*Presented below are water quality standards that are in effect for Clean Water Act purposes.* 

EPA is posting these standards as a convenience to users and has made a reasonable effort to assure their accuracy. Additionally, EPA has made a reasonable effort to identify parts of the standards that are not approved, disapproved, or are otherwise not in effect for Clean Water Act purposes.



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#### Final Administrative Determinations for CSO-Impacted Waters Within the Massachusetts Water Resources Authority (MWRA) Sewer Service Area

The Department of Environmental Protection (DEP) is required pursuant to its Surface Water Quality Standards Regulations at 314 CMR 4.00 to administratively determine the status of certain CSO-impacted waters. On October 31, 1997, Tentative Administrative Determinations were issued by DEP for segments within the Massachusetts Water Resources Authority (MWRA) sewer service area. On December 16, 1997, the Department of Environmental Protection held a Public Hearing to receive comments on its Tentative Determinations for CSO-Impacted Waters related to the Combined Sewer Overflow (CSO) Final Facilities Plan (FFP).<sup>1</sup>

DEP received comments from a number of organizations, agencies, public officials, and individuals, all of which were carefully reviewed and considered by DEP.<sup>2</sup> Based upon that review, DEP issues its Final Administrative Determinations:

<u>Receiving Water</u>	Proposed Standard
Neponset River	B
North Dorchester Bay South Dorchester Bay	SB
Constitution Beach	SB

Back Bay Fens (Muddy River): B(CSO)
Upper Mystic River and Alewife Brook: Variance
Upper and Lower Inner Boston Harbor, Mystic/Chelsea
Confluence, and Reserve and Fort Point Channels: SB(CSO)

Charles River: DEP's October 31, 1997, Tentative

<sup>1</sup> The Tentative Determinations were described in DEP's October 31, 1997, Tentative Approval of MWRA's CSO FFP and in a Notice published in the November 24th Environmental Monitor.

<sup>2</sup>Attachments No. 1 and 2 contain brief summaries of the verbal and written comments.

<u>Determination</u> for the Charles River was a <u>Variance</u>; On December 29th, EPA and DEP jointly requested a four-month extension for the Final Determination from the Federal Court to allow DEP and EPA to assess recent water quality information and proposed variance conditions.

These Determinations are consistent with the requirements of DEP's 1996 revisions to the Massachusetts Water Quality Standards Regulations at 314 CMR 4.00 and DEP's August 11, 1997, Final CSO Policy. This document briefly reviews the three key potential regulatory options for CSO-impacted waters and describes the decisionmaking for the Charles, Mystic/Alewife, and Muddy Rivers, which generated the most significant public comment. Generally, public comment was positive about both the administrative determinations and the open public process.

## Regulatory Options for CSOs

Revisions to DEP's Surface Water Quality Standards<sup>3</sup> were made in 1996 to establish a system for efficient and effective regulation of CSOs. The revisions were based on the 1994 EPA CSO Policy, which encouraged states to review their Water Quality Standards in the context of CSOs.

• Class B or SB Class 3 cr SB requires the elimination of CSO impacts. Separation or relocation of CSOs will be required wherever it can be achieved based on the economic and technical analysis of the facilities planning process, and remains DEP's ultimate goal.

• Class B (CSO) or SB (CSO) Where elimination of CSOs is not economically feasible and the impacts from remaining CSO discharges will be minor, the segment will be identified as B(CSO). Overflow events may be allowed provided that certain conditions are met:

1. an approved facilities plan demonstrates that

<sup>3</sup> CSO discharges can cause violations of water quality standards and short-term impairment of uses. States are responsible for promulgating water quality standards under the federal Clean Water Act and parallel state laws. Water Quality Standards must be reviewed at least every three years. EPA regulations also generally govern the content of and establish an approval process for state water quality standards. Water bodies are classified as A, B, or C (SA, SB, or SC for

Water bodies are classified as A, B, or C (SA, SB, or SC for marine waters). All waters in Massachusetts are currently classified either Class A (use as a public water supply) or Class B ("fishable/swimmable" use).

The water quality standards establish goals for waters of the Commonwealth, as well as providing the basis for water qualitybased effluent limitations in NPDES permits. Because the standards establish goals, the actual quality of water in a water body may not be consistent with the standard. For example, the Charles River is Class B, but it does not fully support that classification because of CSOs and stormwater. allowing minor discharges is the most cost-effective option, and is limited to discharges which can meet water quality standards more than 95 percent of the time;

 2. DEP analyzes the attainability of uses and submits a Use Attainability Analysis to EPA, determining that achieving a greater level of CSO control is not feasible;
 3. existing uses, such as swimming beaches and shellfish beds, are protected; and

4. public participation is provided through permit issuance, facility planning, and notice in the Environmental Monitor.

• Variances Variances are short-term modifications in water quality standards, within the context of an NPDES/MA permit, as analyses are conducted and as progress is made to improve water quality. The standard for the segment will be modified only for the permittee receiving the variance, while clearly maintaining the higher standard for other discharges. A variance will be used where long-term attainability of the standard is uncertain, the CSO abatement plan includes phased implementation and/or the Department believes the standard may be attained within a relatively short timeframe. Variances must be reviewed at least every three years.

