AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, 33 U.S.C. §§1251 et seq., and the Massachusetts Clean Waters Act, as amended, Massachusetts General Laws Chapter 21, §§26-53, the

City of Chelsea
Department on Public Works
380 Beecham Street
Chelsea, MA 02150

is authorized to discharge from:

4 Combined Sewer Overflow (CSO) outfalls listed in Attachment A

to the receiving waters named **Chelsea River and Boston Inner Harbor**, (Mystic River Basin), both Class SB (CSO) waters, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit shall become effective on the date of signature if no comments are received during public notice. If comments are received during public notice, this permit will become effective on the first day of the calendar month following sixty (60) days after the date of signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on April 11, 2003.

This permit consists of **8** pages, **Attachments A and B** in Part I, and 25 pages in Part II, the Standard Conditions.

Signed this day of , 2013

_____	_____
Ken Moraff, Acting Director	David Ferris, Director
Office of Ecosystem Protection	Massachusetts Wastewater Management Program
Environmental Protection Agency	Department of Environmental Protection
Region I	Commonwealth of Massachusetts
Boston, MA	Boston, MA

Part I. EFFLUENT LIMITATIONS AND OTHER PERMIT CONDITIONS

A. Effluent Limitations

1. During wet weather, the permittee is authorized to discharge combined stormwater and wastewaters that exceed the interceptor or regulator capacity as a result of precipitation inflow and precipitation-induced infiltration from combined sewer overflow outfalls listed in **Attachment A**. These discharges are authorized only during wet weather and are subject to the following effluent conditions and requirements:

   a. The permittee must continue to implement the Nine Minimum Controls (NMC) specified below and detailed further in Parts I.B. and I.C. of this permit upon the effective date of the permit.

      (1) Proper operation and regular maintenance programs for the sewer system and the combined sewer overflows.

      (2) Maximum use of the collection system for storage.

      (3) Review and modification of the pretreatment program to assure CSO impacts are minimized.

      (4) Maximization of flow to the Publicly Owned Treatment Works (POTW) for treatment [Deer Island – Massachusetts Water Resources Authority (MWRA].

      (5) Prohibition of dry weather overflows from CSOs.

      (6) Control of solid and floatable materials in CSOs.

      (7) Pollution prevention programs that focus on contaminant reduction activities.

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

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

   b. The authorized typical year discharge (activation) frequencies and volumes for the CSO discharges are limited as shown in **Attachment A.** Discharge frequencies and volumes are expected to vary from year to year as a function of rainfall amount and intensity.

   c. The permittee's discharges must meet Federal and State water quality standards (WQS).

B. Nine Minimum Controls (NMC) Implementation

Pursuant to the requirements of Part I.D.5 below, the permittee must review and update its NMC program no later than April 30th following the first full calendar year of this permit. Until the review and update of the NMC program described in Part I.D.5 is completed, the permittee shall continue to implement the NMCs in accordance with the documentation submitted in the City's CSO Annual Report in April of 2012, which encompassed the 2011 calendar year. The permittee may modify its NMC program to enhance its effectiveness, but the NMC program shall exceed the minimum implementation levels in Part I.C.

C. Minimum Implementation Levels

1. Each CSO structure/regulator, pumping station and/or tidegate shall be routinely inspected, at a minimum of once per month, to ensure that it is in good working condition and adjusted to minimize combined sewer discharges and tidal surcharging (NMC # 1, 2 and 4). The following inspection results shall be recorded: the date and time of the inspection, the general condition of the CSO structure, and whether the structure is operating satisfactorily. If maintenance is necessary, the permittee shall record, at a minimum: the description of the necessary maintenance, the date the necessary maintenance was performed, and whether the observed problem was corrected. The permittee shall maintain all records of inspections for at least eight (8) years.

