



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: July 18, 2018
SUBJECT: Emergency Water Supply Agreement with the Town of Burlington

COMMITTEE: Water Policy & Oversight

Carolyn M. Fiore, Deputy Chief Operating Officer
Beth Card, Director, Environmental and Regulatory Affairs
Preparer/Title

 INFORMATION
 X VOTE

David W. Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute an Emergency Water Supply Agreement with the Town of Burlington, which authorization is expressly conditioned upon MWRA Advisory Board approval for a period of emergency water supply beyond thirty days.

DISCUSSION:

On June 25, 2018, the Town of Burlington Department of Public Works submitted a request to MWRA for emergency withdrawal under MWRA's Operating Policy #:OP.05: Emergency Water Supply Withdrawals. This policy applies to communities outside MWRA's Water Service Area that are seeking MWRA water on an emergency basis. The MWRA may approve emergency withdrawals for no more than six months at a time, and typically, the emergency withdrawal period coincides with a DEP Declaration of Emergency for the Community.

The Town of Burlington has had on-going water supply issues and needs to do maintenance at its surface water treatment facility (Mill Pond). This work, including filter repair, is needed to maintain water quality and production capacity. Burlington can receive MWRA water on an emergency basis via its existing interconnections with Lexington. The ability of Lexington to supply Burlington, even during periods of high demand, has previously been established in flow tests. It is anticipated that the connection may need to stay open for up to four weeks. MWRA is seeking approval for a connection up to six months in the event that maintenance takes longer or in case dry summer conditions result in an on-going emergency need. If Burlington requests that the emergency approval be extended beyond the 30 days, approval from the MWRA Advisory Board will be required before the six-month Emergency Water Supply Agreement is implemented.

Emergency Water Supply Approval Criteria and Requirements

MWRA's emergency water use policy sets forth withdrawal criteria and requirements. The key components of the approval process are as follows:

- The Executive Director or the Chief Operating Officer is authorized to approve the emergency use of MWRA water through an existing or temporary connection to the MWRA or an MWRA water system community by a non-MWRA water system or facility for a period not to exceed thirty (30) calendar days.
- A DEP declaration of water supply emergency in the requesting community, or alternatively, submission by the community of documentation supporting the existence of conditions that could lead to a DEP declaration of water supply emergency per G.L.c21 G §15, is required for these emergency situations. Approval shall only be granted based on emergencies of non-chronic nature, such as supply and transmission disruptions.
- There must be no negative impact on MWRA's system and member communities.
- A long-term plan to remedy supply deficiencies must be developed.
- The applicant community does not use MWRA water supply as a chronic emergency back-up supply without equitable contribution for the fair asset value of the MWRA waterworks system.
- The Community must submit a detailed description of water conservation and water accountability programs undertaken.

Contents of Emergency Water Supply Agreement

The Agreement limits water withdrawals to a maximum rate of 0.7 mgd. If Burlington requests that the emergency approval be extended beyond the 30 days, the proposed emergency water supply agreement will be for a six month period that began on July 5, 2018. Pursuant to the Agreement, all withdrawals must be metered. The Agreement also requires Burlington to adhere to all conditions and requirements contained in the DEP Declaration of Water Supply Emergency. The Agreement reflects MWRA's charges for emergency withdrawals, including a 10% premium charge added to the prevailing rate as well as an asset value contribution payment.

Status of Admission Process

At Burlington's May 2018 Town meeting, members voted to approve Article 15 which provides \$5.3 million in funding to begin the process of joining the MWRA. In June 2018, MWRA staff met with Town representatives to discuss the next steps for the Town related to the MWRA approval process, environmental permitting, construction of additional water mains, and the creation of a water stabilization fund. Options associated with sharing some of the connection costs, particularly if Burlington were to construct a direct connection to MWRA as opposed to wheeling MWRA water through Lexington as they have done in emergencies, is being considered. A flow test has been conducted for calibration of a hydraulic model. This flow test and calibration involved opening a connection between Burlington and Lexington and tracking pressures and flow rates at key locations. On July 2, 2018, MWRA and Burlington staff met with regulatory agency staff in order to begin pursuit of approvals under MEPA and the Interbasin Transfer Act. Coordination with Burlington will be on-going in the year ahead.

