



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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IN THE MATTER OF	:	UNILATERAL ADMINISTRATIVE ORDER
	:	PURSUANT TO THE NEW JERSEY
CITY OF TRENTON	:	SAFE DRINKING WATER ACT
TRENTON WATER WORKS	:	(N.J.S.A. 58:12A-6)
	:	

AUTHORITY

1. This Order is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (“Department”) by N.J.S.A. 13:1D-1, et seq., the New Jersey Safe Drinking Water Act, N.J.S.A. 58:12A-1, et seq., (“SDWA”) and attendant regulations at N.J.A.C. 7:10-1, et seq., the federal Safe Drinking Water Act, 42 U.S.C. §300f, et seq., and the National Primary Drinking Water Regulations at 40 C.F.R. §141, et seq., over which the Department has assumed primary enforcement responsibility pursuant to N.J.S.A. 58:12A-2, the New Jersey Water Supply and Wastewater Operators’ Licensing Act, N.J.S.A. 58:11-64, et seq., and attendant regulations at N.J.A.C. 7:10A-1, et seq., and the Water Supply Management Act, N.J.S.A. 58:1A-1, et seq., and attendant regulations at N.J.A.C. 7:19-1, et seq.
2. The Commissioner may issue an order under N.J.S.A. 58:12A-6 when a contaminant that is present in or is likely to enter a public water system may present an imminent and substantial endangerment to the health of persons.

FINDINGS

3. The City of Trenton (“City”) and Trenton Water Works (“TWW”), a self-financing department of the City, own and operate a public water system (“System”), as defined by N.J.A.C. 7:10-1.3, which has the Public Water System Identification Number 1111001 and is located in the City of Trenton, New Jersey. Collectively, the City and TWW are the Respondents.
4. As a public water system, the System is subject to the New Jersey Safe Drinking Water Act and its implementing regulations. N.J.A.C. 7:10-5.1.
5. New Jersey has incorporated by reference the National Primary Drinking Water Regulations at 40 C.F.R. part 141.
6. The City and TWW are “persons” as that term is defined in N.J.A.C. 7:10-1.3.

7. The System provides water to more than 200,000 people in Trenton, as well as portions of four surrounding municipalities: Ewing, Hamilton, Hopewell, and Lawrence.
8. The System is a surface water system that draws from an intake on the Delaware River in Trenton, New Jersey and is subject to the requirements of the federal Surface Water Treatment Rules, 40 C.F.R. § 141.70, et seq.
9. Based on the facts and circumstances enumerated in the following paragraphs, the Department has determined that conditions exist at the System that may present an imminent and substantial endangerment to the health of persons, and that this Order is necessary to protect public health.

SYSTEM OPERATIONS AND MAINTENANCE FAILURES

10. On September 27, 2022, the Department issued an inspection report based on Compliance Evaluation and Assistance Inspections of the System conducted on October 26, 2021, October 27, 2021, November 8, 2021, and February 3, 2022. As detailed in the September 2022 inspection report, those inspections revealed the Respondents' ongoing failure to properly operate and maintain the System to ensure it reliably produces safe drinking water in compliance with the federal and New Jersey Safe Drinking Water Acts.
11. The Respondents have failed to properly maintain critical treatment processes, monitor water quality, employ adequately trained operating personnel, and invest in required maintenance and capital needs. The compliance issues are long-standing; a 1976 Department investigation found that TWW had "insufficient training of operating personnel, an absence of emergency plans, a lack of proper maintenance at the plant, insufficient funding for maintenance and training, and a lack of understanding of the factors which are essential to the efficient and reliable operation of a water utility." Those findings reverberate in Respondent's present-day pattern of insufficient short-term corrective actions, combined with their ongoing failure to sustain compliance while taking the necessary actions to ensure the System's long-term technical, managerial, and financial capacity to properly maintain and operate TWW in a manner that consistently and reliably produces safe drinking water that meets all legal requirements.
12. Over the last ten years, the Department has identified at least 40 incidents, including 18 in the past five years, in which TWW shut down the treatment plant for reasons including brown-outs, treatment failures, and high turbidity in the Delaware River.
13. Further, a 2013 U.S. Environmental Protection Agency administrative order found multiple violations of various federal regulations, including exceedance of maximum contaminant levels ("MCLs") for total trihalomethanes, which at elevated levels are associated with negative health effects including cancer and adverse reproductive outcomes, failure to perform combined filter effluent turbidity monitoring, and failure to continuously monitor residual disinfectant concentrations entering the distribution system.



