



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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FINAL DETERMINATION TO EXTEND VARIANCE FOR COMBINED SEWER OVERFLOW DISCHARGES TO LOWER CHARLES RIVER/CHARLES BASIN

The Massachusetts Department of Environmental Protection (MassDEP) hereby extends the Variance for CSO Discharges to the Lower Charles River/Charles Basin from September 1, 2016 for a period of three years (to August 31, 2019). This action, which authorizes limited CSO discharges, is taken in connection with NPDES permit Nos. MA0103284 and MA0101982 issued to the Massachusetts Water Resources Authority (MWRA) and the City of Cambridge, respectively. This Variance extension is issued pursuant to the Massachusetts Surface Water Quality Standards at 314 CMR 4.00, and subject to the specific conditions, which follow. This Variance is intended to provide for the completion of design, construction, and subsequent monitoring of CSO controls proposed in the MWRA revised Long-Term Control Plan (LTCP) mandated in the relevant orders of the United States District Court for the District of Massachusetts, Civil Action Nos. 85-0489-MA and 83-1614-MA, including amended Schedule Seven, dated October 19, 2011 (the "Federal Court Order")¹.

MassDEP grants this Variance based on the technical and cost information in the 1997 MWRA CSO Facilities Plan, the Revised Recommended Plan, and affordability analyses demonstrating that implementation of more stringent CSO controls at this time would result in substantial and widespread social and economic impact as specified in 314 CMR 4.03(4)(f). Issuance of this Variance for CSO discharges to the Lower Charles River/Charles Basin is consistent with EPA Guidance: *Coordinating CSO Long-Term Planning with Water Quality Standard Reviews* (July 31, 2001), which states that longer term variances and renewal of variances are warranted given the extended duration necessary for implementation of Long-Term Control Plan(s).

¹ The documents that complete MWRA's LTCP are identified in the Second Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflow Control dated March 15, 2006.

MassDEP has determined that the extension of the CSO Variance to the MWRA and the City of Cambridge for their CSO discharges to the Lower Charles River/Charles Basin is warranted so that essential information can be collected and analyses performed in conjunction with the implementation of the LTCP, which will allow MassDEP to determine whether the Class B uses for the Lower Charles River/Charles Basin can be attained, or in turn, to make a determination on the highest feasible level of CSO control.

It is anticipated that this Variance and its conditions will be incorporated into NPDES permits for the MWRA and the City of Cambridge. Failure by the MWRA and/or the City of Cambridge to comply with the conditions of this Variance following its effective date and prior to and following permit modification or reissuance will constitute a violation of the permit in effect on the date of such violation, as well as the Massachusetts Surface Water Quality Standards (314 CMR 4.00) and Surface Water Discharge Permit Program Regulations (314 CMR 3.00).

VARIANCE CONDITIONS

The CSO Variance is conditioned upon MWRA and the City of Cambridge complying with the following requirements:

A. Implementation of the LTCP

MWRA and the Cities of Cambridge and Boston have completed the construction of the Revised Recommended Plan for the Lower Charles River/Charles Basin to abate CSO discharges. By December 2020, MWRA shall submit the results of a performance assessment to EPA and MassDEP verifying that CSO discharges are consistent with the long-term levels of CSO control defined in Exhibit B of the Second CSO Stipulation incorporated into the Federal Court Order in the Boston Harbor Case on April 27, 2006 and amended on May 7, 2008.

B. Other Actions to Minimize CSO/Sanitary Discharges

- i. MWRA and the City of Cambridge shall continue to implement the Nine Minimum Controls (NMC), and monitor CSO activations and volumes. The City of Cambridge shall submit a report to MassDEP on an annual basis, presenting estimated CSO activations and volumes in the Lower Charles River/Charles Basin for the previous calendar year. The report shall be submitted by April 30 for the preceding calendar year, and the City of Cambridge shall indicate the method of estimating CSO activations and volumes, either by metering data, CSO system model, or a combination of the two. On or before April 30 of each year, MWRA shall submit to MassDEP estimated CSO activations and volumes for all CSO outfalls for the previous calendar year in the Lower Charles River/Charles Basin, using the most recent MWRA sewer system model, supplemented by metering data where such data are available.
- ii. MWRA shall continue to provide technical assistance related to the identification and removal of Infiltration/Inflow (I/I) to member communities. Where requested by any

member community, or by MassDEP, MWRA shall provide information from MWRA metering data, including but not limited to:

1. A system map showing locations of MWRA metering points;
 2. MWRA metering data by each MWRA member sewer community, broken down into estimates of average monthly sanitary flow, average monthly infiltration and average monthly inflow; and
 3. MWRA metering data by meter subarea correlating to a specific storm event.
- iii. The City of Cambridge shall respond to MassDEP information requests to clarify the conditions of the combined sewer system, the status of any CSO abatement work, or the frequency and volume of CSO discharges, within 90 days of receiving such comments.

C. Notification to the Public of CSO Discharges and Impacts

- i. MWRA and the City of Cambridge shall maintain outfall signs for each permitted CSO outfall that are visible both from the shore and from instream locations for their permitted CSO discharges. Pursuant to the NPDES permits, the following language, at a minimum, shall be included:

WARNING:
WET WEATHER
SEWAGE DISCHARGE
OUTFALL (discharge serial number)

- ii. MWRA and the City of Cambridge shall collaborate to provide informational notices to boathouses in the areas affected by the CSO discharges and the Community Sailing program to advise the public of CSO discharges and potential public health impacts and to provide contact information and website links. The text of the notice shall be subject to prior approval by MassDEP.
- iii. The MWRA, in collaboration with City of Cambridge, shall post notifications on their website as well as provide email notice to EPA, MassDEP, local health agents in the communities affected by the CSO discharges, and the Charles River Watershed Association of CSO discharge events at Cottage Farm within 12 hours of the discharge.
- iv. MWRA and the City of Cambridge shall update and maintain their respective websites quarterly to include general information regarding CSOs, potential health impacts, locations of CSO discharges, the status of the CSO abatement program, web links to CSO communities and watershed advocacy groups, and information from the most recent information on CSO activations and volumes in the Lower Charles River/Charles Basin watershed.

D. Receiving Water Monitoring

The MWRA shall continue and expand the water quality monitoring program in the Lower Charles River/Charles Basin to demonstrate the effectiveness of CSO controls implemented in the watershed. The work shall be adequate to assess the water quality impacts of remaining CSO pollutant sources and loads over a range of storms events, and the associated level of attainment of water quality standards in the Lower Charles River/Charles Basin. MWRA shall develop a scope of work for the water quality monitoring program in consultation with MassDEP, and submit the completed scope to MassDEP for review on or before December 1, 2016.

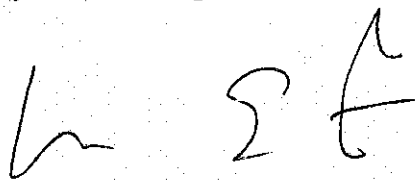
Each year, on or before July 15 for the duration of this Variance, MWRA shall submit to MassDEP and EPA a report on the previous year's sampling program. The report shall include a summary of the receiving water sampling data collected over the past calendar year, including sampling locations and parameters, and comparisons between results during wet and dry weather, a characterization of rainfall events for which wet weather sampling was done, and a correlation of the sampling data with CSO activations and volumes.

E. Performance Assessment

In accordance with the federal court order, MWRA is required to implement a three-year performance assessment of its LTCP beginning in January 2018, and to submit the evaluation of this assessment to MassDEP and EPA in December 2020. On or before May 1, 2017, MWRA shall submit a draft scope of work for the three-year performance assessment to EPA and to MassDEP. The draft scope of work will be published in the Environmental Monitor.

Subject to the conditions included in this Variance, MWRA and the City of Cambridge shall be authorized to have CSO discharges during wet weather events to the Lower Charles River/Charles Basin. CSO discharges shall be consistent with the performance of the Revised Recommended Plan, and upon implementation of the Revised Recommended Plan and after completion of subsequent monitoring to verify that the Long-Term CSO control goals are achieved.

8/31/16
Date Issued



Douglas Fine
Assistant Commissioner
Bureau of Water Resources

9/1/16
Effective Date