BUDGET/FISCAL IMPACT:

Pursuant to OP.05, water taken for the third emergency withdrawal period is charged at the prevailing rate plus a 10% premium and an asset value contribution payment. MWRA will review actual use information to determine and assess the surcharge amounts. The volume of the emergency withdrawals and therefore the amount of revenue MWRA will receive cannot be projected at this time.

ATTACHMENTS:

Draft Burlington Emergency Water Supply Agreement
DEP Emergency Declaration

DRAFT
EMERGENCY WATER SUPPLY AGREEMENT – PERIOD THREE
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF BURLINGTON

Parties.

This Emergency Water Supply Agreement (“Agreement”) is entered into by and between the Massachusetts Water Resources Authority (“MWRA”), and the Town of Burlington (“Burlington”) hereinafter jointly referred to as the “Parties.” This Agreement documents the agreement and understanding of the Parties regarding the arrangement whereby MWRA will supply water to Burlington through an interconnection that Burlington has with Lexington, an MWRA served water community and whereby Burlington will purchase a portion of its water supply from the MWRA through Lexington on an as-needed, emergency basis for a period not exceeding six months, as indicated in paragraph 11 hereof.

Recitals.

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems servicing the greater metropolitan Boston area. Operating pursuant to the terms of Section 8(d) of its Enabling Act, chapter 372 of the Acts of 1984 (the “Act”), and pursuant to the Policies and Procedures for Emergency Water Supply Connections of its Board of Directors, the MWRA may enter into arrangements to provide emergency supplies of water to any local body of the Commonwealth, provided certain conditions are met.
- R.2. Burlington is a duly constituted municipal corporation of the Commonwealth of Massachusetts (“Commonwealth”).
- R.3. Lexington is supplied by the MWRA and Burlington has an emergency interconnection through Lexington to the MWRA water supply system.
- R.4. Burlington’s drinking water sources include both wells in the Vine Brook Aquifer as well as surface water pumped from the Shawsheen River to the Mill Pond Reservoir in Burlington. The ground and surface water sources are served by the Vine Brook Treatment Plant and the Mill Pond Treatment plant, respectively. Water quality factors have required the removal of some of Burlington’s wells from service and needed facility repairs have temporarily impacted Burlington’s ability to meet water demand with its local sources alone.
- R.5. On June 25, 2018, the Town of Burlington Department of Public Works, in an electronic mail communication to MWRA, notified MWRA that due to facility maintenance and

repairs, including a filter replacement, it had concerns about water levels and an emergency connection was desired.

- R.6 On July 5, 2018 the MA Department of Environmental Protection (MassDEP) issued a Declaration of Water Supply Emergency to Burlington, to remain in effect until January 4, 2019 or until such time as MassDEP determines that emergency conditions no longer exist, whichever is sooner. The Declaration of Water Supply Emergency is included as Attachment A to this Agreement.
- R.7 The MWRA's Policy for Emergency Water Supply Withdrawals, OP#.05 (the "Policy") includes criteria and a process for approving requests for emergency withdrawals.
- R.9 Burlington has applied to the MWRA to use emergency interconnections to the MWRA system through Lexington to supplement Burlington's local water supply sources on an as-needed basis.
- R.10. The MWRA has determined that it can supply Burlington with an emergency water supply for a period not exceeding six months under this Agreement without jeopardizing its ability to supply its member communities and without exceeding the safe yield of its water supply system.
- R.11. Burlington must comply with all applicable legal and regulatory requirements.
- R.12. Pursuant to the MWRA Policy, this Agreement is considered an Emergency Water Supply Agreement Period Three.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and Burlington agree as follows:

1. The proposed emergency water supply agreement will extend from July 5, 2018 to January 4, 2019 in accordance with the terms of this Agreement, subject to termination in accordance with numbered paragraph 11 below.
2. Burlington may take water from the emergency interconnection at a maximum rate of 700,000 gallons per day over the six month period.
3. The transfer of water from the MWRA through Lexington to Burlington shall not extend beyond a period of six months, unless Burlington submits an application for an additional emergency water supply withdrawal and the MWRA's Board of Directors approves the additional emergency water supply withdrawal. Any withdrawals beyond the DEP Emergency Declaration six-month period will also require an extension of DEP's Water Supply Emergency Declaration. In considering withdrawals beyond six months, the MWRA will consider Burlington's efforts to reduce consumption, to implement its long range plans and comply with DEP orders, and to implement a water conservation program.

