

COMMONWEALTH OF MASSACHUSETTS
SUPERIOR COURT DEPARTMENT
OF THE TRIAL COURT

BERKSHIRE, SS.

CIVIL ACTION NO.

HOUSATONIC WATER WORKS COMPANY,)

Plaintiff,)

v.)

TOWN OF GREAT BARRINGTON, TOWN OF)

GREAT BARRINGTON BOARD OF HEALTH,)

MICHAEL LANOUE, DR. RUBY CHANG, and)

PETER STANTON, as members of the TOWN OF)

GREAT BARRINGTON BOARD OF HEALTH,)

and REBECCA JURCZYK, as TOWN OF GREAT)

BARRINGTON HEALTH AGENT,)

Defendants.)

VERIFIED COMPLAINT FOR
REVIEW IN THE NATURE OF
CERTIORARI PURSUANT TO
M.G.L. C. 249, § 4

INTRODUCTION

This is an action brought by Plaintiff Housatonic Water Works Company (“HWWC”) for review of Defendant Town of Great Barrington Board of Health’s (“Board”) issuance of a modified Order to Correct dated September 13, 2024.

This matter stems from the Town of Great Barrington’s illegitimate attempt to place blame and responsibility on HWWC for a highly publicized and polarizing issue within the community – discolored drinking water caused by increased manganese levels during warm summer months. As set forth below, the Massachusetts Department of Environmental Protection (“MassDEP”) – not the Board – is responsible for enforcement of drinking water safety rules in Massachusetts, and MassDEP has not brought any enforcement claims, or otherwise asserted any penalties, against HWWC in connection with the discolored water. Despite this, in an effort to placate ill-informed public sentiment, the Board issued an Order to Correct and modified Order to Correct to HWWC. The modified Order to Correct cannot stand as (i) it is preempted by the Federal Safe Drinking

Water Act, 42 U.S.C. §300f *et seq.* (“SDWA”); (ii) it is preempted by G.L. c. 165; (iii) G.L. c. 111 does not support the issuance of the modified Order to Correct; (iv) it is arbitrary and capricious; and (v) it is not supported by substantial evidence.

PARTIES

1. Plaintiff Housatonic Water Works Company (“HWWC”) is a corporation organized under the laws of the Commonwealth of Massachusetts with a principal office located at 80 Maple Ave., Ste. 1, Great Barrington, MA 01230.

2. Upon information and belief, Defendant Town of Great Barrington (the “Town”) is a municipal corporation duly organized and existing under the laws of the Commonwealth of Massachusetts with a principal place of business located at 334 Main Street, Great Barrington, MA 01230.

3. Upon information and belief, Defendant Town of Great Barrington Board of Health (“Board”) is municipal body duly authorized under the laws of the Commonwealth of Massachusetts, with a principal place of business located at 334 Main Street, Great Barrington, MA 01230.

4. Defendants Michael Lanoue, Dr. Ruby Chang, and Peter Stanton are members of the Board, whose offices are located at 334 Main Street, Great Barrington, MA 01230. These defendants are named as parties solely in their official capacities, not as individuals.

5. Defendant Rebecca Jurczyk is Health Agent for the Town, with an office located at 334 Main Street, Great Barrington, MA 01230. She is named solely in her official capacity, not as an individual.

FACTS

6. HWWC is a privately-owned public water supplier serving residents of certain municipalities in western Massachusetts, including residents of the Town of Great Barrington.

7. HWWC supplies water to approximately 750 connections in the Town of Great Barrington and approximately 90 connections in the towns of Stockbridge and West Stockbridge.

MassDEP's Authority to Enforce Drinking Water Safety Rules

8. The Federal Safe Drinking Water Act, 42 U.S.C. §300f *et seq.* ("SDWA"), provides the basis for drinking water safety regulations in Massachusetts.

9. The Massachusetts Department of Environmental Protection ("MassDEP") has certain obligations under the SDWA, including obligations to provide annual reports to both the state Legislature and the U.S. Environmental Protection Agency ("EPA").

10. Under the SDWA, Massachusetts public water systems must meet the requirements of a variety of federal drinking water safety rules.

11. In Massachusetts, MassDEP has authority from the EPA to directly enforce the requirements of the federal drinking water safety rules applicable to Massachusetts public water systems.

12. Drinking water regulations pursuant to the SDWA were promulgated by the MassDEP in 310 Mass. Code Regs. 22, *et seq.*

DPU's Authority to Regulate Water Utilities

13. The Massachusetts Department of Public Utilities ("DPU") is an agency responsible for oversight of, *inter alia*, investor-owned water utilities in Massachusetts, including HWWC.

14. The DPU has general regulatory authority over the sale and delivery of water.

15. Pursuant to G.L. c. 165, § 1A, HWWC was required to obtain DPU's approval of the adequacy of its water distribution system before engaging in the distribution or sale of water.

16. G.L. c. 164, § 93, applicable to water companies through G.L. c. 165, § 2, sets forth the regulatory procedure for addressing the quality of water "sold and delivered" by a water company: "On written complaint of the attorney general, of the mayor of a city or the selectmen of a town where a...company is operated, or of twenty customers thereof" to the DPU, or by the DPU on its own motion, after notice and hearing, the DPU may order "an improvement in the quality thereof."

Discolored Water Supply Due to Increased Presence of Manganese

17. Beginning in or around the summer of 2019, HWWC observed discoloration within its water supply, and thereafter observed discoloration within its water supply during the summers of 2021, 2022, and 2024.

18. In 2019, HWWC took action to determine the cause of the water discoloration by hiring Cornwell Engineering Group to conduct an initial study.

19. Through its initial study, Cornwell Engineering Group determined that manganese was the primary cause of the subject water discoloration.

20. Following Cornwell Engineering Group's evaluation, HWWC hired Northeast Water Solutions, Inc. to study the water discoloration issue in depth.

21. At MassDEP's request, a year-long pilot study was conducted, confirming that seasonal manganese was the cause of the water discoloration.

22. HWWC's engineers concluded that the most appropriate and low-impact solution to rectify the discoloration being caused by manganese was implementation of a green sand filtration system.

23. HWWC has obtained MassDEP's approval to install a green sand filtration system to address the increased manganese levels and is currently working to design the system.

24. Design of the green sand filtration system is scheduled to be complete on or about September 30, 2024, and HWWC aims to have the system in operation by the summer of 2025.

25. Manganese levels have only caused discoloration of HWWC's water supply during warm summer months but have not consistently caused discoloration every summer since 2019. Specifically, during the summers of 2020 and 2023, only negligible levels of manganese were present in HWWC's water supply.

26. Increased levels of manganese during warm weather is not a situation unique to the Town, but rather, is a common issue facing many Massachusetts communities.

27. MassDEP never brought an enforcement claim, or otherwise asserted any penalty, against HWWC, nor did MassDEP ever enter into any Consent Order with HWWC, in connection with increased manganese levels in HWWC's water system leading to water discoloration.

The Board of Health's Meetings Leading Up to the Order to Correct

28. The Board held a meeting on July 23, 2024. The agenda distributed in advance of such meeting indicated that relevant business would include "Review of Brown Water Complaints from Housatonic Water Works Customers."

29. The Board published meeting minutes associated with its July 23, 2024 meeting. The meeting minutes provide, *inter alia*:

R. Jurczyk provided an overview/history and notes recent complaints about brown water which she forwarded to the DEP. She added there has been no response from the DEP and no corrective actions or exceedances have been reported. There was extensive discussion with residents focused on when/what was the most recent water quality report from the DEP and if results must be published. The Board stated it would inquire. The challenges presented by independent water testing/results and the role of the Board of Health in this matter were discussed. M.

Lanoue stated the Board is not the primary regulatory or enforcement authority and there is no evidence DEP testing is faulty.

30. The Board's July 23, 2024 meeting minutes further provide that "Housatonic resident stated that independent testing would pinpoint brown water occurrences and confirm the water is safe – R. Chang replied it may open more questions than it accomplishes as results may not be accepted by the DEP and it is unclear what would be next steps."

31. The Board's July 23, 2024 meeting minutes also indicate that "M. Lanoue replied the green sand filtration system is sanctioned by the DEP as a good fix for the manganese issue."

32. Upon information and belief, the Board held a meeting on July 31, 2024, during which it met in executive session and did not return to public session "to discuss strategy with respect to Housatonic Water Works Co. because an open discussion may have a detrimental effect on the litigation position of the Board of Health."

33. The Board held a further meeting on August 8, 2024. The agenda distributed in advance of such meeting indicated that the public hearing would include "review of the proposed Order to Correct Citing Housatonic Water Works Company under the authority of M.G.L. c. 111, §§ 122 & 123."

34. The Board has not published meeting minutes associated with its August 8, 2024 meeting, however, a recording of such meeting has been posted to YouTube.

35. The Board invited a "specialist" named James Starbard to attend the August 8, 2024 meeting to discuss "the engineering aspects of water testing."

36. The Board asked Mr. Starbard, *inter alia*, what most towns do to get rid of manganese. Mr. Starbard indicated that green sand is a very common treatment for manganese. He further indicated that manganese is "not an uncommon issue that water systems are dealing with and putting treatment for."

37. Mr. Starbard further indicated that MassDEP regulates haloacetic acid levels in water supplies and that, when acceptable levels are exceeded, MassDEP would usually send out a notice of noncompliance and have the water system take corrective action and send public notices.

38. On or about August 8, 2024, the Board issued a draft Order to Correct directed to HWWC. A true and accurate copy of the draft Order to Correct is annexed hereto as **Exhibit A**.

39. The Board held a further meeting on August 15, 2024. The agenda distributed in advance of such meeting indicated that the public hearing would include review of “the proposed Order to Correct Citing Housatonic Water Works Company under the authority of M.G.L. c. 111, §§ 122 & 123.”

40. The Board has not published meeting minutes associated with its August 15, 2024 meeting, however, a recording of such meeting has been posted to YouTube.

41. James Mercer, HWWC’s Treasurer, and HWWC’s counsel made statements at the Board’s August 15, 2024 meeting on behalf of HWWC.

42. HWWC’s counsel advised the Board, *inter alia*, that the proposed order to correct exceeded the Board’s authority as the field of drinking water regulation was occupied by Congress under the SDWA, and as such, the proposed order was preempted by the SDWA and the regulations promulgated thereunder.

43. Mr. Mercer advised the Board, *inter alia*, that MassDEP has comprehensive oversight over HWWC’s operations and promulgates requirements associated with HWWC’s water testing. He explained HWWC’s testing procedures, involving an independent sampling and testing process, following which results are transmitted simultaneously to HWWC and MassDEP. Manganese testing is conducted monthly on HWWC’s raw and finished water and at three locations within the Town.

44. Mr. Mercer further explained that increased levels of manganese is a seasonal issue affected by climate change. Further, increased haloacetic acid levels in HWWC's water supply have been ameliorated through the implementation of a two-step chlorination process.

45. The Board held a further meeting on August 22, 2024. The agenda distributed in advance of such meeting indicated that the public hearing would include review of "the proposed Order to Correct Citing Housatonic Water Works Company under the authority of M.G.L. c. 111, §§ 122 & 123"

46. The Board has not published meeting minutes associated with its August 22, 2024 meeting, however, a recording of such meeting has been posted to YouTube.