2. Discharges to the combined system of septage, holding tank wastes or other material which may cause a visible oil sheen or containing floatable materials are prohibited during wet weather when CSO discharges may be active. (NMC# 3, 6, and 7)

3. Dry weather overflows (DWOs) are prohibited (NMC# 5). All dry weather sanitary and/or industrial discharges from CSO outfalls must be reported to EPA and MassDEP within 24 hours in accordance with the reporting requirements for plant bypass. See Part I.E. (Unauthorized Discharges) and Part II.D.1.e. of this permit.

4. The permittee shall quantify and record all discharges from each combined sewer overflow outfall (NMC# 9) with the metering equipment that is in place. The permittee shall undertake all actions necessary to ensure that the CSO metering equipment is properly maintained and operated in order to provide accurate measurements of CSO flows and shall replace such meters as necessary. The following information must be recorded for each CSO outfall and for each discharge event:

    - Estimated duration (hours) of discharge;
    - Estimated volume (gallons) of discharge;

- National Weather Service precipitation data from the nearest gauge where precipitation is available at daily (24-hour) intervals and the nearest gauge where precipitation data at minimum of one-hour intervals is available to the permittee. Cumulative precipitation per discharge event shall be provided; and
- A description of whether the discharge activation and volume for each CSO outfall is in accordance with the Massachusetts Water Resources Authority (MWRA) Final CSO Facilities Plan or updates to these documents.

The permittee shall maintain all records of discharges for at least eight (8) years after the expiration date of this permit.

5. The permittee shall maintain identification signs for all CSO outfall structures (NMC# 8). The signs shall be located at or near the CSO outfall structures and be readable by the public both from the shore and from instream locations. These signs shall be a minimum of 12 x 18 inches in size, with white lettering against a green background, and shall contain the following language, at a minimum:

WARNING:*
CITY OF CHELSEA
DEPARTMENT OF PUBLIC WORKS
WET WEATHER SEWAGE DISCHARGE OUTFALL (discharge serial number)

***** For existing signs which otherwise meet all of the requirements of this section, the word "Warning" need not be added.

Where easements over property not owned by the permittee must be obtained to meet this requirement, the permittee shall identify the appropriate landowners and obtain the necessary easements, to the extent practicable.

The permittee, to the extent practicable, shall add a universal symbol to its warning signs reflecting a CSO outfall, or place additional signs in languages other than English based on notification from the EPA and the MassDEP or on the permittee's own determination that the primary language of a substantial percentage of the residents in the vicinity of a given outfall structure is not English.

6. The permittee shall update its website to include general information regarding CSOs, including their potential health impacts, locations of its CSO discharges, the overall status of all CSO abatement programs, and the most recent information on all CSO outfall activations and volumes, including the latest Annual Report filed under this permit as detailed in Part I.D. below. (NMC# 8)

D. Annual Report

By April 30th of each year the permittee shall submit a report which includes the following information:

1. Activation frequencies and discharge volumes for each CSO outfall listed on **Attachment A** during the previous calendar year. The permittee shall continue to utilize the outfall metering equipment at each one of its outfalls to quantify the activation frequency and discharge volume of overflow events. This metering equipment was installed in July of 2003 and was described in the City's 2011 Annual Report. Activation frequencies and discharge volumes shall continue to be reported in accordance with this method. Changes to any of the metering equipment at any outfall shall be described in the Annual Report.

2. Precipitation during the previous year for each day, including total rainfall, peak intensity, and average intensity.

3. Status of the implementation of CSO abatement work for which the permittee is directly responsible in accordance with the MWRA Final CSO Facilities Plan, the Federal court order [US v. MDC., et al., No. 85-0489 (D. Mass)], as amended by the Second Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflow Control (as incorporated into the Federal Court Order on April 27, 2006), and any related, subsequent documents. The "Second Stipulation" document is included as **Attachment B**. A description of all additional sewer separation projects that the permittee is undertaking, including a status and schedule of any such projects.

