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## Thousands Without Water After Spill in West Virginia

By Tri<u>p</u> Gabriel

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CHARLESTON, W.Va. — As 300,000 people awoke on Friday to learn that their tap water was unsafe for brushing teeth, brewing coffee or showering, residents and businesses expressed a mix of anger and anxiety in coping with an industrial accident with no clear end in sight.

Schools were closed, restaurants locked their doors and hotels refused reservations. Store shelves were quickly stripped of bottled water, and traffic snarled as drivers waited to fill jugs from tankers delivered by the National Guard.

"It's worrying me so much I'm having chest pains," said Cookie Lilly, 71, who waited with her husband to get a ration of four gallons of water at the South Charleston Community Center.



Freedom Industries processes and stores chemicals used in the coal industry on the Elk River. Tyler Evert/Associated Press

Gov. Earl Ray Tomblin, who ordered the ban on drinking, bathing and cooking with tap water in Charleston, the state capital, and nine surrounding counties, called on people not to panic.

"Help is on the way," he said in a statement. "There is no shortage of bottled water. Supplies are moving into the area as we speak."

Asked at a news conference about his "personal hygiene," the governor sought a touch of levity. "It would be great to hop in a hot shower, but we'll get through it," he said. "We're tough West Virginians."



Authorities did not know how dangerous the chemical was or how long it would take to flush it from the system. Ty Wright for The New York Times

Mayor Danny Jones of Charleston said the do-not-drink order was strangling businesses. "You can't imagine what it's like to function like this, or not function like this," he said, speaking as he drove home on Friday evening in uncommonly light traffic and passed a mall he said was nearly deserted.

The mayor and everyone else said their greatest worry was that no one in authority would say how long it would be before the water supply was potable again.

Officials said that up to 5,000 gallons of an industrial chemical used in coal processing seeped from a ruptured storage tank into the Elk River, just upstream of the intake pipes for the regional water company.

Authorities struggled to determine how much danger the little-known chemical, MCHM, or 4methylcyclohexane methanol, posed.

"We don't know that the water is not safe, but I can't say it is safe," said Jeff McIntyre, president of the West Virginia American Water Company, which supplies most of the household water in the area. "The only appropriate use for this water is toilet flushing."

The chemical, which smells like licorice, can cause headaches, eye and skin irritation, and difficulty breathing from prolonged exposures at high concentrations, according to the American Conference of Governmental Industrial Hygienists.



On Thursday, a worker placed a boom in the Elk River at the site of a chemical leak. Chris Dorst/The Charleston Gazette, via Associated Press

Four to six people had been admitted to hospitals for observation with symptoms of nausea, but none were in serious condition, said Karen L. Bowling, secretary of the State Department of Health and Human Resources.

As President Obama declared a federal emergency, Booth Goodwin, the United States attorney for the Southern District of West Virginia, announced that his office and "other federal law enforcement authorities have opened an investigation into the circumstances surrounding the release."

"We will determine what caused it and take whatever action is appropriate based on the evidence we uncover," Mr. Goodwin said.



Shelves were virtually cleared of water bottles at a Kroger in South Charleston. Tyler Evert/Associated Press

The owner of the ruptured tank, Freedom Industries, processes and stores chemicals used in the coal industry in 14 tanks on the Elk River, 2.5 miles upstream from the junction of the Kanawha River in downtown Charleston.

An Environmental Protection Agency report on the chemical facility showed no violations in the last three years.

The state Department of Environmental Protection issued on Friday a violation notice to the company for releasing MCHM into the air, and it ordered all tanks on the site to be emptied and the chemicals moved off site.



Water was distributed at a school in Charleston on Friday. Craig Cunningham/The Charleston Daily Mail, via Associated Press

Gary Southern, the president of Freedom Industries, said the company did not know how the leak occurred. Workers first noticed leakage from a 35,000-gallon tank into a containment area around 10:30 a.m. on Thursday and began a cleanup, Mr. Southern told reporters on Friday.

His account was contradicted by the Environmental Protection Department, which said that the leak was discovered by its inspectors at 11:10 a.m. in response to complaints from residents about the odor, and that when inspectors arrived at the plant they saw chemicals leaching through a containment dike and no cleanup underway.

Mr. Southern, who apologized for disrupting so many lives, said that MCHM was a "very low toxicity" chemical. "If you look at the technical data avail, it has no effect on aquatic life."

At one point Mr. Southern tried to end the news conference, citing "a very long day." A reporter, calling out "We're not finished," pointed out that it had been a long day for everyone, especially the people who cannot consume their water. Mr. Southern took a few more questions.

At a Rite Aid near Charleston's downtown, a semi truck delivering bottled water was greeted like Santa's sleigh. A line of 25 people immediately formed to buy the bottles as quickly as they were unloaded.

Residents swapped stories of how they first reacted to news of the tap water ban and how they were making do.

"I was in the bathtub when my wife came in and told me, 'Get out of the tub,' " said Curtis Walls, 60, who moved to the city a few months ago. He said the water that flowed from the tap had a licorice smell. You "can't do nothing" without water, he said. "You don't miss it till it goes away."

Patricia McIntyre, 36, was missing work because her employer, Diana's Downtown Café, was closed. She fretted about losing the hours. She had been having her hair washed at a salon when the radio reported the ban. "I thought my hair was going to fall out," she said.

But there was also anger toward Freedom Industries, and some residents rued Charleston's long history as a center of the chemical industry, although many plants have closed.

"Why just a little ways upstream from the water company do they have a chemical company with the opportunity of draining something into the water system?" asked Rex Stewart, a retiree, as he loaded a cooler and two jugs he had just filled into his car.

Mr. McIntyre of the water company, said that because the contaminated water was already in the distribution system, the entire system has to be flushed, including the region's fire hydrants.

It is unclear how long that might take.

"We cannot provide a timeline at this point," he said.

Timothy Williams and Ashley Southall contributed reporting from New York, and Daniel Heyman from Charleston.

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