

logo not found or type unknown

## EPA Recommends WAPA Implement Outreach Program For Customers Before Lifting "Do Not Drink" Advisory For St. Croix

**Federal agency identifies various lead-containing brass plumbing components in WAPA's system and other factors like drought and low pressure as lead sources**

Health / **Published On January 03, 2024 07:51 AM /**

Janeke Simon **January 03, 2024**

Image not found or type unknown



**WAPA's Richmond Water Storage Tank. By. ERNICE GILBERT, V.I. CONSORTIUM**

In their report from the November 2023 round of water sampling, the Environmental Protection Agency says although the multi-agency sampling effort was small and targeted, recommendations made should "apply to the entire island, to best protect public health." These include installing point of use filters at the customer's end as well as the development of a low-flow flushing

program by WAPA.

Eleven homes were sampled in this round, all of which had distribution meters where elevated levels of lead were flagged the month prior. All of these meters that could be observed had brass piping connecting the main to the meter, and PVC piping from the meter into the home. The EPA noted that because of the previous sampling which had disturbed the meters, results from this sampling could skew higher than homes where the meters had not been touched.

Of the 119 samples collected, three had lead concentrations higher than the EPA's action level of 15 parts per billion. Each of the three samples was from a different home, two from samples close to the household tap and the third closer to the meter. The EPA further revealed that 43 of the samples exceeded SMCL – secondary maximum contaminant threshold – levels for iron, which the EPA explains doesn't pose a health risk but could affect water's taste, color and odor. Excessive iron in the water has been blamed for St. Croix's chronic "brown water" issues, and can, according to the report, "cause reduced effectiveness of treatment for other contaminants."

The agency concluded that based on its analysis of the data at hand – all the sampling data as well as water quality from WAPA and service line inventory information – the main source of lead in the water is leaching from "various lead-containing brass plumbing components" in WAPA's distribution system. The leaching is caused by a confluence of factors: inadequate treatment of the high pH, high chloride water in WAPA's Richmond storage tank leaves water with a level of corrosivity that, when it sits stagnant in certain areas of the distribution system, leaches lead from these brass components. Recent drought has reduced the frequency at which WAPA flushes its distribution system, exacerbating the stagnation issue. Chronic low pressure in certain areas, perhaps caused by uncovered storage tanks, also contributes, as does residents' preference for water from the cistern vs their metered municipal supply.

Despite this, the EPA also concluded that "the high levels of lead found during the distribution meter sampling are likely not reaching household taps," although "there are sources of lead in the premise plumbing". First-draw samples taken at two of the households suggested that the lead detected was primarily from "the household plumbing, faucet, and/or aerator."

Based on these findings, the agency issued two categories of recommendations, the first for residents and the second for WAPA and the Department of Planning and Natural Resources.

Consumers of WAPA water should, the EPA says, regularly clean their faucet aerators and use certified lead removal filters on water intended for drinking and cooking. Flushing at least 250 ml (an 8 oz cup or bottle) is recommended, more if water has sat stagnant for over six hours. Residents should also ensure that the plumbing in their premises, including faucets, complies with current requirements. Special attention should be paid to fittings manufactured prior to the 1986 Safe Drinking Water amendments, the EPA recommended.

On the part of WAPA and DPNR, the EPA recommends waiting to rescind the "do not drink" edict until an outreach or education plan has been developed and implemented. Consumers should be taught how to flush water effectively, and how to properly operate and maintain filters. There should be a return to routine monitoring under the Lead and Copper rule, which means collecting compliance samples every six months from at least 60 sites for a year in the first instance.

The EPA is also recommending that WAPA should also develop an optimized corrosion control treatment program, as the existing treatment protocol was never updated when WAPA switched from desalination to reverse osmosis for water generation. WAPA should also implement a more robust flushing program, and inspect and rehabilitate storage tanks, the EPA recommends.

Meanwhile, the authority should continue upgrading its aged infrastructure to meet modern standards.

© Viconsortium 2025