4. For the outfalls listed in **Attachment A,** provide the following information in the Annual Report for years 1 and 3 of this permit (Year 1 is defined as the first full calendar year under this permit), using the updated MWRA model (or equivalent) for comparison:

   a. A comparison between the precipitation for the previous year and the precipitation in the typical year under future planned conditions used in the MWRA Final CSO Facilities Plan, or subsequent document, whichever is appropriate. This comparison shall include the number of discharge events and size (volume) of such events (including recurrence interval).

   b. For each CSO outfall, a comparison between the activation volume and frequency for the previous year and the volume and frequency expected during a typical year under future planned conditions.

c. An evaluation of whether the CSO activation volumes and frequencies for the previous year are in accordance with the estimates in the MWRA Final CSO Facilities Plan, given the precipitation which occurred during the year, and the CSO abatement activities which have been implemented. Where CSO discharges are determined to be greater than the activation frequency or volume in either document above, the permittee shall include their assessment of such result, a discussion of remaining CSO abatement activities, and an assessment of the impact of those projects on attaining the level of CSO control identified in the relevant document, or any amendments thereto.

5. A summary of modifications to the approved NMC program which have been evaluated and a description of those which will be implemented during the upcoming year. In the first annual report based on a full calendar year and submitted in accordance with this permit (due by **April 30, 2014**), the permittee shall submit an updated nine minimum control plan that reviews the current controls and updates them to enhance their effectiveness. The updated NMC plan shall include or exceed all of the minimum implementation levels described in Part I.C.

6. A certification stating that the previous calendar year's monthly inspections were conducted, their results recorded, and records maintained.

E. Unauthorized Discharges

This permit only authorizes the discharge from those outfalls listed in **Attachment A** and only in accordance with the terms and conditions of this permit. Discharges of wastewater from CSO outfalls during dry weather or from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported to EPA and MassDEP in accordance with Part II. D.1.e. (1) of this permit (Twenty-four hour reporting). An SSO Reporting Form that includes MassDEP Regional Office telephone numbers is available on-line at: http://www.mass.gov/dep/water/approvals/surffms.htm#sso.

F. Notice of Elimination

The permittee shall give notice of elimination or change in status of any outfall listed in **Attachment A** as soon as possible and in writing to the Director of the Office of Ecosystem Protection at EPA and to the Director of the Wastewater Management Program at MassDEP.

G. Certification and Signature of Reports

All reports required by the permit and other information requested by the EPA shall be signed and certified in accordance with Part II.D.2. of this permit.

H. Report Submission

Signed and dated originals of all notifications and reports required herein, shall be submitted to the EPA and the State at the following addresses:

U.S. Environmental Protection Agency
Water Technical Unit (OES04-SMR)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

The State Agency is:

Massachusetts Department of Environmental Protection
Bureau of Resource Protection
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887
Attention: Kevin Brander

Duplicate signed copies of all reports or notifications required above shall be submitted to the State at the following addresses:

Massachusetts Department of Environmental Protection
1 Winter Street
Boston, MA 02108
Attention: David Ferris

and

Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

Any verbal reports, if required in Parts I and/or II of this permit, shall be made to both EPA and to MassDEP.

I. Retention of Records

The permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and records of all other data required by or used to demonstrate compliance with this permit, for at least eight (8) years. This time period may be modified by alternative provisions of this permit or extended by request of the Director of EPA's Office of Ecosystem Protection at any time.

J. State Permit Conditions

This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and 314 C.M.R. 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.

This authorization also incorporates the state water quality certification issued by MassDEP under § 401(a) of the Federal Clean Water Act, 40 C.F.R. 124.53, M.G.L. c. 21, § 27 and 314 CMR 3.07. All of the requirements (if any) contained in MassDEP's water quality certification for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 CMR 3.11.

Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit shall remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.

Attachment A

MWRA Long Term CSO Control Plan Discharge Limitations
Chelsea CSO Outfall Discharges

Typical Year Rainfall With Long Term CSO Control Plan[1]		
Outfall	**Activation Frequency[2]**	**Volume (MG)[3]**
CHE002	4	0.22
CHE003	3	0.04
CHE004	3	0.32
CHE008	0	0.0

1. The most current estimates of CSO discharge frequency and volume expected in a typical year after full implementation of the CSO abatement projects as documented in Exhibit B of the "Second Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflow Control" (Second Stipulation), March 15, 2006 - United States District Court for the District of Massachusetts.

