

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Bethany Card Secretary

Martin Suuberg Commissioner

Issued Electronically

October 4, 2022

Mr. James Mercer Housatonic Water Works Company 80 Maple Street Great Barrington, MA 01230

Re: Great Barrington Housatonic Water Works Company PWS ID# 1113003 Enf. Doc Number: 00013199 Enforcement

Dear Mr. Mercer:

Enclosed is your copy of the fully executed Administrative Consent Order (ACO) addressing Housatonic Water Works Company's Disinfection Byproduct violations.

If you have any questions regarding this matter, please contact me at <u>deirdre.doherty@mass.gov</u> or (413) 755-2148 or Douglas Paine by telephone at 413-755-2281 or by email at Douglas.Paine@mass.gov.

Respectfully,

Den her bher

Deirdre Doherty Drinking Water / Municipal Services Chief Bureau of Water Resources

Enclosure: Consent Order cc: DWP Boston; OE Boston; Board of Health; M. Pruhenski, Gt. Barrington; DEP-WERO-H. Pokharel, D. Paine

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# COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of: Housatonic Water Works Company

Enforcement Document Number: 00013199 Issuing Bureau: BWR Issuing Region/Office: WERO Issuing Program: DWP Primary Program Cited: DWP PWS ID # 1113003

### ADMINISTRATIVE CONSENT ORDER AND NOTICE OF NONCOMPLIANCE

#### I. THE PARTIES

1. The Department of Environmental Protection ("Department" or "MassDEP") is a duly constituted agency of the Commonwealth of Massachusetts established pursuant to M.G.L. c. 21A, § 7. MassDEP maintains its principal office at One Winter Street, Boston, Massachusetts 02108, and its Western Regional Office at 436 Dwight Street, Springfield, Massachusetts 01103.

2. Housatonic Water Works Company ("Respondent") is a Corporation with its principal office located at 80 Maple Street. Great Barrington, Massachusetts 01230. Respondent's mailing address for purposes of this Consent Order is also 80 Maple Street, Great Barrington, Massachusetts 01230.

### II. STATEMENT OF FACTS AND LAW

3. MassDEP has primary enforcement responsibility for the requirements of the Federal Safe Drinking Water Act, 42 U.S.C. §300f <u>et seq.</u> and the regulations promulgated there under. MassDEP implements and enforces statutes and regulations of the Commonwealth of Massachusetts for the protection of the public drinking water supply, including, without limitation, M.G.L. c. 111, §5G and §160 and the Drinking Water Regulations at 310 CMR 22.00; the Cross Connections, Distribution System Protection Regulations at 310 CMR 22.22; and the Underground Injection Control Regulations at 310 CMR 27.00. MassDEP, pursuant to M.G.L. c. 111, §160, may issue such orders as it deems necessary to ensure the delivery of fit and pure drinking water by public water systems to all consumers. MassDEP, pursuant to M.G.L. c. 111, §5G, may require by order the provision and operation of such treatment facilities as it deems necessary to ensure the delivery of a safe water supply to all consumers.

MassDEP's Drinking Water Regulations at 310 CMR 22.02 define a public water system as a system for the provision to the public of water for human consumption, through pipes or other

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constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. 310 CMR 22.02 also defines a supplier of water as "any person who owns or operates a public water system." MassDEP has authority under M.G.L. c. 21A, § 16 and the Administrative Penalty Regulations at 310 CMR 5.00 to assess civil administrative penalties to persons in noncompliance with the laws and regulations set forth above.

4. Respondent is a Supplier of Water as defined in 310 CMR 22.02. Respondent owns and operates a Community Public Water System (PWS) located in Great Barrington, Massachusetts.

