

NPDES Permit No. MA 0102598
Fact Sheet for 2012 Partially Revised Draft Permit

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET
BOSTON, MASSACHUSETTS 02114-2023

PARTIALLY REVISED FACT SHEET

PARTIALLY REVISED DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES PURSUANT TO THE
CLEAN WATER ACT (CWA)

NPDES PERMIT NO.: MA0102598

PUBLIC NOTICE DATE:

NAME AND ADDRESS OF APPLICANT AND OF FACILITY WHERE DISCHARGE OCCURS:

Charles River Pollution Control District
66 Village Street
Medway, Massachusetts 02053

The Towns of Franklin, Medway, Millis, and Bellingham are co-permittees for specific activities required in Part I.B, Unauthorized Discharges and Part I.C, Operation and Maintenance of the Sewer System of the Draft NPDES Permit. Part I.B, Unauthorized Discharges and Part I.C, Operation and Maintenance of the Sewer System include conditions that pertain to the operation and maintenance of the collection systems. The responsible municipal departments are:

Town of Franklin
Town Administration
355 East Central Street
Franklin, MA 02038

Town of Medway
Department of Public Services
155 Village Street
Medway, MA 02053

Town of Millis
Department of Public Works
Veterans Memorial Building
900 Main Street
Millis, MA 02054

Town of Bellingham
Department of Public Works
26 Blackstone Street
Bellingham, MA 02019

RECEIVING WATER: Charles River (MA 72 - 05)

CLASSIFICATION: B (warm water fishery)

PROPOSED ACTION

Decision to Partially Reopen the Draft Permit for Public Comment

On July 3, 2008, the Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) released a Draft Permit for the Charles River Pollution Control District (CRPCD) wastewater treatment plant for public review and comment. The public comment period closed on August 1, 2008. Numerous comments were received, including comments from the CRPCD and

several of its member communities. Among the issues raised in the comments were the effluent limitation on total phosphorus and the legal basis for including several of the District member communities as co-permittees to the NPDES Draft Permit. The Draft Permit requirements that applied to the co-permittees were Sections I.B and I.C., which concern sewer system operation and maintenance and unauthorized discharges. Since the close of the public comment period, events have occurred that have influenced EPA's determinations regarding the Draft Permit.

Therefore, EPA and MassDEP have decided to partially reopen the Draft Permit for public comment on the following requirements in the Draft Permit; the total phosphorus limits, the addition of co-permittees for sewer system operation and maintenance and unauthorized discharges, recently revised requirements for submitting monitoring and reporting data and recently updated requirements of standard permit conditions. The specific changes are discussed in detail in this fact sheet. The fact sheet for the 2008 permit is also attached (see Attachment 2, 2008 Fact Sheet) so that the basis for the conditions in that version of the Draft Permit may be understood.

Phosphorus Limits

The total phosphorus limits in the partially revised Draft Permit have been changed to reflect the recommendations in the final version of the **"Total Maximum Daily Load (TMDL) for Nutrients in the Upper/Middle Charles River, Massachusetts Control Number: 272.0"**. See <http://www.mass.gov/dep/water/resources/ucharles.doc>

Co-permittees

In a May 28, 2010 decision related to the appeal of the Upper Blackstone Water Pollution Abatement District permit, the Environmental Appeals Board (EAB) remanded to EPA conditions related to co-permittees, finding that EPA had failed to adequately articulate in the record of proceeding a rule-of-decision, or interpretation, identifying the statutory and regulatory basis for expanding the scope of NPDES authority beyond the treatment plant owner and operator to separately owned and operated collections systems. EPA Region I has conducted an evaluation of its legal authority and has developed a Regional permitting approach for satellite collection systems that supports the inclusion of the owners of satellite collection systems as co-permittees. The permitting strategy, has been included as **Attachment 1, EPA REGION 1 NPDES PERMITTING APPROACH FOR PUBLICLY OWNED TREATMENT WORKS THAT INCLUDE MUNICIPAL SATELLITE SEWAGE COLLECTION SYSTEM** to this fact sheet.

Monitoring and Reporting

The partially revised Draft Permit includes reporting requirements using NetDMR. NetDMR is a national tool for permittees to submit discharge monitoring reports (DMRs) electronically via a secure Internet application to U.S. EPA through the Environmental Information Exchange Network. NetDMR allows participants to discontinue mailing in hard copy forms under 40 CFR 122.41 and 403.12.

Revisions of Standard Permit Conditions

During the extended period since the Draft Permit was released for public comment, EPA has updated several standard permit conditions pertaining to collection system operation and maintenance, and monitoring report submissions. These updated conditions are also included in the partially revised Draft Permit, and are also described in a later section of this fact sheet.

EPA is soliciting public comment on those revisions.

