2023 Catalog

Manufacturer of Turbidity Curtains, also know as Silt Curtains, Oil Containment Booms, and Seaweed Barriers.

ENVIRO-USA AMERICAN MANUFACTURER

"Protecting and Preserving Aquatic Resources"

TABLE OF CONTENTS



Who we are

We are an American manufacturer of Turbidity Curtains, also known as Silt Curtains, for the marine construction industry. We also make Oil Containment Booms as well as Seaweed Barriers to contain or divert seaweed from resorts.



Oil Containment Booms

We manufacture Conventional Oil Containment Booms, Fast Deployment Booms, and Permanent Booms. All of our booms comply with OPA 90, US Coast Guard OSRO and ASTM F1523 guidelines.

SEAWEED BARRIERS

Our Seaweed Barriers have been designed, tested, and proven to prevent seaweed from coming onto beaches at private residences, resorts, and hotels, thereby protecting tourism and marine life.





Turbidity Curtains / Silt Curtains

These curtains are designed to protect marine life while controlling silt and sediment during civil construction projects in or nearby bodies of water. Our barriers protect marine life and the environment.

Accessories

Anchor Systems to keep the barriers in place, Floating Marker Lights to indicate caution and barrier's location, Floating Tow Bridles to tow the barriers in place, and Reels to deploy and retrieve the barriers faster and easier.

PROJECTS

Port Everglades Expansion, Florida USA

St. George's Harbour Expansion, Bermuda

INCIDENT REPORT

Reservoir (DAM) Capillucas at 3151 m.s.n.m <u>– Yauyos – Lima – Perú</u> (pp.13-14)



ABOUT US

Enviro-USA American Manufacturer, LLC is proud to be one of the leaders in the manufacturing of barriers to protect and preserve marine life and the environment.

We manufacture Floating Turbidity Barriers for the marine construction industry, Oil Containment Booms to contain oil spills, and Seaweed Barriers to prevent seaweed from coming ashore and affecting tourism.

As a leader in manufacturing, and as a company, we strive to comply with and exceed market standards by producing quality barriers, while offering the most competitive prices in a world market.



PRODUCTS



Our products protect aquatic resources and preserve marine life.

This photo clearly shows how our barriers create a separation between clean and contaminated water.



Oil Containment Booms

We manufacture Conventional Oil Containment booms, Fast Deployment, and Permanent Booms for oil spills. Our Booms comply with OPA 90, US Coast Guard OSRO, and ASTM F1523 guidelines.

Our Oil Containment Booms can be custom made for the application and/or according to the customer's specifications.



Seaweed Barriers

Enviro-USA's Seaweed Barriers are available in Medium duty for normal applications or heavy duty for harsh environmental conditions.

Our Seaweed Barriers keep unwanted seaweed away from beaches, resorts, hotels, and protect tourism and marine life.



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Turbidity Curtains / Silt curtains

Floating Turbidity Curtains / Silt curtains come in Type 1, 2, 3 also known light, medium, and heavy duty. They can be manufactured as Permeable or Impermeable and in compliance with DOT's requirements. They are available in 100 & 50 ft lengths and 50 ft depths.

OIL CONTAINMENT BOOMS

We manufacture Oil Containment Booms for any application such as containing or diverting oil in marinas, rivers, ports, offshore, etc.



Standard Oil Containment

This type of boom has a round flotation and is commonly used by first responders. Commonly used in rivers and ports.

Available in different sizes and fabrics.

Fast Deployment Boom

Fast Deployment Boom also known as Fence Boom, deploys much faster than any other boom due to its design which allows it to be deployed from a hydraulic reel. 1,000 ft (300M) can be deployed in 8-10 minutes with only 3-4 people.



Permanent Boom

Ideal for permanent installations or frequent deployments. Used in Ports to surround vessels that are loading or offloading any kind of hydrocarbon or fuel, many times per week. It is also great for containing or diverting trash, debris or anything coming down a river.



Accessories

Water Anchor Systems are ideal for keeping a Turbidity Curtain in place while surrounding a work area. Floating Marker lights indicate caution and location of Turbidity Curtain. Floating Tow Bridles are used to tow the barrier while putting it in place. Reels to deploy and retrieve the booms much faster with minimal personnel.

Seaweed Barriers

These Barriers are designed to prevent seaweed from coming onto Resorts & Hotel Beaches thereby protecting tourism. The Seaweed Barrier in this photo was designed and manufactured by Enviro-USA and has demonstrated its capability in Quintana Roo, Mexico under extremely harsh environmental conditions. Please note the clean, clear water, and the beach free of seaweed.



Medium Duty — Seaweed Barrier

This model is to be used in marinas, boat docks, protected ports or any area where there is some wind and or minimal tide change. It does come with a top tension cable to provide good resistance. Very commonly used in Florida.



Heavy Duty — Seaweed Barrier

This model is to be used at shoreline and offshore to keep the seaweed far away from the beach while allowing the tide change and current to take it back out to sea without the need to handle it. *IMPORTANT:* Enviro-USA Heavy Duty model has been tested and proven to withstand **7 ft tidal waves, 8 knot currents, and 25** MPH winds.



Accessories

Water Anchor Systems are ideal for keeping barriers in place while surrounding a work area. Floating Marker lights indicate caution and location of barriers. Floating Tow Bridles are used to tow and put in place the barriers around the work area. Reels are used to deploy and retrieve the booms easier and faster.

Turbidity Curtains Also known as Silt Curtains.

Floating Turbidity Curtains are used to isolate active construction areas within or adjacent to a body of water to minimize the migration of silt laden water outside of the construction zone.



Project: Veracruz Mexico Port expansion.

Enviro-USA's barriers were manufactured with depths ranging from 7 to 49 feet to protect two (2) very large coral reefs. This product was also reinforced to handle the rough environmental conditions.

Our Barriers protect and preserve marine life.



TYPE 1—Light Duty

Type 1 Floating Turbidity Curtains are light duty, have NO top tension cable, therefore are ideal for **calm water applications** such as ponds, shallow lakes, and streams that are sheltered from winds and have very little current.

TYPE 2—Medium

Type 2 Floating Turbidity Curtains are medium duty, have one (1) top tension cable, and are ideal for **moving water applications** such as rivers, inland waterways, harbors and or protected ports.



TYPE 3—Heavy Duty

Type 3 Floating Turbidity Curtains are Heavy Duty and designed to control turbidity in **tidal applications** where wind, current, and or tide changes require a heavy duty product. Ideal for unprotected ports, harbors, shoreline, and offshore.

Accessories

Anchor Systems are ideal for keeping a Turbidity Curtain in place while surrounding a work area. Floating Marker lights indicate caution and the location of a Turbidity Curtain. Floating Tow Bridles are used to tow the booms in place around the work area.

ENVIRO-USA AMERICAN MANUFACTURER, LLC TURBIDITY CURTAIN TYPE 3 IMPERMEABLE 45 FEET DEEP



Everglades Port Expansion, Florida USA

Enviro-USA Turbidity Curtains are containing silt/turbid/contaminated water within the immediate work area. Please note in the picture the difference of color between contaminated and clean water.

ENVIRO-USA AMERICAN MANUFACTURER

TURBIDITY CURTAIN TYPE 3 PERMEABLE 10 FEET DEPTH



These 2 photos are of the same project, the expansion of St. George harbor in Bermuda.

Enviro-USA's Turbidity Curtains are protecting the pristine waters of St. George Bay, which is used for recreation and diving. The diver in the water is a governmental official inspecting a cave that is very popular with divers. The inspector is making sure the Turbidity Curtain is keeping the turbid and silt contained and away from the cave.

Please note the clarity of the water outside the curtain. This clarity demonstrates that Enviro-USA's Turbidity Curtains are working properly and as designed.

Our Turbidity Curtains separate, protect and confine silt and turbid water within the immediate work area.

Visit our website at: www.enviro-usa.com

Standard Oil Containment Booms

(For containing or diverting oil spills.) Below are the Standard Oil Containment Booms that we offer:

10" Standard Oil Containment Boom (25.4 cm) Ideal for CALM WATER applications.

11" Standard Oil Containment Boom (28 cm) For rivers with SLOW CURRENT.

13" Standard Oil Containment Boom(33 cm) For rivers with FAST/ ROUGH CURRENTS.

18" Standard Oil Containment Boom (46 cm) For SMALL PROTECTED BAYS.

19" Standard Oil Containment Boom (48 cm) Widely used by emergency response companies due to it's easy to use size and the versatility that if offers of where it can be used.

Standard Oil Booms have round floats and are most commonly used by oil spill responders. These booms are also the most affordable.

Available in different sizes for different applications for rivers, ports, harbors and open sea.

20" Standard Oil Containment Boom (51 cm) For PROTECTED PORTS.

25" Standard Oil Containment Boom (64 cm) For UNPROTECTED PORTS.

30" Standard Oil Containment Boom (76 cm) For COASTLINES.

36" Standard Oil Containment Boom (91 cm) For OFFSHORE.