47. On August 28, 2024, HWWC was served with a final version of the Board's Order to Correct, dated August 22, 2024 ("Order"). A true and accurate copy of the Order is annexed hereto as **Exhibit B**.

HWWC's Appeal of the Order

48. On August 29, 2024, in accordance with the appeal procedure set forth in the Order, HWWC submitted a written request for an appeal hearing to the Board.

49. HWWC attended an appeal hearing before the Board on September 5, 2024.

50. During the appeal hearing, HWWC's counsel argued that the Order could not stand because, among other reasons, it is preempted by the SDWA and state regulations promulgated under the SDWA, and it is not supported by evidence that HWWC is causing a nuisance.

51. The Board voted to continue the appeal hearing to Tuesday, September 10, 2024 at 6:30 p.m. and to stay the Order, including the assessment of any penalties set forth in the Order, until the conclusion of the continued appeal hearing.

52. During the continued appeal hearing on September 10, 2024, the Board determined

that it would issue a modified Order to Correct, amending certain penalties set forth in the Order, but otherwise maintaining the substance of the original Order. The Board also indicated that the directives and penalties set forth in the modified Order to Correct would become effective upon service of the modified Order to Correct on HWWC.

The Board of Health's Modified Order to Correct

53. On September 17, 2024, HWWC was served with a modified Board of Health Order to Correct, dated September 13, 2024 ("Modified Order"). A true and accurate copy of the Modified Order is annexed hereto as **Exhibit C**.

54. In the Modified Order, the Board indicated that it was acting "under the authority of G. L. c. 111, §§ 122, 123." Ex. C, p. 1.

55. The Modified Order provides that:

Public water suppliers must comply with the Massachusetts Drinking Water Regulations (310 CMR 22.00) and the Safe Drinking Water Act. The Respondent is required to regularly test its water supply for contaminants, including bacteria, chemicals, and other harmful substances, and must ensure that the water it supplies meets or exceeds the health-based standards set by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP).

MassDEP oversees and enforces compliance with these requirements.

Ex. C, pp. 1-2.

56. The Modified Order further provides that:

[T]here are a number of residents of the Town of Great Barrington who are water supply customers of the Respondent and whose water supply is ***potentially*** contaminated, discolored, contains ***as-of-yet insufficiently defined amounts*** of potentially neurotoxic manganese, ***potentially*** carcinogenic levels of haloacetic acids (commonly referred to as HAA5)...subjecting residents...to a risk of long term and potentially fatal illnesses including cancer, manganism, and other diseases.

Ex. C, pp. 2-3 (emphasis added).

57. The Modified Order also contains assertions regarding permissible levels of HAA5 and manganese in drinking water (Ex. C, pp. 3-4), but does not indicate that HWWC's water supply was found to be in violation of such asserted permissible levels of HAA5 and manganese.

58. Further, the Modified Order contains assertions regarding potential health effects allegedly associated with exposure to HAA5 and manganese (Ex. C, pp. 3-4), but does not indicate that any individuals have suffered adverse health effects as a result of exposure to, or consumption of, HWWC's water supply.

59. HWWC is not aware of any individuals experiencing health issues stemming from exposure to, or consumption of, HWWC's water supply.

60. The Modified Order further provides that:

WHEREAS, it is the determination of the Board that selective testing of the water supplied and distributed by Respondent, at intervals and locations selected by Respondent or its agents, at which locations representatives of the Respondent, including senior management and/or owners, are present *may* produce subjective, and scientifically unreliable data as to the quality, potential health risks and aesthetics of the water supplied and distributed by Respondent, and that such testing is, thereby, unreliable and/or inappropriate.

WHEREAS, it is the determination and opinion of the Board that the continued distribution of public water supply by Respondent, without adequate, independent third-party monitoring for contaminants, toxic substances, compounds, and/or solvents, constitutes a nuisance under and within the scope of G.L. c. 111, §§ 122 and 123, which may be injurious to the health of the customers of Respondent and other users of water supplied by Respondent.

Ex. C, p. 6.

The Board of Health's Directive that HWWC Provide an Alternative Supply of Bottled Water

61. The Modified Order contains a series of directives with which HWWC was ordered to comply or face a penalty, including the following:

It is **FURTHER ORDERED** that the Respondent provide each household within the Town of Great Barrington that is a water service customer of the Respondent, ***and which so desires***, with an alternative supply of safe, potable water, through the distribution and supply of bottled water in containers which are larger than “single use containers” yet of such size as can be safely handled by the end user ***taking physical condition and ability of said end user into account***, on a daily basis, and an adequate means of dispensing said water, within 7 days of this **ORDER** and at the expense of the Respondent, ***until further order of the Board***. Such distribution shall consist of a supply of water equal to or greater than 1.5 gallons per day, ***per inhabitant in each such household***. The distribution shall be accomplished in such a way as to allow easy access to the supply by each such household with a minimum of inconvenience.

Ex. C, p. 7 (emphasis added).

62. It is impossible for HWWC to comply with the terms of the directive referenced in Paragraph 61, *supra*, because: (i) HWWC has not been provided with any information regarding which households desire an alternative supply of bottled water; (ii) HWWC has not been provided with information as to how many residents live in each household; (iii) HWWC has no information on the physical condition and ability of each such resident; (iv) the Modified Order does not indicate explicitly whether the bottled water needs to be delivered directly to each household; and (v) the Modified Order is silent as to when this, and the other directives set forth therein, will end.

63. On or about September 18, 2024, HWWC’s counsel communicated with the Town’s counsel regarding the concerns set forth in Paragraph 62 and followed up via email on September 20, 2024. A copy of HWWC’s counsel’s email dated September 20, 2024 is attached hereto as **Exhibit D**.

64. Despite the foregoing, HWWC obtained conservative quotes from two water suppliers associated with the provision of water to 750 homes with an average of two inhabitants per household each using 1.5 gallons of water per day. Both quotes are in the amount of over \$3,370 per day and over \$100,000 for a thirty-day service period.

65. To date in 2024, HWWC's average monthly income is \$59,265. If HWWC is required to incur costs associated with water distribution set forth in Paragraph 64, above, it will experience a shortfall greater than \$40,000 per month on average, requiring all available revenue to be diverted to bottled water distribution with no defined end date. This would place HWWC at significant risk of financial insolvency within a short period—a matter of months, at most—and would leave insufficient funds leftover to cover routine operational costs and critical infrastructure improvements, particularly those necessary to complete installation of the green sand filtration system, which is required to permanently remediate increased manganese levels within HWWC's water system.

66. Further, the Modified Order contains no limits as to the frequency or duration of the testing that it mandates above and beyond that already required by the MassDEP.

67. Fees associated with each individual water test range from \$50 to \$100.

68. Notably, the Town of Great Barrington has not taken any measures to stop the Great Barrington residents from drinking the water, such as declaring a water emergency pursuant to G.L. c. 111, §31 or ordering households to boil their water order. Nor has the Board exercised its powers under Great Barrington Town Meeting Enactments, Chapter 135, §135-7, to temporarily lift the ban on "single-use" bottled water.

69. Further, upon information and belief, in or around November 2023, the Town of Great Barrington received a \$250,000 grant from the Commonwealth of Massachusetts to reimburse individuals, in an amount up to \$300 per household, for the purchase/installation of water filtration systems, bottled water, and laundry-related expenses.

The Board Acted Unlawfully in Issuing the Order

70. Congress occupied the field of public drinking water safety regulation with its

enactment of the SDWA.

71. The Modified Order is unenforceable as it is preempted by the SDWA.

72. The Massachusetts Legislature occupied the field of regulation of the distribution and sale of water through private water companies' pipes, including service quality, through the enactment of G.L. c. 165.

73. The Modified Order is unenforceable as it is preempted by G.L. c. 165.

74. The Modified Order is unenforceable as G.L. c. 111 does not support the issuance of the Order.

75. The Modified Order is unenforceable as it is arbitrary and capricious.

76. The Modified Order is unenforceable as it is unsupported by substantial evidence.

COUNT I

(Review in Nature of Certiorari)

77. HWWC repeats and incorporates by reference every allegation contained in Paragraphs 1 through 76 above as if fully set forth herein.

78. The Board's actions are subject to review by this Court pursuant to M.G.L. c. 249, § 4.

79. As set forth herein, the Board committed substantial and material errors of law in issuing the Modified Order insofar as the Modified Order is preempted by the Safe Drinking Water Act, 42 U.S.C. §300f *et seq.*; it is preempted by G.L. c. 165; and G.L. c. 111 does not support the issuance of the Modified Order, as is apparent from the record of the Board's proceedings.

80. Further, as set forth herein, the Modified Order is arbitrary and capricious and unsupported by substantial evidence, as is apparent from the record of the Board's proceedings.

81. HWWC stands to suffer irreparable harm by the Board's actions as the cost associated with attempted compliance with the terms of the Modified Order would put HWWC at

significant risk of financial insolvency within a short period—a matter of months, at most.

82. HWWC has no remedy other than review under the certiorari statute, G.L. c. 249, § 4.

83. Failure to correct the Board's error in issuing the Modified Order will result in manifest injustice to HWWC.

WHEREFORE, Plaintiff respectfully requests that the Court:

- i. Enter judgment in favor of Housatonic Water Works Company on all Counts of this Verified Complaint;
- ii. Vacate the September 13, 2024 Modified Order to Correct issued by the Board;
- iii. Award Housatonic Water Works Company its costs, fees, and interest; and
- iv. Grant Housatonic Water Works Company such other and further relief as this Court deems just and proper.

HOUSATONIC WATER WORKS COMPANY

By Its Attorneys,



Timothy P. Van Dyck (BBO #548347)
Ashley M. Barnes (BBO #706121)
Patrick M. Capodilupo (BBO #703274)
BOWDITCH & DEWEY, LLP
101 Federal Street, Suite 1405
Boston, MA 02110
Telephone: 617-757-6536
Email: tvandyck@bowditch.com
abarnes@bowditch.com
pcapodilupo@bowditch.com

Date: September 27, 2024

VERIFICATION

I, James J. Mercer, having read the foregoing Verified Complaint, made a diligent inquiry of the facts and allegations contained herein, and based upon that inquiry, verify that the facts and allegations contained in the above Verified Complaint are true and accurate, except those made on information and belief, and I believe those statements to be true and accurate, and that no material facts have been omitted therefrom.

Signed under the pains and penalties of perjury this 27th day of September, 2024.



JAMES J. MERCER

EXHIBIT A

WHEREAS, Respondent, Housatonic Water Works Company, is a privately owned public water supplier serving, *inter alia*, certain residents of the Town of Great Barrington.

WHEREAS, In Massachusetts, public water suppliers have specific duties and responsibilities to their customers, governed by state laws and regulations, to ensure the safety, reliability, and quality of water services. The Respondent has the following duties, without limitation:

1. *Water Quality and Safety*: Public water suppliers must comply with the Massachusetts Drinking Water Regulations (310 CMR 22.00) and the Safe Drinking Water Act. The Respondent is required to regularly test its water supply for contaminants, including bacteria, chemicals, and other harmful substances, and must ensure that the water it supplies meets or exceeds the health-based standards set by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP).

