



EXECUTIVE SUMMARY

Periodic Inspection Results for the Mississippi River – City of Dubuque, Iowa Local Flood Protection Project

The Dubuque, Iowa Flood Control Works is a federally authorized and non-federally operated and maintained urban flood protection project. The project was authorized by Public Law 87-874, to be constructed substantially in accordance with recommendations of the Chief of Engineers in House Document 450, 87th Congress, 2nd session. The Flood Protection Project was completed during 1968-1974 in three stages.

The flood protection consists of levee protection, floodwalls, interior drainage system, pumping stations, gatewells, and closures structures, along the right descending bank of the Mississippi River in Dubuque, Iowa. The project is located between River Mile 582.6 and River Mile 578.6 for a distance of approximately 5.0 miles.

The City of Dubuque is responsible for operating and maintaining the flood protection system.

The five year Periodic Inspection of the Dubuque, Iowa system occurred on May 4, 5, 6, and 24, 2010. The local sponsor shows an active response to operation and maintenance of the project; however, some deficiencies were noted and actions are required. The overall system rating recommended by the contractor who conducted the inspection was unacceptable based on the deficiencies identified in the report.

The Rock Island District received comments from the Sponsor in response to the draft Periodic Inspection Report. Those comments and responses were considered during the levee risk analysis used to determine the final inspection rating. Several deficiencies were determined to be temporary conditions allowing the rating of the system to be appropriately based on an engineering determination of risk.

The Rock Island District has determined that the existing departures from USACE national standards identified during the Periodic Inspection result in an appropriate rating of the levee system as **Minimally Acceptable**. The Rock Island District rating supersedes the contractor's rating.

Issues that could impair the operation of the system and are in the most need of action:

- Unwanted vegetation is present within the vegetation-free zone of the levee system as defined by ETL 1110-2-571.
- Encroachments occur frequently along the flood protection system project. Encroachments typically observed were: private utilities, piping through and over the floodwall, heavy machinery, and security measures.
- Ten closure structures were not operated for inspection. They have not been closed since 2001. In some cases, there was rusting, blockages that prevented closing, or had sills that were not visible due to obstructions.
- Concrete surfaces had spalled areas and open joints.
- Movement of monoliths was observed but not severe enough to warrant immediate action.
- Some sluice / slide gates were rusted.
- Flap gates at Bee Branch Pump Station were missing



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The next annual inspection will be scheduled after October 2011, with periodic inspections currently scheduled every five years.