A. Inadequate Professional Staffing

14. After multiple findings of noncompliance by the Department, on February 5, 2018, the Respondents entered into an Administrative Consent Order (“Operations ACO”) with the Department governing operations. The Operations ACO addressed, in part, the SDWA obligations to ensure adequate staffing and operation and maintenance within the System.
15. The Operations ACO also addressed other System-related issues, including various System resiliency projects, lack of asset management, and critical staffing deficiencies.
16. Despite significant efforts by the Department to assist the Respondents with compliance, the Respondents have failed to maintain and follow operations and maintenance procedures designed to maximize preventative maintenance and operational techniques. This is evident by the condition of major unit treatment processes at the filtration plant and the inability of the Respondents to provide full staffing as specified in the September 25, 2017, Technical, Managerial, and Financial Capacity Report.
17. The Department has repeatedly notified the Respondents that the System’s operations lack trained professional staff in several key positions, including the lack of qualified licensed personnel in critical positions in operations management and the filtration plant.

B. Treatment Failures

18. As detailed in the Department’s September 2022 inspection report, partially functioning and poorly performing treatment units have exacerbated water quality issues throughout the System. The System’s Superpulsator units, part of the System’s treatment to remove suspended materials, are in poor condition and have not been properly maintained. As a result, the System does not adequately remove organic matter before treated water reaches the System’s chlorine contact basins.
19. The failure to remove organic matter prior to chlorination can cause or contribute to the formation of Disinfection By-Products (DBPs), including trihalomethanes and haloacetic acids.
20. The failure to properly remove organic matter in the System’s filtration process can also interfere with treatment and thus increase the risk of *Giardia* and *Cryptosporidium* contamination.
21. *Giardia* is a microscopic parasite that causes the diarrheal disease giardiasis. Common symptoms giardiasis include diarrhea, stomach cramps or pain, upset stomach, nausea, vomiting, and dehydration.
22. *Cryptosporidium*, which is a microscopic parasite, is a significant concern in drinking water because it contaminates most surface water sources, is resistant to chlorine and other disinfectants, and has caused waterborne disease outbreaks. Consuming water with *Cryptosporidium* can cause gastrointestinal illness, which may be severe and sometimes fatal for people with weakened immune systems, including infants and the elderly.



23. Under the Surface Water Treatment Rule, 40 C.F.R. § 141.70, et seq., the U.S. Environmental Protection Agency set maximum contaminant level goals of zero for *Giardia lamblia*, viruses, and *Legionella*; and promulgated National Primary Drinking Water Regulations for all Public Water Systems using surface water sources or ground water sources under the direct influence of surface water. The Surface Water Treatment Rule includes treatment technique requirements for filtered and unfiltered systems that are intended to protect against the adverse health effects of exposure to *Giardia lamblia*, viruses, and *Legionella*, as well as many other pathogenic organisms.
24. The System has been persistently out of compliance for its contaminant levels of DBPs, including Total Haloacetic Acids (“HAA5”) and Total Trihalomethane (“TTHM”). Since 2004, TWW has accumulated at least six violations for HAA5 at concentrations above the MCL, and at least eleven violations for TTHM. Respondents are currently out of compliance for TTHMs.
25. The System’s in-line rapid mixers, which ensure uniform dispersion of ferric chloride during the treatment process, malfunctioned and were removed from service multiple times between March 9, 2019, and August 13, 2021. During inspections on October 26, 2021, October 27, 2021, and November 8, 2021, the Department found that one mixer had malfunctioned. TWW was unable to report how long the mixer had been malfunctioning. The failure of the rapid mixing process can disrupt subsequent treatment processes and contribute to more frequent shutdowns of the treatment plant.
26. As further described in the September 2022 inspection report, the System’s Riverside chlorine contact basin was offline due to shear pin failure and the subsequent significant damage to the basin’s residuals collection system. TWW’s failure to undertake routine cleaning of the contact basins can cause DBP precursors to accumulate and ultimately increase DBP formation. In addition, the presence of organic matter, sediment, and sludge can reduce the effectiveness of disinfectants like chlorine, affecting the concentration and time needed to inactivate pathogens, including *Giardia* and viruses.
27. On October 22, 2018, TWW submitted its DBP Reduction Plan in response to the DBP MCL violations. In a November 7, 2018, letter, the Department required the Respondents to undertake a detailed evaluation of the treatment plant and submit a comprehensive report to reduce levels of DBP at the point-of-entry and address long-standing, ongoing issues.
28. On August 27, 2019, TWW submitted a comprehensive DBP evaluation report to the Department. While this report included improvements to address future formation of DBPs, TWW claimed the improvements were not mandatory to meet MCL requirements.
29. On June 4, 2020, the Department responded to TWW’s August 2019 DBP evaluation report. The Department’s letter reiterated the importance of optimizing the treatment plant and continuing to make improvements to reduce the System’s DBP levels.
30. Nevertheless, in late 2020, the System again exceeded standards for DBPs, including increases in TTHM at every sampling site as compared to the same time the previous year.



