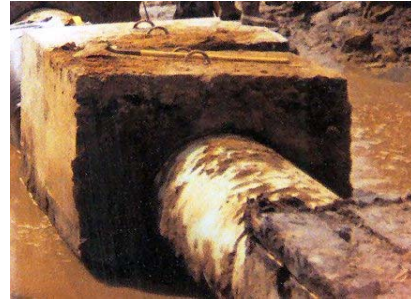


PipeSak® Fabric Weights vs Concrete Set-on Weights



- Environmentally clean – bag fabric is non-biodegradable and fill ballast is local, natural gravel
- Short lead time
- No trench dewatering required
- PipeSaks are a 'soft' weight requiring no extra depth (see Tech Note)
- No men required in trench to place PipeSak weights
- Designed to sit on ANY trench bottom
- PipeSak's low center of gravity prevents the risk of tipping
- No gap between PipeSak and pipe
- With a natural, local stone used as ballast, no chemical leaching to damage the pipeline coating
- Porous fabric and ballast allows easy path to cathodic protection currents
- Left-over PipeSaks easily folded and stored or returned for refund
- Easy to remove with straps if maintenance is required
- Curing of concrete often requires chemicals not natural to the surrounding environment
- Longer lead time for weights to form and cure
- Trench must be dewatered prior to installation
- Extra trench depth required to protect against 3rd party damage
- Men required in trench creating potential safety concern
- Designed to sit on flat trench bottom only to prevent tipping
- Top heavy concrete weights can tip off pipe
- During installation, gaps between weight and top of pipe common
- Have been known to leach chemicals that can attack the pipeline coating and groundwater
- Cathodic protection systems can be shielded
- Any left-over weights are difficult and costly to accommodate
- Lift hooks rust, can be difficult to remove if necessary

Adding to the engineering and environmental benefits listed above is the lower installed cost of the **PipeSak®** Buoyancy Control System – which is typically much less than any equivalent concrete based system.