2. *Public Notification and Reporting*: The Respondent is required to notify customers about any violations of drinking water standards, significant changes in water quality, or issues that may pose a health risk. Included within this requirement, the Respondent must provide annual Consumer Confidence Reports (CCRs) that inform customers about the quality of their drinking water, including information on detected contaminants and compliance with drinking water regulations.

3. *Emergency Response and Preparedness*: The Respondent is required to have emergency response plans in place to address situations such as natural disasters, contamination events, or other emergencies that could affect water quality or supply.

4. *Infrastructure Maintenance and Improvements*: The Respondent is responsible for maintaining and upgrading the water supply infrastructure, including treatment facilities, storage tanks, and distribution systems, to ensure the continued delivery of safe and reliable water.

5. *Customer Service and Communication*: The Respondent is required to provide adequate customer service, including responding to customer inquiries, handling complaints, and providing information about water service, rates, and quality. This obligation also includes the requirement to communicate clearly to customers about service interruptions, boil water advisories, and other important water service notices.

6. *Regulatory Compliance*: The Respondent is required to adhere to all applicable state and federal regulations, including environmental laws and public health standards.

These duties are intended to protect public health and ensure that the public water supplier's customers have access to safe, reliable, and high-quality drinking water.

WHEREAS, MassDEP oversees and enforces compliance with these requirements.

WHEREAS, it is within the purview and authority of the Board of Health to act in the interest of protecting the citizens of the Town by making reasonable health regulations and enforcing the Nuisance Statute, G.L. c. 111, § 122; and the protection of public health is within the police

power of a municipality to protect the health, safety and welfare of its residents. (Druzik et al. v. Board of Health of Haverhill, 324 Mass. 129 (1949))

WHEREAS, there are a number of residents of the Town of Great Barrington who are water supply customers of the Respondent and whose water supply is potentially contaminated, discolored, contains as-of-yet insufficiently defined amounts of potentially neurotoxic manganese, potentially carcinogenic levels of Haloacetic acids (commonly referred to as HAA5), causing them to have a lack of potable water at various times, such conditions thereby subjecting residents of an Environmental Justice neighborhood (as designated by the Massachusetts Executive Office of Environmental Affairs) to a risk of long term and potentially fatal illnesses including cancer, manganism, and other diseases.

WHEREAS, haloacetic acids (HAA5) are a group of chemical compounds that can form as byproducts when disinfectants, such as chlorine, are used to treat drinking water. The group includes five specific acids: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid. These compounds have been determined to be present in the water supplied by the Respondent in as-of-yet insufficiently identified quantities.

WHEREAS, the Board of Health finds that well documented health risks of HAA5 exposure include the following:

1. **Cancer Risk:** Long-term exposure to high levels of HAA5 has been associated with an increased risk of cancer. Specifically, some of the haloacetic acids, like dichloroacetic acid and trichloroacetic acid, have been linked to an increased risk of liver cancer and other cancers in animal studies.
2. **Reproductive and Developmental Effects:** Studies suggest that exposure to HAA5 may affect reproductive and developmental health. For example, certain haloacetic acids have been associated with potential reproductive toxicity and developmental effects, such as birth defects.
3. **Liver and Kidney Damage:** Prolonged exposure to elevated levels of HAA5 may cause liver and kidney damage. Some haloacetic acids are known to cause liver enlargement and other liver issues in animal studies.
4. **Other Health Effects:** There may also be other non-cancer health effects associated with long-term exposure to HAA5, including potential effects on the nervous system and other organs.

WHEREAS, to mitigate these risks, the EPA has established a Maximum Contaminant Level (MCL) for HAA5 in drinking water. The MCL for HAA5 is set at 0.060 milligrams per liter (mg/L) or 60 parts per billion (ppb). Public water systems are required to regularly monitor HAA5 levels and take corrective actions if the MCL is exceeded, in order to protect public health. (Refer to 310 CMR 22.00)

WHEREAS, manganese is a naturally occurring element found in many water sources. While it is an essential nutrient at low levels, necessary for proper bodily functions, elevated levels of manganese in drinking water can pose health risks. The risks associated with manganese in drinking water include:

1. Neurological Effects: There are scientifically well documented differences in health risk among adult and pediatric populations.

a. Adults: Long-term exposure to high levels of manganese can affect the nervous system. In particular, it can lead to symptoms similar to Parkinson's disease, such as tremors, difficulty walking, and facial muscle stiffness. This condition is sometimes referred to as manganism.

b. Infants and Children: Young children, including infants, are more susceptible to the effects of manganese. Elevated levels can impact neurological development, potentially leading to learning and behavioral issues.

2. Cognitive and Behavioral Effects: Studies suggest that high manganese exposure may be associated with lower IQ scores and impaired memory and attention in children. The developing brain is particularly vulnerable, making early childhood exposure a significant concern.

3. Other Health Effects: While the primary concern is neurological, excessive manganese intake may also affect other bodily systems. For example, it could potentially lead to liver and kidney issues, although this is less well-documented compared to neurological effects.

4. Other Issues: High levels of manganese can cause discoloration of water, turning it a brownish color, and can stain laundry and plumbing fixtures. This can cause a nuisance and cause concern among consumers.

WHEREAS, to mitigate the risks from exposure to manganese in drinking water, the EPA has set a secondary maximum contaminant level (SMCL) for manganese at 0.05 milligrams per liter (mg/L) or 50 parts per billion (ppb) to manage aesthetic issues such as taste, color, and staining. However, the EPA also suggests that levels should not exceed 0.3 mg/L for short-term exposure (up to 10 days) and recommends even lower levels for long-term exposure, especially for infants.

The EPA has set a lifetime health advisory level for manganese in drinking water at 0.3 mg/L for adults and a more protective level of 0.05 mg/L for children younger than six months.

WHEREAS, while low levels of manganese are essential for health, elevated concentrations in drinking water can pose significant risks, particularly to vulnerable populations such as infants and young children. Regular monitoring and treatment can help manage and reduce these risks.

WHEREAS Article 97 of the Amendments to the Constitution of the Commonwealth of Massachusetts provides the people with a right to clean water.

WHEREAS, G.L. c. 111, § 122 provides, in relevant part: “The board of health shall examine into all nuisances, sources of filth and causes of sickness within its town, ... which may, in its opinion, be injurious to the public health, shall destroy, remove or prevent the same as the case may require, and shall make regulations for the public health and safety relative thereto and to articles capable of containing or conveying infection or contagion or of creating sickness brought into or conveyed from the town Whoever violates any such regulation shall forfeit not more than one thousand dollars.”

WHEREAS, it is the determination and opinion of the Board of Health of the Town of Great Barrington (Board) that the Respondent has failed to protect the public health of its customers and others exposed to its public water supply through reasonable means.

WHEREAS, at its meeting held on August 8, 2024, after a discussion and deliberation were conducted in an open meeting, the Board voted, upon consideration of the various scientific, regulatory, anecdotal, and photographic evidence and information available to it, together with test results and other reports, its determination and opinion that Respondent is operating a public water supply system in a manner that presents a present and future risk to the public health of the residents of Great Barrington, and is in contravention of Article 97 of the Amendments to the Constitution of the Commonwealth of Massachusetts, which specifically gives the people of the Commonwealth “[t]he right to clean ... water ... and the protection of the people in their right to conservation, ... of the ... water... and other natural resources.”

WHEREAS, it is the determination and opinion of the Board that selective testing of the water supplied and distributed by Respondent, in intervals and locations selected by Respondent or its agents, at which locations representatives of the Respondent, including senior management and/or owners, are present may produce subjective, and scientifically unreliable data as to the quality, potential health risks and aesthetics of the water supplied and distributed by Respondent, and that such testing is, thereby, unreliable and/or inappropriate.

WHEREAS, it is the determination and opinion of the Board that the continued distribution of public water supply by Respondent, without adequate, independent, third-party monitoring for contaminants, toxic substances, compounds, and/or solvents, constitutes a nuisance under and within the scope of G.L. c. 111, §§ 122 and 123, which may be injurious to the health of the customers of Respondent and other users of water supplied by Respondent.

WHEREAS, in addition, it is the determination and opinion of the Board that the distribution of contaminated water by a Public Water Supplier, such as Respondent, may constitute a violation of the Federal Safe Drinking Water Act, 42 U.S.C. c.6A; various federal regulations including, without limitation, 42 C.F.R. Part 141 (National Primary Drinking Water Regulations); and the *Standards and Guidelines for Contaminants in Massachusetts Drinking Waters* (Winter 2020,

Additional violations:

<https://www.mass.gov/doc/2020-standards-and-guidelines-for-contaminants-in-massachusetts-drinking-waters/download>), as well as other applicable statutory and regulatory provisions.

NOW, THEREFORE,

Pursuant to G.L. c. 111, §§122, 123, Respondent is hereby **ORDERED TO CEASE AND DESIST** from violating the above-described Constitutional protections, laws and regulations, and from creating and/or furthering a public health nuisance.

And, Respondent is hereby **ORDERED** to appear before the Board at its next meeting, _____, 2024, or at an earlier date, upon reasonable notice thereof, if such a special meeting is convened, in order to establish a timetable for retaining a licensed site professional and an independent testing laboratory (Laboratory) of the Board's choosing to begin random weekly testing of the water supplied by Respondent in a program to be determined by said Laboratory, to be carried out at the expense of the Respondent for a period of time to be determined by said Laboratory and licensed site professional or until such time as the Board has determined that the water supplied by Respondent either does or does not constitute a continuing risk to the public health of the customers of Respondent in Great Barrington.

It is **FURTHER ORDERED** that, after the initial testing, such tests be conducted not less than seven days from and after the preceding test, and that in the event that such tests are conducted more than seven days apart, in the absence of a declared weather-related emergency and with the permission of the Great Barrington Health Agent or other duly appointed and designated agent of the Board, Respondent shall be subject to a penalty of up to One Thousand Dollars (\$1,000.00) per calendar day until such subsequent test is conducted.

1. It is **FURTHER ORDERED** that no employee or agent of Respondent may impede or otherwise interfere with the collection or analysis of any testing sample taken on the property owned or controlled by Respondent.
2. It is **FURTHER ORDERED** that the Respondent provide each household within the Town of Great Barrington that is a water service customer of the Respondent, and which so desires, with an alternative supply of safe, potable water, through the distribution and supply of bottled water in 5 gallon containers, on a daily basis, and an adequate means of dispensing said water, within 7 days of this **ORDER** and at the expense of the Respondent, until further order of the Board.
 - a. In the event of a violation of this condition, the Respondent shall be subject to a penalty of up to \$1000.00 per day. The Board deems a violation as to any one household on any day to be a separate violation, subject to a separate penalty for each such household.
3. It is **FURTHER ORDERED** that Respondent shall designate and provide a means of 24 hours per day, seven days per week, communication, for the Board's Health Agent or other duly

appointed and designated agent of the Board , as well as the Laboratory, to contact a duly authorized agent or employee of said Respondent in the event of any emergency or violation of the terms of this **ORDER**.

