RETURN TO HARPERS FERRY

15 Years After Mockup, Work is Underway

In March 2006, two busloads of participants in the Second American Natural Cement Conference made their way up the Potomac River Valley from Washington, DC to Harpers Ferry, WV. Stopping along the way to visit the ruins of the former Batchelor & Reynolds natural cement factory in Shepherdstown, WV, the group arrived at Harpers Ferry National Historical Park in the early afternoon and settled in on the slope overlooking the old Shenandoah Pulp Mill ruins to view a repointing demonstration utilizing Rosendale Natural Cement Products[®].



Photos: Shenandoah Pulp Mill Ruins in March 2006, Harpers Ferry National Historical Park, Second American Natural Cement Conference

Over the years the site deteriorated, most notably becoming overgrown with vegetation, but the Rosendale 12M mortar samples were unaffected. In 2020, stabilization of the site was finally funded, and a contract was awarded to the National Park Service Historic Preservation Training Center in Frederick, MD. Work began in the Spring of 2021.



June 2021: Stabilization work in progress, utilizing Rosendale 12M natural cement mortar. Natural cement was found to have been used in the original construction.

From the National Park Service:

The potential for water-powered industry was recognized early in Harpers Ferry's history as illustrated by the establishment of the National Armory in 1798. The Shenandoah Pulp Mill, built in 1887-88 by Thomas Savery, was the last water-powered mill to operate on Virginius Island. Built on the site of the Shenandoah Canal's lower lock, the mill ground wood to pulp for the production of paper. Flumes channeled water over five pairs of turbines, which powered the pulp-making machinery. Three pairs of the turbines were New American Water Wheels on horizontal shafts, one pair was New American Water Wheels on vertical shafts and one pair was Improved Success Water Wheels on vertical shafts.

By the 1920s, the mill was producing 15 tons of wood pulp daily. Mounting losses forced the pulp mill to close after 45 years of operation in 1935. Most of the structure was swept away in the flood of 1936, leaving only the massive stone piers. The closing of the Shenandoah Pulp Mill marked the end of the water-powered industrial era on Virginius Island. However, the stone foundation remains as an important artifact of hydraulic technology in the development of the Potomac River Valley.



View of Virginius Island in the late 19th Century; The Shenandoah Pulp Mill is the structure on the right side of the image.

The preservation of the Pulp Mill ruins has long been a goal of NPS Historical Architect Peter Dessauer, who hopes to see similar efforts undertaken for other structures on Virginius Island. Peter was present at the 2006 mockup installation and is currently overseeing the work at the pulp mill.

As training is part of each NPS project's goals, a training session was held for NPS and HPTC personnel on June 15th. Edison Coatings President Michael Edison traveled to the site to discuss the history, chemistry and properties of natural cement and to explain the important differences with portland cements. Several of the masons working on the project had previous experience working with natural cement on

a project at Fort Pickens in Pensacola Bay and expressed favorable views of the workability and working time for Edison Coatings' natural cement.



NPS Architect Peter Dessauer at the 2006 Natural Cement Conference (right) and at the Pulp Mill work site in 2021 (left).



HPTC Masons install Rosendale 12M natural cement mortar at the Pulp Mill Ruins.

The stabilization project is scheduled to run through October, completing an initiative that began when we were all much younger.



Edison Coatings President Michael Edison discusses the history, chemistry and properties of natural cement with NPS personnel (left) and revisits the 2006 mockup area (right). Courtesy of Peter Dessauer, NPS.



