SUMMARY OF ATSDR'S PUBLIC HEALTH ASSESSMENT

# Evaluation of Chemicals in Public Drinking Water

## DORADO, PUERTO RICO | JUNE 2026

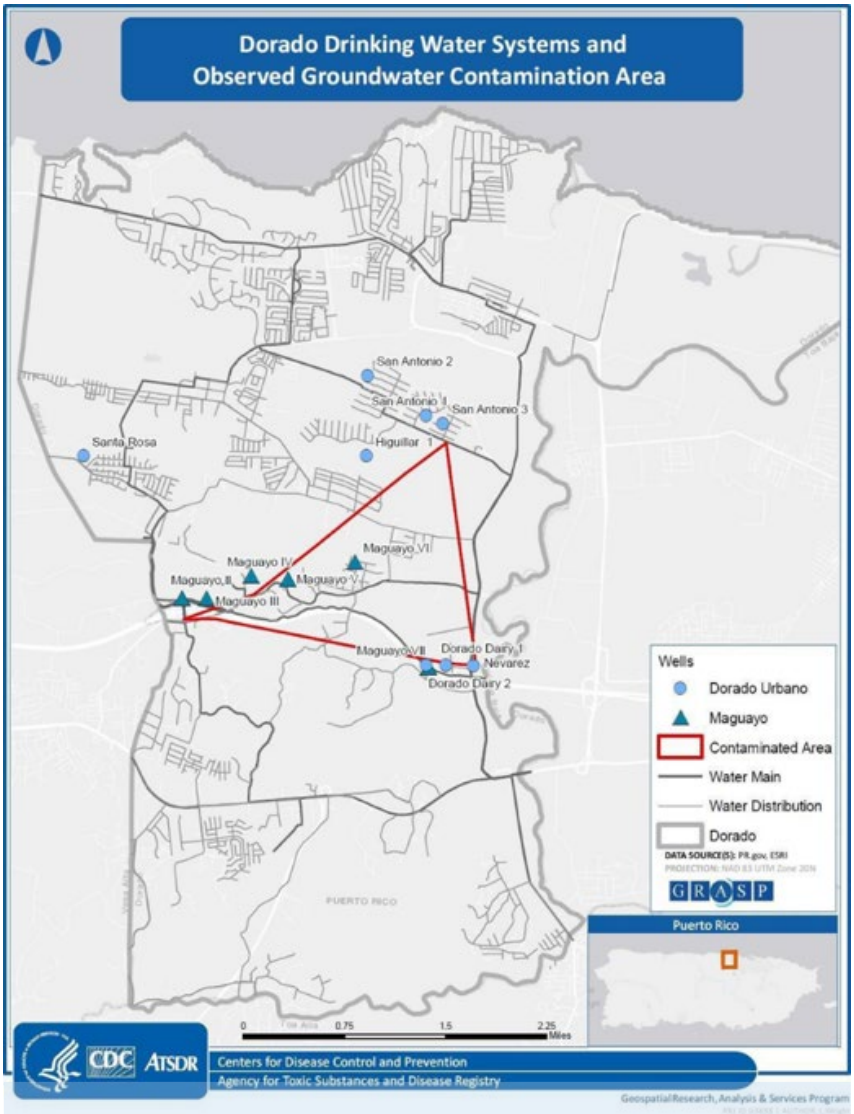
The Agency for Toxic Substances and Disease Registry (ATSDR), an environmental public health agency that is part of the U.S. Department of Health and Human Services, has released a report evaluating whether exposure to volatile organic compounds (VOCs) in the Dorado public drinking water supply system might make people sick. The main VOCs of concern were tetrachloroethylene (PCE) and trichloroethylene (TCE). ATSDR also evaluated disinfectants and disinfection by-products such as trihalomethanes, which were detected at low levels in the drinking water.

## Site Background and What did ATSDR do?

The Dorado Groundwater Contamination site is in a residential neighborhood that has commercial and industrial businesses in Dorado, Puerto Rico. The groundwater is contaminated with VOCs, mainly PCE and TCE (usually used in dry cleaning and metal degreasing activities). Currently, the source of groundwater contamination is unknown. The groundwater contamination has affected drinking water wells in the Maguayo and Dorado Urbano public water systems. In 1990, contaminated wells contributing to the public drinking water supply systems were closed by the Environmental Protection Agency (EPA). In 2001, the Super Aqueduct System was connected to the Dorado groundwater supply systems to supplement the current water supply.

ATSDR reviewed groundwater and soil samples collected between 2002 and 2019 by EPA Region 2 and the Puerto Rico Aqueduct and Sewer Authority (PRASA). We evaluated data for approximately 150 chemicals in 1,500 water samples.

You can find the report at: [Puerto Rico | Public Assessment & Health Consultation | ATSDR (cdc.gov).]




ATSDR graphic of Dorado drinking water systems and contamination area

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## What did ATSDR find?

### Finding 1 – People in the Dorado area using the public drinking water supply system for drinking, cooking, and bathing are not likely to have health problems from the low levels of TCE and PCE in the water.

**Disinfection-Related Chemicals:** PRASA adds chlorine, a disinfecting chemical, to the public drinking water supply system to kill germs. When chlorine is added to the water, a chemical reaction occurs forming other chemicals such as monochloramine and dichloramine along with trihalomethanes, which are byproducts of the disinfection process with chlorine.

ATSDR doesn't have enough water sampling data to know whether coming into contact with disinfectants and disinfection byproducts in the drinking water supply system at the Dorado site could cause an increase in the risk of cancer over a lifetime. We do know that the benefits of using disinfecting chemicals to kill germs in the water keep people from becoming sick with life-threatening illnesses associated with polluted water like cholera, typhoid, or dysentery.

### Finding 2 – ATSDR does not know where the groundwater contamination is coming from. ATSDR cannot tell if anyone is coming into contact with soil or air in buildings that could make them sick from high levels of VOCs through vapor intrusion.

## What are ATSDR's recommendations?

- ATSDR will evaluate additional data collected by EPA and the Puerto Rico Department of Health (PRDOH) and update the findings of this report, if requested.
- EPA and the Puerto Rico Department of Natural Resources and Environment (DNER):
  - ✓ continue efforts to identify the source of contamination;
  - ✓ collect additional samples to determine the level of contamination; and
  - ✓ take action to address and prevent future groundwater contamination.
- PRDOH will continue to conduct routine water monitoring, as required by the Safe Drinking Water Act, with the assistance of EPA.

## Who can I contact if I have more questions?

If you have questions or comments, contact Luis O. Rivera-González, PhD, MS, lqx8@cdc.gov, ATSDR, Region 2, Toxicologist at (732) 906-6933 or by email at lqx8@cdc.gov

### ATSDR

PCE Information: Tetrachloroethylene (PERC) | ToxFAQs™ | ATSDR (cdc.gov)

TCE Information: Trichloroethylene (TCE) | ToxFAQs™ | ATSDR (cdc.gov)

### CDC

CDC - NIOSH Pocket Guide to Chemical Hazards - Trichloroethylene

Disinfection By-Products | The Safe Water System | CDC

### PEHSU

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