Hercules to support a dispersant spray operation. Requesting Party must execute the *Lynden Air Cargo Assignment Agreement* with Lynden at the time of activation to convey all related legal and financial responsibility to the Requesting Party.

Pro Forma Contractor Services Agreement: This Agreement clarifies terms and conditions for contractors and consultants to respond internationally.

Staff Assistance Agreement: CCA typically provides, subject to operational and other considerations, a Technical Advisor to provide assistance and advice on the documentation, operation, maintenance, logistics support, and deployment of equipment and materials purchased/leased from CCA to assist the Requesting Party in its efforts in response to the oil spill. While CCA and/or CCA personnel may advise Requesting Party, the Requesting Party retains sole responsibility for the direction, supervision and control of the response, it being understood that CCA and any CCA personnel shall not act, or be deemed to act, in a managerial or supervisory capacity.

Telecommunications Sharing Agreement: All CCA radio equipment is licensed by the U.S. Federal Communications Commission (FCC). The *Telecommunications Sharing Agreement* must be executed by CCA and the Requesting Party upon mobilization of the communications system to allow the Requesting Party to use CCA’s FCC licenses.

10. LOGISTICS/CUSTOMS DOCUMENTATION & GOVERNMENT LIAISON

Customs Formalities

CCA will prepare shipping documents for the transport of equipment to the appropriate airport or seaport of debarkation nearest the incident site. Our objective is to provide detailed and accurate documentation to ease the clearance of equipment through customs formalities. CCA will e-mail or fax shipping information and documentation to the Requesting Party once equipment is dispatched. CCA has an ongoing Expedited Customs Program designed to pre-identify CCA equipment to national customs authorities within CCA's Area of Interest. Nevertheless, it is the responsibility of the Requesting Party to coordinate with national, state, and local customs agencies and officials to expedite customs approvals. To facilitate, CCA equipment and containers have been labeled as Emergency Oil Spill Response Equipment in English, Spanish, and French (Figure 6). Similarly, the serial number and dimensions of the equipment can be found on a placard which is attached to each cargo pallet (Figure 7).

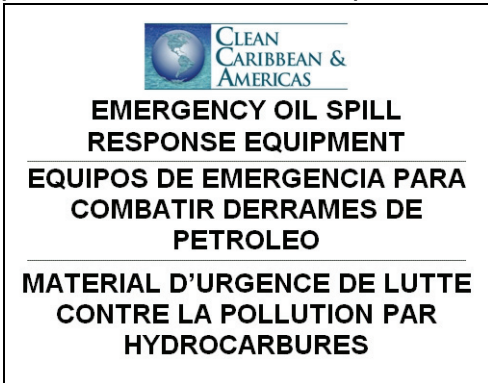


Figure 6. Custom Advisory Placard

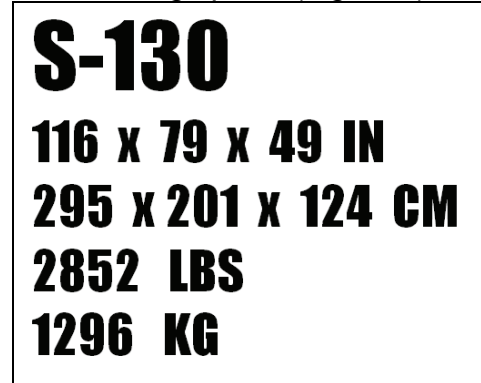


Figure 7. Shipping Placard

Immigration Formalities

CCA will forward names of CCA staff and contractors for immigration coordination. Coordination with Customs and Immigration should take place while the equipment and personnel are en route.

11. FINANCE

Guarantee of Funds

Before CCA resources are dispatched, the Requesting Party must satisfy CCA's requirement for Guarantee of Funds as outlined in the *Sale or Lease Agreements*. Acceptable Guarantee of Funds mechanisms vary depending on Requesting Party's status (Full Member/Associate Member/Non-Member/Government) and credit status.

12. DEMOBILIZATION & RETURN OF EQUIPMENT

CCA must be consulted regarding the return of CCA equipment and resources that has been conveyed under sale and/or lease. Acceptance and the cost of rehabilitation of equipment will depend upon the condition of the equipment at the conclusion of its use in the incident.

*These pages are intended to summarize the CCA Activation Protocol. They are not intended to provide a definitive and all inclusive interpretation of the referenced agreements, documents, and protocols of Clean Caribbean & Americas. The CCA Bylaws and other legal agreements provide in-depth details, terms and conditions of the corporation and take precedence over this document.*

## CCA Shipping Containers

Provide for ground, air, or marine transport of oil spill response equipment. Containers are designed to: maximize cargo for air shipment on readily available aircraft, protect the equipment, and provide temporary storage of recovered oil and/or debris.

### K-1 Shipping Container

#### DESCRIPTION:

Marine grade aluminum with a removable lid and drop down side. Forklift channels on all four sides and has padeyes for overhead lifting.

Dimensions 116x79x49 in./295x201x124 cm. to fits on standard air cargo ULD pallet (“cookie sheet”).

PVC liner is included for use as temporary storage of recovered product or debris.

Capacity is 1,500 gal./36 bbl./6 m3.

Weight 1100 lbs./500 kg.



### K-2 Shipping Container

#### DESCRIPTION:

Marine grade aluminum pallet with four removable side rails. Forklift channels on all four sides and has padeyes for overhead lifting. Straps and ratchet assemblies are used around and over the loads.

Dimensions 116 x 81 x 49 in./295x201x124 cm. fits on standard air cargo ULD pallet (“cookie sheet”).

Weight 460 lbs./209 kg.



### K-3 Shipping Container

#### DESCRIPTION:

Marine grade aluminum with a removable lid/side.

Dimensions 79 x 58 x 80 in./201x147x203 cm. fits on 1/2 standard air cargo ULD pallet (“cookie sheet”).

Weight 368 lbs./167 kg.



## K-4 Shipping Container

### DESCRIPTION:

Marine grade aluminum with lid, drop-down side, carrying handles, and liner. Easy transport by hand (handles attached) or pickup truck (forklift channels all sides).

Dimensions 82 x39 x49 in./208x99x124 cm. fit on 1/3 standard air cargo pallet (“cookie sheet”).

PVC liner is included for use as temporary storage. Capacity is 552 gal./13 bbl./2 m3.

Weight 372 lbs./169 kg.



## Myton Shipping Container

### DESCRIPTION:

Heavy molded plastic container with lid. Forklift channels on all sides. Lightweight and durable. Handles on each end allow hand carriage.

Dimensions 55 x 30 x 24 in. 140x76x61 cm.

Weight 65 lbs./30 kg.



## D Container

### DESCRIPTION:

Collapsible sturdy fiber container fits in pickup trucks. Triple walled cardboard on wood pallet.

Dimensions 58 x 42 x45 in./147x107x114 cm.

Weight 40 lbs./18 kg.



# Airborne Dispersant Delivery System (ADDS Pack)



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

For use in large scale dispersant applications on oil slicks at sea.

## Description:

Self-contained airborne dispersant spraying system designed for deployment in C-130 Hercules cargo aircraft. Dual centrifugal pump system. ADDS has a 5,500 gal. capacity. With an operational load of 5,000 gal. of dispersant per sortie, and at a planning standard of 1:40, approximately 200,000 gal./4762 bbl./757 m3 of oil may be dispersed with each load.

## Operational Considerations:

C-130 or L100 Hercules aircraft is required with roller system removed. ADDS system is positioned with the centerline at Flight Station (FS) 527 in most Hercules aircraft. Crash barriers, 9g cargo net and ten - 25,000 lb. cargo rings are installed per Beigert ADDS operating manual. Capable of 1 - 10+ gal./acre dose rate; 100 - 600 GPM flow rates; 150 ft. swath width at 150 ft. altitude and 150 knots.

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Systems or Units In Stock: 1  
Dimensions (in.): 336x88x92  
Weight (lbs./kgs.): Empty - 4540/2043  
Aircraft Cargo Positions: N/A

Serial No.(s): D-009  
Dimensions (cm.): 853x223x233



# Ayles Fernie Boat Spray 50-TS



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Mount system on a boat for dispersant application on oil slicks.

## Description:

Portable, diesel powered dispersant spray system. Twin spray system (TS) with AFEDO nozzles. Hand start diesel engine driving a Hypro 6500 roller pump. Pressure and RPM gauges to set appropriate flow rate.

AFEDO nozzle system features two (port and starboard) specially developed even drop out nozzles as alternative to spray arms. Spray pattern is even along the swath width.

Packaged in K4.

## Operational Considerations:

Apply dispersants concentrated (neat) or diluted. Operating manual has data and tables for application rates based on boat speed and desired quantity per area. The unit should be positioned within 5 m. of the AFEDO nozzles and for easy access to the dispersant storage tank. Universal clamps are included for mounting on vessel. Extension hoses may be required on larger vessels. Pump has a maximum suction lift of 3 m. for sea water dilution. Hand lances are available for spot treatment.

---

Systems or Units In Stock: 1  
Dimensions (in.): 82x39x49  
Weight (lbs./kgs.): 672/305  
Aircraft Cargo Positions: 0.33

Serial No.(s): D-030  
Dimensions (cm.): 208x99x125

**Category: Dispersant Application Systems**

# Ayles Fernie Dispersant Eduction Spray System



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Can be used on a vessel of opportunity with a fire main system to quickly apply dispersant to an oil spill. Uses a fire main water supply with a capacity of 71 GPM/270 LPM @ 100 psi/7 bar to draw dispersant from drums or a tank. Dispersant can be applied at a rate of up to 24 GPM/90 LPM.

## Description:

"First Aid" eductor type dispersant application system that utilizes a vessel's fire main water supply to educt dispersant into the water flow for application of dispersant by a single nozzle. The nozzle gives a spray length of 66 ft./20 m.

## Operational Considerations:

Must have a source of dispersant and a vessel with a built-in fire main system. Alternatively, can be used with a pump that is capable of producing the required flow. Assorted fittings are provided to match the system to different fire main piping.

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Systems or Units In Stock: 1  
Dimensions (in.): 30x23x16  
Weight (lbs./kgs.): 75/34  
Aircraft Cargo Positions: 0.1

Serial No.(s): D-028  
Dimensions (cm.): 76x58x40

# Dispersant (Corexit 9500)



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Spray application on oil slicks on water from Airborne Dispersant Delivery System (ADDS), vessel spray system, helicopter spray buckets, agricultural spray aircraft, or back-pack units.

## Description:

30,000 gallons Corexit 9500 oil spill dispersant.

Packaged in 330 gal. totes.

Note 1: Corexit 9500 is more effective on heavier oils.

Note 2: MSDS accompanies shipment.

