

# **US Army Corps of Engineers**



# STANDARD OPERATING PROCEDURE TO ABANDON AND SEAL AN EXISTING PIPE



Revised 15 September 2011

Abandonment and sealing of pipes requires a USACE Levee System Permit and appropriate project plans and specifications are submitted with the permit application. In addition to the normal Levee Safety Team permit review, USACE Hydraulics and Hydrology staff will review these permits to ensure that any permanent pipe abandonment does not create any adverse flooding conditions.

Procedures and specifications to abandon in place an existing pipe shall be as follows: The existing pipe shall be cleaned and completely filled with a shrinkage-compensating grout. Cleaning the pipe maximizes the potential for a good bond between the host pipe and grout. Small quantity applications shall meet the requirements of ASTM C-1107 such as SIKA 212, Edoco Grout or approved equal (see information below for the Specs on these products). Large quantity applications shall be filled using 3000 psi sanded grout with a shrinkage compensating admixture such as SIKA Intraplast N, BASF Tetraguard AS20, or approved equal. The pipe shall be completely filled and the quantity of grout required to fill the pipe should be determined in advance to equal the volume of the inside of the pipe for its full length between the inlet and outlet headwalls. Filling of the pipe should be monitored and inspected to ensure the pipe has been completely filled for its entire length.

## Edoco Grout:

http://67.192.65.138/weavecmsresources//c\_TechData\_sheets/TDS\_Edoco2/E\_NFNSGrout\_TDS.pdf

# SikaGrout 212 Grout:

http://www.sikaconstruction.com/tds-cpd-SikaGrout212-us.pdf

### Sika Intraplast-N:

http://www.sika.ca/con-tds-intraplastn-ca.pdf

### BASF Tetraguard AS 20:

http://www.basf-

admixtures.com/en/products/shrinkage\_reducing/tetraguard\_as20/Pages/default.aspx

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