2. Activations per year

3. MG = Million Gallons per year

ATTACHMENT B

UNITED STATES DISTRICT COURT
for the
DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA, Plaintiff, v. METROPOLITAN DISTRICT COMMISSION, et al., Defendants.	CIVIL ACTION No. 85-0489-RGS
CONSERVATION LAW FOUNDATION OF NEW ENGLAND, INC., Plaintiff, v. METROPOLITAN DISTRICT COMMISSION, Defendants.	CIVIL ACTION No. 83-1614-RGS

SECOND STIPULATION OF THE UNITED STATES
AND THE MASSACHUSETTS WATER RESOURCES AUTHORITY
ON RESPONSIBILITY AND LEGAL LIABILITY FOR
COMBINED SEWER OVERFLOW CONTROL

The Massachusetts Water Resources Authority ("Authority") and the United States, on behalf of the Environmental Protection Agency ("EPA"), hereby agree and stipulate as follows:

1. The purpose of this Second Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflow Control ("Second Stipulation") is to terminate the February 27, 1987, Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflows (the "1987 Stipulation") and replace it with this Second Stipulation that reflects developments and progress in the control of combined sewer overflow ("CSO") discharges to Boston Harbor and its tributaries that have taken place since 1987. The 1987 Stipulation shall remain in effect until this Second Stipulation goes into effect. This Second Stipulation shall take effect, and the 1987 Stipulation shall terminate, upon approval by the Court in the above-captioned action of the Joint Motion of the United States and the Massachusetts Water Resources Authority To Amend Schedule Six with Respect to The Charles River, Alewife Brook and East Boston.

2. The Authority's Long-Term Combined Sewer Overflow ("CSO") Control Plan ("LTCP") presently consists of the Authority's July 31, 1997, Final Combined Sewer Overflow Facilities Plan and Environmental Impact Report (the "1997 Facilities Plan"), as modified by the planning documents identified in the attached Exhibit "A," entitled, MWRA Long-Term CSO Control Plan Facilities Planning Documentation.

3. The CSO outfalls that are the subject of the Authority's LTCP include the outfalls listed in Exhibit "B" hereto, entitled, "Summary of Typical

Year CSO Activation Frequency and Volume." The CSO outfalls identified with the prefix "MWR" are owned or operated by the Authority. The CSO outfalls identified with a prefix "BOS," "CAM," "CHE," or "SOM," are owned and operated by member municipalities (Boston, Cambridge, Chelsea, or Somerville, respectively), except that the Union Park Pump Station ("UPPS") is jointly operated by the Authority and the City of Boston.

4. With respect to all of the CSO outfalls within or hydraulically connected to the Authority's sewer system, including the outfalls identified in Exhibit "B" hereto, the Authority accepts legal liability to undertake such corrective action as may be necessary to implement the CSO control requirements set forth in Schedule Six and related orders of the Court in the above-captioned action, and to meet the levels of CSO control (including as to frequency of CSO activation and as to volume of CSO discharge) described in the Authority's Long-Term CSO Control Plan. Whether the Authority has met the levels of CSO control in its Long-Term CSO Control Plan shall be determined by the EPA and the Massachusetts Department of Environmental Protection. With respect to all CSO outfalls owned or operated by the Authority, including the CSO outfalls identified in Exhibit "B" identified with the prefix "MWR," and including the Union Park Pump Station, the Authority also accepts legal liability to undertake such future corrective action as may be necessary to meet the CSO control requirements of the Clean Water Act, 33 U.S.C. § 1251 et seq. The Authority does not accept liability for alleged past

violations of the CSO provisions of NPDES Permit No. MA0102351 (issued in 1976 and transferred to the Authority in 1985) prior to February 27, 1987.

5. This stipulation is not intended to and does not limit the Court's power to find, or any party's right to seek, liability for past or continuing violations of federal law or to enforce compliance with that law.