## Operational Considerations:

Application on oil slicks on saltwater. Apply neat from air; apply diluted with sea water from vessels. At a 1-to-40 ratio, this stockpile may disperse approximately 1,200,000 gal. of oil (30,000 bbl./ 4,200 m<sup>3</sup>)

Totes are easily transported on cargo jets to operations base. Two totes per aircraft position subject to weight and balance:

1 gal. = 8 lbs., 1 tote = 2900 lbs./1315 kg. (tote empty weight = 264 lbs./120 kg.)

The CCA dispersant transfer systems are used to rapidly load application systems.

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Systems or Units In Stock: 91  
Dimensions (in.): 45x45x64  
Weight (lbs./kgs.): 2897/1317  
Aircraft Cargo Positions: 0.5

Serial No.(s): D-050  
Dimensions (cm.): 114x114x162

**Category: Dispersant Application Systems**

# Dispersant PPE



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Provides personal protection to individuals involved in loading, transferring, or applying dispersants.

## Description:

Contents: PPE - 2 cases Tyvek coveralls, gloves, goggles, earplugs, half-face respirators, first aid kit, eyewash; MSDS

## Operational Considerations:

Eye and skin contact with chemical dispersants should be avoided. A proper fit test is required prior to the use of respirators.

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Systems or Units In Stock: 1  
Dimensions (in.): 42x22x19  
Weight (lbs./kgs.): 55/25  
Aircraft Cargo Positions: 0.1

Serial No.(s): D-027  
Dimensions (cm.): 106x56x48

# Dispersant Transfer System



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Transfer system to support dispersant operations. Transfers dispersant chemical from totes or drums to a portable reservoir where the dispersant can be further transferred to an application system (ADDS or helicopter spray bucket.)

## Description:

\* For transfer from drums: 3-in. diaphragm diesel pump mounted on a cart with 4-port aluminum manifold. Four each 1-1/4-in. stinger pipes with valves and hoses (20 ft./6 m. each). Vibration damper and in-line strainer. Throughput: 85 GPM.

\* For transfer from totes and tanks: 3-in. centrifugal pump throughput 300 GPM. 3-in. suction hoses 95 ft./29 m. total. 20x50 ft./6x15 m. berm system.

\* For pooling drums: Canflex 3,000 gal./71 bbl./11 m<sup>3</sup> reservoir. 3-in. dry break valve system.

\* For personnel: Personal Protective Equipment (Tyvek suits, gloves, goggles, and respirators) included.

## Operational Considerations:

Berms are set up to contain drips and spills during transfer operations. One side lets down to allow forklifts in with barrels of dispersant. Totes/drums are pumped into reservoir for consolidation allowing rapid reload of ADDS Pack with the 3-in. centrifugal pump.

---

Systems or Units In Stock: 1  
Dimensions (in.): 116x79x49  
Weight (lbs./kgs.): 2558/1160  
Aircraft Cargo Positions: 1.0

Serial No.(s): D-020A  
Dimensions (cm.): 295x201x125

**Category: Dispersant Application Systems**

# Simplex Helicopter Spray System



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Airborne application of dispersants by helicopter. Generally effective within 25 miles of helicopter pad.

## Description:

Model 6860 dispersant spray system that operates as a slung load from a helicopter with a cargo hook. Fully self-contained power source that is independent of the helicopter. Up to 240 gal./908 l. capacity (helicopter lifting capability dependent). Two spray arms with 34 spray nozzles. Spray swath of 50 ft./15 m. Empty weight 375 lbs./170 kg., fully loaded 2,367 lbs./1074 kg.

## Operational Considerations:

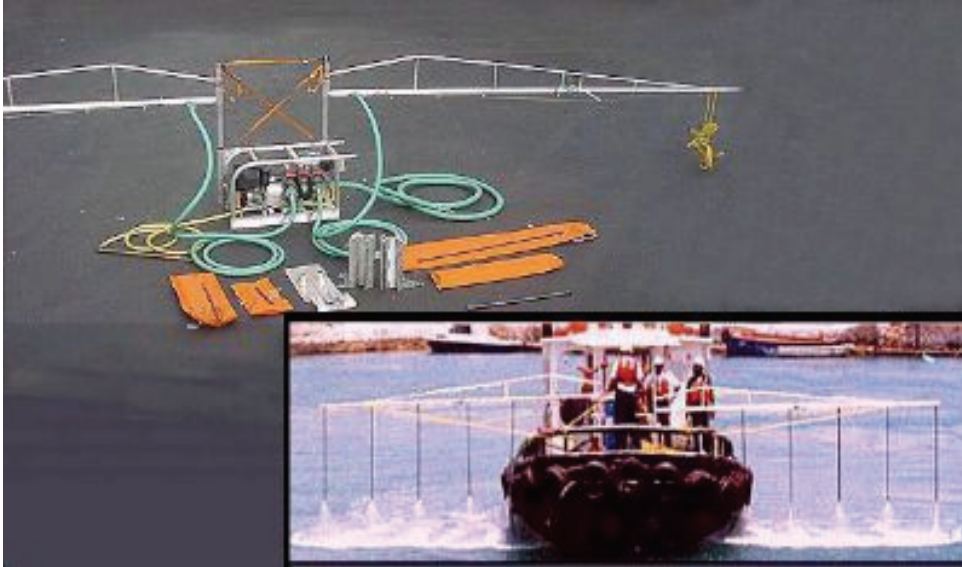
Pilot control via a hand control unit. System can be jettisoned in an emergency. On board pump can be used for filling system from dispersant drums. Helicopter must be equipped with an external cargo hook. Pilot must be experienced in the flying of external loads. Weight of load can be varied within aircraft limitations.

---

Systems or Units In Stock: 1  
Dimensions (in.): 68x57x81  
Weight (lbs./kgs.): 678/308  
Aircraft Cargo Positions: 1.0

Serial No.(s): D-014  
Dimensions (cm.): 173x145x206

# Slickbar Vessel Spray System



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Portable system to mount on vessel of opportunity to apply dispersants to oil slicks.

## Description:

Single cylinder diesel engine driving a fiberglass body centrifugal pump. Spray arms mount on support masts attached to the pump unit frame. Alternative hardware for mounting spray arms on vessel rails or bulwarks. Complete with hoses and 1-in. dispersant pickup tube. Two 16-ft./5 m. spray arms with 5 wide angle spray nozzles each. Approximately 32 ft./10 m. spray swath width. Nozzle extension pipes in three sizes are provided to adjust for different vessel freeboards. Two complete systems packaged in two wood crates that take one aircraft cargo position.

## Operational Considerations:

System should be mounted on a vessel as far forward as possible. A 4x4 ft./1x1 m. area is required for the pump and frame. In addition to considering the distance to the spill site from a dispersant re-supply site, the location and availability of deck space for the stowage of an onboard dispersant supply (55-gal. drums) can significantly affect the overall vessel dispersant operation.

---

Systems or Units In Stock: 2  
Dimensions (in.): 116x37x36  
Weight (lbs./kgs.): 1548/702  
Aircraft Cargo Positions: 0.5

Serial No.(s): D-015 , 016  
Dimensions (cm.): 295x94x91

**Category: Dispersant Application Systems**

# 12-inch River Boom



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Suitable for deflection booming on rivers and streams, collecting oil in harbors, protecting sensitive areas.

## Description:

Lightweight shallow draft boom with ASTM connectors, tow bridles and tow lines. Packaged in K-2 containers.

A. Each of 2 pallets of CCMS boom is constructed of internal segmented, cylindrical foam floatation and a vinyl coated skirt. 1250 ft./381 m. Each section is 50 ft./15 m. Overall height: 12 in./30 cm. 6 in. floatation, 6 in. skirt.

B. Each of 2 pallets of Slickbar MK12 boom is constructed of solid molded polyethylene floats and a skirt material which blends Kevlar yarn with heat set polyester material. 1250 ft./381m. Each section is 250 ft./76 m. Overall height: 12 in./30cm. 6 in. floatation, 6 in. skirt.

## Operational Considerations:

Boom may be deployed directly from K-2 containers by removing one side. All boom has anchor attachment points installed throughout. Rugged MK12 solid floatation resists damage and requires little maintenance. Reusable after decontamination.

---

Systems or Units In Stock: 4

Serial No.(s): B-003,004,123,124

Dimensions (in.): 116x79x83

Dimensions (cm.): 295x201x211

Weight (lbs./kgs.): A:1960/882, B: 3,720/1,690

Aircraft Cargo Positions: 1.0 each K-2

**Category: Containment Boom**



# 18-inch and 24-inch Nearshore Boom



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Suitable for containment, protection of sensitive areas, and deflection of oil in rivers, bays, harbors, and tidal areas.

## Description:

17,000 ft. of lightweight, shallow draft boom for rivers and protected waters. Constructed of internal segmented, cylindrical foam floatation and a vinyl coated skirt. ASTM connectors, tow bridles and tow lines are included. Packaged on K-2 pallets:

A. 12 pallets of 18-in. (0.5 m.) boom (1,000 ft./304 m. each)

B. 6 pallets of 24-in. (0.6 m.) boom (800 ft./344 m. each)

## Operational Considerations:

Boom is easily deployed from K-2 pallets/containers by removing one side. Boom repair kits available: B-115 and 116.

---

Systems or Units In Stock: 12 (18-in.), 6 (24-in.)	Serial No.(s): B-104-122
Dimensions (in.): 116x79x69	Dimensions (cm.): 295x201x175
Weight (lbs./kgs.): A: 2,861/1,291, B: 2,060/927	
Aircraft Cargo Positions: 1.0	

## 43-inch Inflatable Ocean Boom on Pallet



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Offshore and nearshore vessel booming, collection, containment and protection.

### Description:

Air inflatable ocean boom 1000 ft./305 m. on each K-2 pallet in 100 ft./30 m. sections. (1) Air inflator, (2) lighted buoys, and repair kit. ASTM connectors, tow bridles and tow lines included. Overall height: 43 in./109 cm.

### Operational Considerations:

Boom is inflated chamber-by-chamber with gasoline powered air blowers (included). Pallet cover serves as anti-abrasion mat.

---

Systems or Units In Stock: 5

Dimensions (in.): 116x79x50

Weight (lbs./kgs.): 4964/2252

Aircraft Cargo Positions: 1.0

Serial No.(s): B-125, B-125A

Dimensions (cm.): 295x201x185

# 45-inch Inflatable Ocean Boom on Reels



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Offshore and nearshore vessel booming, collection, containment and protection.

## Description:

Air inflatable ocean boom with individual air bladders, (400 ft./122 m. on one reel, sections are 100 ft./30 m.) ASTM connectors, tow bridles and tow lines included. Air blower, repair kit, and accessories are packaged in cardboard shipping crate. Overall height: 45 in./114 cm.

## Operational Considerations:

Boom is inflated chamber-by-chamber with gasoline powered air blowers (included). Pallets fit in pickup truck beds for transport. Reels require a hydraulic power source like the Diesel America or Lamor power packs, or shipboard hydraulics to retrieve the boom.

