UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA NEW ENGLAND
ONE CONGRESS STREET
BOSTON, MASSACHUSETTS 02114

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES.

NPDES PERMIT NO.: **MA0101982**

NAME AND ADDRESS OF APPLICANT:

The City of Somerville
Department of Public Works
Somerville, MA 02145

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Discharges occur at 2 Combined Sewer Overflow (CSO) outfall locations within the City of Somerville (see Figure 1)

RECEIVING WATERS:

Alewife Brook and Upper Mystic River (USGS Hydrologic Code: 01090001)

RECEIVING WATER CLASSIFICATION:

B - variance - Upper Mystic River, Alewife Brook

I. Proposed Action, Type of Facility, and Discharge Locations.

The above named applicant has applied to the U.S. Environmental Protection Agency ("EPA") for the reissuance of its NPDES permit to discharge into the designated receiving waters. The discharges are from combined sewer overflows (CSOs). The current CSO discharge locations are shown in Figure 1.

II. Description of Discharge.

CSO discharges are a combination of sanitary sewage and storm water runoff which discharge only during significant storm events, when collection system capacity is exceeded. Estimates of the number of CSO activations and volume currently discharged in a typical year are shown on Permit Attachment A. Discharges to Outfall 007A receive screening and disinfection. Outfall 007A is jointly permitted to the City of Somerville and the Massachusetts Water Resources Authority (MWRA). The City of Somerville does not own and operate a CSO treatment facility, but the MWRA owns and operates the Somerville Marginal treatment facility located in Somerville.

III. Permit Basis and Explanation of Effluent Limitation Derivation.

General Requirements

Under Section 301 (b)(1)(A) of the Clean Water Act CSOs are subject to technology-based effluent limitations and are not subject to secondary treatment regulations applicable to publicly owned treatment works (Montgomery Environmental Coalition vs. Costle, 646F.2d 568 (D.C. Cir 1980)). Under Section 301(b)(1)(C) of the Clean Water Act (CWA) CSOs are also subject to effluent limitations based on water quality standards.

The Massachusetts Surface Water Quality Standards include the requirements for the regulation and control of toxic constituents and also require that EPA criteria established pursuant to Section 304(a) of the CWA shall be used unless site specific criteria are established. The state will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained or attained.

According to 40 CFR 122.44(l), when a permit is reissued, effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued.

Technology-based requirements

EPA's National CSO control policy has established technology-based effluent limitations for CSOs using best professional judgement. The policy establishes the minimum technology-based requirements as implementation of nine minimum controls (NMCs). The NMCs are:

1. Proper operation and regular maintenance programs for the sewer system and the CSOs;

2. Maximum use of the collection system for storage;

3. Review and modification of pretreatment requirements to assure CSO impacts are minimized;

4. Maximization of flow to the POTW for treatment;

5. Prohibition of CSOs during dry weather;

6. Control of solid and floatable material in CSOs;

7. Pollution prevention;

8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts; and

9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

The National CSO Control Policy required CSO communities to submit documentation of their implementation of the NMCs by January 1, 1997. The City of Somerville submitted its documentation on December 31, 1996. The permit requires the City of Somerville to continue to implement its NMCs program in accordance with its documentation and to also perform EPA Region I's minimum implementation levels, which are defined in the draft permit (See part **I.C.).**

Water Quality Based Requirements

The Massachusetts Water Quality Standards (WQS) establish water quality classifications for all waters of the Commonwealth. Water quality uses, and criteria to support those uses, are established for each classification. The water quality classifications are A, B, C (inland water classes) and SA, SB and SC (coastal and marine classes).

Class A and SA waters are designated as excellent habitat for fish and aquatic life; and suitable for primary and secondary contact recreation; Class A waters are designated as a source of public water supply; Class SA waters, in approved areas, are suitable for shellfish harvesting without depuration.

Class B and SB waters are designated as a habitat for fish, other aquatic life, and for primary and secondary contact recreation; Class B waters, where designated shall be suitable as a source of public water supply with appropriate treatment. Class SB waters, in approved areas shall be suitable for shellfishing with depuration.

The WQS may also assign restrictions to a receiving water, which establish a subcategory of use assigned to a receiving water segment. One of the subcategories which may be established is for CSO-impacted segments. The permitting authority may allow overflows events to waters identified as impacted by CSOs provided that;

a. an approved facilities plan under 310 CMR 41.00 provides justification for the overflows;

b. the Department finds through a uses attainability analysis, and EPA concurs, that achieving a greater level of CSO control is not feasible for one of the reasons specified at 314 CMR 4.03(4)

c. existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected; and

d. public notice is provided through procedures for permit issuance or facility planning under M.G.L. c. 21 §§ 26 through 53 and regulations promulgated pursuant to M.G.L. c. 30A.

The Massachusetts water quality standards do not allow the discharge of CSO, either treated or untreated, into a receiving water that is not designated as CSO impacted. Conversely, if the facilities plan shows that elimination of CSO discharges is feasible, through relocation or sewer separation, no CSO discharges are authorized into that receiving water and the CSO impacted subcategory is removed.

The state may also, with EPA concurrence, establish a water quality standards variance. A variance is a short-term modification of the standards, designed to obtain the information necessary to determine the appropriate water quality standard and level of CSO control for the segment. Variances are discharger and pollutant specific, are time-limited, and do not forego the currently designated use. At the end of the variance, a final Administrative Determination is made regarding the appropriate level of CSO control and final water quality determinations are made.

