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The Total Cost Equation of Pipeline Material Selection

Using the Total Cost Equation (TCE) to responsibly evaluate bid proposals for different pipeline materials often reveals the true cost differential between various pipeline materials involves much more than just the initial per foot bid price of the material itself. The TCE takes into consideration the real and respective factors directly related to the installation and future operation of a pipeline. The initial cost per foot of individual pipeline materials is many times deceiving. Design engineers and utility owners need to include several additional factors common to every pipeline in their materials selection assessment to best serve the utility and customers throughout the pipeline's intended service life. This presentation examines the interwoven contributive costs of:

- The initial bid pipe price along with the distinct bedding required for each material,
- corrosion protection costs and/or the maintenance of same over time,
- tapping requirements and line locating costs,
- operational energy cost disparities over time, and
- other tangible advantages provided by the extended service life of DI pipe.

Life Cycle Cost Analysis	TCE calculation results - 8" diameter					
Buried No Longer - AWWA DI pipe - 105 Years PVC pipe - 55 Years	EQN. Element	Size of Pipe	Length of Pipe	PVC Cost DR-14	Ductile Iron Cost	Cost Savings Using Ductile Iron
	IBP	8 inch	5,280 FT.	\$44,035	\$97,363	(\$53,328)
	BR	8 inch	5,280 FT.	\$25,344		\$25,344
 The AWWA Study "Buried No Longer" 	TR	8 inch	5,280 FT.	\$14,268		\$14,268
Projects that PVC pipe has only	LLR	8 inch	5,280 FT.	\$1,373		\$1,373
one half of the estimated carvice	СР	8 inch	5,280 FT.		\$3,590	
life of DI pipe in many regions of	EC	8 inch	5,280 FT.	\$80,803		\$80,803
the country	TOTAL	8 inch	5,280 FT.	165,823	100,953	\$64,870
		8 inch	190 mi			\$12,325,300
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Presentation Duration: can be tailored from 30 to 60 minutes per client's request.

Available Presenters: McWane Ductile Regional Engineers, Product Engineers and select local Sales Representatives. Details provided upon scheduling of a Training Session.

Prior Presentation Locations: 25 of the 48 contiguous United States. CEU / PDH / TCH professional development hours available in select locations.