---

Systems or Units In Stock: 4  
Dimensions (in.): 79x56x60 Reel  
Weight (lbs./kgs.): 2284/1036  
Aircraft Cargo Positions: 0.5

Serial No.(s): B-100, B-101, B-102, B-103  
Dimensions (cm.): 201x142x152

Category: Containment Boom

# Boom Vane



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Used to set boom from shoreline into moving water. Deflection booming, Protection booming. Create a pocket for collection from shore or vessels.

## Description:

The Boom Vane is a flow-powered device for both shore and vessel based oil boom deployment. The BoomVane is constructed as a cascade of vertical wings mounted in a rectangular frame.

## Operational Considerations:

Current must be at least 1 knot. Works better in higher currents, maximum 6 knots. Typically uses 100-200 ft. (30-60 m.) of river or harbor boom. Proper rigging is essential. Angles and lengths of boom and lines can be computed from tables which are included.

---

Systems or Units In Stock: 3  
Dimensions (in.): 82x39x49  
Weight (lbs./kgs.): 720/327  
Aircraft Cargo Positions: 1.0

Serial No.(s): B-200  
Dimensions (cm.): 208x99x124

**Category: Containment Boom**

# ShoreTidal Boom



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

For intertidal zones, along shorelines, river banks, mud flats and beaches.

## Description:

Specialized boom designed for creating land surface seals. 24 units of 50 ft. sections. The upper portion of the boom (floatation) consists of an inflatable urethane bladder. The skirt (draft) is a dual bladder that is partially (2/3) filled with water. Packaged with blowers and pumps. Overall height: 20 in./50.8 cm. 1200 ft./366 m. to 1500 ft./457 m. Depending on manufacturer. Packaged in K-1 containers.

## Operational Considerations:

Excellent boom for protecting environmentally sensitive areas (marshes and mud flats, etc.) that experience tidal influences. Standard boom may also be attached to floating end of shore sealing boom to make a continuous barrier. One section of the shore guard boom can be used with standard containment boom in a situation where a tight seal is needed with the shoreline.

---

Systems or Units In Stock: 4

Dimensions (in.): 116x79x49

Weight (lbs./kgs.): 3512/1593

Aircraft Cargo Positions: 1.0

Serial No.(s): B-072, B-073

Dimensions (cm.): 295x201x124

**Category: Containment Boom**

# Anchoring Systems



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

To anchor boom in offshore (deepwater), nearshore (shallow water), and inshore (shallow water or shoreline) environments. Anchors are packaged along with buoys and line as complete systems. Lighted buoys are used to mark booms during hours of darkness.

## Description:

Anchors, buoys, and lines in the following systems:

- \* Deep water system packaged in K-1 container (44 anchors).
- \* Shallow water systems packaged (5 anchors each) in Myton plastic containers (55x30x24 in./139x76x61 cm.)
- \* One shoreline anchor system with 1,000 ft./305 m. line, 90 ft./27 m. chain, 32 post anchors. In wood crate (66x48x24 in./167x122x61 cm.)

Battery operated lighted buoys packaged in wood crates.

- \* A-015 Quantity 20 buoys; 76x80x40 in. / 193x203x101 cm.; 1657 lbs. / 753 kg.
- \* A-001, 002, 003 Quantity 5 buoys each; 33x72x28 in. / 84x183x71 cm.; 516 lbs. / 235 kg.

## Operational Considerations:

Anchor line should be at least 3 to 5 times the water depth. Using additional chain and/or additional anchors should be considered in shallow water with strong currents or in tidal situations. Anchor tending and repositioning is made easier by following the anchor diagram provided with each system.

Lighted buoys are used to mark anchored boom for night visibility.

Systems or Units In Stock: Multiple

Serial No.(s): A-001-021

Dimensions (in.): Various

Dimensions (cm.): Various

Weight (lbs./kgs.): Various

Aircraft Cargo Positions: Varies from 0.25 to 1.0 for each crate

**Category: Anchors**

# Aquaguard RBS-5



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Single brush/drum skimmer; oleophilic drum for light/medium oils and oleophilic brush for medium to heavy oil. Portable units, easily transported by hand.

## Description:

Flexible oleophilic skimmer. Components: Skimmer head with interchangeable brush and drum, Diesel hydraulic power pack, pump with 2- in. suction/discharge fittings.

Throughput: 50 GPM.

34 ft./10 m. 2-in. suction hose, 25 ft./8 m. of 2-in. discharge hose. Derated capacity: 336 BPD (48 metric tonnes per day).

Packaged in K-4 container with vinyl liner; temporary storage capacity 552 gal./13 bbl./2 m3.

## Operational Considerations:

Portable unit includes removable handles for manual transport. There are two 8-ft. boom wings to direct oil to the skimmer. Recommend at least one additional temporary storage device.

---

Systems or Units In Stock: 7  
Dimensions (in.): 82x39x49  
Weight (lbs./kgs.): 960/436  
Aircraft Cargo Positions: 0.33

Serial No.(s): S-081--S-087  
Dimensions (cm.): 208x99x124

# Aquaguard RBS-20



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Dual system skimmer with oleophilic drums for light/medium crude oils and light fuel oils and oleophilic brushes for medium to heavy crude oils. Portable skimmer for protected water situations. Can be operated in water as shallow as 12 in./30 cm.

## Description:

Flexible oleophilic skimmer, able to handle changing oil conditions. Packaged complete with temporary storage in a K-2 container. Diesel hydraulic power pack. Interchangeable drum and brush components. 3-in. fittings. 175 ft./23 m. of 3-in. hose. Throughput: 110 GPM, Derated capacity: 755 BPD (113 metric tonnes per day). Two drums and two brushes included.

One open top temporary storage tank included, capacity: 3000 gal./71 bbl./11 m3.

## Operational Considerations:

Limited to sea state 2 (10 knot winds and 3 ft. waves). Drums and brushes can be rapidly removed and replaced with quick connect handles. Dual drum unit can be reconfigured to side-by-side or to single unit to optimize conditions. Boom connection points allow more efficient collection of product. Easily moved; carrying poles provided for lifting individual components over impediments.

---

Systems or Units In Stock: 1  
Dimensions (in.): 116x79x50  
Weight (lbs./kgs.): 2045/932  
Aircraft Cargo Positions: 1.0

Serial No.(s): S-080  
Dimensions (cm.): 295x201x124



## CSI Rope Mop Wringer



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Effective and efficient removal of light to medium oils from harbors or coastal areas, wherever unit can be positioned.

### Description:

Trailer mounted oleophilic rope mop skimmer for use on a wide range of oils. Offers good encounter rate with the oil. Gathered oil is squeezed out through rollers into a sump and pumped to a recovered oil storage unit. Throughput: 36 GPM. Derated capacity: 612 BPD (86 metric tonnes). 3-in. discharge fitting. Spares box available containing extra mop and engine/pump parts, 2-in. trailer hitch ball, 50 ft./15 m. of 3-in. discharge hose.

### Operational Considerations:

Trailer mounted unit may be positioned on dock or shore. Two pulleys provided to route mop through collection area. Unit must be secured in place prior to operating. Extra hoses and fittings are recommended. Trailer tongue is dropped for shipment and easily reattached upon arrival.

---

Systems or Units In Stock: 4  
Dimensions (in.): 100x76x76  
Weight (lbs./kgs.): 3450/1552  
Aircraft Cargo Positions: 1.0

Serial No.(s): S-004,S-005,S-006,S-007  
Dimensions (cm.): 254x193x193

## Desmi DBD5 Disc/Brush-Drum Skimmer



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Recovery of light and medium oil in nearshore, harbor, and river environments. Heavier oil can be recovered using the brush.

### Description:

Lightweight, portable combination skimmer (disc or brush-drum). 2-in. Spate 75C double diaphragm offload pump and hydraulic power pack, hoses and spare parts. 2-in. fittings. 25 ft./8 m. 2-in. suction hose. 108 ft./33 m. 2-in. discharge hose.

Packaged in a K-4 container with disc, and brush-drum assemblies.  
K-4 container with vinyl liner temporary storage capacity 552 gal./13 bbl./2 m3.

### Operational Considerations:

Very portable skimmer; disc, and brush-drum components easily interchangeable. Additional temporary storage is recommended.

---

Systems or Units In Stock: 2  
Dimensions (in.): 82x39x49  
Weight (lbs./kgs.): 715/325  
Aircraft Cargo Positions: 0.33

Serial No.(s): S-111  
Dimensions (cm.): 208x99x124

# Elastec TDS 136



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Excellent for use off docks and piers to collect floating oil. Ideal for industrial applications such as API separation and cleaning oil containment pits.

## Description:

TDS 136 by Elastec. Double drum oleophilic skimmer. Grooved drums for enhanced recovery rate.

Manufacturer Recovery Rate: 70 GPM/16 metric tonnes per hour.

3-in. discharge fitting; 60 ft./18 m. of 3-in. discharge hose included.

Skimmer dimensions: 37x92x18 in./94x234x46 cm.

Weight 100 lbs./45 kg.

Open top tank temporary storage is included, capacity: 3,000 gal./71 bbl./11 m3.

## Operational Considerations:

Lightweight double drum unit can be deployed by two persons. Simple operation. Works best in calm, protected waters.

---

Systems or Units In Stock: 2

Dimensions (in.): 116x79x50

Weight (lbs./kgs.): 2352/1067

Aircraft Cargo Positions: 1.0

Serial No.(s): S-115

Dimensions (cm.): 295x201x124

# Elastec TracVac



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Can be used to recover and transport all types of liquids in a broad range of viscosities including solids and debris up to 2 in./5 cm. Narrow wand pick-up point is useful for removing oil pooled among rocks and boulders.

## Description:

Vacuum recovery system with tank. Utilizes a Mini Vac II vacuum system to recover oil. Includes a drum attachment to use 55-gallon drums for temporary storage of recovered substances. The track mounted vac tank can hold 110 gal./416 L of product. 2-in. and 3-in. suction fittings. 65 ft./20 m. 2-in. suction hose. 60 ft./18 m. 3-in. suction hose.

4-in. discharge fitting on tank.

4-in. to 3-in. and 3-in. to 2-in. fittings included.