4. It is **FURTHER ORDERED** that Respondent, its designated agent, employee or attorney, shall attend any meeting of or with the Board upon reasonable notice from the Health Agent or the Board requesting such attendance.
5. It is **FURTHER ORDERED** that Respondent shall submit a work plan with date milestones for compliance with all of the terms of this **ORDER** within ____ days of the date of this **ORDER**.
6. It is **FURTHER ORDERED** that Respondent shall document, on a daily basis, all work performed for purposes of compliance with this **ORDER**, and supply that documentation to the Board every ____ days. If such report date falls on a weekend or holiday, it is to be rendered the following business day.
7. It is **FURTHER ORDERED** that Respondent shall appear before the Board at each of its regular meetings, notice of which shall be provided, to report on the progress and the expected date of completion of the actions taken for purposes of compliance with this **ORDER**.
8. It is **FURTHER ORDERED** that Respondent shall provide the Board with written notice of any circumstances or conditions of which Respondent becomes aware and which may impair Respondent's ability to comply with this **ORDER**, so the Board may take reasonable and appropriate action in response.
9. It is **FURTHER ORDERED** that, except as otherwise provided herein, Respondent shall be subject to a penalty of up to One Thousand Dollars (\$1,000.00) per calendar day for any violation of this **ORDER**.

ENFORCEMENT:

The Board or its Health Agent may be assisted by the Massachusetts Department of Public Health and the Department of Environmental Protection for matters that fall within the statutory purview of those departments, together with local Police or State Police in the enforcement of this **ORDER**.

APPEAL:

If you are aggrieved by this **ORDER**, you have the right to request a hearing before the Board. This request must be made by you, in writing, and filed within seven (7) days after the date this **ORDER** was served on, or actually received by, you. Any affected party has a right to appear at said hearing.

SO ORDERED, by the Board of Health, this _____ day of _____ 2024.

Signed by:

Name:

Name:

Name:

EXHIBIT B

A true copy attest:
Deputy Sheriff
Date of Service: 8 28 24

TOWN OF GREAT BARRINGTON



BOARD OF HEALTH

ORDER TO CORRECT

M.G.L. c. 111, §§ 122, 123

EFFECTIVE IMMEDIATELY

August 22, 2024

Name of Business/Landowner/Individual: Housatonic Water Works Company
(Hereafter referred to as "Respondent")

Address of Business/Landowner/Individual: 80 Maple Avenue
Great Barrington, MA 01230

The Great Barrington Board of Health, (hereafter referred to as the "Board") acting under the authority of G. L. c. 111, §§ 122, 123, hereby issues this **ORDER TO CORRECT ("ORDER")**, to the Respondent identified above, for the reasons stated herein.

WHEREAS, Respondent, Housatonic Water Works Company, is a privately owned public water supplier serving, *inter alia*, certain residents of the Town of Great Barrington.

WHEREAS, In Massachusetts, public water suppliers have specific duties and responsibilities to their customers, governed by state laws and regulations, to ensure the safety, reliability, and quality of water services. The Respondent has the following duties, without limitation:

1. **Water Quality and Safety:** Public water suppliers must comply with the Massachusetts Drinking Water Regulations (310 CMR 22.00) and the Safe Drinking Water Act. The Respondent is required to regularly test its water supply for contaminants, including bacteria, chemicals, and other harmful substances, and must ensure that the water it supplies meets or exceeds the health-based standards set by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP).
2. **Public Notification and Reporting:** The Respondent is required to notify customers about any violations of drinking water standards, significant changes in water quality, or issues that may pose a health risk. Included within this requirement, the Respondent

must provide annual Consumer Confidence Reports (CCRs) that inform customers about the quality of their drinking water, including information on detected contaminants and compliance with drinking water regulations.

3. *Emergency Response and Preparedness*: The Respondent is required to have emergency response plans in place to address situations such as natural disasters, contamination events, or other emergencies that could affect water quality or supply.

4. *Infrastructure Maintenance and Improvements*: The Respondent is responsible for maintaining and upgrading the water supply infrastructure, including treatment facilities, storage tanks, and distribution systems, to ensure the continued delivery of safe and reliable water.

5. *Customer Service and Communication*: The Respondent is required to provide adequate customer service, including responding to customer inquiries, handling complaints, and providing information about water service, rates, and quality. This obligation also includes the requirement to communicate clearly to customers about service interruptions, boil water advisories, and other important water service notices.

6. *Regulatory Compliance*: The Respondent is required to adhere to all applicable state and federal regulations, including environmental laws and public health standards.

These duties are intended to protect public health and ensure that the public water supplier's customers have access to safe, reliable, and high-quality drinking water.

WHEREAS, MassDEP oversees and enforces compliance with these requirements.

WHEREAS, it is within the purview and authority of the Board of Health to act in the interest of protecting the citizens of the Town by making reasonable health regulations and enforcing the Nuisance Statute, G.L. c. 111, § 122; and the protection of public health is within the police power of a municipality to protect the health, safety and welfare of its residents. (Druzik et al. v. Board of Health of Haverhill, 324 Mass. 129 (1949))

WHEREAS, the Board has based this **ORDER** on the consideration of a sound body of scientific evidence including reliable scientific studies, papers and anecdotal reports as set forth in "Attachment A, Scientific Literature and sources that were reviewed in support of Order to Correct in the Housatonic Water Works matter."

WHEREAS, there are a number of residents of the Town of Great Barrington who are water supply customers of the Respondent and whose water supply is potentially contaminated, discolored, contains as-of-yet insufficiently defined amounts of potentially neurotoxic manganese, potentially carcinogenic levels of haloacetic acids (commonly referred to as HAA5), causing them to have a lack of potable water at various times, such conditions thereby subjecting residents of an Environmental Justice neighborhood (as designated by the Massachusetts Executive Office of Environmental Affairs) to a risk of long term and potentially fatal illnesses including cancer, manganism, and other diseases.

WHEREAS, haloacetic acids (HAA5) are a group of chemical compounds that can form as byproducts when disinfectants, such as chlorine, are used to treat drinking water. The group includes five specific acids: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid,

monobromoacetic acid, and dibromoacetic acid. These compounds have been determined to be present in the water supplied by the Respondent in as-of-yet insufficiently identified quantities.

WHEREAS, the Board of Health finds that well documented health risks of HAA5 exposure include the following:

1. **Cancer Risk:** Long-term exposure to high levels of HAA5 has been associated with an increased risk of cancer. Specifically, some of the haloacetic acids, like dichloroacetic acid and trichloroacetic acid, have been linked to an increased risk of liver cancer and other cancers in animal studies.
2. **Reproductive and Developmental Effects:** Studies suggest that exposure to HAA5 may affect reproductive and developmental health. For example, certain haloacetic acids have been associated with potential reproductive toxicity and developmental effects, such as birth defects.
3. **Liver and Kidney Damage:** Prolonged exposure to elevated levels of HAA5 may cause liver and kidney damage. Some haloacetic acids are known to cause liver enlargement and other liver issues in animal studies.
4. **Other Health Effects:** There may also be other non-cancer health effects associated with long-term exposure to HAA5, including potential effects on the nervous system and other organs.

WHEREAS, to mitigate these risks, the EPA has established a Maximum Contaminant Level (MCL) for HAA5 in drinking water. The MCL for HAA5 is set at 0.060 milligrams per liter (mg/L) or 60 parts per billion (ppb). Public water systems are required to regularly monitor HAA5 levels and take corrective actions if the MCL is exceeded, in order to protect public health. (Refer to 310 CMR 22.00)

WHEREAS, manganese is a naturally occurring element found in many water sources. While it is an essential nutrient at low levels, necessary for proper bodily functions, elevated levels of manganese in drinking water can pose health risks. The risks associated with manganese in drinking water include:

1. **Neurological Effects:** There are scientifically well documented differences in health risk among adult and pediatric populations.
 - a. *Adults:* Long-term exposure to high levels of manganese can affect the nervous system. In particular, it can lead to symptoms similar to Parkinson's disease, such as tremors, difficulty walking, and facial muscle stiffness. This condition is sometimes referred to as manganism.
 - b. *Infants and Children:* Young children, including infants, are more susceptible to the effects of manganese. Elevated levels can impact neurological development, potentially leading to learning and behavioral issues.
2. **Cognitive and Behavioral Effects:** Studies suggest that high manganese exposure may be associated with lower IQ scores and impaired memory and attention in children. The developing brain is particularly vulnerable, making early childhood exposure a significant concern.

3. Other Health Effects: While the primary concern is neurological, excessive manganese intake may also affect other bodily systems. For example, it could potentially lead to liver and kidney issues, although this is less well-documented compared to neurological effects.

4. Other Issues: High levels of manganese can cause discoloration of water, turning it a brownish color, and can stain laundry and plumbing fixtures. This can cause a nuisance and cause concern among consumers.

WHEREAS, to mitigate the risks from exposure to manganese in drinking water, the EPA has set a secondary maximum contaminant level (SMCL) for manganese at 0.05 milligrams per liter (mg/L) or 50 parts per billion (ppb) to manage aesthetic issues such as taste, color, and staining. However, the EPA also suggests that levels should not exceed 0.3 mg/L for short-term exposure (up to 10 days) and recommends even lower levels for long-term exposure, especially for infants.

The EPA has set a lifetime health advisory level for manganese in drinking water at 0.3 mg/L for adults and a more protective level of 0.05 mg/L for children younger than six months.

WHEREAS, while low levels of manganese are essential for health, elevated concentrations in drinking water can pose significant risks, particularly to vulnerable populations such as infants and young children. Regular monitoring and treatment can help manage and reduce these risks.

WHEREAS, the medical term, "Weathering," refers to the cumulative impact of chronic stress, particularly from forms of social disadvantage, on the physical and mental health of individuals over time. According to the medical and scientific literature, this condition is the result of repeated exposure to stressors, particularly those related to systemic inequalities, accelerates the aging process and leads to premature decline in physical health. This can manifest in a variety of ways, including increased risk and incidence of chronic diseases like hypertension, diabetes, and heart disease, as well as poorer birth outcomes for women, such as higher rates of infant mortality and low birth weight. Those so affected may experience accelerated aging and earlier onset of chronic health conditions compared to unaffected persons, largely due to the chronic stress associated with the challenges presented by the triggering mechanism, such as chronic exposure to hazardous substances, such as drinking water that is perceived as unfit for consumption in a household. These conditions, illnesses and social situations are all part of a public health crisis within the purview of the Board and subject to the nuisance jurisdiction of Massachusetts Boards of Health.

WHEREAS Article 97 of the Amendments to the Constitution of the Commonwealth of Massachusetts provides the people with a right to clean water.

WHEREAS, G.L. c. 111, § 122 provides, in relevant part: "The board of health shall examine into all nuisances, sources of filth and causes of sickness within its town, ... which may, in its opinion, be injurious to the public health, shall destroy, remove or prevent the same as the case may require, and shall make regulations for the public health and safety relative thereto and to articles capable of containing or conveying infection or contagion or of creating sickness

brought into or conveyed from the town Whoever violates any such regulation shall forfeit not more than one thousand dollars.”

