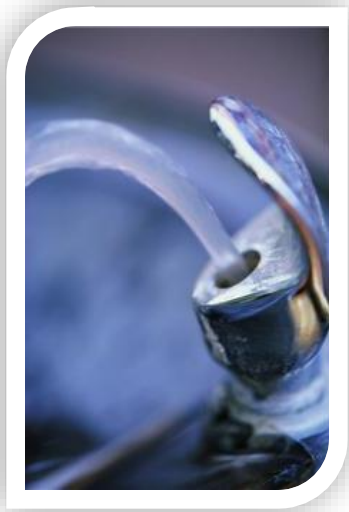




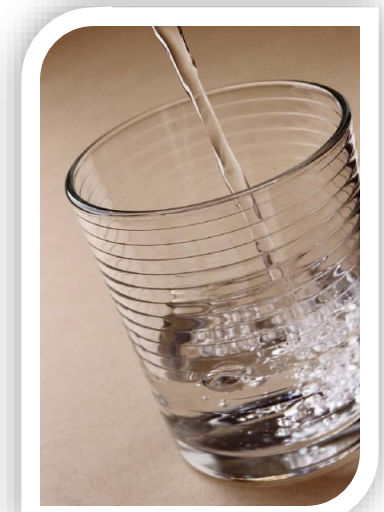
# St. Croix Red/Brown Water Issue



**St. Croix Community Meeting**  
**St. Croix, VI**

**October 24<sup>th</sup>, 2023**

**USEPA Region 2**





# Background

- The Virgin Islands Water and Power Authority (VIWAPA) serves drinking water to approximately 13,000 people on St. Croix.
- Following complaints from VIWAPA customers about Red/Brown Water, VIWAPA, VIDPNR, UVI, and EPA Region 2 developed a sampling plan to assess the water quality.



# Red/Brown Water Sampling Plan

- 66 locations throughout the VIWAPA distribution system on St. Croix.
- Included areas of customer complaints of Red/Brown Water issues.
- The sampling locations focused on distribution water meter connections to homes.
- Samples were collected Thursday, September 28 – Friday, September 29, 2023.

# Sampling Plan

- 2 Teams comprised of VIDPNR, VIWAPA, UVI and USEPA.
- 66 sampling locations.
- 26 locations collected one sample after a 3 to 5-minute flush.
- 40 locations were collected in pairs, labeled "A and "B".
  - first sample (A) within one minute
  - second sample (B) after a 3 to 5-minute flush.
- Collection of a 250 mL sample volume.



# Laboratory Analysis

- The monitoring plan included analysis for Bacteria, pH, conductivity, chlorine, iron, and trace metals.
  - UVI analyzed for bacteria.
  - VIWAPA conducted the secondary DW analysis.
  - EPA Region 2 Laboratory conducted analysis of the 11 Primary Drinking Water Metals' including Lead and Copper.
  - EPA Approved Method 200.8 for Trace Metals.
  - EPA Certified Laboratory for Drinking Water.





# Results

<b>Metal</b>	<b>Action Level (ppb)</b>	<b># of 66 Locations with 1st Sample above Action Level</b>	<b>Concentration Range (ppb)</b>	<b>% of locations with paired sampling (1<sup>st</sup> sample/2<sup>nd</sup> sample) with 2<sup>nd</sup> sample below the Action level "flushed out"</b>
Lead	15	35	16 – 20,000	93%
Copper	1300	15	1320 – 137,000	100%
Iron	300	46	400 - 5600	0%



# Actions

- VIWAPA-St. Croix issued a press statement , on October 14, 2023, notifying the public about the elevated lead and copper levels detected from the sampling effort.
- On October 16, 2023, Gov. Albert Bryan Jr. issued a “no drinking” advisory for Water and Power Authority water in Estate Diamond, Castle Burke, Colquohoun, and Mon Bijou.
- Until we have more information about the source, and how we can mitigate it, EPA recommends that people do not consume the WAPA water from the tap.



# Actions

- Region 2 is actively working to provide technical assistance to the USVI regarding communication, outreach, funding and additional sampling and analysis to assess the extent and cause of the lead and copper levels.
- VIWAPA resampled the 35 locations with elevated Lead levels.
  - Collecting 1<sup>st</sup> immediate grab sample and 2nd sample after 10 to 15-minute flush.
  - Collection of a 1000 mL sample volume.
  - Flushed the lines to the meters at least 8 hours before sampling.
- EPA is actively working with the USVI government on follow up specialized sampling, called “sequential sampling,” that will help determine the source of the elevated lead and copper levels.





# Questions/Comments