## Operational Considerations:

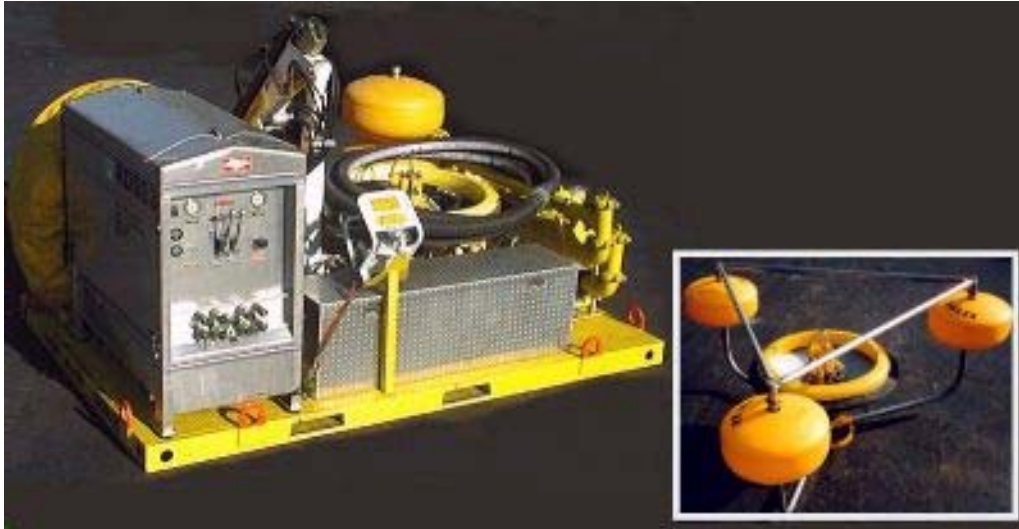
Requires: additional storage to support recovery operations; access to spill site (enhanced by tracks on units). Operators must be selective when skimming thin slicks from water surface to limit water intake with oil.

---

Systems or Units In Stock: 1  
Dimensions (in.): 116x79x49  
Weight (lbs./kgs.): 2852/1296  
Aircraft Cargo Positions: 1.0

Serial No.(s): S-130  
Dimensions (cm.): 295x201x124

# Foilex Rapid Deployment Skimming System [RDSS]



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

High volume skimming of marine oil spills. Capable of recovering light, medium or heavy oils.

## Description:

Air transportable skimming system for widest range of oils modified to fit on one skid. System consists of a Foilex TDS 200 Archimedeian screw pump, remote control unit and floating weir, 3-in. Bayou City Poppet Pump, Diesel America 45 HP hydraulic power pack, and Palfinger Marine Crane. Foilex TDS 200 has 4-in. discharge fitting; skimmer throughput: 380 GPM, derated capacity: 2,625 BPD (417 metric tonnes). Poppet transfer pump is rated at 250 GPM. 200 ft./61 m. of 4-in. discharge hose and 50 ft./15 m. of 3-in. suction hose are included. Operational spares and tools are stowed in two aluminum storage boxes mounted on the skid.

## Operational Considerations:

Palfinger marine crane lifting capacity is 1,012 lbs./460 kg. System may be deployed and operated directly from the skid or the components (with the exception of the marine crane) can be removed from the skid to operate from a smaller platform. Weir level self-adjusts with the floats adjustable over a 24 in. range for different sea conditions. Skimmer requires 30-36 in. of minimum water depth for proper operation. Additional hoses and fittings are available.

---

Systems or Units In Stock: 4  
Dimensions (in.): 117x81x74  
Weight (lbs./kgs.): 6412/2909  
Aircraft Cargo Positions: 1.0

Serial No.(s): S-041B, S-042B, S-045B, S-  
Dimensions (cm.): 295x201x125

# Lamor LWS 70 with Brush Adaptor



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Recovering light, medium and heavy oil offshore and in protected harbors and river environments. Brush adaptor, positive displacement screw pump, and water injection improve heavy oil capacity.

## Description:

System consists of weir skimmer, heavy oil brush adapter, 3-in. Archimedes screw pump, diesel hydraulic power pack, spare parts and hoses, packaged in K-2 container. System has derated capacity of 1509 bbl. Per day (216 metric tonnes). 3-in. discharge fitting. 100 ft./30 m. 3-in. discharge hose. 1-in. water injection fitting. 80 ft./24 m. of 1-in. water hose.

## Operational Considerations:

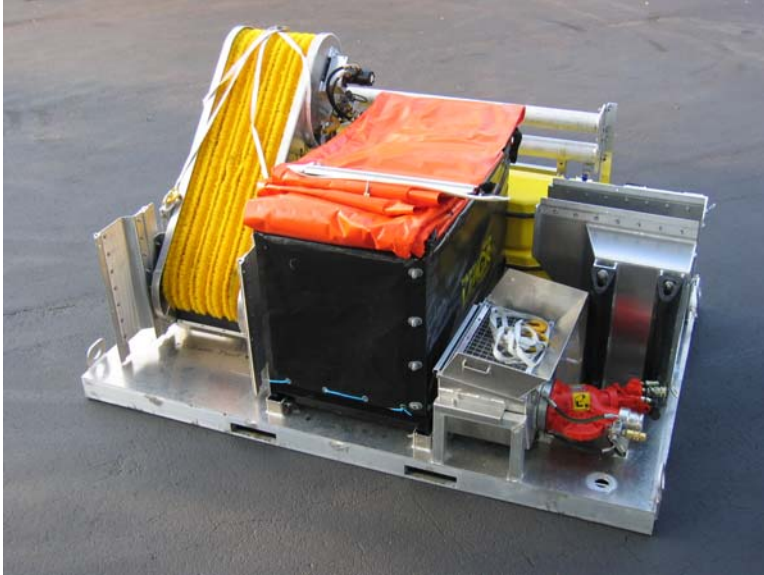
GTA70 pump has an inlet side steam/hot water annulus water injection flange (AWIF). This capability improves viscous oil pumping. When used as a transfer pump, the GTA70 will fit through a 16-in. (400 mm.) diameter hatch or manhole. Temporary storage tank is required for recovered oil.

---

Systems or Units In Stock: 1  
Dimensions (in.): 116x79x49  
Weight (lbs./kgs.): 3084/1399  
Aircraft Cargo Positions: 1.0

Serial No.(s): S-112  
Dimensions (cm.): 295x201x124

# Lamor Minimax 30 BC



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Components can be assembled on vessel of opportunity to create an advancing skimming system on starboard side of vessel. Use outrigger arm, boom sections to funnel oil to skimmer. Can be operated up to 2 1/2 knots speed or standing still. Internal propeller draws oil to skimmer.

## Description:

Lamor V-brush belt skimmer mounted on pontoons and rigged with two 21 ft./7 m. boom sweep sections of 30 in./76 cm. overall height. Lamor Power Pack 30, diesel/hydraulic. Desmi DOP-160 vertical screw pump, 121 GPM, 10 bar (147 psi) discharge pressure. 3-in. fittings. 86 ft./26 m. of 3-in. discharge hose.

## Operational Considerations:

Vessel of minimum 36 foot (12m) length with deck space capable of supporting a 1,400 pound powerpack. 4-inch flange for skimmer hopper to facilitate offload by a vacuum truck or suction pump instead of Desmi DOP 160 pump. Temporary storage is required for recovered oil.

---

Systems or Units In Stock: 2  
Dimensions (in.): 116x79x49  
Weight (lbs./kgs.): 3274/1485  
Aircraft Cargo Positions: 1.0

Serial No.(s): S-110  
Dimensions (cm.): 295x201x124

# Peristaltic Pump Skimmer System



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

For removing light and medium oil from water surfaces. Pump has excellent suction lift of viscous fluids and transfer operations.

## Description:

Lightweight Desmi weir skimmer and Manta Ray skimmer with 2-in. peristaltic pump, 25 ft./8 m. of suction and 40 ft./12 m. of discharge hose per system. Each pump delivers a flow rate throughput of 115 GPM; derated capacity 788 BPD (112 metric tonnes).

Wagon cart included for ease of moving equipment. Two systems in each K-4 container.

K-4 temporary storage included with capacity 552 gal./13 bbl./2 m3.

## Operational Considerations:

Components may be removed from the container and put in wagon to transport to site. Skimmer heads are limiting factor for viscous product recovery.

---

Systems or Units In Stock: 5

Dimensions (in.): 82x39x49

Weight (lbs./kgs.): 1135/515

Aircraft Cargo Positions: 0.33

Serial No.(s): S-073

Dimensions (cm.): 208x99x124



# Ro-Clean Desmi SeaMop 4090



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Recovery of floating oil from a platform (vessel or pier) suspended from crane or davit. Recovered product can be transferred to a temporary storage device. Effective recovery of light, medium and heavy oils. Most efficient on medium oil.

## Description:

Oleophilic vertical rope mop with four 9-in. mops for wide range of oils. Mounted on air transportable pallet with Diesel America West Diesel Hydraulic power pack, SeaMop control stand and transfer pump. SeaMop has 4-in. discharge fittings, 100 ft./30 m. of 4-in. discharge hose. SeaMop 4090 throughput: 154 GPM. Derated capacity: 1,056 BPD (149 metric tonnes). Diesel America 45hp hydraulic power pack; 32 GPM. 3-in. Bayou City Poppet Pump: 250 GPM. 50 ft./15 m. of 3-in. suction hose is included.

## Operational Considerations:

Requires boom arm (crane or davit) to position the system over the oil. Effective in up to sea state 3 (15 knot winds and 6 ft. waves). Can be adapted with a Foilex TDS 200 screw pump to push heavy oils to a storage container.

---

Systems or Units In Stock: 6  
Dimensions (in.): 117x81x74  
Weight (lbs./kgs.): 5396/2447  
Aircraft Cargo Positions: 1.0

Serial No.(s): S-035--S-040  
Dimensions (cm.): 295x201x125

# Sala RollPump



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Clean up and transfer system for oils and chemicals. Strong suction and debris tolerance of 1-1/2 in./40 mm. High discharge pressure enables long discharge distances.

## Description:

Peristaltic type of suction and pressure pump that delivers a flow rate of 48 GPM (329 BPD/47 metric tonnes). Diesel/hydraulic power pack. Packaged with suction wand for product pickup.

2.5-in. suction fittings. 30 ft./9 m. of suction hose.

2.5-in. discharge fitting. 5 ft./1.5 m. of 2.5-in. discharge hose with fitting to 3-in. 75 ft./23 m. of 3-in. discharge hose.

Packaged in K-4 container with temporary storage capacity 552 gal./13 bbl./2 m3.

## Operational Considerations:

Extremely portable for remote areas. Reverse flow, and variable speed. Lifting height 33 ft./10 m. Discharge to 1640 ft./500 m. depending on type of product pumped.

---

Systems or Units In Stock: 2  
Dimensions (in.): 82x39x49  
Weight (lbs./kgs.): 1275/577  
Aircraft Cargo Positions: 0.33

Serial No.(s): S-100  
Dimensions (cm.): 208x99x124

## Skim Pak



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Portable, widely used skimmer head. For use in protected waters.

### Description:

Skimming head/wand and hoses to be used with any small 2-in. pump (not included). Weir skimmer with wire mesh debris guard. Extension wands allow operator to position the skimmer for best results. 2-in. fittings. 25 ft./8 m. 2-in. discharge hose.