MWRA CSO Facilities Plan/ Water Quality Standards

In 1987, through a Stipulation entered in the Boston Harbor Case (U.S. v. M.D.C., et al., No. 85-0489 (D. Mass)), MWRA accepted responsibility for developing a control plan to address CSO discharges from all CSOs hydraulically connected to the MWRA sewer system, including outfalls owned by the member communities. Under a Court-ordered schedule, MWRA developed a CSO Conceptual Control Plan in 1994, recommending more than 25 site-specific CSO projects located in Boston, Cambridge, Somerville and Chelsea. The CSO Conceptual Control Plan was later refined in the July 1997 Final CSO Facilities Plan/Environmental Impact Report.

In 1996, design and construction milestones for the 25 projects in the Final CSO Plan were added to the Federal Court Schedule, requiring implementation of the projects from 1996 to 2008. MWRA is directly responsible for implementation of many of the projects and has negotiated agreements with each of the four CSO communities for implementation of certain projects affecting the community systems. The facilities plan evaluated and selected abatement alternatives for each CSO and was conducted in accordance with EPA's National CSO Control Policy.

For those CSOs which MWRA did not believe could be eliminated, the plan included information to support a Use Attainability Analysis (UAA) pursuant to 40 CFR Section 131.10 (g). A UAA is an evaluation conducted by the state which supports removal of a National Goal Use based on criteria such as costs and impacts associated with attaining that use. The state submitted its final administrative determinations, including a UAA, to EPA for approval on December 31, 1997 . On February 27, 1998 EPA approved the state's changes to water quality standards, which included removal of CSO-impacted designations for the Neponset River, North Dorchester Bay, South Dorchester Bay, and Constitution Beach; a SB_{CSO} designation for Boston Inner Harbor; a B_{CSO} designation for the Muddy River; and a tentative determination for the issuance of a variance for the Lower Charles River, the Alewife Brook, and the Upper Mystic River.

Final Variance conditions for the Alewife/Upper Mystic sub-basin were issued on March 5, 1999. The Variance was effective for three years and was extended as described below.

For receiving waters granted a water quality standards variance, such as these above, the recommended abatement facilities, level of performance, and water quality results are established as the minimum requirements to meet water quality standards and are the basis for the permitee's requirements for each outfall. These variance conditions require the permittee and MWRA to develop additional information to allow DEP and EPA to determine whether a higher level of CSO control is feasible. These conditions are included as conditions of the draft permit.

Effluent Limitations

· Alewife Brook and Upper Mystic River

Water quality standards allow the discharge of CSOs into Alewife Brook and the Upper Mystic River in accordance with the approved facilities plan. There are two (2) Somerville CSOs remaining from the nine (9) which were permitted in 1992. The expected discharge frequency and discharge volumes expected in a typical year for both existing conditions and under future planned conditions in the approved CSO facilities plan are also included. The discharge volumes and frequencies expected after completion of the abatement projects recommended by the final CSO facilities plan are established in the draft permit as effluent limitations for a typical year under future planned conditions.

Since the effluent limitations are based on expected performance during a typical year under future planned conditions, compliance with those limits cannot be determined until the precipitation for that

year is compared with the typical year under future planned conditions used in the facilities plan, and a determination made, based on the actual precipitation events, whether the CSO activation and frequency were in accordance with the performance expected in the facilities plan. Therefore the draft permit requires the permittee to provide an annual report which provides discharge frequency and volume for each CSO during the previous year, the precipitation for that year, and an evaluation of whether the discharge frequency and volume from each CSO was in accordance with the expected frequency and volume as projected in the facilities plan. Violations of the effluent limitations will be determined based on this annual report and other relevant documentation.

This variance was extended through September 5, 2003 by letter from DEP of May 8, 2002. However, ***unless the Alewife variance is extended beyond September 5, 2003*****,** it is expected that a final determination will be made regarding water quality standards within the term of the permit. Therefore, the draft permit contains a reopener clause which specifies that the effluent limitations and other conditions for Alewife Brook and the Upper Mystic River CSOs may be modified subsequent to the effective date of the changes to water quality standards for this receiving water.

IV. State Certification Requirements

EPA may not issue a permit unless the Massachusetts Department of Environmental Protection certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards. The staff of the Massachusetts Department of Environmental Protection has reviewed the draft permit and advised EPA that the limitations are adequate to protect water quality. EPA has requested permit certification by the State pursuant to 40 CFR 124.53 and expects that the draft permit will be certified.

V. Public Comment Period and Procedures for Final Decision

All persons, including applicants, who believe any condition of the draft permit is 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 the U.S. EPA, Massachusetts Office of Ecosystem Protection (CMA), 1 Congress Street, Suite 1100, Boston, Massachusetts 02114-2023. Any person, prior to such date, may submit a request in writing for a public hearing to consider the 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 after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Regional Administrator 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 a public hearing, if such hearing is held, the Regional Administrator 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.

During the 30 day period following the issuance of the permit, any person aggrieved by the issuance of the permit may file a request for an adjudicatory hearing at the MA DEP. The standing of a person to request a hearing and procedure for filing such a request are governed by the provisions of M.G.L. c.30A and 310 CMR 1.01. See also 314 CMR 2.08.

VI. EPA and MA DEP Contacts

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

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March 3, 2003
Date

Linda M. Murphy, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency