## Pumps and Supplies Fact Sheet

**Sandbags**. A conventional sandbag is a sack made of hessian/burlap, polypropylene or other materials that is filled with sand or soil. Advantages are that sandbags and sand are inexpensive and bags can be brought in empty and filled locally. Sandbags are not always effective in flood-fighting

as water will eventually seep through the bags and finer materials, like clay, may leak through the seam. After an event, unused sandbags can be stored for future use; wet bags must be disposed in a landfill as they become contaminated from flood waters. The National Flood Fight Materials Center stocks woven poly propylene bags that are 14 inches by 26 inches. Large sandbags, Flexible Intermediate Bulk Containers (FIBC), also known as big or bulk bags are most often made of thick woven polyethylene or polypropylene, either coated or uncoated, have a duffle top so they can be dropped from a helicopter, and normally measure around 45-48 inches cubed. . Their capacity is normally around 2,000 lbs.



**Crisafulli Trailer Pumps.** Power-take-off (PTO) Powered Crisafulli Trailer Pumps are driven from the PTO fitting on any tractor. The District stocks HB12RI (12"), and HB16RI (16") models. The 12" crisafulli pumps operate at a maximum of 540 rpm with 5000 gpm at 10 feet of total head and 3450 gpm at 30 feet of total head. The 16" pumps operate at 540 RPM, with 9,500 gpm at 10 feet of total head and 7,100 gpm with 30 feet of total head.

**Godwin Pumps**. Godwin Dri-Prime pumps with vacuum priming compressors are mounted to diesel engines on highway trailers. These automatic priming centrifugal pumps are maneuverable portable trash pumps featuring a venturi air evacuation system that allows priming from dry with suction lifts up to 28 feet (8.5 meters). They can run dry indefinitely without damage due to a high-pressure oil bath mechanical seal design. The District stocks 4" and 6", Godwin models CD103M and CD150M, with flow capability up to 1,100 gallons per minute, total dynamic head to 25 feet and solids handling to 3" in diameter.



**HESCO Bastion.** The barrier is made of a collapsible wire mesh container and heavy duty fabric liner, and is used as a temporary to semi-permanent dike or barrier for flood control and military fortification. Originally designed for use on beaches and marshes for erosion and flood control, the HESCO Bastion quickly became a popular security device in the 1990s. Hesco barriers continue to be used for their original purpose, and were most notably used in 2005 to reinforce levees around New Orleans in Hurricanes Katrina and Rita; during the June 2008 Midwest floods; and in Fargo, North Dakota to fight floods. HESCO Bastion is available from the National Flood Fight Materials Center in Rock Island District and is returned there after use. It requires special equipment to lift and remove the baskets.



**Portadam**. Portadam is a temporary, portable cofferdam comprising a unique free-standing steel support system and impervious fabric membrane, and eliminates the need for excavation or fill, costly pile driving equipment, or time-consuming sandbag dikes. The Portadam system consists of two main components; a welded tubular steel framework support and a flexible waterproof membrane permitting easy installation in any configuration and over uneven bed contours. Portadam is available from the National Flood Fight Materials Center in Rock Island District and is returned there after use.