### Operational Considerations:

Requires a 2-in. suction pump or fittings to match the 2-in. cam-lock on the unit.

---

Systems or Units In Stock: 2  
Dimensions (in.): 55x30x24  
Weight (lbs./kgs.): 112 / 51  
Aircraft Cargo Positions: 0.10

Serial No.(s): S-116  
Dimensions (cm.): 140x76x61

# Vikoma Komara 12K Disc System



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Skimming light to medium oils from vessels, piers, or shorelines. Ideal as a portable skimmer in shallow water situations.

## Description:

Portable, lightweight oleophilic disc skimmer. Complete with Fastank, power pack and hoses. 3-in. fittings. 100 feet of hose. Rated at 12 metric tonnes/hour with crude oil and 2 metric tonnes/hour in gas/diesel oil. Throughput: 70 GPM. Derated capacity: 480 BPD (68 m<sup>3</sup>).

Fastank temporary storage capacity is: 2,400 gal./57 bbl./9 m<sup>3</sup>.

Packaged in K-3 container.

## Operational Considerations:

Small wheel mounted power pack cart with Spate pump allows versatile deployment and movement. One Fastank for recovered oil storage is included with each skimmer along with spare parts and tools. Skimmer cover provided for use in choppy seas which reduces water splash over. Operates in water depths as shallow as 9.5 in. 32 plastic discs driven by 2 hydraulic motors from a remote diesel hydraulic power pack. Discharge through a 3-in. line by a Spate 75C diaphragm pump mounted on the power pack.

---

Systems or Units In Stock: 1  
Dimensions (in.): 79x58x80  
Weight (lbs./kgs.): 1600/726  
Aircraft Cargo Positions: 0.5

Serial No.(s): S-050  
Dimensions (cm.): 201x147x203

# Vikoma Komara 20K Disc System



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Skimming light to medium oils from vessels, piers, or shorelines. Ideal as a portable skimmer in shallow water situations.

## Description:

Portable, lightweight oleophilic disc skimmer. Complete with storage tanks, power pack and hoses. 3-in. fittings. 100 ft./30 m. of hose. Rated at 20 metric tonnes/hour with crude oil. Derated capacity: 384 metric tonnes per day. Skimmer is packaged in K-3 container.

One open top temporary storage tank included, capacity: 3000 gal./71 bbl./11 m<sup>3</sup>).

## Operational Considerations:

Power pack is mounted on wheels. Hydraulic pump is separate unit.

---

Systems or Units In Stock: 2  
Dimensions (in.): 79x58x80  
Weight (lbs./kgs.): 1456/660  
Aircraft Cargo Positions: 0.5

Serial No.(s): S-051A, S-051B  
Dimensions (cm.): 201x147x203

# Vikoma Komara Duplex Skimmer



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Versatility allows use as either a disc skimmer or a brush skimmer over a wide range of oil viscosities. The discs will recover oil with viscosity as low as 5cSt, maximum disc recovery rate is achieved at 2-3000cSt with very low free water pickup (typically less than 2%). The brush can extend the range, allowing oil of higher viscosity to be recovered. The skimmer can be converted from discs to brushes or vice-versa in the field in less than 1 minute without the need for special tools.

## Description:

Portable, versatile skimmer. Multi-function skimmer head, transfer pump and power pack with hoses and spares. Recovery rate up to 14 tonnes per hour. Derated capacity: 470 BPD/67 metric tonnes per day.

Single cylinder diesel/hydraulic powerpack.

2.5-in. fittings. 4 ft./1 m. 2.5-in. suction hose. 50 ft./15 m. 2.5-in. discharge hose. (2.5-in. to 3-in. fitting included)

Packaged in K-4 Container with vinyl liner; temporary storage capacity 552 gal./13 bbl./2 m<sup>3</sup>.

## Operational Considerations:

Floating pump unit coupled close to the skimmer allows pumping of higher viscosity products. Portable components for ease of movement and deployment. Power Pack has wheels.

---

Systems or Units In Stock: 1  
Dimensions (in.): 82x39x49  
Weight (lbs./kgs.): 770/350  
Aircraft Cargo Positions: 0.3

Serial No.(s): S-113  
Dimensions (cm.): 208x99x124

# Vikoma Mini Vac



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Portable vacuum recovery system for the collection of spilled oils, especially useful in remote and poorly accessible sites. This includes rocky beaches, ponds & lakes, mangroves, marshes, as well as port and industrial areas.

## Description:

Light weight aluminum, system comprising vacuum unit, transfer pump, hopper, hoses, tools, lances and spark arrestor muffler. Diesel engine powered. Vac spares and pump spares included. Derated recovery rate: 965 BPD/115 metric tonnes per day.

2.5-in. suction fitting. 9 ft./3 m. 2.5-in. suction hose. 3-in. discharge fitting. 88 ft./27 m. 3-in. discharge hose.

System includes Canfex reservoir; temporary storage capacity: 3,000 gal./71 bbl./11m<sup>3</sup>.

Packaged in K-4 Container with vinyl liner; additional temporary storage capacity: 552 gal./13 bbl./2 m<sup>3</sup>.

## Operational Considerations:

The flexibility and lightweight construction of the system allows the components to be lifted by two people, overcoming mobility problems on rocky beaches and other unstable areas where vehicles would be unable to negotiate the terrain.

Transfer pump can be used singularly.

Demonstrated Recovery Rates:

34 m<sup>3</sup>/hr. (diesel)

23.7 m<sup>3</sup>/hr. (light oil)

3.6 m<sup>3</sup>/hr. (medium oil)

---

Systems or Units In Stock: 2  
Dimensions (in.): 82x39x49  
Weight (lbs./kgs.): 1100/499  
Aircraft Cargo Positions: 1.0

Serial No.(s): S-114  
Dimensions (cm.): 208x99x124

**Category: Skimming Systems**

# High Viscosity Oil Pump Conversion Kit



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Modifies Foilex TDS 200 for pumping heavy, highly viscous oil.

## Description:

Plastic container with parts to convert Foilex TDS 200 to transfer pump. Includes cover with 3-in. fittings, hydraulic lines.

## Operational Considerations:

Only works on the Foilex TDS 200 pump.

---

Systems or Units In Stock: 1  
Dimensions (in.): 26x18x17  
Weight (lbs./kgs.): 60/27  
Aircraft Cargo Positions: 0.001

Serial No.(s): S-091  
Dimensions (cm.): 66x46x43



# Sunken Oil Recovery Equipment



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Heavy duty pump to collect and transfer highly viscous and high density (low API) oils from surface and sub-surface and used for lightering.

## Description:

Foilex TDS 200 Archimedean screw pump, 3-in. fittings along with extension wands and suction heads, valves, fittings and reducers for 3-in. and 4-in. operation. Packaged on aluminum pallet in two Myton plastic containers (dimensions each container: 55x30x24 in./140x76x61cm.) Also includes tripod, chain fall, and rope spool.

## Operational Considerations:

POWER PACK REQUIRED. System designed to work under surface operated by divers to pick up sunken oil.

---

Systems or Units In Stock: 1  
Dimensions (in.): 125x88x24  
Weight (lbs./kgs.): 1145/519  
Aircraft Cargo Positions: 0.2

Serial No.(s): S-090  
Dimensions (cm.): 318x224x61

# 1,300 Gallon/5 Cubic Meter Decant Tank



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Use to separate water from oil. Discharge water from bottom after allowing mixture to settle.

## Description:

Sight gage shows volume. 3-in. fittings near top for loading and near bottom for discharge. Some units have aluminum covers.

Capacity: 1300 gal./31 bbl./5 m3.

## Operational Considerations:

---

Systems or Units In Stock: 6

Dimensions (in.): 117x81x70

Weight (lbs./kgs.): 1390/6302

Aircraft Cargo Positions: 1.0

Serial No.(s): S-041A--S-046A

Dimensions (cm.): 297x206x178

## 2,000 Gallon/7 Cubic Meter Tank



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Temporary shoreside storage for recovered oil in support of skimming operations and in the emptying of 55-gal. drums of dispersant to support dispersant spray operations.

### Description:

Canflex CF-2000 low profile, self-standing tank. Constructed of PVC/urethane coated polyester fabric. Packaged in a heavy vinyl bag and includes two 3-in. ball valves, ground mat, and top cover. Capacity: 2000 gal./48 bbl./7 m3.

### Operational Considerations:

Tank should be placed on a level surface. Ensure that ground mat is placed under the tank to protect it from abrasion. Tarp-like cover used to keep rain water and debris out of the reservoir. Extra hoses and fittings available.

---

Systems or Units In Stock: 10  
Dimensions (in.): 42x36x38  
Weight (lbs./kgs.): 218/99  
Aircraft Cargo Positions: .2

Serial No.(s): C-033B, C-033B1  
Dimensions (cm.): 106x92x97

# 2,400 Gallon/9 Cubic Meter Fastank



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Temporary shoreside storage for recovered oil in support of skimming operations and in the emptying of 55-gal. drums of dispersant in support of dispersant spraying operations.

## Description:

Lightweight, portable storage tank. Aluminum structure with polyester fabric coated with polyvinyl chloride. Includes: top cover, ground mat, decant pump and liner.

Packaged in reusable wood or plastic containers.

Capacity: 2,400 gal./57 bbl./9 m3.

## Operational Considerations:

Tank should be erected on level ground. Ensure that ground mat is placed under the tank to protect it from abrasion. Assembles and dis-assembles in minutes. Tarp like cover used to keep rain water and debris out of the reservoir. Container has handles which allow carriage by two persons.

---

Systems or Units In Stock: 4

Dimensions (in.): 64x17x18

Weight (lbs./kgs.): 205/93

Aircraft Cargo Positions: .1

Serial No.(s): C-063 or C-063A

Dimensions (cm.): 163x43x46

**Category: Temporary/Intermediate Storage**

## 3,000 Gallon/11 Cubic Meter Tank



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Temporary shoreside storage for recovered oil in support of skimming operations and in the emptying of 55-gal. drums of dispersant to support dispersant spraying operations.

### Description:

Canflex CF-3000 low profile, self-standing tank. Constructed of PVC/urethane coated polyester fabric. Packaged in a heavy vinyl bag and includes two 3-in. valves, ground mat, and top cover. Capacity: 3,000 gal./71 bbl./11m<sup>3</sup>.

### Operational Considerations:

Tank should be placed on a level surface. Ensure that ground mat is placed under the tank to protect it from abrasion. Tarp-like cover used to keep rain water and debris out of the reservoir. Extra hoses and fittings available.

