

Handout 3 - "Why didn't Flint treat its water? An answer, at last"

Why didn't Flint treat its water? An answer, at last

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Back in 2014, Flint water treatment workers expected they'd add corrosion control to the city's drinking water—chemicals that would that would have prevented a public health crisis—after the city switched its water supply. But the Michigan Department of Environmental Quality said they didn't have to.

Up to this point, it's been hard to understand why the state didn't require Flint to use corrosion control, chemicals that stop lead from leaching into the city's water supply. And the state's rationale, that it misunderstood federal guidelines, has mystified water treatment experts interviewed by the Free Press. It also drew scorn from the Flint Water Advisory Task Force, appointed by Gov. Rick Snyder himself to investigate the crisis—the task force called MDEQ's interpretation of the rule "egregious" and "lax," saying it bypassed important and obvious questions about water safety.

But testimony at a legislative hearing this week from the city's utilities chief may help explain why: When Flint began to pump drinking water from the Flint River, the city's water treatment plant wasn't capable of adding corrosion control treatment, not without equipment upgrades the broke city couldn't afford.

In fact, Flint didn't start to install the required equipment until November 2015, when MDEQ signed off on a October permit application for a temporary phosphate feed system while a permanent feed was under construction, according to state records.

That's the same month Snyder finally acknowledged that there was a problem in Flint, that the abundant evidence amassed by independent researchers was accurate, and that the city's drinking water was not safe.

It's critical context for understanding the state's disastrous decision-making in Flint. Michael Glasgow, then a lab supervisor and now the city's utilities administrator, testified Tuesday at a legislative hearing about the Flint water crisis.

The state has said, for months, that MDEQ misinterpreted the federal Lead and Copper Rule, a guideline for treating water to prevent the kind of public health crisis that happened in Flint—because water pumped from the Flint River hadn't been dosed with corrosion control chemicals, the city's residents were exposed to lead-contaminated water, for almost two years, including nearly 9,000 children younger than 6.

And even after the U.S. Environmental Protection Agency told the state last spring that Flint must begin corrosion control immediately, the state didn't act—in official emails, claiming it was



appropriate to continue monitoring the city's water before changing its treatment, even as two rounds of state testing showed lead levels in the city's drinking water climbing.

The decision to skip corrosion control certainly didn't save money. Corrosion-control chemicals, which keep lead contained by coating the inside of plumbing pipes, are cheap; some reports estimate the cost of treating Flint River water at less than \$150 a day.

Plant upgrades, however, are expensive. A 2014 engineering report, performed in conjunction with a bond offering for a new regional water authority the state OK'd Flint to join in 2013, said the local treatment plant would require \$8 million in upgrades to process the Lake Huron water the new system would pump.

Flint was broke by the time it joined the new regional water authority, and under the oversight of a state-appointed emergency manager hired to cut costs. And it was still broke the next year, when a different emergency emergency manager opted to pull drinking water from the Flint River while the new system was under construction, instead of purchasing water from the Detroit system Flint had patronized for years.

Both choices were billed as cost-saving measures, justified because of Flint's financial situation. That 2009 report didn't specify how much of that \$8 million total installation of corrosion control equipment would account for, but the idea that Flint's plant needed a corrosion control upgrade wasn't new. A 2009 engineering analysis associated with the same water system detailed equipment necessary to add corrosion control at Flint's plant: a 6,000-gallon bulk storage tank, a transfer pump and a 120-gallon day tank and chemical metering pumps.

According to MDEQ, no upgrades to corrosion-control equipment were made at the plant before it began to pump and treat Flint River water, more corrosive than the Lake Huron water it expected to use when the new system was complete.

I asked Ari Adler, a spokesman for Gov. Rick Snyder, whether the plant's lack of equipment was a factor in the state's decision to skip corrosion control. Adler stuck with the state's line, that MDEQ misunderstood the Lead and Copper Rule. Nor, Adler said, did the Flint plant's capacity impact the state's decisions in the wake of EPA's order to start corrosion control immediately. In a series of emails earlier this year, MDEQ spokespeople said the state hadn't required Flint to upgrade its corrosion control equipment because upgrades of its corrosion control equipment weren't required.

It's the kind of circular, maddening illogic that makes parsing the causes and consequence of the Flint water crisis so maddening.

But one thing's sure: As we all work to understand what happened in Flint, the conditions at the water treatment plant—and whether the cost of adding equipment impacted public health decisions—should be a part of the conversation.