Massachusetts Water Resources Authority

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Boston, MA 02203
(617) 918-1735

Dated: March 15, 2006

B3131253.1

Exhibit A
to
Second Stipulation

MWRA Long-Term CSO Control Plan - Facilities Planning Documentation

Planning Document	Project	Receiving Water
Final Combined Sewer Overflow Facilities Plan and Environmental Impact Report, July 31, 1997	Hydraulic Relief for CAM005	Upper and Lower Charles River Basin
	Stony Brook Sewer Separation	
	Floatables Control at CAM007, CAM009, CAM011 and CAM017	
	Baffle Manhole Separation at SOM 001 and SOM 006-007	Alewife Brook/Upper Mystic River
	Hydraulic Relief for BOS 017[1]	Mystic/Chelsea Confluence
	Chelsea Branch Relief Sewer	
Minor modifications were addressed in Notice of Project Change, March 1999	Trunk Sewer Relief for CHE 002-004	
	Outfall Repairs and Floatables Control at CHE 008	
	Storage Conduit for BOS 019	Upper Inner Harbor
	Detention/Treatment Facility at Union Park Pump Station	Fort Point Channel
	South Dorchester Bay Sewer Separation	South Dorchester Bay
	Constitution Beach Sewer Separation	Constitution Beach
	Neponset River Sewer Separation	Neponset River
The following reports <u>supplement</u> information in the Final CSO Facilities Plan and Environmental Impact Report, July 31, 1997		
Upgrades to Existing CSO Facilities, Supplemental Environmental Impact Report, September 30, 1998	Cottage Farm Facility Upgrade	Upper Charles River Basin
	Prison Point Facility Upgrade[2]	Upper Inner Harbor
	Somerville Marginal Facility Upgrade	Upper Mystic River; Mystic/Chelsea Confluence
	Commercial Point Facility Upgrade	South Dorchester Bay
Upgrades to the Fox Point CSO Treatment Facility, Supplemental Environmental Impact Report, December 31, 1998	Fox Point Facility Upgrade	South Dorchester Bay
Fort Point Channel CSO Storage Conduit Notice of Project Change, June 2003, and MWRA Long Term CSO Control Plan, Fort Point Channel Sewer Separation and System Optimization Project, Level of Control at CSO Outfalls BOS072 and BOS073, letter dated June 7, 2004.	Sewer Separation for BOS072 and BOS073	Fort Point Channel

Exhibit A
to
Second Stipulation

MWRA Long-Term CSO Control Plan - Facilities Planning Documentation

Planning Document	Project	Receiving Water
Re-Assessing Long Term Floatables Control for Outfalls MWR018, 019 and 020, February 2001 Report on Re-Assessment of CSO Activation Frequency and Volume for Outfall MWR010, April 2001, and supplemental letter report (Metcalf & Eddy, Inc.), May 31, 2001	Regionwide Floatables Controls and Outfall Closing Projects	Regionwide
Final Variance Report for Alewife Brook and the Upper Mystic River, July 2003, and supplemental letter report (Metcalf & Eddy, Inc.), July 8, 2003	Sewer Separation at CAM004 and CAM400	Alewife Brook
	Interceptor Connection Relief and Floatables Control at CAM002, CAM401B and SOM01A, and Floatables Control at CAM001 and CAM401A	
	Control Gate/Floatables Control at Outfall MWR003 and MWRA Rindge Avenue Siphon Relief	
East Boston Branch Sewer Relief Project Reevaluation Report, February 2004 Recommendations and Proposed Schedule for Long-Term CSO Control for the Charles River, Alewife Brook and East Boston, August 2, 2005	Interceptor Relief For BOS003-014	Mystic/Chelsea Confluence; Upper and Lower Inner Harbor
Supplemental Facilities Plan and Environmental Impact Report on the Long-term CSO Control Plan for North Dorchester Bay and Reserved Channel, April 27, 2004	North Dorchester Bay Storage Tunnel and Related Facilities	North Dorchester Bay
	Pleasure Bay Storm Drain Improvements	
	Morrissey Boulevard Storm Drain	
	Reserved Channel Sewer Separation	Reserved Channel
Recommendations and Proposed Schedule for Long-Term CSO Control for the Charles River, Alewife Brook and East Boston, August 2, 2005, and MWRA Revised Recommended CSO Control Plan for the Charles River, Typical Year CSO Discharge Activations and Volumes, November 15, 2005.	Brookline Connection, Cottage Farm Overflow Chamber Interconnection and Cottage Farm Gate Control	Upper and Lower Charles River Basin
	Brookline Sewer Separation	
	Bulfinch Triangle Sewer Separation	
	Charles River Valley/South Charles Relief Sewer Gate Controls	
	Evaluation of Additional Charles River Interceptor Interconnection Alternatives	

