



**US Army Corps  
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St. Louis District

# News Release

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## **Chain of Rocks Locks 27 main chamber closed for emergency repairs**

**St. Louis, MO – March 23, 2009** – The U.S. Army Corps of Engineers closed the main 1200-foot-long, 110-foot wide chamber at the Chain of Rocks Locks 27, near Granite City, Ill., Sunday night at 9:45 p.m. for emergency repairs.

The closure was made necessary when a lock operator at the facility noted movement of the base of the anchorage of the hydraulic cylinder that moves one of the giant miter gates that open and shut like doors. District structural engineers were contacted and they identified the problem as critical. They recommended that operating the lock gate be suspended until they could assess the problem and make repairs.

The damage is located on the Illinois side gate leaf at the south, or downstream end of the chamber. Each of the gates is 65-feet wide and 70-feet tall. Each leaf weighs about 220 tons, or about the same as the Statue of Liberty.

The problem appears to be deteriorating material under the base of the cylinder anchorage. Corps of Engineers technicians are removing that material and will replace it.

Repair work will include chipping out concrete under the base and then inserting new material to stabilize the anchorage. A notice to river navigation interests indicates it will take 48 hours for the new foundation material to cure properly once it is replaced.

The lock's adjacent 600-foot auxiliary chamber remains in service. While it is usually used for smaller tows than the 15-barge tows that can be accommodated in the main chamber in a single lockage, it can accommodate these tows in what are termed "double-cut" operations.

In that process, up to nine barges are locked through first, using a helper boat to pull them out of the chamber and hold them. Then the next six barge "cut" and its tow boat are locked and the tow is reassembled by deckhands. This takes one-and-a-half to two hours vice a single-cut lockage which normally takes about 20 minutes.

The locks at the south end of the Chain of Rocks Canal, which parallels a treacherous stretch of the Mississippi River, are the entry and exit point to and from the system of 29 locks and dams that support navigation on the Upper Mississippi River. Each year some 70-80 million tons of bulk commodities and thousands of small private vessels transit the locks north and southbound.