



C O N F E R E N C E

June 2-5, 2015
San Francisco, CA



Thursday, June 4, 2015 at 9:30am

FEATURED SPEAKER

Khaled Chowdhury, P.E., G.E. | AECOM
California, USA

IMPROVEMENTS TO COMMONLY USED CUTOFF WALL SPECIFICATIONS

Cutoff walls are the most common seepage improvement measure for levee flood control projects throughout California's Central Valley. Cutoff walls are widely used because they can be implemented within an existing right of way in either heavily urbanized areas with limited access, or in high-value crop agricultural areas. The most commonly used seepage cutoff wall types are soil-bentonite (SB), soilcement-bentonite (SCB), and cement-bentonite (CB). Contract values for cutoff wall rehabilitation projects in the Central Valley range from several millions of dollars to hundreds of millions of dollars, and play a significant role in the reduction of flood risk in urban and rural areas. However, recently completed construction of several levee improvement projects has shown limitations and inconsistencies among the commonly used technical specifications for construction of seepage cutoff walls. These limitations were evaluated by practicing engineers involved in different stages of cutoff wall design and construction. This paper describes the specification areas that typically generate design and construction issues. Recommended improvements to specifications are suggested to address these issues. The paper's topics include: the applicability of the different types of cutoff wall materials and construction methods, quality control testing requirements, backfill gradation requirements, mixing procedures, and settlement criteria for backfill.

For more information, contact Khaled Chowdhury by email at khaled.chowdhury@aecom.com.

Visit the Conference Website at www.deepmixing2015.org