WHEREAS, it is the determination and opinion of the Board of Health of the Town of Great Barrington (Board) that the Respondent has failed to protect the public health of its customers and others exposed to its public water supply through reasonable means, thereby creating a public health nuisance.

WHEREAS, at its meeting held on August 8, 2024, after a discussion and deliberation were conducted in an open meeting, at which the Board heard testimony of 18 members of the public, and considered certain technical advice and input from a consultant duly licensed by the Commonwealth as a Drinking Water Supply Facilities Operator, and upon consideration of the various scientific, regulatory, and anecdotal evidence and information available to it, together with its past and current experience with test results and other reports, the Board voted its determination and opinion that Respondent is perpetuating a public health nuisance by operating a public water supply system in a manner that presents a present and future risk to the public health of the residents of Great Barrington, and is in contravention of Article 97 of the Amendments to the Constitution of the Commonwealth of Massachusetts, which specifically gives the people of the Commonwealth “[t]he right to clean ... water ... and the protection of the people in their right to conservation, ... of the ... water... and other natural resources.”

WHEREAS, at its meeting held on August 15, 2024, a continuation of the discussion and deliberation begun at the Board’s meeting of August 8, 2024 was conducted in an open meeting, at which time the Board received counsel from Town Counsel, received input from the Director of Strategies for the Massachusetts Association of Health Boards, received input from counsel for Respondent, and then heard a statement from an officer of the Respondent, James J. Mercer, Treasurer and Director. At the same meeting, the Board received 10 testimonial statements from 8 members of the public, and considered certain technical advice. Upon consideration of the various scientific, regulatory, and anecdotal evidence and information available to it, together with its past and current experience with test results and other reports, the Board set the date of August 22, 2024, for a vote upon a determination and opinion that Respondent is perpetuating a public health nuisance by operating a public water supply system in a manner that presents a present and future risk to the public health of the residents of Great Barrington, and is in contravention of Article 97 of the Amendments to the Constitution of the Commonwealth of Massachusetts, which specifically gives the people of the Commonwealth “[t]he right to clean ... water ... and the protection of the people in their right to conservation, ... of the ... water... and other natural resources.”

WHEREAS, at its meeting held on August 22, 2024, the Board voted to adopt this **ORDER**, which reflects revisions from the draft orders reviewed at the August 8 and August 15 meetings.

WHEREAS, it is the determination and opinion of the Board that selective testing of the water supplied and distributed by Respondent, in intervals and locations selected by Respondent or its agents, at which locations representatives of the Respondent, including senior management and/or owners, are present may produce subjective, and scientifically unreliable data as to the

quality, potential health risks and aesthetics of the water supplied and distributed by Respondent, and that such testing is, thereby, unreliable and/or inappropriate.

WHEREAS, it is the determination and opinion of the Board that the continued distribution of public water supply by Respondent, without adequate, independent, third-party monitoring for contaminants, toxic substances, compounds, and/or solvents, constitutes a nuisance under and within the scope of G.L. c. 111, §§ 122 and 123, which may be injurious to the health of the customers of Respondent and other users of water supplied by Respondent.

WHEREAS, in addition, it is the determination and opinion of the Board that the distribution of contaminated water by a Public Water Supplier, such as Respondent, may constitute a violation of the Federal Safe Drinking Water Act, 42 U.S.C. c.6A; various federal regulations including, without limitation, 42 C.F.R. Part 141 (National Primary Drinking Water Regulations); and the *Standards and Guidelines for Contaminants in Massachusetts Drinking Waters* (Winter 2020, <https://www.mass.gov/doc/2020-standards-and-guidelines-for-contaminants-in-massachusetts-drinking-waters/download>), as well as other applicable statutory and regulatory provisions.

NOW, THEREFORE,

Pursuant to G.L. c. 111, §§122, 123, Respondent is hereby **ORDERED TO CEASE AND DESIST** from violating the above-described Constitutional protections, laws and regulations, and from creating and/or furthering a public health nuisance.

And, Respondent is hereby **ORDERED** to appear before the Board at its next regular meeting, September 5, 2024, or at an earlier date, upon reasonable notice thereof, if such a special meeting is convened, in order to establish a timetable for retaining a water systems operating consultant and an independent testing laboratory (Laboratory) of the Board's choosing, and which is certified by the Mass DEP, to begin a program of testing of the water supplied by Respondent, the frequency, duration and extent of which is to be determined by the Board upon the advice of said Laboratory and consultant, to be carried out at the expense of the Respondent for a period of time to be determined by said Laboratory and consultant or until such time as the Board has determined that the water supplied by Respondent either does or does not constitute a continuing risk to the public health of the customers of Respondent in Great Barrington.

It is **FURTHER ORDERED** that, after the initial testing, based upon sound reasoning and the results of the initial baseline testing, such tests shall be conducted at intervals and locations determined by the consultant or an agent of the Board, with not more than ten days from and after the preceding test. In the event that a test sample is taken at a residence or business, there shall be a corresponding test taken at the source of that supply, to be delivered to the testing laboratory simultaneously. In the event of any deviation from the schedule established hereunder in the absence of a declared weather-related emergency or by permission of an agent of the Board, Respondent shall be subject to a penalty of up to One Thousand Dollars (\$1,000.00) per calendar day until such subsequent test is conducted.

1. It is **FURTHER ORDERED** that no employee or agent of Respondent may impede or otherwise interfere with the collection or analysis of any testing sample taken on the property owned or controlled by Respondent.
2. It is **FURTHER ORDERED** that said samples may be collected in accordance with generally accepted laboratory practices by an agent of the Board and transported to the Laboratory's testing facility by that or another agent of the Board. The agent(s) of the Board shall maintain "chain of custody" documentation.
3. It is **FURTHER ORDERED** that the Respondent provide each household within the Town of Great Barrington that is a water service customer of the Respondent, and which so desires, with an alternative supply of safe, potable water, through the distribution and supply of bottled water in containers which are larger than "single use containers" yet of such size as can be safely handled by the end user taking physical condition and ability of said end user into account, on a daily basis, and an adequate means of dispensing said water, within 7 days of this **ORDER** and at the expense of the Respondent, until further order of the Board. Such distribution shall consist of a supply of water equal to or greater than 1.5 gallons per day, per inhabitant in each such household. The distribution shall be accomplished in such a way as to allow easy access to the supply by each such household with a minimum of inconvenience.
 - a. In the event of a violation of this condition, the Respondent shall be subject to a penalty of up to \$1000.00 per day. The Board deems a violation as to any one household on any day to be a separate violation, subject to a separate penalty for each such household.
4. It is **FURTHER ORDERED** that Respondent shall designate and provide a means of 24 hours per day, seven days per week, communication, for the Board's Health Agent or other duly appointed and designated agent of the Board, as well as the Laboratory, to contact a duly authorized agent or employee of said Respondent in the event of any emergency or violation of the terms of this **ORDER**.
5. It is **FURTHER ORDERED** that Respondent, its designated agent, employee or attorney, shall attend any meeting of or with the Board upon reasonable notice from the Health Agent or the Board requesting such attendance.
6. It is **FURTHER ORDERED** that Respondent shall submit a work plan with date milestones for compliance with all of the terms of this within 14 days of the date of this **ORDER**.
7. It is **FURTHER ORDERED** that Respondent shall document, on a daily basis, all work performed for purposes of compliance with this **ORDER**, and supply that documentation to the Board every 7 days. If such report date falls on a weekend or holiday, it is to be rendered the following business day.

8. It is **FURTHER ORDERED** that Respondent shall appear before the Board at each of its regular meetings, notice of which shall be provided, to report on the progress and the expected date of completion of the actions taken for purposes of compliance with this **ORDER**.
9. It is **FURTHER ORDERED** that Respondent shall provide the Board with written notice of any circumstances or conditions of which Respondent becomes aware and which may impair Respondent's ability to comply with this **ORDER**, so the Board may take reasonable and appropriate action in response.
10. It is **FURTHER ORDERED** that, except as otherwise provided herein, Respondent shall be subject to a penalty of up to One Thousand Dollars (\$1,000.00) per calendar day for any violation of this **ORDER**.
11. It is **FURTHER ORDERED** that service of this **ORDER** on the Respondent will be completed within 24 hours of the said vote of the Board of Health on August 22, and all dates and deadlines for performance of conditions in this **ORDER** will be effective upon service.

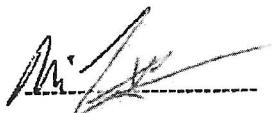
ENFORCEMENT:

The Board or its Health Agent may be assisted by the Massachusetts Department of Public Health and the Department of Environmental Protection for matters that fall within the statutory purview of those departments, together with local Police or State Police in the enforcement of this **ORDER**.

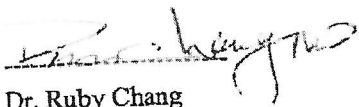
APPEAL:

If you are aggrieved by this **ORDER**, you have the right to request a hearing before the Board. This request must be made by you, in writing, and filed within seven (7) days after the date this **ORDER** was served on, or actually received by, you. Any affected party has a right to appear at said hearing.

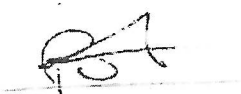
SO ORDERED, by the Board of Health, this 22nd day of August, 2024.



Michael Lanoue,
Chair



Dr. Ruby Chang



Peter Stanton,
Vice Chair

Attachment A

Scientific Literature and sources that were reviewed in support of
Order to Correct in the Housatonic Water Works matter.

MANGANESE Primary Sources:

Banta RG, Markesbery WR. Elevated manganese levels associated with dementia and extrapyramidal signs. *Neurology*. 1977;27:213–216.

Adinolfi M. The development of the human blood-CSF-brain barrier. *Dev Med Child Neurol*. 1985;27(4):532–537.

Barnes DG, Dourson M. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol*. 1988; 8(4):471–486.

Aschner M, Aschner JL. Manganese transport across the blood-brain barrier: relationship to iron homeostasis. *Brain Res Bull*. 1990;24:857–860.

Alarcón OM, Reinos-Fuller JA, Silva T, et al. Manganese levels in serum of healthy Venezuelan infants living in Mérida. *J Trace Elem Med Biol*. 1996;10:210–213.

Brürok H, Schjott J, Berg K, et al. Manganese and the heart: Acute cardiodepression and myocardial accumulation of manganese. *Acta Physiol Scand*. 1997;159:33–40.

Beuter A, Edwards R, de Geoffroy A, et al. Quantification of neuromotor function for detection of the effects of manganese. *Neurotoxicology*. 1999;20:355–366.

Calabresi P, Ammassari-Teule M, Gubellini P, et al. A synaptic mechanism underlying the behavioral abnormalities induced by manganese intoxication. *Neurobiol Dis*. 2001;9:419–432.

Bast-Pettersen R, Ellingsen DG, Hetland SM, et al. Neuropsychological function in manganese alloy plant workers. *Int Arch Occup Environ Health*. 2004;77:277–287.