Fast Deployment Oil Containment Booms

(For containing or diverting oil spills.) **Below are the sizes we offer:**

16" Fast Deployment Oil Boom (40.64 cm) For CALM WATER.

19" Fast Deployment Oil Boom (48.26 cm) For PROTECTED PORTS.

25" Fast Deployment Oil Boom (63.5 cm)

The favorite to be used on PORTS AND BAYS.

30" Fast Deployment Oil Boom (76.2 cm) For COASTLINES.

36" Fast Deployment Oil Boom (91.44 cm) For OFFSHORE.





Fast Deployment booms are a must when there is limited storage space, minimal manpower, and or there is a need to deploy the boom as soon as possible.

Also known as Fence Boom, it has a flat float, stores, deploys, and retrieves easily from a hydraulic reel, which allows 1,000 ft to be deployed in about 8-10 minutes with only 3-4 persons.

A hydraulic reel can store up to 2,000 ft which then can be deployed relatively quick.



ACCESSORIES







Water Anchor System

Enviro-USA's Water Anchoring Systems are used to keep Turbidity Curtains or Oil Containment Booms in place while deployed. Our anchor systems are completely assembled and ready to be deployed. Available with 25, 40, or 65 lbs. anchors.

Floating Tow Bridles

Enviro-USA's Tow Bridles connect to the end of Oil Containment Boom or Turbidity Barriers to tow boom around while getting them in place. Tow Bridles protect and prolong the life of the barriers by evenly distributing the towing load throughout the connectors and booms.

Floating Marker Lights

Enviro-USA's Floating Marker Lights are used to indicate caution and location of barriers while deployed. It has a Day/ Night sensor that automatically turns on at dusk and off at dawn, flashes every 3 seconds, and has a 1 mile visibility.

Land Anchor Systems

Enviro-USA's Land Anchor Systems come complete with all that is required for anchoring and securing a floating Turbidity Barrier or oil containment boom to a river bank, land, or beach, to keep them in place while deployed.



Tide Riser

Tide Risers are used to attach Oil Containment Boom to it which then allows the boom to ride up and down as water fluctuations increase or decrease.



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INCIDENT REPORT Report Date: Friday, January 29, 2021

Type of incident: Boom detachment, suction by gate, intake and launch to the rocks, traveling 4km in the Cañete river.

Date: Thursday, January 28, 2021 at 04:00 am and recovered at 11:00 am

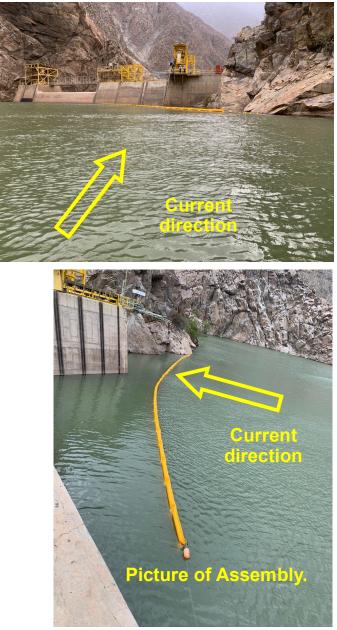
Place: Capillucas DAM a 3151 m.a.s.l. Yauyos - Lima - Perú - South America.

Background: The El Platanal Hydroelectric Plant - CHEP by its commercial name CELEPSA S.A. owns the Capillucas DAM, the company needs to install a boom before the retaining wall to divert the natural solid waste that is transported during the rainy season and the river floods such as logs, sticks and other natural waste that are transported by the river and that finally damage the power generation system, for this reason CELEPSA has decided to install a 30" boom from Enviro-USA American Manufacturer LLC, installed by Arturo Barragán as shown in the picture to the right.

Facts: On Thursday, January 28, 2021 at 04:00 am, one of the mooring lines was cut at one end, taking the 60 meters of the boom to the corner of the DAM, where the gate is located discharge, this was sucked in its length and ended up being pulled from the other end at a fast speed of 40 m/s (90 mph), discharging it violently in the form of a whip to the rocks of the river, following the current of the river for 4 kilometers of "rapids" (River Rapids) hitting the rocks innumerable times, turning, twisting and stretching, until it was recovered at 11:00 am, seven (07) hours after crossing.

Conclusion: After careful inspection, only one key pin on the connector was found to be missing, but the Enviro-USA American Manufacturer LLC, <u>barrier</u> <u>was undamaged.</u>





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CC TV recording the moment **▼**



- **◄**Photo of barriers after the incident:
- Fabric without damage.
- Other components without damage.
- Fully compliant configuration.





"Protecting and Preserving Aquatic Resources"

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