Sewage Pump-Out Systems
Types of Pump-Out Systems

- **Portable Units**
  - Dolly
  - Cart
  - Boat

- **Stationary Units**
  - Diaphragm
  - Peristaltic
  - Vacuum
- Diaphragm Pumps

- Peristaltic Pumps

- Vacuum Systems
Types of Pump-Out Systems
Pump-Out Accessories
Sewage Pump-Out
Design and Installation
Basic Steps to Pump-Out Design

- Determine Best Location for Boats
- Locate the Sewer Connection
- Locate the Best Electrical Supply
- Locate the Pump-Out Unit and Stanchions
Best Location for Boats

- Fuel Dock
- Transient Dock
- Dedicated Slip
- At Individual Slips
Types of Sewer Connections

- Gravity Line
- Lift Station
- Holding Tank
- Septic Tank
Electrical Supply

- Main Service Panel
- Sub-Panel
- Power Pedestal
- GFCI Receptacle
Locate Pump-Out Unit

Discharge Head

Suction Lift

Point of Pump-Out

Point of Service

Point of Gravity Flow
Locate Pump-Out Unit

- On Land
- On Fixed Pier
- On Floating Dock
Materials

- **Piping**
  - Schedule 40 PVC - Good
  - Schedule 80 PVC - Better
  - High-density Polyethylene Piping (HDPE) – Best
  - Reinforced Flexible PVC – for Gangways

- **Fittings**
  - Pressure (not DWV) Glue Fittings for PVC
  - Welded / Fused Joints for HDPE
PVC
HDPE
Sample Installations

Southport Marina
Southport Marina
St. James Marina
South Harbour Village
Deep Point Marina
Long Cove Marina
Misc.
Misc.
Misc.