### General Discussion of Public Comment on Class B and B(CSO)

Based on a number of the comments received by DEP, it appears that the B(CSO) classification, and the requirement for complete elimination of CSO discharges to allow for removal of the CSO-impacted notation of CSO-impacted receiving waters to Class B or SB, has been misconstrued. DEP is able to maintain Class B standards for the currently CSO-impacted Neponset River, South and North Dorchester Bays and Constitution Beach because full and complete separation is proposed, has been deemed technically feasible, and will eliminate the discharges. Where elimination of CSOs is not feasible, the B(CSO) notation indicates that water quality will be effected when outfalls cannot be eliminated due to economic or technical constraints. In every case the Water Quality Standards already indicate the presence of CSO impacts, and DEP's approach to the regulation of CSO discharges is premised on its responsibility to reflect the reality of CSO discharges which cannot be eliminated.

### <u>Charles River Basin</u>

On December 29, 1997, EPA and DEP, with MWRA's concurrence, filed a Joint Motion with the Federal Court requesting a four (4) month extension for DEP decisionmaking on its Final Administrative Determinations for the Charles River. DEP's Tentative Administrative Determination continues to be that a variance is appropriate for the Charles,<sup>4</sup> to allow MWRA to

<sup>4</sup>At this point in time, full separation has been determined to be neither feasible nor cost-effective based on an assessment of project costs (approximately an additional \$500 million) to /\*conduct sampling and analysis of stormdrains to determine the relative merits of additional controls over stormwater as compared to additional CSO controls. DEP, EPA, EOEA, and the Charles River Watershed Association all have extensive commitments to assess or address stormwater impacts on the Charles. Conditions on the variance could include triggers so that a projected improvement in water quality from stormwater controls would require additional CSO controls.

The four month extension will allow DEP and EPA to evaluate the results of recent sampling data from the Charles and to discuss possible variance conditions, assuming a variance is the Final Determination. DEP will provide notice in the Environmental Monitor of its intent to make its Final Determination sufficiently in advance of issuance to allow for an additional public review and comment period.

## Mystic River/Alewife Brook

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DEP's Tentative Determinations solicited comment on two options for the Mystic River and Alewife Brook: B(CSO) or Variance. The Final Administrative Determination of Variance reflects public comments supporting further study of contribution of pollutants from sources other than CSOs under a variance.

#### Muddy River/ Back Bay Fens

Several commenters requested that a Class B designation for the Muddy River. Although the MWRA has selected the control strategy of sever separation, the most aggressive and expensive option, current information indicates that it is not technically feasible to <u>completely eliminate</u> all CSO discharges in the Stony Brook Area which impact the Muddy River. Therefore, the B(CSO) notation will indicate the presence of the few discharges that will remain despite the control strategy.

Others commenters proposed a Variance for the Muddy to "allow for assessment of additional information". As indicated previously, a variance is intended to be used as on a short-term basis where long-term attainability of the standard and/or ultimate level of CSO control are uncertain. In the context of the Charles, the additional analyses under a variance on the impacts of stormwater and CSO discharges will be used to ensure that further controls are not feasible or appropriate. For the Muddy, DEP knows the long-term solution is separation (which is considered the highest level of CSO control). In addition, it is unlikely that BWSC and DEP will have sufficient documentation to determine whether the remaining CSO overflows can be completely eliminated for at least 8 to 10 years, which is not considered "short-term."

However, DEP will be incorporating an interim schedule into BWSC's CSO/Stormwater NPDES Permit (currently undergoing final

separate all combined sewers in the basin and resultant benefits to users and resources of the receiving water.

/review at EPA) to require that BWSC periodically report to EPA and DEP on the status of the separation work in the Stony Brook Area and complementary hydraulic analyses of the overall sewer/stormwater systems to assess the potential for further limiting and/or completely eliminating CSO overflows to the Charles or Muddy Rivers. If and when a feasible solution is determined, the discharge will no longer meet the requirements for B(CSC) and DEP will modify the permit to remove the CSC discharge and will revoke the B(CSO) designation so that the Muddy River will be classified as B. It is important to understand that the B(CSO) classification will only allow for CSO activations and discharges to the extent defined in the FFP, and does not affect the need for full compliance with Class B standards by other discharges to the Muddy River.

In addition, DEP will review the NPDES/MA Stormwater permit for consistency with its Stormwater Policy as applicable and will incorporate any additional stormwater performance standards necessary to ensure that water quality in the Muddy River improves. DEP's approach to the Muddy is both more appropriate and as environmentally protective, as compared to the use of a variance.

# Next Steps: Development of Variance Conditions and Additional Water Quality Standards Review

Over the next few months DEP will be drafting the conditions for inclusion into Variances for the Upper Mystic River/Alewife Brook (and also possibly for the Charles River) and reviewing them with EPA and MWRA. DEP will notice their availability in the Environmental Monitor for public review and comment prior to their finalization and inclusion in MWRA's (and possibly other) draft NPDES Permit.

In accordance with the Federal Clean Water Act 33 U.S.C. §1313, states must reassess all receiving water classifications every three years (triennial review). As part of that reassessment, DEP will specifically review all B(CSO) and SB(CSO) designations to determine if revisions should be made to the designations and/or modifications to the currently approved CSC controls.

December 31, 1997

leen O'Dannell Arleen O'Donnell, Assistant Commissioner Bureau of Resource Protection

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