---

Systems or Units In Stock: 8  
Dimensions (in.): 60x30x36  
Weight (lbs./kgs.): 244/111  
Aircraft Cargo Positions: .2

Serial No.(s): C-033A, C-033A1  
Dimensions (cm.): 152x76x92

**Category: Temporary/Intermediate Storage**

# 1,250 Gallon/5 Cubic Meter Bladder



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Temporary floating storage for recovered oil in support of on-water skimming operations. Can also be used for storage of recovered oil on land when placed in a shallow pit for side support.

## Description:

Canflex FCB-12 floating, towable bladder. (10) bladders packaged in a single K-1 container. Constructed of PVC coated polyester fabric. Each unit is individually packaged in a heavy vinyl bag for easy handling. 3-in. fittings are provided for filling and discharge.

Capacity: 1250 gal./30 bbl./5 m3.

## Operational Considerations:

Vessel operators need to exercise care in towing bladders by being aware of the draft and in maneuvering alongside piers.

---

Systems or Units In Stock: 1

Dimensions (in.): 116x79x49

Weight (lbs./kgs.): 3260/1478

Aircraft Cargo Positions: 1.0

Serial No.(s): C-001

Dimensions (cm.): 295x201x125

**Category: Temporary/Intermediate Storage**

## 2,500 Gallon/10 Cubic Meter Bladder



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Temporary floating storage for recovered oil in support of on-water skimming operations. Can also be used for storage of recovered oil on land when placed in a shallow pit for support.

### Description:

Canflex FCB-25. towable storage bladder. Constructed of PVC coated polyester fabric. 10 ft. of 4-in. suction hose attaches to bladder with a 3-in. or 4-in. ball valve, supported by buoy. Adapter fittings and valves are included.

Capacity: 2,500 gal./60 bbl./10 m<sup>3</sup>.

\*Units C-016 and C-016A have 4 complete bladders packaged in K-1.

\*Two other bladders are available separately and packaged with fittings in their own wood crate.

### Operational Considerations:

Vessel operators need to exercise care in towing bladders by being aware of the draft and in maneuvering alongside piers. Filling and discharging is accomplished through use of ball valve at end of hose which is suspended by a floating buoy. Air inflatable chamber in nose for buoyancy. Each unit, along with its fittings, is individually packaged in a heavy vinyl bag for easy handling.

---

Systems or Units In Stock: 2

Dimensions (in.): 116x79x49

Weight (lbs./kgs.): 2838/1287 K1

Aircraft Cargo Positions: 1.0

Serial No.(s): C-016, C-016A

Dimensions (cm.): 295x201x125

**Category: Temporary/Intermediate Storage**

## 6,600 Gallon/25 Cubic Meter Bladder



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Temporary floating storage for recovered oil in support of on-water skimming operations. It can also be used for storage of recovered oil on land when placed in a shallow pit for support.

### Description:

Canflex FCB-60. towable storage bladder. Constructed of PVC coated polyester fabric. Length when filled: 11.7 m., diameter: 1.8 m. Large diameter offload hatch accommodates the Lamor GTA 20 heavy oil transfer pump, included in the package. The GTA 20 is a modified positive displacement Archimedes screw pump, maximum peak flow rate is 288 GPM/20 m<sup>3</sup> per hour. Capacity: 6,600 gal./157 bbl./25 m<sup>3</sup>.

Requires a diesel hydraulic power pack (not included) to operate the GTA 20 Pump.

### Operational Considerations:

Vessel operators need to exercise care in towing bladders by being aware of the draft and in maneuvering alongside piers. For discharge operation, a 3-in. hose is connected to the GTA 20 pump via the hatch lid along with hydraulic connections from power pack. Air inflatable chamber in nose for buoyancy (manual air pump included).

---

Systems or Units In Stock: 1

Dimensions (in.): 62x48x53

Weight (lbs./kgs.): 1252/570

Aircraft Cargo Positions: 0.5

Serial No.(s): C-065

Dimensions (cm.): 295x201x125

**Category: Temporary/Intermediate Storage**



# 12,500 Gallon/50 Cubic Meter Bladder



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Temporary floating storage for recovered oil in support of on-water skimming operations. Can also be used for storage of recovered oil on land when placed in a shallow pit for support. Two FCB-125's are intended to support each RDSS in a shuttle operation from the skimmer to staging/off-loading site.

## Description:

Canflex FCB-125. towable storage bladder. Constructed of PVC coated polyester fabric: Top half is 88 oz. PVC coated polyester fabric, bottom half is 140 oz. PVC coated polyester fabric. Packaged one bladder to a K-1 container. 3-in. fittings provided for filling and discharge. Each bladder has a submersible 3-in. pump for off-load (300 GPM/1 m<sup>3</sup>/hr.) Diesel hydraulic power packs are included in six of the systems.

Capacity: 12,500 gal./300 bbl./50 m<sup>3</sup>.

## Operational Considerations:

Vessel operators need to exercise care in towing bladders by being aware of the draft and in maneuvering alongside piers. For discharge operation, a 3-in. hose is connected to lid along with hydraulic connections from power pack. The internal submersible pump discharges the bladder completely in approximately 45 minutes. Air inflatable chamber in nose for buoyancy.

---

Systems or Units In Stock: 12  
Dimensions (in.): 116x79x49  
Weight (lbs./kgs.): 3442/1561  
Aircraft Cargo Positions: 1.0

Serial No.(s): C-036 thru C-047  
Dimensions (cm.): 295x201x125

**Category: Temporary/Intermediate Storage**

# 105,000 Gallon/398 Cubic Meter Pit Liner



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Temporary shoreside storage of recovered oil in the support of skimming and disposal operations.

## Description:

Heavy duty fabricated material to line an excavated pit for temporary storage of liquid oil and/or oiled debris. The liner is made of Seimens XR-5 material and is packaged with a geotextile pad.

Dimensions of the lined pit are 72 x72 x 6 ft./22x22x2 m. Packaged in K-3.

Capacity: 105,000 gal./2,500 bbl./ 398 m3.

## Operational Considerations:

Installation instructions are provided. A large pit must be excavated. Repair kit with 3 sq.yd. of patch material is included with each unit. Manufacturer representative is available through the CCA Contractor and Resources Network to oversee on-site pit liner installation .

---

Systems or Units In Stock: 3

Dimensions (in.): 79x58x80

Weight (lbs./kgs.): 3000/1361

Aircraft Cargo Positions: 0.5

Serial No.(s): C-048,C-049,C-050

Dimensions (cm.): 201x147x203

**Category: Temporary/Intermediate Storage**

## 6-inch Trash Pump



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

High volume, low pressure flushing of stranded oil, or transfer of large volumes of water/oil mixture.

### Description:

Trailer mounted 6-in. Jaeger pump with Deutz diesel engine. Throughput: 2,000 GPM/7.6 m<sup>3</sup>/min.

25 ft./8 m. of suction hose and 100 ft./33 m. of discharge hose included. Units have two DC powered work lights mounted on the trailer. Air transportable each occupying one aircraft pallet position.

### Operational Considerations:

Trailer tongue is removed for air shipment and easily attached upon arrival. 2-in. ball trailer hitch included. Strainer included for suction hose. Optional use: Lengths of 4-in. to 6-in. hose drilled with 1/4 in. holes may be used as a water flushing system for oiled shoreline when connected to this pump unit.

---

Systems or Units In Stock: 5  
Dimensions (in.): 93x74x78  
Weight (lbs./kgs.): 3700/1665  
Aircraft Cargo Positions: 1.0

Serial No.(s): P-001,P-002, P-003,P-004,  
Dimensions (cm.): 236x188x198

Category: Shoreline Clean-up

# Bobcat Beach Maintenance Vehicle



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Remove oily waste from beaches, scrape, and rake sand. Dig small pits or drainage ditches for shoreline cleanup operations.

## Description:

Bobcat "skid steer loader". Four-wheel independent drive, diesel powered tractor. Steering, direction and speed controlled by two hand levers. Hydrostatic transmission provides braking. Lift, tilt and auxiliary functions controlled by separate foot pedals. Hand lever throttle and key-type starter switch. 1550 lb./680 kg. rated operating capacity. Five accessories: Pallet forks, backhoe, bucket, rake, and special landscape rake which aerates soil, rakes, picks up rocks/debris, and breaks up dirt clods.

## Operational Considerations:

Bobcat tractor and all components except backhoe are air transportable. Components are quickly interchanged using the "Bob-Tach" system.

---

Systems or Units In Stock: 2  
Dimensions (in.): 108x65x88  
Weight (lbs./kgs.): 5780/2600  
Aircraft Cargo Positions: 1.0

Serial No.(s): HVYEQ-010, HVYEQ-011  
Dimensions (cm.): 333x196x175

Category: Shoreline Clean-up

# Decontamination and Shoreline Cleanup Kit



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Decontamination of personal and equipment. Manual cleaning of beaches and manmade objects. Hand raking of beach area.

## Description:

Miscellaneous materials packaged in K-2 Container: 2,500 poly plastic 6-mil bags (55 gal. size). Assorted rakes and shovels for manual removal of stranded oil. 5 backpack sprayers, 4 gal. tank, polyurethane for use with dispersant and beach cleaning agents. Assorted buckets, hoses, brushes, soap included. Sorbent blankets (1 bale) and 4 in. sorbent boom (4 bales) are also provided. Personnel decontamination berms (12x5 ft./4x2 m.) One Chainsaw is included.

## Operational Considerations:

Application of dispersant and/or beach cleaning agents using backpack sprayers may require the approval of local authorities.

---

Systems or Units In Stock: 2  
Dimensions (in.): 116x79x49  
Weight (lbs./kgs.): 3594/1630  
Aircraft Cargo Positions: 1.0

Serial No.(s): M-031  
Dimensions (cm.): 295x201x125

# Gator Utility Vehicle



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Operates well on beaches, soft and rough terrain to transport equipment. Also useful as transportation for shoreline assessment team or supervisor of cleanup crews.

## Description:

UTV Gator 6x4 by John Deere.

Six wheels, four wheel drive.

Liquid cooled, three-cylinder, 4-cycle Yanmar diesel engine.

Speed to 20 mph.

1,200 lb./544 kg. cargo box capacity and 1,600 lb./726 kg. total payload.

## Operational Considerations:

Traction assist (differential lock) is built into the transaxle provides increased traction in tough spots. Trailer included.

---

Systems or Units In Stock: 2  
Dimensions (in.): 108x60x43  
Weight (lbs./kgs.): 2200/1000  
Aircraft Cargo Positions: 1.0

Serial No.(s): HVYEQ-025  
Dimensions (cm.): 274x152x109

# Pressure/Steam Washer



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

High pressure removal of oil from boulders, rocks and man-made structures.  
Decontamination of oiled response equipment.

## Description:

Skid mounted Landa pressure washer. Capable of high pressure, hot water and steam applications. Produces 4.4 GPM @ up to 3,000 psi. Gasoline powered pump. Diesel fueled heater. Wand with various size and shaped tips and 150 ft. of hose are included. A 5/8 in. hose fitting for a fresh water source connection. A manifold and electric pump is included. Can be shipped on a single air cargo pallet.