- 5. The following facts and allegations have led MassDEP to issue this Consent Order:
  - A. As a PWS which uses a surface water source, and provides chlorine-based disinfection, Respondent is subject to the requirements of the Disinfection Byproducts Rule (DBPR). Under the DBPR, Respondent must maintain a Total Trihalomethane (TTHM) running annual average at its single testing location of less than 80 ug/l, and a Haloacetic Acid 5 (HAA5) running annual average at its single testing locations of less than 60 ug/l.
  - B. A PWS, such as Respondent, that is subject to the requirements of the DBPR, has exceeded the operational evaluation level (OEL) at any monitoring location when the sum of the two previous quarters TTHM or HAA5 results, plus twice the current quarter's result, divided by four (to determine an average), exceeds 80 ug/l for TTHM or 60 ug/l for HAA5. Systems that exceed the OEL must submit an <u>Operational Evaluation Reporting Form</u>, detailing the reasons for the exceedance and the actions to be taken to reduce future DBPR levels.
  - C. Pursuant to 310 CMR 22.07F(7)(d)1, under the Stage 2 DBPR, Respondent must maintain compliance with the Maximum Contaminant Levels (MCLs) for TTHM and HAA5. The MCL for TTHM is 80 ug/l and the MCL for HAA5 is 60 ug/l. The MCLs are determined by calculating the running annual average at its testing location (the "Locational Running Annual Average" or "LRAA" as defined in 310 CMR 22.02).
  - D. Massachusetts Drinking Water Regulation 310 CMR 22.03(14) requires that, if a regulated contaminant limit is violated, a Supplier of Water take appropriate actions to reduce the level of contaminant concentrations to safe levels. Massachusetts Drinking Water Regulation 310 CMR 22.07E(4)(b) identifies the best technology, Treatment Techniques, or other means available for achieving compliance with the Maximum Contaminant Levels for TTHM and HAA5 identified in 310 CMR 22.07E(1). The Disinfection Byproduct Best Available Technology is identified in Drinking Water Regulation 310 CMR 22.07E(4)(b) as Enhanced Coagulation or Enhanced Softening, plus GAC10 (granular activated carbon filter beds as defined in 310 CMR 22.02); or nanofiltration with a molecular weight cutoff less than or equal

to 1000 Daltons; or granular activated carbon filter beds GAC20 (granular activated carbon filter beds as defined in 310 CMR 22.02).

- E. Respondent had HAA5 OEL exceedances during the third quarter of 2021 (July 1-September 30, 2021), the fourth quarter of 2021 (October 1 December 31, 2021), and the first quarter of 2022 (January 1- March 31, 2022).
- F. Respondent exceeded the HAA5 maximum contaminant level during third quarter of 2021 (July 1- September 30, 2021) and the fourth quarter of 2021 (October 1 December 31, 2021), in violation of 310 CMR 22.07F(7)(d)1.
- G. Respondent exceeded the HAA5 maximum contaminant level during second quarter of 2022 (April 1-June 30, 2022), in violation of 310 CMR 22.07F(7)(d)1.
- H. In response to each quarterly OEL exceedance(s), MassDEP issued individual letters requiring that Respondent complete and submit an *Operational Evaluation Reporting Form (OEL Form)*. The purpose of the form is to provide a self-evaluation of the potential causes for the OEL exceedances and to put into place remedies that would prevent further OEL exceedances and MCL exceedances. OEL Forms are required to be submitted no later than 90 days after being notified of the analytical result that causes the PWS to exceed the operational evaluation level.
- *I.* Respondent failed to submit a completed *OEL Form* for the Quarter 3 2021 HAA5 exceedance within the required time period, in violation of 310 CMR 22.07F(13).
- J. Respondent submitted substantially complete *OEL Forms* in response to each of the HAA5 OEL exceedances. Within its submitted *OEL Forms* Respondent states that it has implemented the following steps as its short-term response to the OEL exceedances:
  - a. Reduced chlorine residual levels; and
  - b. Monitor raw and finished water for TOC quarterly for the next year.
- K. MassDEP acknowledges Respondent's implementation of short-term measures to control disinfection byproducts but asserts that additional short-term measures directed at reducing water age may be available to Respondent and should be evaluated and implemented if appropriate.
- L. In response to the third and fourth quarter 2021 HAA5 MCL violations and other violations, including the failure to provide timely public notice for the third quarter 2021 HAA5 MCL; MassDEP issued a March 3, 2022 Notice of Noncompliance (March 3, 2022 NON). Within the March 3, 2022 NON, Respondent is required to submit a written proposal setting forth how and when Respondent proposes to come into compliance with the HAA5 maximum contaminant levels. Options for coming into compliance include Respondent submitting a report prepared by a Massachusetts

Registered Professional Engineer, which would include an alternatives analysis; an effectiveness determination; a cost estimate; and an implementation schedule. A second option included within the March 3, 2022 NON for coming into compliance is for Respondent to propose its own compliance plan for MassDEP's approval.