31. The Department required an updated progress report on the DBP reduction measures TWW had committed to in its August 2019 report. TWW represented that TTHMs levels were already falling due to corrective action it had undertaken pre-dating the August 2019 report and used this to justify not completing the reductions measures from the August 2019 report. However, historic TTHM quarterly data between 2019 and 2021 evidenced a steady increase of DBPs approaching the relevant MCL. Due to this concerning data, the Department again strongly recommended that TWW meaningfully engage in DBP reduction efforts.
32. During the third quarter of 2021, TTHM levels in the System exceeded the MCL. But TWW then repeatedly submitted deficient DBP Remedial Measures Reports. As a result, the Department issued three “Remedial Measures Report Deficient” letters before the Respondents’ Remedial Measures Report could be approved on June 1, 2022.
33. TWW remains out of compliance with the TTHM MCL from the third quarter of 2021.
34. As a result of the System’s current and long history of DBP violations, TWW must complete all approved remedial measures and tally two consecutive quarters below the relevant MCL. DBP formation in the System is linked to seasonal changes, the uncovered finished reservoir, and operation and maintenance failures causing organic matter to remain in the treated water leaving the plant.
35. Potential health risks of exposure to DBPs in drinking water include bladder cancer, early-term miscarriage, and birth defects.
36. On January 15, 2018, freezing temperatures caused ice formation in the System’s open-air gravity thickeners, impeding the System’s scraper arms and causing sludge buildup. Respondents then failed to meet the required CT standard (concentration of a disinfectant multiplied by the time that disinfectant is in contact with the water) and issued a Boil Water Advisory to a portion of their service area.
37. The Department requested an After Action Report from TWW, which revealed numerous issues: (1) only one of the two contact basins had been in operation; (2) high levels of solids from the gravity thickeners caused an unsustainably increased chlorine demand; (3) the raw water online turbidimeter did not show a spike in turbidity because the analyzer was clogged due to multiple days of high turbidity levels; and (4) TWW provided recommendations but no corrective actions or preventative measures. These issues are ongoing as of the date of this Order.
38. These issues, combined with the failure to meet the CT standard and the increase in turbidity, pose a significant health risk. The Respondents were providing water that was not properly treated to inactivate/remove *Giardia lamblia*, cysts, viruses, and other potential human pathogens.
39. On September 27, 2019, a leak in the chlorine feed line resulted in low chlorine residuals at the Central Pumping Station, and, accordingly, TWW issued a Boil Water Advisory. In response to this incident, the Department became aware that low chlorine residual readings were typical in portions of the service area, especially the areas surrounding the storage tanks. In a subsequent report, TWW indicated it had issues with turnover of the water in the Mercerville



tank and that low chlorine readings were typical. The lack of turnover in the tanks leads to high water age, dissipation of chlorine and increased water temperature that can promote the growth of bacteria and other pathogens. TWW indicated that it had retained an engineering consultant to design a pumping system to mitigate this issue. In the interim, TWW represented that it had drained the tank on a routine basis to encourage turnover. In fact, however, TWW did not drain the Mercerville tank routinely, and the chlorine residuals did not improve.

40. In a follow-up letter, the Department highlighted that, on numerous occasions, there was little to no chlorine residual leaving TWW's storage tanks. Failing to maintain a chlorine residual in the distribution system may provide a favorable environment for bacteria, including *E. coli*, and other microorganisms harmful to human health. *E. coli* and other microorganisms can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, elderly, and people with severely compromised immune systems.
41. TWW's operators failed to collect required daily turbidimeter verification samples on August 3, 2021, July 22, 2021, through July 29, 2021, and April 28, 2021. TWW also failed to collect a four-hour grab sample on July 29, 2020, while the turbidimeter was undergoing maintenance. Monitoring for turbidity, the "cloudiness" of the water, is critical to assess the performance of filtration treatment and ensure the protection of public health.
42. Turbidity may indicate that failures in treatment process have allowed or promoted the presence of disease-causing microorganisms (such as *Cryptosporidium*), permitting them to move through the treatment process into the finished water. For this reason, high levels of turbidity are considered an acute health risk that may cause severe gastrointestinal symptoms and require Tier 1 (Boil Water Advisory) public notification within 24 hours.
43. The Respondents' systemic failure to properly operate and maintain the System to ensure it reliably produces safe drinking water in compliance with the federal and New Jersey Safe Drinking Water Acts, including recent operational and maintenance violations and deficiencies noted in the September 27, 2022, inspection report, creates conditions in which contaminants are likely to enter the System that may present an imminent and substantial endangerment to public health.

FAILURE TO COVER OR ADEQUATELY TREAT UNCOVERED RESERVOIR

44. The Respondents maintain a seven-acre open, uncovered finished water reservoir, which contains millions of gallons of treated water providing drinking water to consumers daily.
45. Treated water from the TWW filtration plant supplies water directly to 30% of TWW consumers in the gravity feed area of the distribution system within Trenton. The remainder is pumped to the reservoir.
46. The reservoir serves as a source of water supply to TWW's Central Pumping Station, which pumps the finished water to 70% of TWW's customer base—approximately 151,900 residential consumers.



47. The impacts of human activity, algal growth, and animal waste upon open, uncovered finished water reservoirs pose a continual risk of introducing pathogens, including viruses, *Giardia lamblia*, and *Cryptosporidium*, directly into the drinking water systems that uncovered reservoirs supply. The National Primary Drinking Water Regulations, 40 C.F.R. 141.714, governing the enhanced treatment of *Cryptosporidium*, therefore require the Respondents to “cover” the reservoir, which could include efforts to physically cover it, replace it, or provide adequate treatment to address the pathogen risks. Pursuant to 40 C.F.R. 141.714, TWW must “be in compliance with a State-approved schedule” to cover the Pennington Reservoir.
48. Under the federal Safe Drinking Water Act, the Respondents were required to meet these reservoir requirements or comply with a State-approved compliance schedule by April 2009, which was extended to March 2013. The Respondents failed to meet this deadline.
49. The February 5, 2018, Operations ACO required the Respondents to cover the reservoir by July 31, 2023, extended from March 2013, to comply with federal requirements. The Operations ACO included several interim deadlines for the reservoir covering project.
50. The Respondents submitted a June 10, 2021, Pennington Reservoir Project Plan, in which they proposed to construct a series of above-ground storage tanks as an alternative to installation of a reservoir cover. But the Respondents have not obtained either formal DEP approval or adequate funding because of the Trenton City Council’s recurrent failure to approve critical and necessary funding.
51. TWW is presently in violation of the Operations ACO due to multiple project delays, cessation of the reservoir covering project without entering into a new DEP-approved schedule as required by 40 C.F.R. 141.714, and failure to address the ongoing public health risk from disease causing pathogens, including *Cryptosporidium*. In addition, TWW has missed the Operations ACO deadlines to complete supervisory control and data acquisition system upgrades on or before March 30, 2018, and to award a contract for the Reservoir inspection, cleaning, and repair and to obtain all final construction permit approvals on or before May 31, 2021.
52. To satisfy the necessary reservoir project obligations, the Respondents proposed comprehensive ordinances to the Trenton City Council to revise water rates for its customers and allow the City to bond for the \$108 million needed to fund capital improvements, including lead service line replacement and the reservoir project.
53. The ordinances expressly stated that they were intended to provide a means for the City to achieve compliance with its Operations ACO obligations.
54. On April 2, 2020, the Trenton City Council approved a portion of the comprehensive ordinance, adopting a rate increase and approving \$7 million in funding for lead service line replacement.
55. Despite written support from the Department and from surrounding municipalities served by the System, the City Council rejected the remaining request for more than \$83 million in bonds, which included \$50 million for the protection of the finished water in the System and was also necessary to ensure other maintenance and operations obligations are satisfied.



