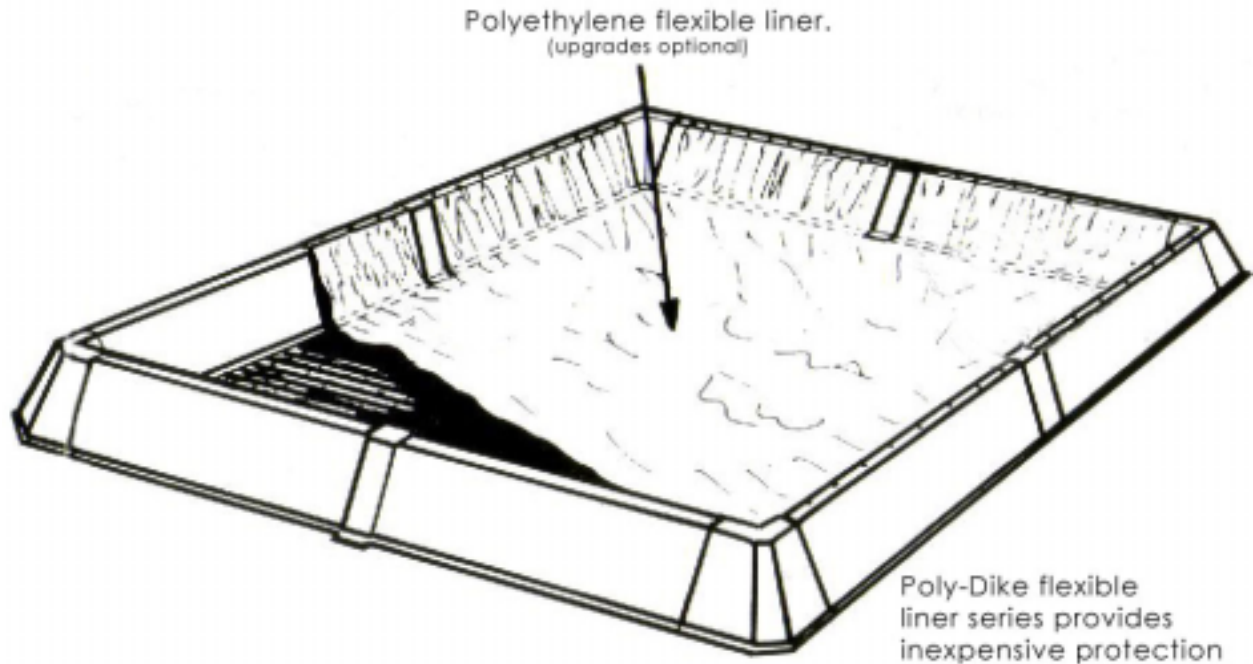


BULK FUEL BLADDER CONTAINMENT SYSTEM: POLY DIKE WALL (PDW)



OBJECTIVE

To provide the **DOD** with a heavy-duty, re-useable, Fuel Bladder containment system. Strong enough to withstand a catastrophic bladder failure, yet light enough for G.I. labor to install without special equipment. Able to ship on a single pallet; sets up in hours.

ADVANTAGES

- **Quick deployment** via aircraft or trailer
- ... **stores compact,**
- ... **ships compact,**
- ... **re-useable,**
- ... **sets-up & breaks down fast**
- ... requires only **G.i. labor,**
- ... **no** special lifting equipment,
- ... accommodates **all sizes** of bladders,
- ... will **withstand catastrophic bladder failures,**
- ... **priced competitive** with other long term applications.



FEATURES & BENEFITS

1) The PDW containment system can accommodate fuel bladders of any size due to its modular design.

2) PDW systems store compact. The wall structure “nests” together to every two inches (2”). Ten 24” high wall structures can stack in a 46” high configuration. Standard size: 10’L x 22”W x 24”H; therefore, a 100’ of dike wall could be stored in a space 10’ long by 22” wide, by 45” high. Ships well by aircraft.



3) The PDW system sets-up and breaks down in a few hours using only GI labor. Requires minimum crew of two men, a hammer, and a wrench. No special tools or lift trucks required.



4) Fully assembled system can sustain a catastrophic Bladder rupture without containment failure.

Pictured RIGHT: In a test conducted at a OH ARNG facility, the Poly Dike system withstood a 20,000 gallon catastrophic failure without sustaining damage to the integrity of the berm wall. The full force of the four-foot high wall of water hit the dike wall pictured here. Result: the Poly Dike wall did not move and the bulk of the spill was safely contained within the perimeter of the berm.



5) PDW systems can be used and reused.

