



Department of Health
Room 209
Three Capitol Hill
Providence, RI 02908-5097

TTY: 711
www.health.ri.gov

September 2, 2021

CERTIFIED MAIL

7020 2450 0001 5704 5167

PWS #RI1592023
Robin Weber, Moderator, Administrative Contact
Prudence Island Water District
PO Box 100
Prudence Island, RI 02872

Dear Ms. Weber:

Enclosed is the Second Amended Consent Order signed by both Rhode Island Department of Health and Prudence Island Water District.

Sincerely,

A handwritten signature in black ink, appearing to read "Seema Dixit".

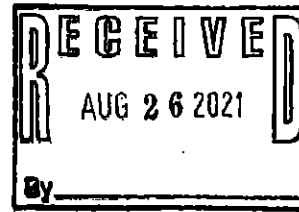
Seema Dixit
Director
Environmental Health Division

Enclosures

Cc: William Capron, Designated Operator (by email)
Prudence Island Water District, Owner (0412 Narragansett Ave, Prudence Island, RI 02872)
Ralph Kinder, Prudence Island Water District Legal Counsel (Gilstein, Kinder & Levin, LLP, 300 Metro Center Blvd., Suite 150A, Warwick, RI 02886)
Anita Flax, RIDOH
Carlene Newman, RIDOH
Colin Millar, RIDOH
Hui Chen, RIDOH
Garth Hoxsie-Quinn, RIDOH
Christina Millar, RIDOH
Zhengkai Li, RIDOH



State of Rhode Island



**IN THE MATTER OF:
PRUDENCE ISLAND WATER DISTRICT PUBLIC
WATER SYSTEM # RI 1592023**

SECOND AMENDED CONSENT ORDER

The Prudence Island Water District (PIWD) is licensed as a Public Water System pursuant to R.I. Gen. Laws § 46-13-1 *et seq.* (Public Drinking Water Supply) and 216-RICR-50-05-1 (Public Drinking Water). The Rhode Island Department of Health, Division of Environmental Health, Center for Drinking Water Quality, in connection with the matter described below, herein makes the following:

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. PIWD is licensed by RIDOH as Public Water System #RI 1592023.
2. During the period July 1, 2018 to July 31, 2018, PIWD violated Section 17.1 of R4613-DWQ¹ in that it exceeded the microbiological Maximum Contaminant Level for the Total Coliform Rule.
3. During the period September 1, 2018 to September 30, 2018, PIWD violated Section 16.4(c)(6)(B) of R46-13-DWQ in that it exceeded the microbiological Maximum Contaminant Level for the Total Coliform Rule.
4. During the period September 1, 2018 to September 30, 2018, PIWD violated Section 16.4(c) of R46-13-DWQ and 40 CFR § 141.860(a) of the National Primary Drinking Water Regulations in that it exceeded the microbiological Maximum Contaminant Level for the Total Coliform Rule and the Revised Total Coliform Rule.
5. By email dated October 4, 2018 RIDOH notified PIWD that PIWD was required to provide public notice of a boil water advisory because *E. coli* bacteria was found in the water supply.
6. From June, 2017 to June, 2021, PIWD had 49 sample results out of 210 samples that were present for total coliform, triggering ten Level 1 or Level 2 Assessments.

¹ R46-13-DWQ was superseded by 216-RICR-50-05-1 on 10/31/2018.