(1) Also "MWRA Long-Term CSO Control Plan Target CSO Activation Frequency and Volume by Outfall," letter dated December 9, 2005; "MWRA Long-Term CSO Control Plan Response to Additional EPA Questions Regarding Prison Point Discharges," letter dated January 9, 2005 (2006).

(2) Also "MWRA Long-Term CSO Control Plan Target CSO Activation Frequency and Volume by Outfall," letter dated December 9, 2005.

Exhibit B
to
Second Stipulation

SUMMARY OF TYPICAL YEAR CSO ACTIVATION FREQUENCY AND VOLUME

OUTFALL	TYPICAL YEAR		REFERENCE (*)
	LONG TERM CONTROL PLAN 2005 (*)		
	Activation Frequency	Volume (MG)	
ALEWIFE BROOK[1]			
CAM001	5	0.19	5
CAM002	4	0.69	5
MWR003	5	0.98	5
CAM004	To be closed	N/A	5
CAM400	To be closed	N/A	5
CAM401A	5	1.61	5
CAM401B	7	2.15	5
SOM001A	3	1.67	5
SOM001	Closed	N/A	
SOM002A	Closed	N/A	
SOM003	Closed	N/A	
SOM004	Closed	N/A	
TOTAL		**7.29**	
UPPER MYSTIC RIVER			
SOM007A/MWR205A (Somerville Marginal)	3	3.48	
SOM007	Closed	N/A	
TOTAL		**3.48**	
MYSTIC / CHELSEA CONFLUENCE			
MWR205 (Somerville Marginal)	39	60.58	
BOS013	4	0.54	6
BOS014	0	0.00	6
BOS015	Closed	N/A	6
BOS017	1	0.02	9
CHE002	4	0.22	
CHE003	3	0.04	
CHE004	3	0.32	
CHE008	0	0.00	
TOTAL		**61.72**	
UPPER INNER HARBOR			
BOS009	5	0.59	6
BOS010	4	0.72	6
BOS012	5	0.72	6
BOS019	2	0.58	
BOS050	Closed	N/A	
BOS052	Closed	N/A	
BOS057	1	0.43	
BOS058	Closed	N/A	
BOS060	0	0.00	
MWR203 (Prison Point)	30	335.00	1, 9
TOTAL		**338.04**	
LOWER INNER HARBOR			
BOS003	4	2.87	6
BOS004	5	1.84	6
BOS005	1	0.01	6
BOS006	4	0.24	6
BOS007	6	1.05	6
TOTAL		**6.01**	