56. As a result of the City Council's failure to approve the \$83 million funding ordinance, the Respondents are without sufficient funding to fully meet their SDWA obligations.
57. On November 4, 2021, the City Council failed to approve a resolution to demolish an abandoned building for TWW to erect water storage tanks in place of the reservoir as a critical first step to fully meet Respondents' SDWA obligations.
58. The Department's September 27, 2022, inspection report reiterates that the Respondents have failed to meet the milestones outlined in the June 10, 2021, Pennington Reservoir Replacement Project Plan, jeopardizing the Respondents' ability to meet the July 2023 deadline to decommission the reservoir, especially given that necessary construction and demolition activities have not been approved or completed.
59. The Respondents' failure to address the potential health impacts from the uncovered finished water reservoir has resulted in multiple significant issues—both new and recurring. Beginning in July 2020, the Department began receiving reports from a Ewing Township resident about the presence of midges in TWW's distribution systems, which were followed by additional reports of midges in July 2022.
60. In July 2022, TWW performed sampling, which identified the widespread presence of midges in the System's distribution system. TWW indicated that algal growth in the reservoir was identified as a contributing factor to the presence of midges. In turn, the algal growth was caused or worsened by the Respondents' operations and maintenance failures as further described below.
61. The SDWA is designed to protect drinking water through a multi-barrier approach to establish barriers to eliminate or minimize the impacts from natural and human-made sources of contamination. The Department has determined that the midges originate from the uncovered finished water Pennington Reservoir. The detection of these midges in the distribution system signifies a breakdown of the multi-barrier approach necessary to comply with the SDWA and raises concerns about the health risk of other contaminants that may have been introduced into the finished water from the reservoir.
62. The Department has determined that midges were breeding in the Reservoir and feeding on the algae that was, in turn, feeding on zinc orthophosphate ("ZOP") that was backflowing into the reservoir due to a broken check valve first reported to the Department on July 14, 2022. Phosphorus is a primary food source for cyanobacteria, and the presence of ZOP in the reservoir has also contributed to the growth of cyanobacteria and a potential cyanotoxin public health risk.
63. The ingestion of drinking water that contains cyanotoxins at elevated concentrations can have a variety of adverse health effects that may include abdominal pain, headache, sore throat, vomiting and nausea, dry cough, diarrhea, blistering around the mouth, and pneumonia. Additionally, very high or repeated exposures to some types of cyanotoxins can cause additional effects, such as liver and kidney damage. Some groups of cyanotoxins can affect the nervous system, resulting in tingling, burning, numbness, and respiratory complications. These health effects are more significant for sensitive populations, including children.



64. Further, the Respondents have failed to conclusively determine when the broken check valve first started backflowing ZOP into the reservoir, but reported it was likely several months prior to reporting to the Department. This represents a failure in operations and maintenance procedures to effectively manage the reservoir and monitor ongoing water quality changes – both visual and chemical – that should have alerted TWW personnel to this issue much earlier. During the summer of 2022, TWW added copper sulfate to the Reservoir to treat the algae counts. However, based on calls with TWW and the Department, TWW failed to establish procedures to ensure this was done in a manner that would effectively treat the algae.
65. TWW has shut off ZOP treatment at the filtration plant until the check valve is repaired by a date that TWW has yet to determine. The lack of ZOP treatment also poses a concern as ZOP is necessary to reduce the risk of lead leaching from lead service lines within the gravity zone of TWW’s distribution system. ZOP is being dosed from the Central Pumping Station for corrosion control in the high service area of the distribution system.
66. In June 2020, the Department filed suit against the City and Trenton Water Works in the Superior Court of New Jersey, Mercer County, Chancery Division, seeking, in part, to compel the Respondents to take specific actions to address non-compliance with the Operations ACO. As of this date, the litigation is ongoing.
67. Notwithstanding the litigation, Respondents owe continuing obligations to the public pursuant to the SDWA, have missed key milestones to remedy the threat of contamination of the open finished water reservoir and have otherwise failed to bring the System into compliance with the SDWA’s requirements, which may present an imminent and substantial endangerment to the health of its consumers.

POTENTIAL *LEGIONELLA* RISKS

68. The Respondents have failed to take action to correct the factors that may be contributing to *Legionella* growth within the TWW distribution system.
69. *Legionella* is a type of naturally occurring bacteria that can become a health concern, especially for the elderly and those with weakened immune systems. Legionnaires’ disease is a severe form of pneumonia caused by breathing in droplets of water containing *Legionella* that can be fatal in some cases.
70. In August 2020, the NJ Department of Health (DOH) initiated an outbreak investigation into cases of Legionnaires’ disease in Hamilton Township. This effort included the recruitment of 20 volunteers from Hamilton Township to have their homes tested for *Legionella*. The sampling results indicated that the occurrence of *Legionella* in Hamilton was greater than expected compared to state-wide baseline data.
71. The Department has been working with DOH to evaluate the potential link between the TWW distribution system based on a failure of TWW to properly operate and maintain the distribution system. Water utility deficiencies could lead to growth of *Legionella* and possible “over-seeding” of *Legionella* during hydraulic events into buildings and homes. The Department has



identified numerous factors that are likely to promote *Legionella* growth within the TWW distribution system.

