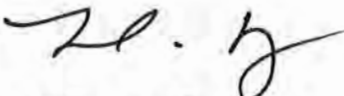


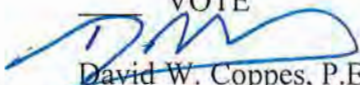
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: December 19, 2018
SUBJECT: Emergency Water Supply Agreement with the Town of Burlington

COMMITTEE: Water Policy & Oversight

INFORMATION
VOTE

Mark Johnson, Director of Waterworks
Beth Card, Director, Environmental and Regulatory Affairs
Preparer/Title


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

RECOMMENDATION:

For information only. The Authority has authorized the Town of Burlington to temporarily utilize an emergency water supply connection via Lexington under the provisions for short-term approvals in #: OP.05: Emergency Water Supply Withdrawals.

DISCUSSION:

On November 30, 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. DEP's Declaration of Emergency was issued on December 10, 2018, and is attached.

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, requires a full plant shut down in order to remove sludge from the sedimentation basin. 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 approximately seven days. Approval has been granted for a connection of no more than 30 days in the event that maintenance takes longer. If Burlington requests that the emergency approval be extended beyond the 30 days, approval from the MWRA Advisory Board and MWRA Board of Directors will be required before a 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; and
- The Community must submit a detailed description of water conservation and water accountability programs undertaken.

Staff have determined that each of these criteria and requirements have been met.

Status of Admission Process

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. In October 2018, Burlington filed its Environmental Notification Form (ENF) with MEPA. MEPA has scheduled a scoping session on that filing for December 17, 2018, which will include MWRA staff, the Town of Burlington, and the regulatory agencies. Comments on that filing are due on December 28, 2018.

The Project will be completed in two phases. Phase 1 will supplement Burlington's current water system by providing approximately 1-million gallons-per-day (mgd) through a connection with Lexington and approximately 2,450 linear feet of new water main. Phase 2 will provide capacity for Burlington to be fully supplied by MWRA with an average day demand of 3.47 mgd and a maximum day demand of 6.45 mgd. Phase 2 contains two alternatives which would involve upgrading and replacing either a) approximately 16,300 feet of water main on Lowell Street in Lexington from the Arlington Town line to Adams Street in Burlington or b) approximately 19,800 feet of water main on Lowell Street in Lexington and North Street and Muller Road to Wheeler Road in Burlington. MWRA expects that its comments on the ENF will be supportive in nature and will relate to the Water System Expansion process, Water Quality, and MWRA Enabling Statute Section 8(m) Permitting.

BUDGET/FISCAL IMPACT:

Pursuant to #: OP.05, water taken for the fourth 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:

DEP Emergency Declaration - December 10, 2018



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

Matthew A. Beaton
Secretary

Karyn E. Polito
Lieutenant Governor

Martin Suuberg
Commissioner

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

**In the Matter of)
Town of Burlington)**

Enforcement Number 00006128

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 has a full capacity of 3.2 MGD 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 and has a full

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capacity of 4.5 MGD. 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.

4. On Friday, November 30, 2018, MassDEP received a letter from the Town, 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 “[t]he Mill Pond Facility requires full shut down in order to remove sludge from the sedimentation basin”. The Town also outlined that, although there is no outdoor watering this time of the year, the Vine Brook treatment facility is not sufficient to supply the distribution system while the Mill Pond Treatment Plant is off-line for maintenance because the Town’s winter demand is as high as 2.5 MGD. The Town further stated that activation of the connection to Lexington would allow the Town “to meet water demand while Mill Pond Treatment Facility undergoes maintenance.”
5. The Water Management Act, M.G.L. c.21G, § 15, and the Water Management Act 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.
6. Pursuant to M.G.L. c.21G, § 15 and the Water Management Act Regulations 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.
7. 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....

8. 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

9. For the reasons set forth above and pursuant to the Water Management Act, M.G.L. c.21G, § 15 and the Water Management Act Regulations, 310 CMR 36.00, 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 **June 9, 2019** or until such time as MassDEP determines that emergency conditions no longer exist, whichever is sooner.
10. 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. Given this information, MassDEP hereby requires the Town to conduct a full lead and copper sampling round during the June 1, 2019 -September 30, 2019 monitoring

period. Analytical results of said samples shall be reported in writing to MassDEP on or before October 10, 2019.

11. Effective immediately, the Town shall implement a ban on non-essential outside water use 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.
12. **On or before February 1, 2019**, 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.
13. 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.
14. 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 10th day of December 2018.

By _____

Eric S. Worrall, Regional Director