Exhibit B
to
Second Stipulation

SUMMARY OF TYPICAL YEAR CSO ACTIVATION FREQUENCY AND VOLUME

OUTFALL	TYPICAL YEAR		REFERENCE (*)
	LONG TERM CONTROL PLAN 2005 (*)		
	Activation Frequency	Volume (MG)	
CONSTITUTION BEACH			
MWR207	Closed	N/A	
TOTAL		**0.00**	
FORT POINT CHANNEL			
BOS062	1	0.01	
BOS064	0	0.00	
BOS065	1	0.06	
BOS068	0	0.00	
BOS070			
BOS070/DBC	3	2.19	3
UPPS	17	71.37	
BOS070/RCC	2	0.26	
BOS072	0	0.00	4
BOS073	0	0.00	4
TOTAL		**73.89**	
RESERVED CHANNEL			
BOS076	3	0.91	7
BOS078	3	0.28	7
BOS079	1	0.04	7
BOS080	3	0.25	7
TOTAL		**1.48**	
NORTHERN DORCHESTER BAY			
BOS081	0 / 25 year	N/A	
BOS082	0 / 25 year	N/A	
BOS083	0 / 25 year	N/A	
BOS084	0 / 25 year	N/A	
BOS085	0 / 25 year	N/A	
BOS086	0 / 25 year	N/A	
BOS087	0 / 25 year	N/A	
TOTAL		**0.00**	
SOUTHERN DORCHESTER BAY			
BOS088	To be closed	N/A	
BOS089 (Fox Point)	To be closed	N/A	
BOS090 (Commercial Point)	To be closed	N/A	
TOTAL		**0.00**	
UPPER CHARLES			
BOS032	Closed	N/A	
BOS033	Closed	N/A	
CAM005	3	0.84	8
CAM007	1	0.03	8
CAM009	2	0.01	8
CAM011	0	0.00	8
TOTAL		**0.88**	

Exhibit B
to
Second Stipulation

SUMMARY OF TYPICAL YEAR CSO ACTIVATION FREQUENCY AND VOLUME

OUTFALL	TYPICAL YEAR		REFERENCE (*)
	LONG TERM CONTROL PLAN 2005 (*)		
	Activation Frequency	Volume (MG)	
LOWER CHARLES			
BOS028	Closed	N/A	
BOS042	Closed	N/A	
BOS049	To be closed	N/A	
CAM017	1	0.45	8
MWR010	0	0.00	2
MWR018	0	0.00	1
MWR019	0	0.00	1
MWR020	0	0.00	1
MWR021	Closed	N/A	
MWR022	Closed	N/A	
MWR201 (Cottage Farm)	2	6.30	8
MWR023	2	0.13	
SOM010	Closed	N/A	
TOTAL		**6.88**	
NEPONSET RIVER			
BOS093	Closed	N/A	
BOS095	Closed	N/A	
TOTAL		**0.00**	
BACK BAY FENS			
BOS046	2	5.38	
TOTAL		**5.38**	

(*) Long-term Control Plan activation frequency and volumes were established in the 1997 CSO Facilities Plan and Enviromental Impact Report or as noted in the "Reference" column.

1- Re-assessing Long Term Floatables Control for Outfalls MWR018, 019 and 020, February 2001.

2- Report on Re-Assessment of CSO Activation Frequency and Volume for Outfall MWR010, April 2001, and supplemental letter report (Metcalf & Eddy, Inc.), May 31, 2001.

3- Report on Re-Assessment of CSO Activation Frequency and Volume to Dorchester Brook Conduit and Outfall BOS086, January 2001 and supplemental letter report (Metcalf & Eddy, Inc.), June 28, 2001.

4- MWRA Long Term CSO Control Plan, Fort Point Channel Sewer Separation and System Optimization Project, Level of Control at CSO Outfalls BOS072 and BOS073, June 7, 2004.

5- Final Variance Report for Alewife Brook and the Upper Mystic River, July 2003, and supplemental letter report (Metcalf &Eddy, Inc.), July 8, 2003.

6- East Boston Branch Sewer Relief Project Reevaluation Report, February 2004.

7- Supplemental Facilities Plan and Environmental Impact Report on the Long-term CSO Control Plan for North Dorchester Bay and Reserved Channel, April 27, 2004.

8- Recommendations and Proposed Schedule for Long-Term CSO Control for the Charles River, Alewife Brook and East Boston, August 2, 2005; MWRA Revised Recommended CSO Control Plan for the Charles River, Typical Year CSO Discharge Activations and Volumes, November 15, 2005; MWRA Long-Term CSO Control Plan, Response to Additional EPA Questions Reagarding Prison Point Discharges, January 9, 2005 (2006).

