

Dam Safety Modification Mandatory Center of Expertise

David P. Sullivan, P.E.
Chief, General Engineering Division, DSMMCX

Derek Maxey, P.E.
Senior Cost Engineer

Michael McCray, P.G.
Senior Geologist, DSMMCX

Michael Robinette, P.E.
Senior Geotechnical Engineer, DSMMCX

13 May 2014



US Army Corps of Engineers
BUILDING STRONG[®]



Mission

The Dam Safety Modification Mandatory Center of Expertise (DSMMCX) is a National Center that provides oversight and technical support for the Agency's Dam Safety Modification Mission.

Seven Regional Production Centers were also established to execute the Dam Safety Modification Mission.

Dam Safety Production Centers

- **Huntington, WV (Production Center and MCX)**
- **Concord, MA**
- **Sacramento, CA**
- **Omaha, NE**
- **Vicksburg, MS**
- **Atlanta, GA**
- **Tulsa, OK**



DSPC Roles

Primary organization responsible for the preparation of engineering products and activities associated with Dam Safety Modifications:

- Dam Safety Modification Report (decision document)
- Design documentation
- Plans and Specifications
- Engineering support during construction
- Construction Liaison

DSMMCX Roles

Responsible for oversight of the above activities in addition to:

- Ensure consistency and lessons learned across DSPCs
- Facilitate coordination of resources across DSPCs
- Provide oversight to DSPCs & perform Agency Technical Review
- Develop and conduct Dam Safety related training
- Administer national level A-E contracts for Dam Safety Modifications



Corporate Goals for DSMMCX & DSPCs

- **Improve technical quality of products and services**
- **Efficiently provide risk reduction across USACE dam inventory**
- **Ensure consistent implementation of engineering methodologies and policies**
- **Enhance, sustain and maintain technical competency capability within USACE**



Current Contracts

A-E Design Services

- Stantec/Tetra Tech JV
- URS Group Inc.

A-E Geotechnical Services

- Currently going through selection process

Drilling Services (Co-managed with LRH)

- Stantec (land based activities)
- Terracon (land based activities)
- Stantec (floating plant & land based activities)



Typical Corrective Features

Seepage Cutoff

- Grouting, concrete/soil cutoff walls, deep soil mixing

Seepage Control

- Relief wells, seepage berms/blankets, toe drains

Concrete Structure Rehabilitation

- Anchoring, RCC, Demolition/replacement, foundation drains

Scour/erosion Rehabilitation

- Anchoring, stilling basin modifications, channel armoring/scour protection

Overtopping Protection

- Gate/machinery rehabilitation/replacement, increase capacity

Miscellaneous

- Instrumentation, data management



Recent Project Contributions

- **Mosul Dam, Iraq**
- **Dahla Dam, Afghanistan**
- **Folsom Dam - California**
- **Isabella Dam - California**
- **Amistad Dam - Texas/Mexico**
- **East Branch Dam - Pennsylvania**
- **Herbert Hoover Dike - Florida**
- **Canton Dam - Oklahoma**
- **Lewisville Dam - Texas**
- **Center Hill Dam - Tennessee**
- **Bluestone Dam - West Virginia**
- **Dover Dam - Ohio**
- **Bolivar Dam - Ohio**
- **Zoar Levee - Ohio**



Questions/Comments?



BUILDING STRONG®