Scope of Opening

In accordance with 40 CFR § 124.14(c), comments filed on this Draft Permit during the reopened comment period are limited to the “substantial new questions that caused its reopening.” Substantial new questions that caused its reopening are the revised total phosphorus limitations based on new information and data in the TMDL report, the inclusion of the satellite sewer communities as limited co-permittees, the permittee and co-permittees responsibilities in Part I.C, Operation and Maintenance of the Sewer System, and the revisions in Part I. I Monitoring and Reporting, and Part I.J Standard Permit Conditions. Comments on other conditions of the permit will not be accepted. EPA will respond to all comments received on the 2008 Draft Permit and this partial reopening in its final permit decision.

PERMIT BASIS AND EXPLANATION OF CHANGES

Phosphorus

Phosphorus is an essential nutrient for plant growth but, excessive amounts of phosphorus in a water body has the potential to accelerate stream eutrophication, characterized by excessive plant growth, low dissolved oxygen and, large diurnal swings in dissolved oxygen in the water body. The range of the monthly average phosphorus data reported on the facility’s discharge monitoring reports (DMRs) for the period from January 2009 through May 2012 was 0.07 mg/l to 2.07 mg/l.

The 2008 Draft Permit included a 0.12 mg/l monthly average limit for total phosphorus for the months of April through October, which was based on achieving EPA Gold Book criteria of 0.10 mg/l in the receiving water during the growing season, and a 1.0 mg/l monthly average limit for the months of November through March based on limiting the amount of particulate phosphorus in the discharge that would settle in the receiving water and be bioavailable during the growing season.

Regulatory Background

Massachusetts Water Quality Standards do not include numeric criteria for phosphorus. The Standards include narrative criteria, including, in 314 CMR 4.05(5)(c) that states “Unless naturally occurring, all surface waters shall be free from nutrients in concentrations that would cause or contribute to impairment of existing or designated uses and shall not exceed the site specific criteria developed in a TMDL or as otherwise established by the Department pursuant to 314 CMR 4.00.” Any existing point source discharge containing nutrients in concentrations that would cause or contribute to cultural eutrophication, including the excessive growth of aquatic plants or algae, in any surface water shall be provided with the most appropriate treatment as determined by the Department, including, where necessary, highest and best practical treatment (HBPT) for POTWs and BAT for non POTWs, to remove such nutrients to ensure protection of existing and designated uses.”

In the absence of numeric criteria or a TMDL, EPA would interpret the narrative criteria using the procedures found at 40 CFR Part 122.44(d)(1)(vi), including the use of available guidance and other relevant information. In the fact sheet for the 2008 Draft Permit, EPA determined that there was reasonable potential for the discharge of phosphorus by the facility to cause or contribute to an exceedance of water quality standards, using the Gold Book-recommended criteria, and also established the monthly average limit using the criteria. The fact sheet for the 2008 Draft Permit includes a detailed discussion of the

process used by EPA to develop the phosphorus limits proposed in the 2008 Draft Permit. See Attachment 2, 2008 Fact Sheet.

The TMDL includes a phosphorus waste load allocation for the major and minor POTWs discharging into this segment of the river. Section 3 of the TMDL report discusses nutrient enrichment as it relates to this segment of the river and presents data used in the formulation of the suggested waste load allocation for the major POTWs. Section 7 of the TMDL recommends that reissued NPDES permits for the major POTWs in this reach of the river include total phosphorus limits of 0.10 mg/l from April through October and 0.30 mg/l from November through March. Regulations at 40 CFR 122.44(d)(1)(vii)(B) require that effluent limitations developed to protect water quality criteria be consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.

Limit Derivation/Compliance Schedule

The phosphorus limits, required by the TMDL, have been incorporated in the partially revised Draft Permit and are more stringent than the limits in the 2008 Draft Permit. A review of phosphorus data submitted on the Town's DMRs from January 2009 through May 2012 as shown in Table 1, Total Phosphorus DMR Data below indicates that the facility's effluent phosphorus concentrations are greater than the proposed permit limits, indicating that upgrades to the facility will be necessary to achieve the established limits. Extensive upgrades to treatment plant are being planned.

The CRPCD recognizes that upgrades to the treatment plant will have to be completed to be in compliance with the TMDL and has begun work on a preliminary design for the upgrades. A four year design/build schedule has been projected for completion of the necessary upgrades. Attachment 3, Charles River Pollution Control District Facility Upgrades, presents a list of process upgrades under consideration between CRPCD and their consultants.

Accordingly, a schedule of compliance has been included in the partially revised Draft Permit for attaining the proposed total phosphorus limits. The compliance schedule provides 48 months from the effective date of the permit for the completion of the necessary construction upgrades.