## Operational Considerations:

Mounted on wood pallets to allow forklift movement. Fits easily on the bed of a pickup truck. Source of fresh water recommended for operation. Both gasoline and diesel fuels are required. Manifolds and electric pump are used to direct source water under proper pressure to the pressure/steam washer.

Warning: hot water/steam under high pressure can cause serious injuries. Proper clothing, gloves and goggles should be worn!

---

Systems or Units In Stock: 5  
Dimensions (in.): 48x36x48  
Weight (lbs./kgs.): 800/363  
Aircraft Cargo Positions: 0.2

Serial No.(s): M-020,M-021,M-022,M-023,  
Dimensions (cm.): 122x21x122

Category: Shoreline Clean-up

# Shoreline Deluge/Flushing System



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Pump system used to flush stranded oil from 400 ft./122 m. of sand or gravel beach. Low pressure, high volume discharge.

## Description:

Each pump system includes two, 3-inch diesel pumps (300 GPM/1 m<sup>3</sup>/min.) with 40 ft./12 m. of suction hose, 50 ft./15 m. of discharge hose and 20 ft./6 m. of discharge hose, with holes for flushing, and spare parts.

Packaged in K4 Container with liner. Temporary storage capacity is 552 gal./13 bbl./2 m<sup>3</sup>.

## Operational Considerations:

Low pressure deluge is used to prevent erosion. Water floats oil to surface for collection. Maximum pressure 56 psi; total head 130 ft.; priming lift 25 ft.

---

Systems or Units In Stock: 2  
Dimensions (in.): 82x39x49  
Weight (lbs./kgs.): 1078/490  
Aircraft Cargo Positions: 0.33

Serial No.(s): P-050 A and B  
Dimensions (cm.): 208x99x125



# Spate 75C Transfer Pump Package



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Use to offload floating storage bags or to transfer product from temporary storage tanks. Can also be attached to weir/suction skimmer heads to skim oil from water surface. Suction lift of 30 ft./9 m.

## Description:

3-in. induced flow spate double diaphragm pump. Constructed out of lightweight sea water resistant aluminum. Self-priming and can be run dry indefinitely. Package includes 60 ft./20 m. suction hose and 100 ft./33 m. discharge hose. Pump rate: 117 GPM/0.5 m<sup>3</sup>/min. Packaged in wood shipping crate.

## Operational Considerations:

Design and construction provides for ease of maintenance; induced flow design creates continuous flow through the pump without surging thereby minimizing formation of emulsions.

---

Systems or Units In Stock: 2  
Dimensions (in.): 48x48x52  
Weight (lbs./kgs.): 724/328  
Aircraft Cargo Positions: 0.5

Serial No.(s): P-049  
Dimensions (cm.): 122x122x132

# Washdown Pump



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Pump for pressure washdown from manmade structures; can also be used to herd floating oil to containment collection area or for flushing oil from under docks/piers.

## Description:

2-in. diesel pump with 1-1/2 in. fire hose and nozzle. Pump rate: 180 GPM/0.7 m<sup>3</sup>/min. Packaged in one plastic crate.

## Operational Considerations:

Maximum Pressure 48 psi; Total head 110 ft./34 m.; Priming Lift 26 ft./8 m. Can be operated from shore or off small support vessel.

---

Systems or Units In Stock: 5  
Dimensions (in.): 55x30x24 inches  
Weight (lbs./kgs.): 230/105  
Aircraft Cargo Positions: 0.10

Serial No.(s): P-051 A-E  
Dimensions (cm.): 140x76x61

# Sorbent Material



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Sweeps for sweeping sheen or light floating oil off water surface and in protecting irregular shorelines. Pads and blankets are used in recovering floating oil, protecting surfaces and in decontaminating personnel and equipment. Booms are used to contain and remove floating oil and to back-up regular containment booms as well as to fill containment gaps. Snares (pom-poms) are used in intertidal zones, rocky areas; particularly effective to recover heavy oils.

## Description:

Sorbent Inventory: Flexible mix of sorbents to provide initial support to containment and recovery operations. Additional shipments of sorbent material can be directed from the manufacturer to the incident staging area. Small amounts of sorbent material also are included with skimming systems.

\*Pads (100 bales) 100 - 18x18 in. pads/bale (43x43 cm.)

\*Rolls/Blankets (30 bales) 3x144 ft. roll (1x44 m.)

\*Sweeps (50 bales) 18x100 ft. sweep (5x30 m.)

\*Sorbent Boom (200 bales) 4 sections 5 in. x 10 ft.booms/bale (3 m.)

\*Snare (200 bales) Snare (pom-poms) on a Rope (30 snares on 50 ft. (15 m.) rope/bale)

## Operational Considerations:

Snares work well to recover heavy, viscous oil. May be placed in rip-rap prior to oil impact. Pads and sweeps work best with light or medium oil and to remove floating sheen.

---

Systems or Units In Stock: 8 K-2 pallets

Serial No.(s): E-001--026

Dimensions (in.): 116x79x50

Dimensions (cm.): 295x201x211

Weight (lbs/kgs.): Approximately 2,000/900

Aircraft Cargo Positions: 1.0

**Category: Sorbent Materials**

# Inflatable Fire Boom



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Used to contain and burn oil on the water's surface in-situ, or in place, after forming a U-shaped catenary with the boom and towing it to concentrate the floating oil. Can also be used to protect vessels, structures or sensitive areas from burning oil slicks or used to encircle an already burning discharge from a submerged pipeline or well.

## Description:

Each system includes: 450 ft. (137 m.) of fire boom and 400 ft. (122 m.) of leader boom on each hydraulic powered reel. Fire boom is made of high temperature insulating fabrics and the design creates a heat transfer with the water. Air chambers provide sufficient buoyancy to the boom to allow for good sea keeping. Single point inflation is accomplished by attaching an air blower at one end. ASTM connectors, tow bridles and tow lines are included. Overall height: 30 in. (76 cm.) (12 in. floatation, 18 in. skirt). Support equipment consisting of two diesel hydraulic power packs and two air blowers are packaged on one aircraft pallet (Oil Stop Power Pack System, X-006).

## Operational Considerations:

Boom reels have upper ends removed for shipment. Boom is inflated as it is deployed and kept constantly inflated by air blower. Boom reels must be securely fastened to deck. Portable power packs and air blowers are mounted on wheeled frames and easily moved. A spreader bar is included to allow crane loading of the boom reel and A-frame on to a support vessel.

---

Systems or Units In Stock: 2  
Dimensions (in.): 118x80x81  
Weight (lbs./kgs.): 6402/2903  
Aircraft Cargo Positions: 1.5

Serial No.(s): X-005, X-007  
Dimensions (cm.): 300x203x205

**Category: In-Situ Burning**

# Simplex Heli-Torch and Igniters



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Used as an ignition source for in-situ burning of oil on water by depositing a burning gel from a helicopter. Optionally, hand-held igniters are included which may be actuated by a boat crew.

## Description:

Lightweight unit designed to be operated with any helicopter equipped with a cargo hook. Consists of an aluminum frame, a high strength steel bail, a single point suspension system, 30 or 55 gal. fuel barrel, and a pump and motor with a propane ignition tip assembly. Electrical controls and emergency breakaway fittings for connecting to helicopter electrical system (28 volt DC). Fuel source is Sure Fire - II and gasoline mixed to form a gel. Two torches are packaged in a K-2 container with tools, spares, propane bottles, and bags of dry Sure-Fire gel. (12) hand held igniters are included. Heli-Torch weight empty: 180 lbs/82 kg., full: 375 lbs./170 kg. (30 gal. tank) or 575 lbs./261 kg. (55 gal. tank).

## Operational Considerations:

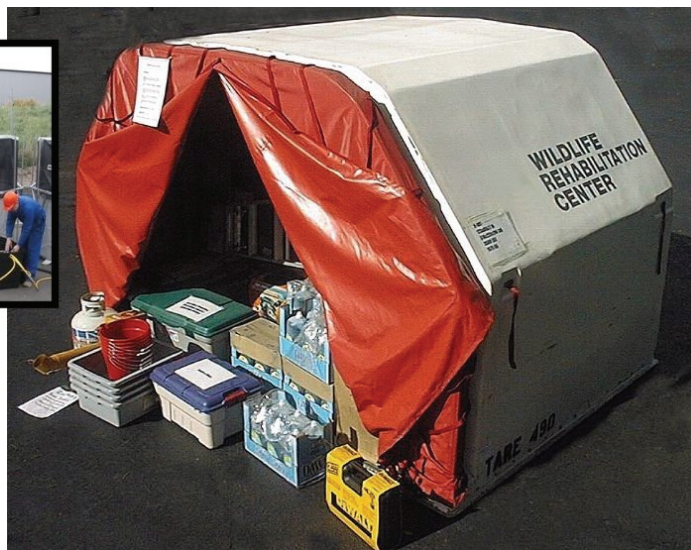
Helicopter must have an external cargo hook. Pilots must be experienced in flying with external loads. Heli-Torch is suspended 22 feet below helicopter with the cable harness (included). Sure Fire Gel is mixed with gasoline fuel. Hand-held igniters also require mixing of gasoline fuel with Sure Fire Gel.

---

Systems or Units In Stock: 1  
Dimensions (in.): 116x79x49  
Weight (lbs./kgs.): 1288/584  
Aircraft Cargo Positions: 1.0

Serial No.(s): X-004  
Dimensions (cm.): 295x201x125

# Wildlife Rehabilitation Center



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

To provide a basic, remote wildlife rehabilitation station for oiled birds and mammals.

## Description:

Air mobile inventory of wildlife rehabilitation supplies not readily available. Supplies to include a mix of deterrent and rehabilitation items. Included items: propane powered water heaters, high temperature water hose, wash tubs, pools, cages, tarps, meshed shade screening, towels, swabs, soap, propane bird scarers (cannons) and hand tools. Shipped in a modified A-3 cargo container.

## Operational Considerations:

Should be used by professional wildlife rescuers from the CCA Contractor and Resource Network or other local or national wildlife responders.

---

Systems or Units In Stock: 1  
Dimensions (in.): 125x88x77  
Weight (lbs./kgs.): 2560/1161  
Aircraft Cargo Positions: 1.0

Serial No.(s): R-001  
Dimensions (cm): 317x223x196

# BGAN Sat Comm System



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Internet connectivity from remote areas; supports up to 10 computers via ethernet or WiFi connections. Ability to send e-mail and data. Voice communications via included analog phone.

## Description:

Broadband Global Area Network (BGAN) mobile satellite service is available. System includes Thrane and Thrane Explorer satellite terminal, Dell D630 laptop, Iridium satellite phone and accessories.