Bouchard M, Mergler D, Baldwin M. Manganese exposure and age: Neurobehavioral performance among alloy production workers. *Environ Toxicol Pharmacol*. 2005;19(3):687–694.

Aschner M, Dorman DC. Manganese: Pharmacokinetics and molecular mechanisms of brain uptake. *Toxicol Rev*. 2006;25(3):147–154.

Bouchard M, Laforest F, Vandelac L, et al. Hair manganese and hyperactive behaviors: Pilot study of school-age children exposed through tap water. *Environ Health Perspect*. 2007; 115:122–127.

Kim Y, Kim BN, Hong YC, Shin MS, Yoo HJ, Kim JW, Bhang SY, Cho SC. Co-exposure to environmental lead and manganese affects the intelligence of school-aged children. *Neurotoxicology*. 2009 Jul;30(4):564–71. doi: 10.1016/j.neuro.2009.03.012. Epub 2009 Apr 14.

- Farias AC, Cunha A, Benko CR, et al. Manganese in children with attention-deficit/hyperactivity disorder: Relationship with methylphenidate exposure. *J Child Adolesc Psychopharmacol*. 2010;20(2):113–118
- Claus Henn B, Schnaas L, Ettinger AS, et al. Associations of early childhood manganese and lead co-exposure with neurodevelopment. *Environ Health Perspect*. 2011.
- Hernandez-Bonilla D, Schilman A, Montes S, et al. Environmental exposure to manganese and motor function of children in Mexico. *Neurotoxicology*. 2011;32(5):615–621.
- Menezes-Filho JA, Novaes Cde O, Moreira JC, et al. Elevated manganese and cognitive performance in school-aged children and their mothers. *Environ Res*. 2011;111(1):156–163.
- Kim Y, Bowler RM, Abdelouahab N, et al. Motor function in adults of an Ohio community with environmental manganese exposure. *Neurotoxicology*. 2011;32(5):606–614.
- Bouchard MF, Sauve S, Barbeau B, et al. Intellectual impairment in school-age children exposed to manganese from drinking water. *Environ Health Perspect*. 2011;119(1):138–143.
- Brna P, Gordon K, Dooley JM, et al. Manganese toxicity in a child with iron deficiency and polycythemia. *J Child Neurol*. 2011;26(7):891–894.
- Williams M, Todd GD, Roney N, Crawford J, Coles C, McClure PR, Garey JD, Zaccaria K, Citra M 2, Toxicological Profile for Manganese, Agency for Toxic Substances and Disease Registry (US), Atlanta (GA), 20 Sep 2013.
- Zoni S, Lucchini RG. Manganese exposure: cognitive, motor and behavioral effects on children: a review of recent findings. *Curr Opin Pediatr*. 2013 Apr;25(2):255–60. doi: 10.1097/MOP.0b013e32835e906b.
- Geir Bjørklund, Max Stanley Chartrand, Jan Aaseth, Manganese exposure and neurotoxic effects in children, *Environ Res*. 2017 May;155:380–384. doi: 10.1016/j.envres.2017.03.003. Epub 2017 Mar 10.
- Bhang SY, Cho SC, Kim JW, Hong YC, Shin MS, Yoo HJ, Cho IH, Kim Y, Kim BN, Relationship between blood manganese levels and children's attention, cognition, behavior, and academic performance--a nationwide cross-sectional study. *Environ Res*. 2013 Oct;126:9–16. doi: 10.1016/j.envres.2013.05.006. Epub 2013 Jun 20.
- Tung PW, Burt A, Karagas M, Jackson BP, Punshon T, Lester B, Marsit CJ., Prenatal exposure to metal mixtures and newborn neurobehavior in the Rhode Island Child Health Study. *Environ Epidemiol*. 2022 Jan 28;6(1):e194. doi: 10.1097/ EE9.000000000000194. eCollection 2022 Feb.
- Gu Q, Liu J, Zhang X, Huang A, Yu X, Wu K, Huang Y., Association between heavy metals exposure and risk of attention deficit hyperactivity disorder (ADHD) in children: a systematic review and meta-analysis. *Eur Child Adolesc Psychiatry*. 2024 Aug 10. doi: 10.1007/s00787-024-02546-z. Online ahead of print.

HAA5 Primary Sources:

Haloacetic Acids in Drinking Water, 8/22, 510 page source material, Pesticide and Environmental Toxicology Branch Office of Environmental Health Hazard Assessment California Environmental Protection Agency,
<https://oehha.ca.gov/media/downloads/cmr/haaphgsecdraft081922.pdf>

Draft Report on Carcinogens Monograph on Haloacetic Acids Found as Water Disinfection By-Products, US DHHS Nat'l Toxicology Program, Office of the Report on Carcinogens Division of the National Toxicology Program National Institute of Environmental Health Sciences U.S. Department of Health and Human Services, 184 page report, 6/17

Parvez S, Ashby JL, Kimura SY, Richardson SD. Exposure Characterization of Haloacetic Acids in Humans for Exposure and Risk Assessment Applications: An Exploratory Study. *Int J Environ Res Public Health*. 2019 Feb 6;16(3):471. doi: 10.3390/ijerph16030471. PMID: 30736287; PMCID: PMC6388255.

Mass. DEP, Fact Sheet: Haloacetic Acids and Total Trihalomethane In Drinking Water Information for Consumers, <https://www.mass.gov/doc/factsheet-haloacetic-acids-and-total-trihalomethane-in-drinking-water-information-for-consumers/> 12/22

Elisabet Pérez-Albaladejoa,RaquelPinteñoa, María del Carmen Aznar-Luquea,MartaCasadoa, Cristina Postigob,a,c,* , Cinta Porte: Genotoxicity and endocrine disruption potential of haloacetic acids in human placental and lung cells, *Science of the Total Environment* 879 (2023) 162981

Weathering Primary Sources:

Arline T. Geronimus, Margaret Hicken, Danya Keene, and John Bound: "Weathering" and Age Patterns of Allostatic Load Scores Among Blacks and Whites in the United States, *American Journal of Public Health* | May 2006, Vol 96, No. 5

Letang, S. K., Lin, S. S. H., Parmelee, P. A., & McDonough, I. M. (2021). "Ethnoracial disparities in cognition are associated with multiple socioeconomic status-stress pathways". *Cognitive Research: Principles and Implications*, 6(1), 1-17.

Weathering: What are the health effects of stress and discrimination? *Medical News Today*, 2/26/21, accessed at: <https://www.medicalnewstoday.com/articles/weathering-what-are-the-health-effects-of-stress-and-discrimination>.

Weathering: The Extraordinary Stress of Ordinary Life in an Unjust Society, " Arline Geronimus, University of Michigan's Population Studies Center, by Little Brown in March 2023.

EXHIBIT C

TOWN OF GREAT BARRINGTON



BOARD OF HEALTH

ORDER TO CORRECT

M.G.L. c. 111, §§ 122, 123

EFFECTIVE IMMEDIATELY

September 13, 2024

Name of Business/Landowner/Individual:
(Hereafter referred to as "Respondent")

Housatonic Water Works Company

Address of Business/Landowner/Individual:

80 Maple Avenue
Great Barrington, MA 01230

The Great Barrington Board of Health, (hereafter referred to as the "Board") acting under the authority of G. L. c. 111, §§ 122, 123, hereby issues this **ORDER TO CORRECT ("ORDER")**, to the Respondent identified above, for the reasons stated herein. *This ORDER is a modification of the order to the Respondent dated August 22, 2024, which the Respondent appealed as allowed for in the order, and this ORDER is being issued after an appeal hearing held by the Board on September 5 and September 10, 2024, at which the Respondent appeared and was represented by counsel, and after which the Board voted to uphold, with modifications, the August 22, 2024 order and to authorize the chair to sign this ORDER on behalf of the Board.*

WHEREAS, Respondent, Housatonic Water Works Company, is a privately owned public water supplier serving, *inter alia*, certain residents of the Town of Great Barrington.

WHEREAS, In Massachusetts, public water suppliers have specific duties and responsibilities to their customers, governed by state laws and regulations, to ensure the safety, reliability, and quality of water services. The Respondent has the following duties, without limitation:

1. **Water Quality and Safety:** Public water suppliers must comply with the Massachusetts Drinking Water Regulations (310 CMR 22.00) and the Safe Drinking Water Act. The Respondent is required to regularly test its water supply for contaminants, including bacteria, chemicals, and other harmful substances, and must ensure that the water it supplies

meets or exceeds the health-based standards set by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP).

2. *Public Notification and Reporting*: The Respondent is required to notify customers about any violations of drinking water standards, significant changes in water quality, or issues that may pose a health risk. Included within this requirement, the Respondent must provide annual Consumer Confidence Reports (CCRs) that inform customers about the quality of their drinking water, including information on detected contaminants and compliance with drinking water regulations.

3. *Emergency Response and Preparedness*: The Respondent is required to have emergency response plans in place to address situations such as natural disasters, contamination events, or other emergencies that could affect water quality or supply.

4. *Infrastructure Maintenance and Improvements*: The Respondent is responsible for maintaining and upgrading the water supply infrastructure, including treatment facilities, storage tanks, and distribution systems, to ensure the continued delivery of safe and reliable water.

5. *Customer Service and Communication*: The Respondent is required to provide adequate customer service, including responding to customer inquiries, handling complaints, and providing information about water service, rates, and quality. This obligation also includes the requirement to communicate clearly to customers about service interruptions, boil water advisories, and other important water service notices.

6. *Regulatory Compliance*: The Respondent is required to adhere to all applicable state and federal regulations, including environmental laws and public health standards.

These duties are intended to protect public health and ensure that the public water supplier's customers have access to safe, reliable, and high-quality drinking water.

WHEREAS, MassDEP oversees and enforces compliance with these requirements.

WHEREAS, it is within the purview and authority of the Board of Health to act in the interest of protecting the citizens of the Town by making reasonable health regulations and enforcing the Nuisance Statute, G.L. c. 111, § 122; and the protection of public health is within the police power of a municipality to protect the health, safety and welfare of its residents. (Druzik et al. v. Board of Health of Haverhill, 324 Mass. 129 (1949))

WHEREAS, the Board has based this **ORDER** on the consideration of a sound body of scientific evidence including reliable scientific studies, papers and anecdotal reports as set forth in "Attachment A, Scientific Literature and sources that were reviewed in support of Order to Correct in the Housatonic Water Works matter."

WHEREAS, there are a number of residents of the Town of Great Barrington who are water supply customers of the Respondent and whose water supply is potentially contaminated, discolored, contains as-of-yet insufficiently defined amounts of potentially neurotoxic manganese, potentially carcinogenic levels of haloacetic acids (commonly referred to as HAA5), causing them to have a lack of potable water at various times, such conditions thereby subjecting residents of an Environmental Justice neighborhood (as designated by the

Massachusetts Executive Office of Environmental Affairs) to a risk of long term and potentially fatal illnesses including cancer, manganism, and other diseases.

WHEREAS, haloacetic acids (HAA5) are a group of chemical compounds that can form as byproducts when disinfectants, such as chlorine, are used to treat drinking water. The group includes five specific acids: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid. These compounds have been determined to be present in the water supplied by the Respondent in as-of-yet insufficiently identified quantities.