- M. Within a March 30, 2022 response to the March 3, 2022 NON, Respondent provided a completed *DBP Violation Response and Compliance Schedule Approval Form* within which Respondent selected the second option and provided a letter that stated it had identified unusual precipitation events in July of 2021 as the underlying cause of its HAA5 MCL violations and proposed as its long-term compliance plan to wait for better water quality in the future, while its short-term compliance plan is to reduce chlorine residual levels.
- N. Within an April 5, 2022 letter, MassDEP rejected Respondent's long-term compliance option as presented within its March 30, 2022 DBP Violation Response and Compliance Schedule Approval Form and required that by May 20, 2022, and directed Respondent to submit a report, prepared by a Massachusetts Registered Professional Engineer with expertise in Drinking Water compliance documenting the causes of the HAA5 MCL violations and to include recommendations for preventing future MCL violations. Respondent's failure to comply with the requirement to submit a report detailing long-term compliance alternatives, prepared by a Massachusetts Registered Professional Engineer, by May 20, 2022 is a violation of 310 CMR 22.03(1) and 310 CMR 22.03(14).
- O. MassDEP finds that Respondent's water system has demonstrated that it is susceptible to increases in HAA5 levels during severe weather events, and that basing future HAA5 compliance on weather stability is not a viable long-range plan to prevent future violations.
- P. Within a July 11, 2022 letter, Respondent's consultant, Northeast Water Solutions, references a previously submitted application to conduct a pilot test using Greensand Plus filtration for manganese removal, and asserted that the pilot testing and evaluation will also determine alternatives for corrective action to maintain DBP compliance. MassDEP conditionally approved that pilot proposal for manganese removal within an August 1, 2022 permit approval letter.
- Q. The Environmental Protection Agency (EPA), pursuant to the federal Safe Drinking Water Act, § 1412, 40 CFR 141, identifies best technology, Treatment Techniques, or other means available for achieving compliance with the Maximum Contaminant Levels for TTHM and HAA5. Further, MassDEP approves technologies that have been approved for use in Massachusetts. The use of Greensand Plus filtration as a method for controlling disinfection byproducts (DBP) is not identified by the EPA as a best technology or treatment technique for achieving Disinfection Byproduct compliance, nor is it a MassDEP approved technology for DBP control. Use of an

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> unapproved technology, which has been demonstrated to provide effective treatment in Massachusetts, will require either site specific or state-wide approval through a MassDEP permit.

#### **Regulations**

R. 310 CMR 22.03(1) "No source of water used by a Public Water System, no system of water supply used by a Public Water System, and no treatment facilities or treatment works used by a Public Water System shall be deemed by the Department to be safe, fit, or pure, or in any other way approved; and no Supplier of Water, or other Person subject to a requirement of 310 CMR 22.00 shall supply drinking water to the users of a Public Water System, including without limitation for emergency use; unless that Public Water System complies with 310 CMR 22.00. In the event of a violation of 310 CMR 22.00, the Department may establish a schedule for compliance within an administrative consent order or other enforceable document that may include interim measures that the Supplier of Water must take. It shall be a violation of 310 CMR 22.00 to fail to comply with:

(a) any provision or requirement of 310 CMR 22.00;

(b) a schedule for compliance, including any interim measures required by the Department in an administrative consent order or other enforceable document; or (c) any term or condition of a permit, written approval, registration, certification or order issued by the Department pursuant to M.G.L. c. 111, § 160 or 310 CMR 22.00.

S. 310 CMR 22.03(14) states "In the event of a violation of a regulated contaminant limit established by 310 CMR 22.00, or notification by the Department either pursuant to sampling and analysis required by 310 CMR 22.03(2), or pursuant to 310 CMR 22.03(8), a Supplier of Water shall:

(a) take appropriate actions to reduce the level of contaminant concentrations to levels the Department deems safe by the deadline specified by the Department. The Supplier of Water shall conduct monitoring as directed by the Department and provide public notification in accordance with 310 CMR 22.16; and

(b) unless the Department directs the Supplier of Water to take specific corrective action, the Supplier of Water shall submit a corrective action plan to the Department within 30 days of the Supplier of Water learning of the violation or receipt of the Department's notification of the exceedance. The corrective action plan shall detail the specific interim and long-term action measures the Supplier of Water intends to take to ensure water supplied to consumers meets applicable standards."

T. 310 CMR 22.07E(1) states "MCLs for Disinfection Byproducts. The Maximum Contaminant Levels for Disinfection byproducts of 310 CMR 22.07E apply only to Community Water Systems and Non-transient Non-community Water Systems which add a chemical Disinfectant (oxidant) to the water in any part of the drinking water treatment process. The MCLs are as follows:

Disinfection Byproduct MCL (mg/l) Total Trihalomethanes (TTHM) 0.080 Haloacetic (Acids Five) (HAA5) 0.060 In the Matter of: Housatonic Water Works Company ACO 00013199 Page 6 of 12

> Bromate 0.010 Chlorite 1.0

Total Trihalomethanes are the sum of the concentrations of bromodichloromethane, dibromochloromethane, tribromomethane (bromoform) and trichloromethane (chloroform) expressed in milligrams per liter (mg/l). Haloacetic acids are the sum of the concentrations of monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid and dibromoacetic acid expressed in milligrams per liter (mg/l)."

- U. 310 CMR 22.07E(4)(b) states "The EPA Administrator, pursuant to the federal Safe Drinking Water Act, § 1412, 40 CFR 141, hereby identifies the following as the best technology, Treatment Techniques, or other means available for achieving compliance with the Maximum Contaminant Levels for TTHM and HAA5 identified in 310 CMR 22.07E(1) for all systems that disinfect their source water: Disinfection byproduct Best Available Technology
  Total Trihalomethanes (TTHM) and Haloacetic (Acids Five) (HAA5). Enhanced Coagulation or Enhanced Softening, plus GAC10; or nanofiltration with a molecular weight cutoff <1000 Daltons; or GAC20</li>
- V. 310 CMR 22.07F(7)(d) states in part "1. Systems Required to Monitor Quarterly. To comply with MCLs required by 310 CMR 22.07F listed in 310 CMR 22.07E(1), the Supplier of Water must calculate LRAAs for TTHM and HAA5 using monitoring results collected under 310 CMR 22.07F and determine that each LRAA does not exceed the MCL..."

W. 310 CMR 22.07F(13) states in part "Operational Evaluation Levels.

(a) The Supplier of Water has exceeded the operational evaluation level at any monitoring location where the sum of the two previous quarters' TTHM results plus twice the current quarter's TTHM result, divided by four to determine an average, exceeds 0.080 mg/L, or where the sum of the two previous quarters' HAA5 results plus twice the current quarter's HAA5 result, divided by four to determine an average, exceeds 0.060 mg/L.

(b) 1. If the Supplier of Water exceeds the operational evaluation level, they must conduct an operational evaluation and submit a written report of the evaluation to the Department no later than 90 days after being notified of the analytical result that causes them to exceed the operational evaluation level. The written report must be made available to the public upon request.

2. The Supplier of Water's operational evaluation must include an examination of system treatment and distribution operational practices, including storage tank operations, excess storage capacity, Distribution System flushing, changes in sources or source water quality, and treatment changes or problems that may contribute to TTHM and HAA5 formation and what steps could be considered to minimize future exceedances..."

## III. DISPOSITION AND ORDER

For the reasons set forth above, MassDEP hereby issues, and Respondent hereby consents to, this Order:

6. The parties have agreed to enter into this Consent Order because they agree that it is in their own interests, and in the public interest, to proceed promptly with the actions called for herein rather than to expend additional time and resources litigating the matters set forth above. Respondent enters into this Consent Order without admitting or denying the facts or allegations set forth herein. However, Respondent agrees not to contest such facts and allegations for purposes of the issuance or enforcement of this Consent Order.

7. MassDEP's authority to issue this Consent Order is conferred by the Statutes and Regulations cited in Part II of this Consent Order.

- 8. Respondent shall perform the following actions:
  - A. Within 45-days of the effective date of this Consent Order, Respondent shall provide the results of an evaluation of reducing water age by lowering levels within its water storage tank as a short-term means of reducing disinfection byproducts.
  - B. Within 120-days of the effective date of this Consent Order, Respondent shall:
    - a. Submit to MassDEP a report by a Massachusetts Registered Professional Engineer with expertise in Drinking Water compliance which:
      - i. documents the causes of the HAA5 MCL violation and the engineer's recommendations for preventing future HAA5 MCL violations in the water distribution system.
      - ii. includes an alternatives analysis including a feasibility evaluation, effectiveness determination, cost estimates, and implementation schedule.
      - iii. incorporates an evaluation of proposed treatment alternatives with respect to EPAs identified best available technologies (BAT) for achieving compliance with the maximum contaminant levels for disinfection byproducts (DBP) and provides an explanation as to why the selected alternative is Respondent's best option for achieving and maintaining DBP compliance.
      - iv. evaluates proposed treatment alternatives with respect to MassDEP's technology approval for achieving compliance with the maximum contaminant levels for disinfection byproducts, and details Respondent's intended method of obtaining approval for any technology not currently on MassDEP approved technologies list.

- v. Respondent shall implement the recommended actions set forth in the report as approved by MassDEP in accordance with a schedule approved by MassDEP.
- C. Repeat the public notice and certification every three months as long as HAA5 MCL violations persist in accordance with 310 CMR 22.16, including content approved by MassDEP.

9. Unless submitted via eDEP or except as otherwise provided, all notices, submittals and other communications required by this Consent Order shall be directed to:

Douglas Paine, Drinking Water Program Massachusetts Department of Environmental Protection 436 Dwight Street Springfield, MA 01103

Such notices, submittals and other communications shall be considered delivered by Respondent upon receipt by MassDEP.

10. Actions required by this Consent Order shall be taken in accordance with all applicable federal, state, and local laws, regulations and approvals. This Consent Order shall not be construed as, nor operate as, relieving Respondent or any other person of the necessity of complying with all applicable federal, state, and local laws, regulations and approvals.

11. For purposes of M.G.L. c. 114, § 16 and 310 CMR 5.00, this Consent Order shall also serve as a Notice of Noncompliance for Respondent's noncompliance with the requirements cited in Part II 5. G., 5. I. and 5.M., above. MassDEP hereby determines, and Respondent hereby agrees, that any deadlines set forth in this Consent Order constitute reasonable periods of time for Respondent to take the actions described.

12. Respondent is permittee, as that term is defined in 310 CMR 4.02, for the purpose of assessing and collecting annual compliance assurance fees pursuant to M.G.L. c. 21A 18 and M.G.L. c. 21E, 3B.

13. Respondent understands, and hereby waives, its right to an adjudicatory hearing before MassDEP on, and judicial review of, the issuance and terms of this Consent Order and to notice of any such rights of review. This waiver does not extend to any other order issued by the MassDEP.

14. This Consent Order may be modified only by written agreement of the parties hereto.

15. The provisions of this Consent Order are severable, and if any provision of this Consent Order or the application thereof is held invalid, such invalidity shall not affect the validity of other provisions of this Consent Order, or the application of such other provisions, which can be

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given effect without the invalid provision or application, provided however, that MassDEP shall have the discretion to void this Consent Order in the event of any such invalidity.