7. By letter dated October 19, 2018, RIDOH notified PIWD that RIDOH had concluded that despite the implementation of several corrective actions to attempt to remedy recurring coliform presence in the distribution system, the coliform issue still remained, had been assessed as a sanitary defect and significant deficiency that was expected to continue, and required PIWD to install permanent chlorination at all wells in order to maintain a disinfect residual of at least 0.2 mg/L throughout the distribution system pursuant to Sections 13.4, 16.4 (c) and 10.1 of R46-13-DWQ. RIDOH stated that this permanent chlorination system must reliably achieve 4-log (99.99%) inactivation of viruses before the first customer for each groundwater source in accordance with Section 13.4. RIDOH stated that the permanent chlorination system must be installed and approved by May 17, 2019.
8. By letter dated October 29, 2018, PIWD filed a timely request for a hearing on the issue of whether RIDOH was justified in ordering plans for permanent chlorination at all PIWD wells.
9. During the period October 1, 2018 to October 31, 2018, the PIWD violated Section 16.4(c) of R46-13-DWQ in that it exceeded the microbiological Maximum Contaminant Level for the Total Coliform Rule.
10. On or about February 28, 2019, RIDOH and PIWD entered into a Consent Order under which PIWD agreed to attain compliance through the implementation of a cross-connection plan by August 1, 2020. PIWD also agreed to apply for approval of a permanent chlorination system by September 13, 2020 and to install a permanent chlorination system by July 1, 2021 if compliance through the implementation of a cross-connection plan was not attained by August 1, 2020.
11. On or about June 15, 2020, RIDOH and PIWD entered into a First Amendment and Restatement of the Consent Order under which PIWD agreed to attain compliance through the implementation of a cross-connection plan by December 1, 2020. PIWD also agreed to apply for approval of a permanent chlorination system by January 13, 2021 and install the permanent chlorination system by November 1, 2021 if compliance through the implementation of a cross-connection plan was not attained by December 1, 2020.
12. PIWD did not attain compliance through the implementation of a cross-connection plan by December 1, 2020.
13. PIWD did not apply for approval of a permanent chlorination system by January 13, 2021. PIWD requested an extension by email on January 13, 2021 and RIDOH approved the extension by email on January 14, 2021.
14. Upon information and belief, the permanent chlorination system will not be installed by November 1, 2021.

15. PIWD admits to the jurisdiction of RIDOH.

16. PIWD hereby acknowledges and waives:

- a. The right to an administrative hearing on whether RIDOH was justified in ordering plans for permanent chlorination at all PIWD wells;
- b. The right to legal representation at said hearing;
- c. The right to produce testimony, witnesses, and evidence on its behalf at said hearing; and
- d. Any and all rights of appeal.

ACCORDINGLY, AND BASED ON THE FOREGOING,

RIDOH and PIWD hereby agree:

1. PIWD must have all cross-connection control surveys performed by an individual holding a current certification from a cross-connection control program recognized by RIDOH (216-RICR-50-05-1.9.4(E)(1)).
2. PIWD has until May 31, 2025 to attain compliance through implementation of a cross connection control plan, including the inspection of existing backflow preventers and installation and inspection of backflow preventers at locations where a proper backflow preventer is not present, at each service connection.
3. On or before October 31, 2021, PIWD shall submit an application to the Rhode Island Infrastructure Bank for a loan from the State Revolving Fund for the purpose of obtaining funding, or otherwise apply for funding by October 31, 2021 from a different financial institution, for a permanent chlorination system at all wells (and an iron-manganese pre-treatment system at the Indian Spring wells) in order to maintain a disinfect residual of at least 0.2 mg/L throughout the distribution system pursuant to 216-RICR-50-05-1.13.4, 216-RICR-50-05-1.16.4(A)(6)(j) and 216RICR-50-05-1.10(A) of R46-13-DWQ. This permanent chlorination system must reliably achieve 4-log (99.99%) inactivation of viruses before the first customer for each groundwater source in accordance with 216-RICR-50-05-1.13.4. PIWD shall comply with all state and federal statutes and regulations in submitting this application (see <https://www.riib.org/sites/default/files/Drinking-Water.pdf>). PIWD shall provide to RIIB or another financial institution all information necessary to ensure financing is secured in order to meet the requirements of Items 4 through 7 below.
4. PIWD shall submit an application to RIDOH for approval of a permanent chlorination system as described in the RIDOH letters dated October 19, 2018 and June 10, 2021, attached hereto as Exhibit A, by December 31, 2021. The application must include:

- a. Plans, specifications, and calculations for iron and manganese pre-treatment of the Indian Spring wells. These plans, specifications, and calculations shall be signed and stamped by a Rhode Island-registered Professional Engineer and include manufacturer cut sheets and NSF 60 and 61 certifications for all components that come into contact with the water. PIWD shall comply with all state and federal statutes and regulations in submitting this application (see <https://health.ri.gov/publications/specifications/Relevant-Federal-and-StateLaws.pdf>).
 - b. A corrosion control study performed, stamped, and signed by a Rhode Island registered Professional Engineer to ensure any alteration of water chemistry due to the addition of chlorine will not cause a destabilization to the existing pipe scale. This study is required under 216-RICR-50-05-1.7.2(B)(3)(c) and shall include results of:
 - i. A materials survey or re-evaluate the most recent survey completed for the Lead and Copper Rule. The objective is to determine the existing structure of the water distribution system and the potential sources/tiers of lead and copper (216-RICR-50-05-1.7.7(A)).
 - ii. A water characteristics evaluation or re-evaluate the most recent studies that measures for lead, copper, pH, alkalinity, calcium hardness, conductivity, water temperature, dissolved oxygen, chlorides, sulfates, the oxidation-reduction potential and corrosion inhibitor, if used. Depending on the model of evaluation that is utilized, there are other analytes that should be considered. These include but are not limited to natural organic matter, total dissolved solids, ammonia, and buffer intensity.
 - iii. A desktop study, which includes evaluations of literature, pre-engineering work, prior PIWD system investigations, water quality data and information, theory, and similar system information in order to demonstrate if an alteration in the water chemistry can cause a destabilization of existing scale. All references must be cited.
 - c. A plan created, stamped, and signed by a Rhode Island-registered Professional Engineer for reducing the potential for Disinfection Byproducts formation. This plan must include test results of the wells for total organic carbon and other water quality parameters the Professional Engineer deems necessary to make this determination.
5. Within 90 days of preliminary approval by RIDOH of the permanent chlorination system engineering design, PIWD shall submit to RIDOH its final Environmental Assessment as required by Section 6.11 of the *Rhode Island Drinking Water State Revolving Fund* regulations, 216-RICR-50-05-6.

6. PIWD shall respond to comments and questions in RIDOH's engineering plan review letter(s) related to the treatment system within 31 days or by the date included in the letter(s), whichever is later.
7. Within 120 days of receiving financing or the final RIDOH engineering approval letter, whichever is later, PIWD shall install the permanent chlorination system treatment system and notify the RIDOH project engineer of the completion of the installation so that a conformance inspection can be performed by RIDOH.
8. PIWD will submit progress reports to RIDOH, which will be due January 15, 2022, January 15, 2023, January 15, 2024 and October 31, 2024 in accordance with 216-RICR50-05-1.9.4. These reports shall include progress on Items 4(a) through 4(c) above.
9. PIWD customers will remain on a boil water advisory until the treatment system is installed and approved by RIDOH, 4-log chlorination is shown to be maintained in two consecutive months of Groundwater Rule Compliance Monitoring monthly operating reports, and a minimum concentration of 0.2 mg/L chlorine residual is maintained throughout the distribution system as shown in two consecutive months of chlorine monitoring with Revised Total Coliform Rule coliform samples. PIWD will provide boil water advisory Public Notice Distribution and Posting to consumers, a copy to RIDOH, and Public Notice Certification to RIDOH on or before September 3, 2021 and every three months thereafter until the boil water advisory is lifted by RIDOH.
10. All previous Notices of Violation issued to date, including without limitation those dated October 19 and October 31, 2018, and any and all appeals thereof, are hereby dismissed/null and void with no assessments.
11. Should PIWD remain out of compliance with 216-RICR-50-05-1 following the expiration of all deadlines stated herein, PIWD will be subject to all fines and administrative penalties allowable by law, including, but not limited to, R.I. Gen. Laws § 46-13-16 and 216-RICR50-05-1.20.
12. This Second Amended Consent Order supersedes the First Amendment and Restatement of the Consent Order dated June 15, 2020 and is binding on the PIWD, its successors, and assigns, and cannot be terminated or modified unless a written agreement is executed between the parties.

Signed this 23 day of August, 2021.



ROBIN WEBER
PWS # RI1592023

PRUDENCE ISLAND WATER DISTRICT

Ratified by the RI Department of Health on the 1st day of September 2021.

Seema Dixit

AMY B. PARMENTER, CHIEF
CENTER FOR DRINKING WATER QUALITY
RHODE ISLAND DEPARTMENT OF HEALTH