

## Builder proud, relieved that Floodgates held

BY JAMES HAGGERTY (STAFF WRITER)

Oct 8, 2011

### CARBONDALE

Bob Non's anxiety rose with the swollen Susquehanna River as it exerted immense force on the floodgates protecting Wilkes-Barre and Kingston.

Mr. Non's company, Pleasant Mount Welding Inc., built the portable barriers for the opposite ends of the Market Street Bridge, linking levees holding back the deluge.

"It was very scary," Mr. Non, 49, of Crystal Lake, recalled of the flood's Sept. 9 crest near the tops of the 12-foot floodgates. "I went to bed figuring, 'In the morning we'll either be in business or we'll be out of business.' "

The floodgates held.

The river receded.



Bob Non of Crystal Lake and president of Pleasant Mount Welding Inc., in Carbondale used aluminum and steel to build the Floodgates that stopped flood waters from breaching on Market Street in Wilkes-Barre and Kingston. Photo Taken Thursday, Oct. 06, 2011. Jake Danna Stevens / Staff Photographer

JAKE D.STEVENS



Sunday Times file Water leaks under the floodgates at the Market Street Bridge on Sept. 9 after the Susquehanna River crested at a record of 42.66 feet.

MICHAEL R. SISAk / THE CITIZENS'

Wilkes-Barre and Kingston averted potential loss of life and catastrophic property damage. Pleasant Mount Welding, a business started 28 years ago out of a truck, dodged its own disaster.

"If that thing failed," Mr. Non paused, "complete devastation."

"We would have been sued by everybody," he said. "The legal costs would have been unbelievable."

After the Army Corps of Engineers initiated a 15-mile, \$250 million Wyoming Valley flood-control project in 1997, the federal agency initially wanted removable floodgates that were too high to install easily, said Jim Brozena, executive director of the Luzerne County Flood Protection Authority.

"We said, 'Give us something with minimal, moving parts,'" Mr. Brozena said, and the corps responded with a "post-and-panel" floodgate plan.

Pleasant Mount Welding, which designs and fabricates metal apparatus for dams, water treatment facilities and environmental projects, won a \$1 million contract to build the floodgates and several pumping stations in the Wyoming Valley in 2002.

Workers at Pleasant Mount took seven months to draft the plans and win approval of the design from the Army Corps before four months of manufacturing fashioned the steel I-beams and aluminum panels forming the basis of the gates.

"You design by numbers, It's not an exact science," said Mr. Non, who started the business in 1983 in Wayne County as a mobile operation to weld construction equipment and farm implements.

"The gates are built to conform to the curvature of the roadway," said Steven Garbarino, spokesman for the Army Corps of Engineers.

As the flood threat emerged, workers scrambled to assemble the 140-foot long Wilkes-Barre gate and the 110-foot Kingston gate in about four hours, Mr. Brozena said. Street-level plates were removed over pockets holding the 24-inch I-beams, rubber seals were placed along the base and one-half-inch-thick, four-foot aluminum panels were stacked between the beams before the apparatus was bolted tight.

"The gates had seen some water before, not a whole lot," Mr. Brozena said.

The Susquehanna peaked at 42.6 feet in Wilkes-Barre, about 1.5 feet higher than the devastating Agnes flood of 1972, and water rose to about 10 feet at the 12-foot gates. At the flood's height, Mr. Brozena estimates, water rushing past the gates moved at about 400 cubic feet per second, equivalent to 3,000 gallons per second.

"You've got a river 1,000 feet wide sitting behind the gates and running at 8 to 9 miles-per-hour," he said. "That is a tremendous volume of water."

Some seals at the base of the gates burst and thousands of gallons of water gushed beneath, but the breaches were anticipated and the structures remained intact.

"Spillage is inherent in all gauges," Mr. Garbarino said. "The gates didn't fail. They handled the pressure just fine."

Back at Pleasant Mount Welding, though, tension was high.

As Mr. Non watched a correspondent from the Weather Channel standing in front of the floodgates as he broadcast a national television report, a feeling of helplessness overcame him.

"I thought, 'Are these things going to hold up?' No one knows the power of the river," Mr. Non said as he looked over diagrams of the floodgates in a conference room at Pleasant Mount's plant on Dundaff Street. "There could be something floating down the river that can completely wipe out those floodgates.

"There was nothing you could do."

Workers at Pleasant Mount, knowing the company's reputation and existence were at stake, shared their tension electronically.

"They were emailing YouTube videos back and forth showing breaches on the floodgates," Mr. Non said.

"We obviously had tremendous leakage through those gates, but the structures held up well," Mr. Brozena said. "It was a success. There was about \$5 billion saved because of the flood-control system."

U " u ° # ‡ ) # h k

U V 7 # k = o h o y # u # =

h U #

U V company.

"Our people and their process have withstood the test," he said. "It helps when you are looking for major, high-risk projects."

Contact the writer: [jhaggerty@timeshamrock.com](mailto:jhaggerty@timeshamrock.com)