4. During the six month term of this Agreement, Burlington shall institute and continue all practicable conservation measures including, but not limited to, a water conservation public education program; 100% metering; leak detection surveys and rehabilitation programs; conservation pricing for water services; and a local by-law governing outdoor water use with appropriate enforcement measures such as fines and water shut-off for non-compliance. Burlington shall actively administer and enforce such local by-law.
5. Burlington shall submit to MWRA a report on water use, and the status of the emergency.
6. Burlington shall comply with all the conditions of any DEP Declaration of Water Supply Emergency.
7. During the term of this Agreement, the MWRA shall bill Lexington for the total volume of water used by Burlington as metered by Lexington, and will bill Burlington directly for the 10% surcharge over the prevailing rate and an asset value contribution as mandated by the Policy. Lexington shall bill Burlington for water used in accordance with the terms of the agreement between Lexington and Burlington, which is incorporated by reference. Burlington shall remit its payments to Lexington for the total volume of water used. Burlington will remit its payments for the 10% surcharge and an asset value contribution to MWRA directly.
8. The parties agree that the emergency withdrawal authorized under this Agreement is not appropriate for or intended to provide a permanent water supply to Burlington. Any request by Burlington for a permanent partial water supply from MWRA shall require full consideration of all alternatives, including effective water conservation and leak detection, and shall be subject to all approvals required under Section 8 (d) of Chapter 372 of the Acts of 1984, MWRA policies, and under applicable state law and regulations.
9. The MWRA provides potable water in compliance with federal and state drinking water standards at the revenue meters of its waterworks communities. The parties agree that MWRA assumes no liability for the compliance of water delivered pursuant to this Agreement with those state and federal drinking water standards once the water has entered the water distribution system of the Town of Lexington.
10. Any dispute arising between the MWRA and Burlington under the terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 C.M.R. 1.00.
11. The term of this Agreement shall extend from July 5, 2018, the day in which Burlington could begin to take water ("start date") through and including the six-month anniversary of the Start Date. During the term, MWRA reserves the right to terminate this Agreement at any time due to unforeseen circumstances such as inadequate supply, insufficient hydraulic capacity and other conditions related to the safe supply of existing users and operational requirements of the MWRA's waterworks system.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this _____ day of _____, 2018 by their duly authorized representatives.

MASSACHUSETTS WATER
RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

TOWN OF BURLINGTON

By:

John D. Petrin
Town Administrator



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

July 5, 2018

VIA Certified Mail No.: 7015 1520 0002 1412 9235

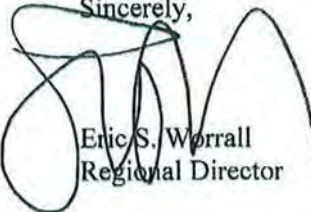
John D. Petrin, Town Administrator
Town of Burlington
Town Hall
29 Center Street
Burlington, MA 01803

City/Town: Burlington
PWS Name: Burlington Water and Sewer
PWSID: 3048000
WMA Registration No. 3-15-048.01
WMA Permit No. 9P3-15-048.01
Emergency Declaration No. 00004889

Dear Administrator Petrin:

The Massachusetts Department of Environmental Protection ("MassDEP") received a petition from the Town of Burlington (the "Town"), dated June 27, 2018, requesting an Emergency Declaration under the provisions of the Water Management Act, M.G.L. c. 21G, §15 (the "petition"). According to the petition, the capacity of the two water treatment facilities has been reduced due to repair and maintenance needs, and the activation of the interconnection to the Town of Lexington is needed to allow the work to be completed. Attached is the MassDEP's Declaration of State of Water Supply Emergency, No. 00004889. If you have any questions regarding this letter, please contact me at (978) 694-3225.

