Phosphoric Acid Violation Frequently Asked Questions

Q: What does this mean for me? Is my water safe?

A: Yes, your water is safe. You do not need to do anything to your water. Testing has shown that our water is safe to drink and was safe to drink all throughout 2021.

Q: Did the uncertified phosphoric acid poison the water?

A: No. We sent in a sample of the uncertified acid for testing, and results showed that it wasn't harmful at the levels we fed.

Q: Can I have my water tested to make sure it's safe?

A: Sampling your water is not necessary. We have test results that show that the uncertified acid did not harm our water. When the uncertified acid was being fed, we ran over 6,500 tests on the plant tap and over 1,900 tests on water in the distribution system. These tests confirmed that the water was safe.

Q: Should I start drinking bottled water or get a filter?

A: These are not necessary. We have some of the highest quality tap water in the nation. Our water testing consistently shows that the water is safe to drink, and doesn't need to be filtered at home. If you do choose to use an in-home filter, be sure to change the filter as often as the manufacturer recommends.

Q: How could the water department make a mistake like this?

A: Water plant staff lets their chemical suppliers know that our water treatment chemicals must be NSF 60 certified. In this instance, the supplier made a mistake and sent acid that didn't get NSF 60 certified. Plant staff verified that the chemical was phosphoric acid, but didn't go to the extra step of verifying NSF 60. Procedures and policies are now in place to verify NSF 60 so this doesn't happen again.

Q: How did you discover that the chemical being fed was uncertified?

A: Plant staff did a review of their recent chemical deliveries and couldn't find documentation stating that the phosphoric acid being fed was NSF 60. Staff contacted the chemical supplier and the supplier discovered that the chemical they sent wasn't NSF 60 certified. The uncertified chemical was so similar to NSF 60 phosphoric acid, that plant staff wouldn't have discovered the difference any other way.

Q: Did you stop feeding the uncertified phosphoric acid as soon as you discovered it?

A: The Michigan Department of Environment, Great Lakes & Energy (EGLE) instructed us to keep feeding the uncertified chemical until we could swap it out with NSF 60 certified phosphoric acid. They said that not feeding the corrosion control chemical could have done more harm than leaving in the uncertified chemical. Plant staff discovered that uncertified phosphoric acid was being fed on August 31 and had it replaced with NSF 60 acid by September 1.

Q: What's the difference between NSF 60 phosphoric acid and the uncertified acid that you fed?

A: The phosphoric acid that we fed was technical grade. Technical grade phosphoric acid is often also certified as NSF 60. To gain NSF 60 certification, the acid needs to go through testing to ensure that it won't harm the public if added to potable water. The acid we fed didn't go through

this testing. We did test the technical grade acid after, and results showed that it wasn't harmful at the levels we fed.

Q: If you knew about this in August, why are you only telling me this now?

A: It doesn't appear that the water was ever unsafe to drink. Because of this, the State of Michigan (EGLE) gave us 30 days to get out the notice. It took us a while to compile our data, create the notice, and have them all printed and mailed. If we ever discover a reason why you shouldn't drink the water, you will be notified within 24 hours.

Q: If my water is safe and I don't have to do anything, why'd you send out this letter in the mail?

A: Because the Michigan Department of Environment, Great Lakes & Energy (EGLE) determined that this violation required direct mailing to all water customers within 30 days of their issued violation.

Q: Why do you feed phosphoric acid in the first place?

A: Phosphoric acid helps us with corrosion control. It forms a coating on lead and copper surfaces which helps keep those metals from dissolving into the water.

Q: At what level was the phosphoric acid fed into the water?

A: Our records show that the uncertified phosphoric acid was fed at levels between 4.0 mg/L to 5.0 mg/L.

Q: What effect did the uncertified corrosion control chemical have on corrosion or lead levels?

A: Our testing showed that the uncertified phosphoric acid provided as much corrosion control as the NSF 60 certified acid. Houses were tested for lead and copper between June to August, and the results were similar or lower than previous years.

Q: What does the NSF 60 rating mean?

A: NSF 60 certifies that a chemical is safe to add to potable (drinking) water. It also sets the maximum limit that a chemical can be fed to water and still be safe to drink.

Q: What is NSF?

A: NSF stands for National Sanitation Foundation. They were founded in 1944 by the University of Michigan's School of Public Health to standardize sanitation and food safety requirements. NSF International is an accredited, independent third-party certification body that tests and certifies products (including water treatment chemicals) to verify they meet public health and safety standards.

Q: What is being done to keep this from happening again?

A: Water Plant staff has setup a system to catch problems with chemicals prior to being added to the water supply. Staff will now review delivery chemical containers, paperwork, and the chemical (through lab testing). A plant supervisor will review and approve the chemical prior to being unloaded into plant chemical tanks.