16. Nothing in this Consent Order shall be construed or operate as barring, diminishing, adjudicating or in any way affecting (i) any legal or equitable right of MassDEP to issue any additional order or to seek any other relief with respect to the subject matter covered by this Consent Order, or (ii) any legal or equitable right of MassDEP to pursue any other claim, action, suit, cause of action, or demand which MassDEP may have with respect to the subject matter covered by this Covered by this Consent Order, including, without limitation, any action to enforce this Consent Order in an administrative or judicial proceeding.

17. This Consent Order shall not be construed or operate as barring, diminishing, adjudicating, or in any way affecting, any legal or equitable right of MassDEP or Respondent with respect to any subject matter not covered by this Consent Order.

18. This Consent Order shall be binding upon Respondent and upon Respondent's heirs, successors and assigns. Respondent shall not violate this Consent Order and shall not allow or suffer Respondent's employees, agents, contractors or consultants to violate this Consent Order. Until Respondent has fully complied with this Consent Order, Respondent shall provide a copy of this Consent Order to each successor or assignee at such time that any succession or assignment occurs.

19. In addition to the penalty set forth in this Consent Order, if any (including any suspended penalty), if Respondent violates any provision of the Consent Order, Respondent shall pay stipulated civil administrative penalties to the Commonwealth in the amount of \$100 per day for each day, or portion thereof, each such violation continues.

Stipulated civil administrative penalties shall begin to accrue on the day a violation occurs and shall continue to accrue until the day Respondent corrects the violation or completes performance, whichever is applicable. Stipulated civil administrative penalties shall accrue regardless of whether MassDEP has notified Respondent of a violation or act of noncompliance. All stipulated civil administrative penalties accruing under this Consent Order shall be paid within thirty (30) days of the date MassDEP issues Respondent a written demand for payment. If simultaneous violations occur, separate penalties shall accrue for separate violations of this Consent Order. The payment of stipulated civil administrative penalties shall not alter in any way Respondent's obligation to complete performance as required by this Consent Order. MassDEP reserves its right to elect to pursue alternative remedies and alternative civil and criminal penalties which may be available by reason of Respondent's failure to comply with the requirements of this Consent Order. In the event MassDEP collects alternative civil administrative penalties, Respondent shall not be required to pay stipulated civil administrative penalties penalties pursuant to this Consent Order for the same violations.

Respondent reserves whatever rights it may have to contest MassDEP's determination that Respondent failed to comply with the Consent Order and/or to contest the accuracy of MassDEP's calculation of the amount of the stipulated civil administrative penalty. Upon exhaustion of such In the Matter of: Housatonic Water Works Company ACO 00013199 Page 10 of 12

rights, if any, Respondent agrees to assent to the entry of a court judgment if such court judgment is necessary to execute a claim for stipulated penalties under this Consent Order.

20. Failure on the part of MassDEP to complain of any action or inaction on the part of Respondent shall not constitute a waiver by MassDEP of any of its rights under this Consent Order. Further, no waiver by MassDEP of any provision of this Consent Order shall be construed as a waiver of any other provision of this Consent Order.

21. To the extent authorized by the current owner, Respondent agrees to provide MassDEP, and MassDEP's employees, representatives and contractors, access at all reasonable times to the Housatonic Water Works Company facilities for purposes of conducting any activity related to its oversight of this Consent Order. Notwithstanding any provision of this Consent Order, MassDEP retains all of its access authorities and rights under applicable state and federal law.

22. This Consent Order may be executed in one or more counterpart originals, all of which when executed shall constitute a single Consent Order.

23. All applicable transmittal fees shall accompany any submissions(s) required by this Consent Order.

24. The undersigned certify that they are fully authorized to enter into the terms and conditions of this Consent Order and to legally bind the party on whose behalf they are signing this Consent Order.

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25. This Consent Order shall become effective on the date that it is executed by MassDEP.

#### Consented To: HOUSATONIC WATER WORKS COMPANY

france 2 men Fredrick Mercer

President

Date: 9/29/22

Issued By: DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: Brian Harrington

Brian D. Harrington for Michael Gorski Regional Director MassDEP

Date: 10/4/22

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