72. Conditions conducive for *Legionella* growth in the TWW distribution system include high turbidity, increased sedimentation, increased nutrient availability, low chlorine residuals during warm weather months, stagnant water in the storage tank, and no well-established flushing program.
73. As established by the September 27, 2022, inspection report, TWW has failed to maintain major unit processes at the Filtration Plant that are responsible for sedimentation and organics removal. TWW has also delayed in completing pump-down mixing systems at several of the storage tanks within their service area. A pump-down mixing system was recently placed into service at the Mercerville Tank, but TWW has yet to complete the design and installation of similar systems at the Lawrence tank.
74. Additionally, tuberculation (*i.e.*, the development of small mounds of corrosion products) in pipes from corrosive water or leaching of pipe material such as lead could allow for increased biofilm formation and provide opportunities for *Legionella* to harbor from disinfection. Most of the aging water mains in the TWW distribution system are made of cast iron, which is susceptible to corrosion and can promote *Legionella* growth.
75. TWW's failure to address the factors within the System that are enhancing conditions known to promote *Legionella* growth may present an imminent and substantial endangerment to the health of TWW's consumers.

POTENTIAL LEAD RISKS

76. Lead occurs in drinking water primarily because of corrosion of plumbing materials in water distribution systems. See 56 Fed. Reg. 26,463. Exposure to lead in drinking water may cause health problems ranging from stomach distress to brain damage. There is no safe level for lead in drinking water. See <https://www.epa.gov/ground-water-and-drinking-water/basicinformation-about-lead-drinking-water>. Children are particularly vulnerable to lead contamination. The Lead and Copper Rule ("LCR") requires large water systems to implement corrosion control techniques to minimize the potential for lead to enter drinking water. See 40 C.F.R. §141.80(b)(incorporated by reference by N.J.A.C. 7:10-5.1 to 5.2(a)(9)).
77. To maintain the integrity of their system operations and to provide the public with safe drinking water, Respondents are subject to state and federal drinking water requirements, including the SDWA's LCR. See N.J.S.A. 58:12A-1 to -39; see also N.J.A.C. 7:10-5.1. The LCR requires monitoring of lead and copper levels in drinking water, and it also requires a water system to take certain additional actions whenever more than 10% of samples taken during a monitoring period show lead concentrations above a certain concentration. These include replacement of lead service lines. See 40 C.F.R. §141.84.
78. Under the LCR, a water system experiences "Action Level Exceedances" ("ALE") when more than 10% of tap-water samples taken during a monitoring period show lead concentrations above 0.015 mg/l (15 parts per billion, or "ppb"). 40 C.F.R. §141.80(c)(1).



79. After a water system records an ALE, the SDWA requires that system to implement several corrective action measures. Among the required corrective actions, a water system with corrosion control treatment must inventory the lead service lines that it owns and replace at least 7% of system-owned lead service lines over a one-year period, and offer to replace the customer-owned portion, starting the first day following the monitoring period in which the ALE occurred. See 40 C.F.R. § 141.84(b)(1).
80. Respondents had three lead ALEs for the monitoring periods of January 1 to June 30, 2017; January 1 to June 30, 2018; and July 1 to December 31, 2018.
81. The Department directed the Respondents to undertake a number of actions pursuant to the LCR, including the following: 1) continue optimal and follow-up Water Quality Parameter monitoring; 2) conduct source water-monitoring for lead and copper and submit a source water treatment recommendations by December 30, 2017; 3) submit a corrosion control study by December 30, 2017; and 4) immediately commence lead service line ("LSL") replacement and submit a LSL inventory and replacement schedule within 60 days.
82. In violation of the LCR, the Respondent failed to provide a corrosion control study, source water treatment recommendation, and a lead service line inventory and replacement schedule by the applicable deadlines.
83. The first lead ALE required Respondents to replace 7% of the approved lead service line inventory by June 30, 2018. 40 C.F.R. § 141.84(b)(1). Respondents did not meet this deadline.
84. The second lead ALE required Respondents to complete a total replacement of 14% of the approved lead service line inventory by June 30, 2019 (i.e., an additional 7%) and the third lead ALE required an additional 7% to be replaced by June 30, 2020. See 40 C.F.R. §141.84(b)(1). Respondents did not meet this deadline.
85. Because of Respondents' failure to meet the regulatory deadline after the first ALE in 2017, Respondents and the Department entered into an Administrative Consent Order on July 26, 2018.
86. The July 26, 2018, ACO extended the deadline for Respondents to replace the initial 7% of lead service lines to December 31, 2019. The Respondents did not meet this ACO deadline.
87. As of March 15, 2022, the Respondents belatedly completed the 7%, 14% and 21% lead service line replacement milestones as required based upon the July 2019 LSL inventory.
88. The Respondents are required to continue lead service line replacement in accordance with N.J.S.A. 58:12A-40, et seq.
89. Pursuant to N.J.S.A. 58:12A-40, et seq., effective July 22, 2021, all community water systems must replace all lead service lines within their system by July 22, 2031, at an average annual replacement rate of ten percent. The law includes galvanized lines as lead service lines, which were not required to be replaced under the federal Lead and Copper Rule.