EPA believes this is a reasonable schedule of compliance, but invites comments from the permittee and other interested parties regarding the length of this schedule. The partially revised Draft Permit includes an interim monthly average limit of 0.2 mg/l for the months of April through October, and an interim monthly average limit of 1.0 mg/l for the months of November through March. These are the total phosphorus limits in the existing permit.

Table 1- Total Phosphorus DMR Data, mg/l							
Month/Year	Mo.Avg (mg/l)	Month/Year	Mo.Avg (mg/l)	Month/Year	Mo.Avg (mg/l)	Month/Year	Mo.Avg (mg/l)
01/2009	0.53	01/2010	1.8	01/2011	0.08	01/2012	0.65
02/2009	0.68	02/2010	0.88	02/2011	0.40	02/2012	0.86
03/2009	0.91	03/2010	1.6	03/2011	0.35	03/2012	0.52
04/2009	0.19	04/2010	0.25	04/2011	0.12	04/2012	0.34
05/2009	0.31	05/2010	0.15	05/2011	0.20	05/2012	0.62
06/2009	2.07	06/2010	0.18	06/2011	0.21		
07/2009	0.75	07/2010	0.15	07/2011	0.13		
08/2009	0.14	08/2010	0.15	08/2011	0.15		
09/2009	0.18	09/2010	0.19	09/2011	0.19		
10/2009	0.39	10/2010	0.65	10/2011	0.20		
11/2009	0.49	11/2010	0.21	11/2011	0.63		
12/2009	1.0	12/2010	0.070	12/2011	0.59		

Co-Permittees

The Towns of Franklin, Medway, Millis and, Bellingham were listed as co-permittees on the 2008 Draft Permit and shall remain co-permittees on the partially revised Draft Permit. Each Town owns and operates a separate section of the sewer collection system that transports sewage to the CRPCD's facility for treatment. As in the 2008 Draft Permit, the co-permittees are only subject to the requirements in Part I B, Unauthorized Discharges and Part I.C, Operation and Maintenance of the Sewer System of the partially revised Draft Permit. Comments received on the 2008 Draft Permit included comments from CRPCD and its satellite sewer communities opposing the inclusion of the satellite sewer communities as limited co-permittees.

On May 28, 2010, the Environmental Appeals Board (EAB) remanded to EPA the co-permitting provisions in a permit issued to the Upper Blackstone Water Pollution Abatement District in Millbury, Massachusetts, a large publicly owned treatment plant. These conditions had been appealed to the EAB by the permittee and four of its satellite communities. In its order, the EAB found that EPA had not adequately articulated in the record of the proceeding a rule-of-decision, or interpretation, identifying the statutory and regulatory basis for expanding the scope of NPDES authority beyond the treatment plant owner and operator to separately owned and operated collection systems that discharge to the treatment plant, and gave EPA the options of providing the appropriate legal and technical basis for supporting the co-permitting provision, or withdrawing the provisions. In the interest of quickly placing other contested provisions into effect, EPA withdrew the co-permitting requirements in that permit. See <http://www.epa.gov/region1/npdes/permits/2010/finalma0102369DeterminationOnRemand.pdf>

However, since that time, EPA Region 1 has developed a more comprehensive factual and legal rationale for its decision to regulate satellite collection systems. Attachment 1 of this fact sheet is a copy of “**EPA REGION 1 NPDES PERMITTING APPROACH FOR PUBLICLY OWNED TREATMENT WORKS THAT INCLUDE MUNICIPAL SATELLITE SEWAGE COLLECTION SYSTEMS**”. This document establishes legal authority to include satellite communities as co-permittees.

Unauthorized Discharges

The requirements in Part I. B, Unauthorized Discharges (Part I. B) allows discharges from the facilities that are in accordance to the terms and conditions of the Draft Permit. The only discharge authorized from this facility is the treatment plant outfall, as listed in Part I.A.1. All other discharges are prohibited including sanitary sewer overflows (SSOs).

Part I.B also requires that all unauthorized discharges, including sanitary sewer overflows be reported in accordance with general requirements of Part II, Standard Conditions of the Draft Permit. Therefore, the Towns that own and operate satellite collection systems are subject to this Part for the sections of the collections systems it owns and operates and unauthorized discharge from these collection systems must be reported by the owner.

The Part I.B requirements in the partially revised Draft Permit are the same as in the original Draft Permit.

Operation and Maintenance of the Sewer System

Part I.C, Operation and Maintenance of the Sewer System (Part I.C) has also been reopened for public comment. The standard language and requirements in Part I. C have been updated from the requirements in the 2008 Draft Permit. The revised language and requirements reflect the standard requirements for all NPDES permits now being drafted for publicly owned treatment works in Massachusetts.