Sincerely,



Eric S. Worrall
Regional Director

cc: John G. Sanchez, P.E., Director, Town of Burlington-Department of Public Works, 25 Center Street, Burlington, MA 01803

Town of Burlington Board of Health, Human Services Building, 61 Center Street, Burlington, MA 01803

Bethany A. Card, Director, Environmental and Regulatory Affairs, Massachusetts Water Resources Authority, Charlestown Navy Yard, 100 First Avenue, Building 39, Boston, MA 02129

e-cc: Duane LeVangie, MassDEP-BWR-Boston
Heidi M. Zisch, MassDEP-OGC-NERO

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This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5761.
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**COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In the Matter of)
Town of Burlington)
)

Enforcement Number 00004889

EMERGENCY DECLARATION

The Parties

1. The Massachusetts Department of Environmental Protection (“MassDEP”) is a duly constituted agency of the Commonwealth of Massachusetts established pursuant to M.G.L. c. 21, § 7. MassDEP has its principal office located at One Winter Street, Boston, Massachusetts 02108, and its Northeast Regional Office located at 205B Lowell Street, Wilmington, Massachusetts 01887.
2. The Town of Burlington (the “Town”) is a Municipality within the Commonwealth of Massachusetts having a principal place of business and a mailing address at 29 Center Street, Burlington, MA 01803.

Statement of Facts and Law

3. The Town operates a public water system with MassDEP Registration number 3-15-048.01 and Permit Number 9P-3-15-048.01. The Town, by and through its Water Department, operates and maintains two water treatment facilities, one is the Vine Brook Treatment Facility, which treats groundwater from seven groundwater wells in the Vine Brook aquifer, and the second is the Mill Pond Treatment Facility, which treats surface water that is pumped from the Shawsheen River in Billerica to the Mill Pond Reservoir in Burlington. To meet the new recommended maximum level for 1,4-dioxane, the Town took out of operation wells 3, 4, and 5 at the Vine Brook Treatment Facility in 2013, limiting the amount of water supplied from that location.
4. On Wednesday, June 27, 2018, MassDEP received a letter from Burlington petitioning MassDEP for a declaration of a state of water emergency pursuant to M.G.L. c. 21G, § 15 and seeking to open its emergency connection with the Town of Lexington as soon as possible. In the letter, the Town stated that it was seeking the Emergency Declaration “[d]ue to the limited production capacity at the Vine Brook Treatment Plant caused by the 1,4, dioxane contamination of drinking water wells,” and that repairs of a filter unit have further limited the capacity of the Vine Brook facility. The Town also outlined that the Mill Pond Treatment Facility is required to be shut down for maintenance in order to obtain the full capacity of the facility. The Town stated that activation of the connection to Lexington “would allow for needed repairs at the Vine Brook Treatment Facility and for maintenance at the Mill Pond Treatment Facility.”

5. On Wednesday, June 27, 2018, the Town imposed a full outdoor water ban, effective July 5, 2018.
6. The Water Management Act, M.G.L. c.21G, § 15, and the Water Management Regulations, specifically the section set out at 310 CMR 36.40(1), authorize any water system to petition MassDEP for a Declaration of a State of Water Supply Emergency if it finds that there exists or impends a water supply shortage of a dimension which endangers the public health, safety or welfare.
7. Pursuant to M.G.L. c.21G, § 15, and the Water Management Regulations set out at 310 CMR 36.40(2), MassDEP may declare a state of water emergency if it finds that there exists or impends a water supply shortage of a dimension which endangers the public health, safety or welfare. Further, in response to a petition for a Declaration of a State of Water Supply Emergency and pursuant to this statutory section, MassDEP may require the water supplier to submit for its review and approval a plan for restraining the use of water by whatever means it deems appropriate and feasible. The statute limits any Declaration of a State of Water Supply Emergency to no more than six months in the aggregate in any twelve month period, unless MassDEP determines that a longer state of emergency is required to protect the public health.
8. Furthermore, the Water Management Regulations at 310 CMR 36.40(2) provides:

Upon receiving a petition for a declaration of a state of water supply emergency, the Department may declare an emergency if it finds that there exists or impends a water supply shortage of a dimension which endangers the public health, safety or welfare, due to circumstances including, but not limited to:

(a) Demand for water exceeds the availability of water;

...