90. Based on the System’s current lead service line inventory, 16,257 of lead service lines, serving consumers within the System’s service area, remain. In addition, the system has 15,301 service lines of unknown material that must be evaluated and replaced if they are found to contain lead.
91. Despite ongoing lead service line replacement obligations and the considerable subsidies available from the Department, the City Council has refused to authorize the bonds necessary to finance additional phases of the lead service line replacement program. To that end, in State Fiscal Year 2022, the City failed to submit contracts for certification of additional phases of the lead service line replacement program, which would have been eligible for over \$18 million in principal forgiveness loans.
92. As described above, the Respondents have ceased introducing ZOP into the water supply due to a broken check valve. The Respondents have yet to determine the date by which the valve will be repaired. The absence of ZOP treatment poses a concern as ZOP is necessary to reduce the risk of lead leaching from lead service lines within the gravity zone of TWW’s distribution system. ZOP is being dosed from the Central Pumping Station for corrosion control in the high service area of the distribution system. The absence of ZOP treatment as outlined above will extend the timeframe in which corrosion control treatment will not be optimized.

**FAILURE TO ADVANCE CAPITAL IMPROVEMENTS CRITICAL TO SAFE
DRINKING WATER ACT COMPLIANCE AND COMPORT WITH STATE
INFRASTRUCTURE FUNDING REQUIREMENTS**

93. The Respondents require and have been the beneficiaries of considerable State funding to advance capital improvements necessary to achieve and sustain compliance with the SDWA.
94. The Department and the New Jersey Infrastructure Bank (“I-Bank”) together administer the Water Bank Program, which has provided Respondents significant funding to finance critical TWW improvements necessary to meet and maintain their safe drinking water obligations.
95. Respondents have failed to maintain compliance with their obligations to the Water Bank.
96. The City currently has eight outstanding long-term loans with the Water Bank, one of which has approximately \$8.5 million in aggregate proceeds still available to be drawn. The Water Bank also recently made two short-term Construction Loans totaling \$40 million to support initial phases of the City’s necessary lead service line replacement program—the total cost of which is projected to reach \$254 million.
97. In addition, the City has submitted two pending applications for projects totaling \$131.5 million, including \$107.5 million for the necessary and long-overdue reservoir replacement project, and \$24 million for a meter replacement project.
98. In State Fiscal Year 2022, the City failed to submit contracts for certification of additional phases of the lead service line replacement program, which would have been eligible for over \$18 million in principal forgiveness.
99. On July 28, 2022, the Department and the I-Bank provided written notice to the City of the risk of default on its existing Water Bank loans and informed the City that the acts and omissions



of the City Council may render the City ineligible to receive future Water Bank funding. The City was required to adopt a municipal budget in accordance with N.J.S.A. 40A:4-10. Pursuant to each loan agreement relating to the existing loans, the Water Bank's notice provided the formal 30 days for the City to address its covenant violations and adopt and submit a municipal budget on or before August 27, 2022, to avoid a Technical Event of Default.

100. In an August 16, 2022, letter to the Mayor and Council, the Department and the I-Bank reiterated that the City had until August 27, 2022, to adopt a budget for 2022 and submit the budget to the Division of Local Government Services to avoid a Technical Event of Default on its Water Bank loans.
101. On August 28, 2022, the City's failure to adopt and submit a timely 2022 budget to the State resulted in the City's Technical Event of Default on its Water Bank loan obligations.
102. This renders the City ineligible for any additional Water Bank financing, including low-interest and principal forgiveness loan packages that the State has made available to the City.
103. Critically, as a result of the Technical Event of Default on its loan obligations, the City is now ineligible to receive the benefit of water infrastructure funding that the Department is making available with funding from the federal Infrastructure Investment and Jobs Act, American Rescue Plan Act of 2021, and new state appropriations in the Fiscal Year 2023 budget.
104. The Trenton City Council has failed to approve the necessary funding for improvements the law demands and, now without access to low-cost water infrastructure funding, and in the absence of a 2022 budget, the Respondents will be unlikely to meet their long-outstanding obligations under the Safe Drinking Water Act, which presents an imminent and substantial endangerment to human health.