Constructed of rugged 1/4” thick fiberglass lay-up; resistant to UV rays, and easy to repair if damaged, the Poly Dike Walls system should provide DOD customers with years of use. If a section is damaged in the field the modular design permits easy replacement of the damaged section so that the entire system is not rendered useless.

PRODUCT DESCRIPTION

Comprised of five (5) construction components.

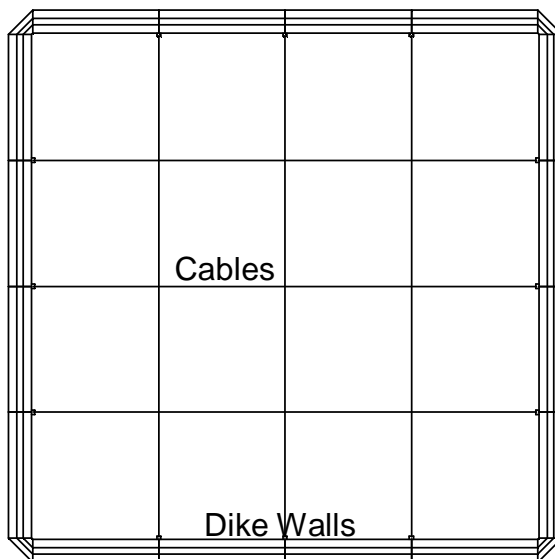
- 1) **POLY DIKE WALLS (PDW)** ... This is the basic building block of the PDW system. Constructed of $\frac{1}{4}$ " thick fiberglass lay-up, each PDW measures 18" wide, by 24" high. PDW's come in standard 10' lengths. Walls could be constructed to different lengths to accommodate special palleting requirements. A 24" high PDW weights approximately 12 lbs. per linear foot, therefore, the 10' length weighs approximately 120 lbs. For added structure, one end of the PDW is closed. At the closed end, the final 8" of wall is indented a $\frac{1}{4}$ ". This indentation allows for the closed end of the PDW to be inserted into (mated with) the open end of the adjacent wall, tying the PDW's together and adding structure at both ends of each wall section. The PDW joints are further secured with a lock pin. The bottom of the wall is finished with a 3" wide flange on both sides. These are drilled with $\frac{3}{8}$ " holes to accommodate an anchor stake. Walls should be staked in areas where heavy hoses will be draped over the walls or where there will be significant operator traffic over the walls.



- 2) **BRIDGE ARM** ... 90 degree corners are secured with a Bridge Arm. Two dike walls are brought together at a 90 degree angle till the inside flanges overlap. The Bridge Arm is inserted into the top of both PDWs and a bolt secures the PDWs and Bridge Arm together.



- 3) **STEEL CABLE CROSS TIES** ... With the PDWs in place and secured at the corners by the Bridge Arm the next step is to tie the opposite walls together with steel wire cross ties. A small steel flange is molded into a corner of each PDW. When the



containment walls are properly positioned a steel cable is secured to each joint flange and ties to the appropriate joint on the opposite side of the berm. These steel cables tie the walls into single system. In the event of a catastrophic failure of the fuel bladder, the resulting wave of fuel hitting the one wall receives tremendous support from the opposite wall.

4) **LINER ...** The liner is sized 4' wider on all sides than the floor area of the berm. Thus, if the enclosed berm offered an ID of 50' square, the liner would be ordered at 58' square. Rocks, sticks, and other debris in sump area must be removed to protect the floor of the berm liner. The liner is rolled out and the excess material is draped over the PDW walls. Excess material in the corners is rolled over the Bridge Arm and tucked under the backside of the Bridge Arm. The berm liner should not be secured to the PDW walls until the liner material has settled, or been pushed down along the inside edge of the PDWs (i.e. the liner material should not be stretched across the area's surface, but rather laid out and allowed to settle onto the floor and up against the entire inside surface of the PDW walls).



5) **CORNER & WALL CAPS ...** Once the liner has been draped over the PDWs and has settled into place, with excess corner material rolled over the Bridge Arm and tucked under the back side of the Bridge Arm, a Corner Cap is dropped over each corner, providing a clean, finished look to the corner, while securing the liner into the corner. The liner material draped over the PDW walls is now secured with Liner Caps. Once the liner has been secured under the Liner Cap, excess material should be trimmed away from the outside edge of the Liner Cap. This will give the finish system a clean, sharp appearance.



THE BULK FUEL BLADDER CONTAINMENT SYSTEM IS READY TO BE USED.

SUPPLIERS

Poly Dike Wall System with Polyethylene or XR-5 liners. Manufactured by Polystar, Inc., a Twinsburg, OH, based corporation, and exclusively marketed by Containment Corporation through its agent, Bowhead Manufacturing. 8A contacts available.