## Operational Considerations:

Antenna must be outdoors, placed facing satellite without obstruction. 30 ft. (9 m.) of antenna cable is provided.

---

Systems or Units In Stock: 2

Dimensions (in.): 34x28x17

Weight (lbs./kgs.): 66/30

Aircraft Cargo Positions: 0.05

Serial No.(s): T-630

Dimensions (cm.): 87x71x43

# Nera Mini-M Inmarsat Telephone



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Provides access to the international dial-up telephone, fax, and data networks via Inmarsat system. Battery powered with 110/120 A.C. power pack. Must have clear unobstructed view of sky.

## Description:

Small, compact WorldPhone communication terminal in heavy plastic transit case. Unit cover serves as antenna. Instructions included.

## Operational Considerations:

Antenna must be outdoors, placed facing satellite without obstruction. 30 ft. (9 m.) of antenna cable is provided.

---

Systems or Units In Stock: 1  
Dimensions (in.): 21x17x9  
Weight (lbs./kgs.): 23/11  
Aircraft Cargo Positions: .01

Serial No.(s): T-620  
Dimensions (cm.): 53x43x22



## 5 kW Generators



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Provides power for remote site field command post shelters complete with air conditioning, lighting, and electricity for radios and appliances.

### Description:

(2) or (4) Yanmar 5 kW diesel generators to provide 220/110 power. Packaged in a wood crate.

### Operational Considerations:

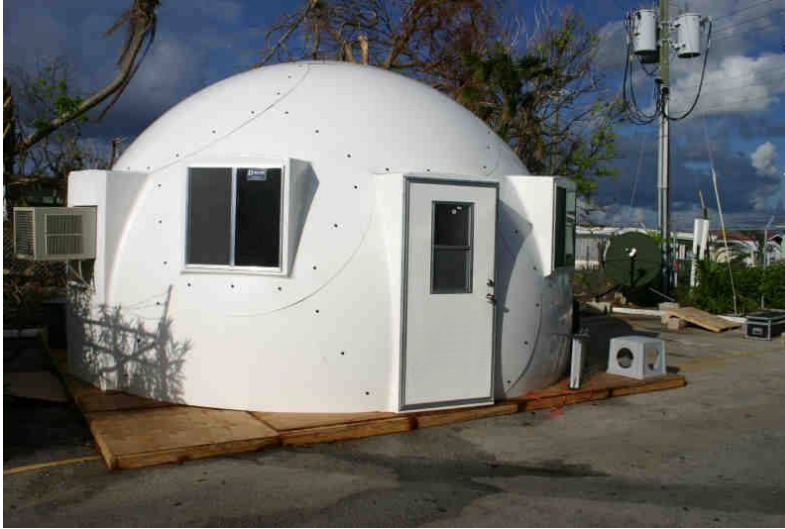
Two portable generators provide electrical power for each Omni-Sphere: one for communications equipment, one for A/C and housekeeping requirements. Pre-wired electrical panel and outlets. Yanmar 5 kW generators operate on diesel fuel.

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Systems or Units In Stock: 3  
Dimensions (in.): 59x56x31  
Weight (lbs./kgs.): 1464/664  
Aircraft Cargo Positions: 0.5

Serial No.(s): G-000, G-001,G-002  
Dimensions (cm.): 150x142x79

# Field Command Post Shelters



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Provides shelter for remote site field command post complete with air conditioning, lighting, and electricity for radios and appliances.

## Description:

20-ft/6 m. diameter Omni-Sphere (314 sq. ft./29 m<sup>2</sup>) structures. Portable, frameless enclosure molded of fiberglass with an air conditioner, overhead fan and light, electrical panel, vinyl floor, two doors, two windows and two flood lights. Packaged in modified A-3 containers, one or two to a container. Yanmar 5 kW diesel generators are packaged two or four to a crate to provide 220/110 power.

## Operational Considerations:

Multiple spheres can be connected together at a doorway fitting. Two portable generators (G-000-002) provide electrical power for each Omni-Sphere: one for communications equipment, one for A/C and housekeeping requirements. Pre-wired electrical panel and outlets. UPS units for the protection of electronic equipment from power surges. Panels for the Omni-Sphere can be stacked in the bed of a pickup truck for transportation to a remote site. Assembly takes 2-3 hours. Yanmar 5 kW generators operate on diesel fuel.

---

Systems or Units In Stock: 2

Dimensions (in.): 125x88x77

Weight (lbs./kgs.): 3770/1710

Aircraft Cargo Positions: 1.0

Serial No.(s): T-701, T-702

Dimensions (cm.): 318x224x196

**Category: Support Equipment**

# Lighting and Generators



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Lighting for extending recovery operations and in maintenance support areas.  
Lighting for security at staging area or equipment compound.

## Description:

19 - Portable Coleman 3.5 kW gasoline generators and 40 - Halogen light stands.  
Packaged in K-1 container. Extension chords and spare bulbs provided.

## Operational Considerations:

Generators provide one 220/60Hz connection with 30 amp breaker, one 110/60Hz twist lock connection with 20 amp breaker and one 110/60 Hz duplex connection with 15 amp breaker for electrical power for tools or other equipment. Generator also has one 12 volt DC connection for charging storage batteries. Gasoline is required for generators.

---

Systems or Units In Stock: 1  
Dimensions (in.): 118x79x49  
Weight (lbs./kgs.): 4462/2024  
Aircraft Cargo Positions: 1.0

Serial No.(s): L-003  
Dimensions (cm.): 295x201x125

## Personal Protective Equipment (PPE)



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

### Application:

Protects personnel from hazards associated with oil spill cleanup activities.

### Description:

Assorted PPE to outfit approximately 50 responders for three days. Multiple sizes and/or adjustable.

- Plastic hard hats
- Rubber boot covers & gloves
- Tyvek suits
- Ear plugs

Packaged in plastic containers.

### Operational Considerations:

Boots, gloves, and Tyvek suits are disposable after one day's use. Decontamination areas should be set where reusable equipment can be cleaned for next use. This is a limited amount of equipment intended for an initial response. One crate of thirty Personal Flotation Devices (PFD's) is also available. Vendors should be contacted immediately to ensure an uninterrupted supply of PPE.

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Systems or Units In Stock: 2

Serial No.(s): M-011

Dimensions (in.): 55x30x24

Dimensions (cm.): 140x76x61

Weight (lbs./kgs.): 225/102

Aircraft Cargo Positions: 0.1

**Category: Support Equipment**

# Hoses and Fittings



Type of Oil  
Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Can be used with pumps and skimmers to extend operations, or modify transfer plans.

## Description:

Hose and fittings. Various 2, 3, and 4 in. suction and discharge hose. Various fittings and reducers, 2, 3 and 4 in.

Hose Quantities:

- (2) 3-in. x 100 ft./33 m. discharge
- (10) 3-in. x 25 ft./8 m. suction
- (8) 4-in. x 25 ft./8 m. suction
- (5) 4-in. x 50 ft./ 15 m. discharge (cotton jacket)
- (10) 4-in. x 50 ft./15 m. discharge
- (5) 4-in. x 100 ft./33 m. discharge

Packaged as required for situation in aluminum, plastic, or wood crates.

Also available: Sixty-six 4-in. by 10-ft./3 m. hoses (33 in each crate)

## Operational Considerations:

Kit may sent as is or modified based on situation and equipment in use. Should be kept at equipment depot with an accurate inventory as fittings and hoses are issued to crews.

---

Systems or Units In Stock: Multiple  
Dimensions (in.): Various  
Weight (lbs./kgs.): Various  
Aircraft Cargo Positions: Various

Serial No.(s): S-065  
Dimensions (cm.): Various

**Category: Support Equipment**

# Cargo Slave Pallet



Type of Oil Effective With:

- Group I
- Group II
- Group III
- Group IV
- Group V

Environment:

- Ocean
- Nearshore
- River

## Application:

Used with large forklift to unload equipment at airfields that do not have high/K-Loader cargo handling equipment.

## Description:

Slave Pallets are shipped on the aircraft and used to unload equipment at airfields that do not have high/K-Loader cargo handling equipment. Packaged on a standard air cargo ULD pallet.

## Operational Considerations:

Heavy forklift is required to unload aircraft. Minimum 10,000 lb./4536 kg. at a lift height of 12 ft./3.6 m. Operators must be extremely careful moving near aircraft. (photo is available on page ix of this catalog).

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Systems or Units In Stock: 2

Dimensions (in.): 132x96x23

Weight (lbs./kgs.): 2032/922

Aircraft Cargo Positions: 1.0

Serial No.(s): M-025, M-026

Dimensions (cm.): 335x244x58

## Useful Conversions and Equivalents

<b>Volume</b>	
Gallons (U.S.) (gal.) x 3.785	= Liters (L)
Liters (L) x 0.264	= Gallons (U.S.)
Cubic Meters (m <sup>3</sup> ) x 264.2	= Gallons (U.S.)
Gallons (U.S.) x 42	= Barrels (BBL)
1 Barrel	= 42 Gallons (U.S.)
1 Metric Tonne	= 1,000 liters, 1 cubic meter,
1 Metric Tonne of Oil	= Approximately 7 barrels or 294 gallons
<b>Volume Rate</b>	
L/sec x 15.9	= Gallons (U.S.) per minute (gpm)
gpm x 0.23	= m <sup>3</sup> /hr
gpm x 1.43	= BBL/hr
m <sup>3</sup> /hr x 16.7	= L/min
m <sup>3</sup> /hr x 6.29	= BBL/hr
L/min x 0.06	= m <sup>3</sup> /hr
L/min x 0.377	= BBL/hr
gpm x 3.785	= L/min
<b>Length</b>	
Feet (ft.) x 0.3048	= Meters
Meters x 3.2808	= Feet
Inches (in.) x 2.54	= Centimeters
1 statute mile (SM)	= 5,280 feet, 1,609.3 meters
1 nautical mile (NM)	= 6,076 feet , 1,852 meters
Feet/minute x 0.0183	= Kilometers/hour
Feet/minute x 0.0114	= Miles/hour (mph)
Kilometers/hour x 0.5396	= Knots (Kts.)
<b>Weight</b>	
1 Pound (lb.)	= 0.45 kilograms (kgs.)
1 Kilogram (kg.)	= 2.2 pounds
1 Metric Tonne	= 1,000 kilograms (about 1 long ton)
1 Gallon of water	= Approximately 8.34 pounds
1 Gallon of dispersant	= From 7.9 to 8.2 pounds



KEEPING THE CARIBBEAN AND THE AMERICAS CLEAN SINCE 1977

2381 STIRLING ROAD, FORT LAUDERDALE, FLORIDA 33312

Telephone: 954 983 9880 Fax: 954 987 3001

Email: [staff@cleancaribbean.org](mailto:staff@cleancaribbean.org)

[www.cleancaribbean.org](http://www.cleancaribbean.org)

