STANDARD OPERATING PROCEDURE
FOR
EMERGENCY CLOSURE DURING CONSTRUCTION PROJECTS ON THE OHIO RIVER

30 November 2010

Provisions for the flood level or flood event that trigger the construction of a temporary emergency closure should be determined during the permit review process. USACE Hydrology & Hydraulics (H&H) Design personnel review the base elevations of a proposed closure and then, using this information along with the rate of river rise, provide a trigger elevation that is incorporated into construction contract documents regarding the Emergency Closure Plan.

In regards to the Emergency Closure Plan, the floodgate contractor will be required to provide the method of temporary closure to the Corps of Engineers for approval once the contract has been awarded. If required as a result of a potential flood event, the emergency closure has to be in place within 72 hours of notification by the Local Sponsor. Because the crest of a flood often rises, falls and then rises again, the closure system would need to be designed to be flexible - in other words it must have the capacity to be raised if necessary to match the top elevation of the rest of the flood protection system. This also means the structural elements (if the temporary closure is structural) would need to have the capacity to resist the full height flood. This does not mean that all structural components providing protection up to the full floodwall height would need to be installed for every flood event. Calculations must be provided to show that the temporary closure can withstand a full height flood.

The construction contractor must be able to provide evidence that their proposed emergency closure system consists of components that are either already in their possession, or are obtainable within the 72 hour time frame, and that they can also provide the means and methods, including manpower, required to have all components in place within the same time frame.

For most cases, the emergency closure would likely only be required to be constructed to the projected flood crest elevation plus five feet or so. The extra height provides a safety margin to include both freeboard for wave run up and uncertainty. USACE Hydraulics reviewers should make that determination.