The revisions in Part I.C require CRPCD and each co-permittee to develop a collection system operation and maintenance plan, and to map its sanitary sewer system. The schedule for completing the collection system operation and maintenance plan has two milestones.

The first milestone is that within six (6) months of the effective date of the permit, the permittee and each co-permittee shall submit to EPA and MassDEP a description of the collection system management goals, staffing, information management, and legal authorities; a description of the overall condition of the collection system including a list of recent studies and construction activities; and a schedule for the development and implementation of the full Collection System O & M Plan.

The second milestone is that within twenty four (24) months from the effective date of the permit, the full Collection System O & M Plan shall be implemented, and a copy of the permittee's and each co-permittee's plan shall be submitted to EPA and MassDEP. The final plan is required to include: a preventative maintenance and monitoring program for the collection system; sufficient staffing to properly operate and maintain the sanitary sewer collection system; sufficient funding and the source(s) of funding for implementing the plan; identification of known and suspected overflows and back-ups, including manholes, a description of the cause of the identified overflows and back-ups, and a plan for addressing the overflows and back-ups consistent with the requirements of the permit; a description of the permittees and each co-permittees programs for preventing I/I-related effluent violations and all unauthorized discharges of wastewater, including overflows and bypasses, and an ongoing program to identify and remove sources of I/I. The program is required to also include an inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts; and an educational public outreach program for all aspects of I/I control, particularly private inflow.

The permit also requires that sanitary sewer mapping be completed within thirty (30) months of the effective date of the permit, and includes specific information to be recorded on the maps.

Monitoring and Reporting

Part 1.I Monitoring and Reporting in the Draft Permit includes the new provisions related to the electronic submittals of Discharge Monitoring Reports (DMRs) known as NetDMR. NetDMR is a national tool for regulated Clean Water Act permittees to submit discharge monitoring reports (DMRs) electronically via a secure Internet application to the U.S. EPA through the Environmental Information Exchange Network. NetDMR allows participants to discontinue mailing in hard copy forms under 40 CFR 122.41 and 403.12. NetDMR is a Web-based tool that allows NPDES permittees to electronically sign and submit their discharge monitoring reports (DMRs) to EPA's [Integrated Compliance Information System \(ICIS-NPDES\)](#) via the [Environmental Information Exchange Network](#).

NetDMR will reduce the burden on EPA, states, and the regulated community; improve data quality; and expand the ability of both states and EPA in targeting their limited resources to meet environmental goals. An essential component of NetDMR when fully implemented will be the exchange of data with ICIS-NPDES allowing permittees to complete a DMR that is specific to their permit limits and outfalls.

Standard Permit Conditions

The language in Part 1.J, Standard Permit Conditions of the partially revised Draft Permit has also been updated. It includes information of the federal and state permit authorizations as they apply to the issuance of an NPDES permit and, provides information on the water quality certification authorization issued by MassDEP.

III. STATE CERTIFICATION REQUIREMENTS

Staff of MassDEP have reviewed the partially revised Draft Permit. EPA has requested permit certification by the State pursuant to CWA § 401(a)(1) and 40 CFR § 124.53 and expects that the Draft Permit, as revised, will be certified.

IV. COMMENT PERIOD, HEARING REQUESTS, and PROCEDURES FOR FINAL DECISIONS

All persons, including applicants, who believe the revised conditions of the partially revised Draft Permit are inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to Betsy Davis, U.S. EPA, Office of Ecosystem Protection, Municipal Permits Section, 5 Post Office Square-Suite 100, Boston, Massachusetts 02109-3912. Any person, prior to such date, may submit a request in writing for a public hearing to consider the revised conditions in the partially revised Draft Permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held if the criteria stated in 40 CFR § 124.12 are satisfied. In reaching a final decision on the Draft Permit, the EPA will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after any public hearings, if such hearings are held, the EPA will issue a Final Permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Pursuant to 40 CFR 124.17, at the time the final permit decision is issued, EPA will also issue a response to comments, which will include responses to all significant comments submitted on the 2008 Draft permit and on the 2012 partially revised Draft Permit.

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V. EPA AND MassDEP CONTACTS

Additional information concerning the permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays, from:

Betsy Davis
US Environmental Protection Agency
5 Post Office Square
Suite 100 (CMA)
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1576
Fax: (617) 918-0565
Email: davis.betsy@epamail.epa.gov

or

Kathleen Keohane
MA Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, MA 01608
Telephone: (508)767-2856
Fax: (508) 791-4131
Email: kathleen.keohane@state.ma.us

Date

Stephen S. Perkins, Director*
Office of Ecosystem Protection
U.S. Environmental Protection System

Comments should be addressed to both Betsy Davis and Kathleen Keohane, not Stephen S. Perkins.