ORDER

In consideration of the seriousness of the Respondents' continued noncompliance with the Safe Drinking Water Act, and the resulting imminent and substantial endangerment to the health of persons, pursuant to N.J.S.A. 58:12A-6, N.J.S.A. 58:12A-4(e), N.J.S.A. 58:12A-4(f), and N.J.S.A. 13:1D-9(d), it is hereby ORDERED that:

1. Respondents shall facilitate the direct oversight and monitoring of the System by the Department and its consultants, which shall include, but not be limited to the retention of a third-party oversight contractor ("TPO"), selected by and responsible to the Department and funded by Respondents, who shall be embedded within the System for the purposes of monitoring and assessing all System operations and maintenance; adding necessary technical and managerial capacity to the System; and, making technical, managerial, and financial recommendations necessary to bring the System into compliance with applicable law. The primary goals of the TPO shall be improving System operations and maintenance consistently and reliably achieving regulatory requirements intended to protect public health and the environment, which includes ensuring that contaminants that may present an imminent and substantial endangerment to human health are not currently in or likely to enter the System.



2. Respondents shall incorporate the TPO into the System's management and daily operations and enable the TPO to take actions deemed necessary to ensure the provision of potable drinking water and build the technical capacity necessary to address the deficiencies described herein, which shall include providing the TPO with resources necessary to fill staffing vacancies where the Department deems appropriate.
3. Respondents shall provide the TPO, the Department and its consultants full physical access to the System, as well as access to records and personnel, to undertake a comprehensive technical, managerial, and financial capacity assessment of the System that shall result in a report of organizational and operational recommendations, as well as short- and long-term asset management and capital improvement recommendations. The comprehensive assessment shall focus on addressing the deficiencies described in the September 27, 2022, inspection report and any other deficiencies otherwise identified that may result in contaminants being present in or likely to enter the System that present an imminent and substantial endangerment to human health.
4. Respondents shall comply with all orders issued by the Department pursuant to its authority under the SDWA necessary to make appropriate alterations to the System and its operations and maintenance, including this Order and any supplements hereto.
5. Respondents shall reimburse the Department for all costs directly and reasonably incurred, including TPO and consultant costs, to effectuate this Order.
6. The City Council shall fully cooperate with the Department and readily approve any measures necessary to effectuate this Order.
7. This Order shall take effect immediately upon its receipt by any official associated with Respondent.
8. Within twenty-four hours of receipt of this Order, Respondents shall notify the Department of their intent to comply. Notification by e-mail to the Department point of contact identified below is acceptable.

GENERAL PROVISIONS

9. Any notices required by this Order to be submitted to the Department shall be submitted to the following address.

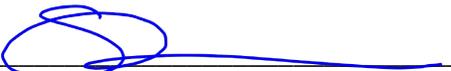
Kimberly Cahall, Chief Enforcement Officer
New Jersey Department of Environmental Protection
401 East State Street, Trenton, New Jersey 08625
kimberly.cahall@dep.nj.gov

10. This Order does not relieve the Respondents from the obligation to comply with any applicable federal state, or local law.
11. The Department may amend or modify this Order or issue additional orders if, in its judgement, any such amendment or modification is necessary to protect human health or the environment.



12. The Department reserves all statutory and common law rights to require the Respondents to take additional actions(s) if the Department determines that such actions are necessary to protect public health, safety, welfare, and the environment. Nothing in this Order shall constitute a waiver of any statutory or common law right of the Department to require such additional measures should the Department determine that such measures are necessary.
13. Pursuant to section 1447(a) of the federal Safe Drinking Water Act, Respondents are subject to and shall comply with all federal, state, interstate, and local requirements, both substantive and procedural, respecting public water systems in the same manner and to the same extent as any person is subject to such requirements, including, but not limited to, administrative orders and all civil and administrative penalties and fines. 42 U.S.C. § 300j-6(a).
14. Nothing in this Order is intended to trigger a default under section 5.01(d) of the City of Trenton's loan agreements with the Department and the I-Bank.
15. This Order constitutes a final agency action.
16. The Department may modify this Order. The Department will communicate any modification(s) to Respondents in writing and they shall be incorporated into this Order.
17. Notice is given that pursuant to N.J.S.A. 58:12A-10d, any person who violates the Safe Drinking Water Act, N.J.S.A. 58:12A-1, et seq., or an administrative order issued pursuant to N.J.S.A. 58:12A-10b, shall be subject upon order of the court, to a civil penalty not to exceed \$10,000 per day of the violation, and each day's continuance of the violations shall constitute a separate and distinct violation. Any penalty imposed pursuant to N.J.S.A. 58:12A-10d may be recovered with costs in Superior Court pursuant to N.J.S.A. 2A:58-1, et seq.

Dated: October 12, 2022


Shawn M. LaTourette
Commissioner

