



EXECUTIVE SUMMARY

Periodic Inspection Results for the Mississippi River – City of East Moline, Illinois Local Flood Protection Project

The East Moline, Illinois Local Flood Protection Project is a federally authorized and non-federally operated and maintained urban flood protection project. The East Moline, Illinois Local Flood Protection Project was authorized by Public Law 90-483, 90th Congress, 2nd Session, approved 13 August 1968. The flood protection project is located on the east (left) descending bank of the Mississippi River between river miles 488.4 and 490.4, and a temporary levee system along the west/north right (descending) bank of the Rock River. The Rock River temporary levee system is considered to be a “flood fight contingency element” and is not officially part of the PL84-99 program. The system of levees and floodwalls was completed in 1983.

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

The five year Periodic Inspection of the East Moline system, including the Sugar Creek interior drainage levee, occurred on May 11, 12, and 13, 2010. The inspection of the associated pump stations was performed on May 25, 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 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:

- Encroachments were observed along portions of the levee which will interfere with flood fighting efforts if proper coordination and procedures are not implemented.
- Unwanted vegetation is present within the vegetation-free zone of the levee system as defined by ETL 1110-2-571.
- Insufficient sod cover was observed, mainly on the levee crown and landside levee slope.
- The Animal Control program may need improvement as animal burrows are present within the levee profile at various locations.
- A few minor depressions were observed along the levee alignment generally along the landside levee toe.
- Bank erosion and insufficient amounts riprap were observed on the riverside levee slope.
- There was missing closure method documentation on culvert and discharge pipes.
- An inoperable slide gate was observed at Station 130+00.



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- Various areas and items within the pump stations had corrosion and required repair and protection.
- Pump stations had insufficient documentation and frequency of inspections, and insufficient performance testing of pumps.
- The future disposition and operation of the “International Harvester Pumping Plant” is a concern.
- Many pumps were missing anchor bolts, had slight vibrations, and missing motor guards. In addition, an inoperable float control system was observed at a pump.
- The crane and a slide gate at the Sugar Creek Pump Station were inoperable and need to be repaired or replaced.

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