WHEREAS, the Board of Health finds that well documented health risks of HAA5 exposure include the following:

1. **Cancer Risk:** Long-term exposure to high levels of HAA5 has been associated with an increased risk of cancer. Specifically, some of the haloacetic acids, like dichloroacetic acid and trichloroacetic acid, have been linked to an increased risk of liver cancer and other cancers in animal studies.
2. **Reproductive and Developmental Effects:** Studies suggest that exposure to HAA5 may affect reproductive and developmental health. For example, certain haloacetic acids have been associated with potential reproductive toxicity and developmental effects, such as birth defects.
3. **Liver and Kidney Damage:** Prolonged exposure to elevated levels of HAA5 may cause liver and kidney damage. Some haloacetic acids are known to cause liver enlargement and other liver issues in animal studies.
4. **Other Health Effects:** There may also be other non-cancer health effects associated with long-term exposure to HAA5, including potential effects on the nervous system and other organs.

WHEREAS, to mitigate these risks, the EPA has established a Maximum Contaminant Level (MCL) for HAA5 in drinking water. The MCL for HAA5 is set at 0.060 milligrams per liter (mg/L) or 60 parts per billion (ppb). Public water systems are required to regularly monitor HAA5 levels and take corrective actions if the MCL is exceeded, in order to protect public health. (Refer to 310 CMR 22.00)

WHEREAS, manganese is a naturally occurring element found in many water sources. While it is an essential nutrient at low levels, necessary for proper bodily functions, elevated levels of manganese in drinking water can pose health risks. The risks associated with manganese in drinking water include:

1. **Neurological Effects:** There are scientifically well documented differences in health risk among adult and pediatric populations.
 - a. *Adults:* Long-term exposure to high levels of manganese can affect the nervous system. In particular, it can lead to symptoms similar to Parkinson's disease, such as tremors, difficulty walking, and facial muscle stiffness. This condition is sometimes referred to as manganism.

The EPA has set a lifetime health advisory level for manganese in drinking water at 0.3 mg/L for adults and a more protective level of 0.05 mg/L for children younger than six months.

WHEREAS, the medical term, “Weathering,” refers to the cumulative impact of chronic stress, particularly from forms of social disadvantage, on the physical and mental health of individuals over time. According to the medical and scientific literature, this condition is the result of repeated exposure to stressors, particularly those related to systemic inequalities, accelerates the aging process and leads to premature decline in physical health. This can manifest in a variety of ways, including increased risk and incidence of chronic diseases like hypertension, diabetes, and heart disease, as well as poorer birth outcomes for women, such as higher rates of infant mortality and low birth weight. Those so affected may experience accelerated aging and earlier onset of chronic health conditions compared to unaffected persons, largely due to the chronic stress associated with the challenges presented by the triggering mechanism, such as chronic exposure to hazardous substances, such as drinking water that is perceived as unfit for consumption in a household. These conditions, illnesses and social situations are all part of a public health crisis within the purview of the Board and subject to the nuisance jurisdiction of Massachusetts Boards of Health.

4

WHEREAS, G.L. c. 111, § 122 provides, in relevant part: “The board of health shall examine into all nuisances, sources of filth and causes of sickness within its town, ... which may, in its opinion, be injurious to the public health, shall destroy, remove or prevent the same as the case may require, and shall make regulations for the public health and safety relative thereto and to articles capable of containing or conveying infection or contagion or of creating sickness brought into or conveyed from the town Whoever violates any such regulation shall forfeit not more than one thousand dollars.”

WHEREAS, it is the determination and opinion of the Board of Health of the Town of Great Barrington (Board) that the Respondent has failed to protect the public health of its customers and others exposed to its public water supply through reasonable means, thereby creating a public health nuisance.

WHEREAS, at its meeting held on August 8, 2024, after a discussion and deliberation were conducted in an open meeting, at which the Board heard testimony of 18 members of the public, and considered certain technical advice and input from a consultant duly licensed by the Commonwealth as a Drinking Water Supply Facilities Operator, and upon consideration of the various scientific, regulatory, and anecdotal evidence and information available to it, together with its past and current experience with test results and other reports, the Board voted its determination and opinion that Respondent is perpetuating a public health nuisance by operating a public water supply system in a manner that presents a present and future risk to the public health of the residents of Great Barrington, and is in contravention of Article 97 of the Amendments to the Constitution of the Commonwealth of Massachusetts, which specifically gives the people of the Commonwealth “[t]he right to clean ... water ... and the protection of the people in their right to conservation, ... of the ... water... and other natural resources.”

WHEREAS, at its meeting held on August 15, 2024, a continuation of the discussion and deliberation begun at the Board’s meeting of August 8, 2024 was conducted in an open meeting, at which time the Board received counsel from Town Counsel, received input from the Director of Strategies for the Massachusetts Association of Health Boards, received input from counsel for Respondent, and then heard a statement from an officer of the Respondent, James J. Mercer, Treasurer and Director. At the same meeting, the Board received 10 testimonial statements from 8 members of the public, and considered certain technical advice. Upon consideration of the various scientific, regulatory, and anecdotal evidence and information available to it, together with its past and current experience with test results and other reports, the Board set the date of August 22, 2024, for a vote upon a determination and opinion that Respondent is perpetuating a public health nuisance by operating a public water supply system in a manner that presents a present and future risk to the public health of the residents of Great Barrington, and is in contravention of Article 97 of the Amendments to the Constitution of the Commonwealth of Massachusetts, which specifically gives the people of the Commonwealth “[t]he right to clean ... water ... and the protection of the people in their right to conservation, ... of the ... water... and other natural resources.”

WHEREAS, at its meeting held on August 22, 2024, the Board voted to adopt the August 22, 2024 order, which reflected revisions from the draft orders reviewed at the August 8 and August 15 meetings.

WHEREAS, it is the determination and opinion of the Board that selective testing of the water supplied and distributed by Respondent, in intervals and locations selected by Respondent or its agents, at which locations representatives of the Respondent, including senior management and/or owners, are present may produce subjective, and scientifically unreliable data as to the quality, potential health risks and aesthetics of the water supplied and distributed by Respondent, and that such testing is, thereby, unreliable and/or inappropriate.

WHEREAS, it is the determination and opinion of the Board that the continued distribution of public water supply by Respondent, without adequate, independent, third-party monitoring for contaminants, toxic substances, compounds, and/or solvents, constitutes a nuisance under and within the scope of G.L. c. 111, §§ 122 and 123, which may be injurious to the health of the customers of Respondent and other users of water supplied by Respondent.

WHEREAS, in addition, it is the determination and opinion of the Board that the distribution of contaminated water by a Public Water Supplier, such as Respondent, may constitute a violation of the Federal Safe Drinking Water Act, 42 U.S.C. c.6A; various federal regulations including, without limitation, 42 C.F.R. Part 141 (National Primary Drinking Water Regulations); and the *Standards and Guidelines for Contaminants in Massachusetts Drinking Waters* (Winter 2020, <https://www.mass.gov/doc/2020-standards-and-guidelines-for-contaminants-in-massachusetts-drinking-waters/download>), as well as other applicable statutory and regulatory provisions.

NOW, THEREFORE,

Pursuant to G.L. c. 111, §§122, 123, Respondent is hereby **ORDERED TO CEASE AND DESIST** from violating the above-described Constitutional protections, laws and regulations, and from creating and/or furthering a public health nuisance.

And, Respondent is hereby **ORDERED** to appear before the Board at its next regular meeting, September 5, 2024, or at an earlier date, upon reasonable notice thereof, if such a special meeting is convened, in order to establish a timetable for retaining a water systems operating consultant and an independent testing laboratory (Laboratory) of the Board's choosing, and which is certified by the Mass DEP, to begin a program of testing of the water supplied by Respondent, the frequency, duration and extent of which is to be determined by the Board upon the advice of said Laboratory and consultant, to be carried out at the expense of the Respondent for a period of time to be determined by said Laboratory and consultant or until such time as the Board has determined that the water supplied by Respondent either does or does not constitute a continuing risk to the public health of the customers of Respondent in Great Barrington. *The Respondent did appear at the Board's meeting of September 5, 2024, for purposes of a hearing on its appeal of the August 22, 2024 order, which hearing was continued*

to September 10, 2024 for an additional session. The Respondent did not present a timetable as described above.

It is **FURTHER ORDERED** that, after the initial testing, based upon sound reasoning and the results of the initial baseline testing, such tests shall be conducted at intervals and locations determined by the consultant or an agent of the Board, with not more than ten days from and after the preceding test. In the event that a test sample is taken at a residence or business, there shall be a corresponding test taken at the source of that supply, to be delivered to the testing laboratory simultaneously. In the event of any deviation from the schedule established hereunder in the absence *Except in the case of a declared weather-related emergency or by permission of an agent of the Board, Respondent shall comply with the schedule established.*

1. It is **FURTHER ORDERED** that no employee or agent of Respondent may impede or otherwise interfere with the collection or analysis of any testing sample taken on the property owned or controlled by Respondent.
2. It is **FURTHER ORDERED** that said samples may be collected in accordance with generally accepted laboratory practices by an agent of the Board and transported to the Laboratory's testing facility by that or another agent of the Board. The agent(s) of the Board shall maintain "chain of custody" documentation.
3. It is **FURTHER ORDERED** that the Respondent provide each household within the Town of Great Barrington that is a water service customer of the Respondent, and which so desires, with an alternative supply of safe, potable water, through the distribution and supply of bottled water in containers which are larger than "single use containers" yet of such size as can be safely handled by the end user taking physical condition and ability of said end user into account, on a daily basis, and an adequate means of dispensing said water, within 7 days of this **ORDER** and at the expense of the Respondent, until further order of the Board. Such distribution shall consist of a supply of water equal to or greater than 1.5 gallons per day, per inhabitant in each such household. The distribution shall be accomplished in such a way as to allow easy access to the supply by each such household with a minimum of inconvenience.
4. It is **FURTHER ORDERED** that Respondent shall designate and provide a means of 24 hours per day, seven days per week, communication, for the Board's Health Agent or other duly appointed and designated agent of the Board, as well as the Laboratory, to contact a duly authorized agent or employee of said Respondent in the event of any emergency or violation of the terms of this **ORDER**.
5. It is **FURTHER ORDERED** that Respondent, its designated agent, employee or attorney, shall attend any meeting of or with the Board upon reasonable notice from the Health Agent or the Board requesting such attendance.
6. It is **FURTHER ORDERED** that Respondent shall submit a work plan with date milestones for compliance with all of the terms of this **ORDER** within 14 days of the date of this **ORDER**.

