



US Army Corps
of Engineers
Pittsburgh District

Notice to Navigation Interests

In reply refer to
Notice No. below

US Army Corps of Engineers, Pittsburgh District
1000 Liberty Avenue, Pittsburgh, PA 15222-4186
(412) 395-7334
http://www.lrd.usace.army.mil/op/nav_notice.htm

Notice No. 04-13

Date: March 16, 2004

REVISED - Locks and Dam 2, Monongahela River, Mile 11.2
Removal of Existing Fixed Crest Dam

1. Reference: Notice to Navigation Interest No. 04-10.
2. **TO ALL WHOM IT MAY CONCERN:** Notice is given that a contractor for the U.S. Army Corps of Engineers will be removing the existing fixed crest dam at Locks and Dam 2, Monongahela River, Mile 11.2. The demolition work is scheduled to begin in late March 2004 and take approximately 60 days to remove the fixed crest dam. This work was originally scheduled to start earlier but has been delayed due to high river flows.
3. This dam removal process will involve the drilling and controlled blasting of the existing concrete structure to systematically remove concrete monoliths.
4. River traffic passing the site should not be interrupted with the exception of periodic delays just prior to and immediately following any scheduled blast. These delays may occur as often as once per day during the main demolition phases of this work. These delays would last approximately 1½ to 2 hours. Blasting will occur sometime between the hours of 12:00 noon and 4:00 P.M. The following protocol will be in place during all blasting operations:

Safety Warning and Traffic Control During Blasting

- Industry will be notified through the Waterways Association of Pittsburgh calling tree 24 hours prior to any scheduled blasting operation at the existing dam, and the anticipated time when the blast will occur. Throughout the demolition phase, warning signs will be posted at all accesses to the locks, at the locks, and along the left abutment to indicate the area is within the blast zone. Warning signs will also be posted approximately ½ mile upstream and downstream of the dam site using anchored floating signs. All signage will be approximately 4 feet by 6 feet with the wording "WARNING BLASTING AREA CONTACT LOCKMASTER."

- Approximately 1-hour before the scheduled blast, the demolition contractor will position sentry boats approximately ½ mile upstream and downstream of the existing locks. Personnel onboard these boats will be equipped with marine radios to warn river traffic of the upcoming blast. The Lockmaster will issue a marine notification to traffic at approximately this same time. During this final hour leading up to and immediately following the blast, the Lockmaster and contractor personnel will be utilizing portable radios on the same frequency in order to monitor the blast operations.
- All traffic will be halted within the area one hour prior to the scheduled blast. Access to the locks or any other areas leading into the blasting area will also be prohibited.
- Minutes prior to the anticipated blast, air horns and other safety warning sounds will be heard until the detonation.
- After detonation, traffic and access will continue to be halted until the contractor can complete the necessary post-blast safety checks of the blast area to ascertain the completeness of the blast and make sure that no blasting agents are left undetonated. It is expected that this post-blast checkout will take between ½ to 1 hour following the detonation. When this is complete, an "all clear" signal will be issued and traffic and access to the locks will be resumed. The surge due to release of water during a blast is only expected to be significant during the initial detonation of a 90 foot section in the middle of the dam. This surge will not exceed one foot in the lower pool at Braddock, and will rapidly diminish in magnitude farther downstream. At Pittsburgh Point the surge will be negligible.

5. Control of Upstream Pool Levels.

Beginning in late March 2004, the Government will periodically close the new tainter gates at Braddock Dam to lower the water level between the dams to facilitate preparation of the old dam for demolition. In doing so, the upstream pool will be artificially raised to near elevation 724.0 (upper gage 14.3 feet). These operations will only occur if the river discharge is below approximately 15,000 cfs (upper gage 12.7 feet); otherwise the dam gates will remain in a fully raised position. During periods when the dam gates are closed, the Government will pass flow through the

CELRP-OR-TW

Navigation Notice No. 04-13

lock chamber filling system when no lockages are taking place, to minimize the rate of pool rise during the tainter gate closure. Bypassing of flows through the locks filling system will stop when tows are being locked through.

The Government will monitor the pool elevation during this period and reopen the tainter gates to hold the pool no higher than 14.3 feet on the upper gage. The upper pool may rise from its initial level to 14.3 feet at a maximum rate of approximately one foot per hour.

The lower pool at Braddock may initially fall up to two feet in two hours after the tainter gates are closed. When the gates are reopened, the lower pool may rise up to three feet, at a maximum rate of approximately two feet in two hours. The pool fluctuations will diminish downstream of Braddock Dam. Five miles downstream, the fluctuation will drop off by roughly 50%. At Pittsburgh Point, the fluctuations should not exceed one-half foot.

FOR THE DISTRICT ENGINEER:

/signed/

Richard C. Lockwood
Chief, Operations and
Readiness Division