(d) Inadequate source of water, inadequate distribution system capacity, inadequate storage capacity or drought including seasonal water shortages which repeatedly affect the same public water system....

9. Pursuant to the Water Management Act, M.G.L. c.21G, § 17, MassDEP may issue orders during a state of water emergency declared under M.G.L. c.21G, § 15 to, among other things, establish priorities for the distribution of any water or quantity of water use, to permit any person engaged in the operation of a water supply system to cease the distribution of water, to distribute water to certain users as specified by MassDEP, and to require the implementation of specific water conservation measures.

Determination and Order

10. For the reasons set forth above and pursuant to the Water Management Act, M.G.L. c.21G, § 15, MassDEP hereby determines that a water supply emergency exists and that it endangers the public health, safety or welfare of the citizens of the Town. Unless

extended by MassDEP, this Emergency Declaration shall remain in effect until January 4, 2019 or until such time as MassDEP determines that emergency conditions no longer exist, whichever is sooner.

11. By issuing this Emergency Declaration, MassDEP hereby grants the Town authority to use its emergency connection to the Town of Lexington, subject to the following specific conditions:
 - a. The Town shall maintain records of any water pumped from these sources as required under the Regulations during the duration of this Declaration and provide those records to the Department on request.
 - b. The Town shall comply with the requirements of the Massachusetts Water Resources Authority (MWRA) governing emergency use of connections with an MWRA community.
 - c. Changes in the use of sources such as the activation of a new interconnection may result in disturbances in the distribution system due to changes in flow volumes, flow patterns, and mechanical disruption. Impacts to the distribution system may include colored water, changes in chlorine demand and residuals, and potential health risks, such as bacterial contamination. A new interconnection may also change hydraulic conditions in the system, impacting the operation of tanks. Additionally, EPA has concluded that distribution maintenance can lead to lead scale disruption, which could cause an increase in drinking water lead concentrations. Burlington should consider these impacts and develop a plan, as necessary, to prevent nuisance conditions and mitigate risks.
12. Effective immediately, the current town-wide ban on non-essential outside water use shall remain in place for the duration of this Emergency Declaration. For purposes of this Emergency Declaration, the term "nonessential outside water use" is defined to include those uses that do not have health or safety impacts, are not required by regulation, and are not needed to meet the core functions of a business or other organization.
13. Within seven (7) days of the date of issuance of this Emergency Declaration, the Town shall provide MassDEP with the written text of the Reverse-911 message sent by the Town to its users on July 5, 2018. The Town shall further notify customers by any additional means, including but not limited to sign boards, notices on its web site and social media, as deemed necessary. If the Town has published notice in a local newspaper and/or on the Town's website or by any other means, then the Town shall also submit a copy of the public notice to MassDEP within ten (10) days of publication of the notice.
14. On or before August 1, 2018, the Town shall submit to MassDEP a written report documenting all efforts taken by the Town to implement and enforce the ban on nonessential outside water use required herein, including all actions taken by the Town to inform the public of the ban and to enforce the ban, including the assessment of penalties or imposition of fines. The report shall describe water use trends over the period of the

emergency and describe progress and the status of all other conservation programs being implemented by the Town, including any efforts to limit the use of private wells. The Town shall submit copies of all materials and notices prepared to inform the public of the need to conserve water and comply with the ban on nonessential outside water use.

15. The Town shall comply with all the remaining terms and conditions of its MassDEP Registration number 3-15-048.01 and Permit Number 9P-3-15-048.01 that remain unchanged by this Emergency Declaration.
16. If the Town fails to comply with the provisions of this Emergency Declaration, MassDEP may assess a civil administrative penalty as provided in M.G.L. c.21A, § 16 and M.G.L. c.21G, § 14. MassDEP may also seek civil judicial penalties as provided in M.G.L. c.21G, § 14. Each day of continued violation shall constitute a separate offense. In addition, MassDEP may ask the Attorney General to bring an action in the superior court to compel compliance with this Declaration.

Issued by the Department of Environmental Protection this 5th day of July 2018.

By 
Eric S. Worrall, Regional Director