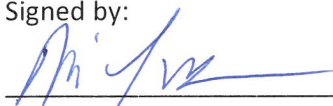
7. It is **FURTHER ORDERED** that Respondent shall document, on a daily basis, all work performed for purposes of compliance with this **ORDER**, and supply that documentation to the Board every 7 days. If such report date falls on a weekend or holiday, it is to be rendered the following business day.
8. It is **FURTHER ORDERED** that Respondent shall appear before the Board at each of its regular meetings, notice of which shall be provided, to report on the progress and the expected date of completion of the actions taken for purposes of compliance with this **ORDER**. *The Board's next regular meeting is on October 3, 2024. It will be a hybrid meeting, with in-person and remote attendance allowed.*
9. It is **FURTHER ORDERED** that Respondent shall provide the Board with written notice of any circumstances or conditions of which Respondent becomes aware and which may impair Respondent's ability to comply with this **ORDER**, so the Board may take reasonable and appropriate action in response.
10. It is **FURTHER ORDERED** that, except as otherwise provided herein, Respondent shall be subject to a penalty of up to One Thousand Dollars (\$1,000.00) per calendar day for any violation of this **ORDER**.
11. It is **FURTHER ORDERED** that this **ORDER** shall be served on the Respondent , and all dates and deadlines for performance of conditions in this **ORDER**, and penalties for violation of this **ORDER**, will be effective upon service.

ENFORCEMENT:

The Board or its Health Agent may be assisted by the Massachusetts Department of Public Health and the Department of Environmental Protection for matters that fall within the statutory purview of those departments, together with local Police or State Police in the enforcement of this **ORDER**.

SO ORDERED, by the Board of Health, by vote adopted on September 10, 2024.

Signed by:



Name: Michael Lanoue, Chair

Attachment A

Scientific Literature and sources that were reviewed in support of
Order to Correct in the Housatonic Water Works matter.

MANGANESE Primary Sources:

Banta RG, Markesbery WR. Elevated manganese levels associated with dementia and extrapyramidal signs. *Neurology*. 1977;27:213–216.

Adinolfi M. The development of the human blood-CSF-brain barrier. *Dev Med Child Neurol*. 1985;27(4):532–537.

Barnes DG, Dourson M. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol*. 1988; 8(4):471–486.

Aschner M, Aschner JL. Manganese transport across the blood-brain barrier: relationship to iron homeostasis. *Brain Res Bull*. 1990;24:857–860.

Alarcón OM, Reinoso-Fuller JA, Silva T, et al. Manganese levels in serum of healthy Venezuelan infants living in Mérida. *J Trace Elem Med Biol*. 1996;10:210–213.

Brürok H, Schjott J, Berg K, et al. Manganese and the heart: Acute cardiodepression and myocardial accumulation of manganese. *Acta Physiol Scand*. 1997;159:33–40.

Beuter A, Edwards R, de Geoffroy A, et al. Quantification of neuromotor function for detection of the effects of manganese. *Neurotoxicology*. 1999;20:355–366.

Calabresi P, Ammassari-Teule M, Gubellini P, et al. A synaptic mechanism underlying the behavioral abnormalities induced by manganese intoxication. *Neurobiol Dis*. 2001;9:419–432.

Bast-Pettersen R, Ellingsen DG, Hetland SM, et al. Neuropsychological function in manganese alloy plant workers. *Int Arch Occup Environ Health*. 2004;77:277–287.

Bouchard M, Mergler D, Baldwin M. Manganese exposure and age: Neurobehavioral performance among alloy production workers. *Environ Toxicol Pharmacol*. 2005;19(3):687–694.

Aschner M, Dorman DC. Manganese: Pharmacokinetics and molecular mechanisms of brain uptake. *Toxicol Rev*. 2006;25(3):147–154.

Bouchard M, Laforest F, Vandelac L, et al. Hair manganese and hyperactive behaviors: Pilot study of school-age children exposed through tap water. *Environ Health Perspect*. 2007; 115:122–127.

Kim Y, Kim BN, Hong YC, Shin MS, Yoo HJ, Kim JW, Bhang SY, Cho SC. Co-exposure to environmental lead and manganese affects the intelligence of school-aged children. *Neurotoxicology*. 2009 Jul;30(4):564-71. doi: 10.1016/j.neuro.2009.03.012. Epub 2009 Apr 14.

Farias AC, Cunha A, Benko CR, et al. Manganese in children with attention-deficit/hyperactivity disorder: Relationship with methylphenidate exposure. *J Child Adolesc Psychopharmacol*. 2010;20(2):113–118

Claus Henn B, Schnaas L, Ettinger AS, et al. Associations of early childhood manganese and lead co-exposure with neurodevelopment. *Environ Health Perspect*. 2011.

Hernandez-Bonilla D, Schilman A, Montes S, et al. Environmental exposure to manganese and motor function of children in Mexico. *Neurotoxicology*. 2011;32(5):615–621.

Menezes-Filho JA, Novaes Cde O, Moreira JC, et al. Elevated manganese and cognitive performance in school-aged children and their mothers. *Environ Res*. 2011;111(1):156–163.

Kim Y, Bowler RM, Abdelouahab N, et al. Motor function in adults of an Ohio community with environmental manganese exposure. *Neurotoxicology*. 2011;32(5):606–614.

Bouchard MF, Sauve S, Barbeau B, et al. Intellectual impairment in school-age children exposed to manganese from drinking water. *Environ Health Perspect*. 2011;119(1):138–143.

Brna P, Gordon K, Dooley JM, et al. Manganese toxicity in a child with iron deficiency and polycythemia. *J Child Neurol*. 2011;26(7):891–894.

Williams M, Todd GD, Roney N, Crawford J, Coles C, McClure PR, Garey JD, Zaccaria K, Citra M 2, Toxicological Profile for Manganese, Agency for Toxic Substances and Disease Registry (US), Atlanta (GA), 20 Sep 2013.

Zoni S, Lucchini RG. Manganese exposure: cognitive, motor and behavioral effects on children: a review of recent findings. *Curr Opin Pediatr*. 2013 Apr;25(2):255-60. doi: 10.1097/MOP.0b013e32835e906b.

Geir Bjørklund, Max Stanley Chartrand, Jan Aaseth, Manganese exposure and neurotoxic effects in children, *Environ Res*. 2017 May;155:380-384.doi: 10.1016/j.envres.2017.03.003. Epub 2017 Mar 10.

Bhang SY, Cho SC, Kim JW, Hong YC, Shin MS, Yoo HJ, Cho IH, Kim Y, Kim BN, Relationship between blood manganese levels and children's attention, cognition, behavior, and academic performance--a nationwide cross-sectional study. *Environ Res*. 2013 Oct;126:9-16. doi: 10.1016/j.envres.2013.05.006. Epub 2013 Jun 20.

Tung PW, Burt A, Karagas M, Jackson BP, Punshon T, Lester B, Marsit CJ., Prenatal exposure to metal mixtures and newborn neurobehavior in the Rhode Island Child Health Study. *Environ Epidemiol*. 2022 Jan 28;6(1):e194. doi: 10.1097/EE9.0000000000000194. eCollection 2022 Feb.

Gu Q, Liu J, Zhang X, Huang A, Yu X, Wu K, Huang Y., Association between heavy metals exposure and risk of attention deficit hyperactivity disorder (ADHD) in children: a systematic

review and meta-analysis. *Eur Child Adolesc Psychiatry*. 2024 Aug 10. doi: 10.1007/s00787-024-02546-z. Online ahead of print.

HAA5 Primary Sources:

Haloacetic Acids in Drinking Water, 8/22, 510 page source material, Pesticide and Environmental Toxicology Branch Office of Environmental Health Hazard Assessment California Environmental Protection Agency,
<https://oehha.ca.gov/media/downloads/crnrr/haaphgsecdraft081922.pdf>

Draft Report on Carcinogens Monograph on Haloacetic Acids Found as Water Disinfection By-Products, US DHHS Nat'l Toxicology Program, Office of the Report on Carcinogens Division of the National Toxicology Program National Institute of Environmental Health Sciences U.S. Department of Health and Human Services, 184 page report, 6/17

Parvez S, Ashby JL, Kimura SY, Richardson SD. Exposure Characterization of Haloacetic Acids in Humans for Exposure and Risk Assessment Applications: An Exploratory Study. *Int J Environ Res Public Health*. 2019 Feb 6;16(3):471. doi: 10.3390/ijerph16030471. PMID: 30736287; PMCID: PMC6388255.

Mass. DEP, Fact Sheet: Haloacetic Acids and Total Trihalomethane In Drinking Water Information for Consumers, <https://www.mass.gov/doc/factsheet-haloacetic-acids-and-total-trihalomethane-in-drinking-water-information-for-consumers/> 12/22

Elisabet Pérez-Albaladejoa,RaquelPinteñoa, María del Carmen Aznar-Luquea,MartaCasadoa, Cristina Postigob,a,c,* , Cinta Porte: Genotoxicity and endocrine disruption potential of haloacetic acids in human placental and lung cells, *Science of the Total Environment* 879 (2023) 162981

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Letang, S. K., Lin, S. S. H., Parmelee, P. A., & McDonough, I. M. (2021). "Ethnoracial disparities in cognition are associated with multiple socioeconomic status-stress pathways". *Cognitive Research: Principles and Implications*, 6(1), 1-17.

Weathering: What are the health effects of stress and discrimination? *Medical News Today*, 2/26/21, accessed at: <https://www.medicalnewstoday.com/articles/weathering-what-are-the-health-effects-of-stress-and-discrimination>.

Weathering: The Extraordinary Stress of Ordinary Life in an Unjust Society, Arline Geronimus, University of Michigan's Population Studies Center, by Little Brown in March 2023.

EXHIBIT D

From: Ashley Barnes
Sent: Friday, September 20, 2024 11:49 AM
To: David J. Doneski
Cc: Timothy Van Dyck; Robert D. Cox, Jr.
Subject: HWWC / Great Barrington BOH Order to Correct

David,

Thank you for taking the time to speak with me on Wednesday regarding the Board of Health's modified Order to Correct. I am writing to confirm my understanding regarding the directive set forth in the third numbered paragraph on page 7 of the Order, and more specifically, regarding the provision of an alternative supply of bottled water, which is scheduled to go into effect on Tuesday of next week.

As I informed you, HWWC cannot comply with the terms of the above-referenced directive for a number of reasons. First, HWWC has not been provided with any information regarding which households desire an alternative supply of bottled water. Second, HWWC has not been informed as to how many residents live in each household. Third, HWWC has no information on the physical condition and ability of each such resident. Fourth, the Order does not indicate explicitly whether the bottled water needs to be delivered directly to each household. And finally, the Order is silent as to when this and the other directives set forth therein will end. As drafted, the Order does not make clear what HWWC is required to do, is completely open-ended, and compliance with its directives could last indefinitely.

I understand that you spoke with the Board chair regarding the above concerns, but that the Board chair cannot speak for the Board in its entirety. In terms of attempting to comply with the Order in the short term, you indicated that you believe the Board's position would be that HWWC needs to get the water delivered to customers' households, and you believe that it would be fair to assume that almost all of HWWC's customers would want the alternative water supply.

You indicated that the relevant time period during which HWWC would need to comply with the directives in the Order would probably depend on weather and testing. There will likely be some diminishment in discoloration as we move into and through October and you believe the Board would like to see some kind of tangible result in the water system before it would be willing to put an end to the directives set forth in the Order. You indicated that there needs to be further discussion on this point.

Please let me know as soon as possible if this email does not accurately summarize our conversation.

Kind regards,

Ashley