9- MWRA Long Term CSO Control Plan Target CSO Activation Frequency and Volume by Outfall, December 9, 2005.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

FACT SHEET

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 NUMBER: MA0101877

PUBLIC NOTICE START AND END DATES: March 20, 2013 – April 18, 2013

NAME AND MAILING ADDRESS OF APPLICANT:

City of Chelsea
Department of Public Works
380 Beecham Street
Chelsea, Massachusetts 02150

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

4 Combined Sewer Overflow (CSO) Outfalls (See Figure 1)

RECEIVING WATERS: Chelsea River and Boston Inner Harbor
USGS Hydrologic Code #01090001, Mystic River Watershed and Boston Harbor

RECEIVING WATER CLASSIFICATION: Class SB (CSO)

Contents

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

The City of Chelsea has applied to the U.S. Environmental Protection Agency ("EPA") for the reissuance of its NPDES permit to discharge from four (4) combined sewer overflow outfalls (CSOs) into the designated receiving waters. These CSO outfall discharge locations are shown on **Figure 1.**

The City's current permit was issued on April 11, 2003, and expired on June 10, 2008, five years from the effective date. EPA received a completed permit renewal application from the applicant dated March 18, 2009. Since the permit renewal application was deemed complete by EPA, the permit has been administratively continued pursuant to 40 CFR § 122.6.

II. Description of Discharges

The City of Chelsea owns and operates a combined sewer system that comprises about 70% of the City's wastewater sewer system. A combined sewer system is a wastewater collection system owned by a State or municipality [as defined by Section 502(4) of the Clean Water Act (CWA)] that conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and stormwater through a single-pipe system to a publicly owned treatment works (POTW) treatment plant [as defined in 40 CFR 403.3(p)]. The wastewater collected in this system is transported to the Massachusetts Water Resources Authority's (MWRA) Deer Island Wastewater Treatment Plant. There are four (4) CSO outfalls that discharge from the combined sewer system under certain wet weather conditions. A CSO is the discharge from a combined sewer system at a point prior to the POTW. CSO outfalls are point sources subject to NPDES permit requirements including both technology-based and water quality-based requirements of the CWA. CSOs occur during wet weather[1] when the flow in the combined sewer system exceeds the system's capacity and for the Chelsea CSO outfalls, activation (discharge) typically occurs during periods of heavy rain and is dependent on the precipitation intensity and the tide elevation. CSOs are distinguished from bypasses which are "intentional diversions of waste streams from any portion of a treatment facility" (40 CFR §122.41(m)).

The City began separating its combined collection system (building separate sanitary sewage and storm water systems) in the early 1970s. Work to further abate CSOs has continued according to a schedule in a federal court order [U.S. v. M.D.C., et al., No. 85-0489 (D. Mass)] and includes further sewer separation, hydraulic relief projects, and floatables control structures. The frequency and volume of CSO discharges have been reduced as CSO abatement projects have been completed. However, as will be discussed further in Section IV, the required projects were not expected to eliminate CSO discharges entirely.

[1] Flows in combined sewers can be classified into two categories: dry weather flow and wet weather flow. Dry weather flow is the flow that results from domestic sewage, groundwater infiltration, commercial and industrial wastewaters, and any other non-precipitation related flows (e.g. tidal infiltration). Wet weather flow includes all of the dry weather flow components plus storm water flow, including snow melt runoff (see 40 CFR 122.26(b)(13). The draft permit prohibits dry weather discharges from the City's CSO outfalls.

Modeled estimates of the number of CSO activations and flow volumes which are expected in a typical year for each CSO outfall after full implementation of the CSO abatement projects as documented in Exhibit B of the "Second Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflow Control" (Second Stipulation) are shown in **Permit Attachment A.**

III. Receiving Water Description

The Massachusetts Surface Water Quality Standards, found at 314 CMR 4.00, designate Boston Inner Harbor (Segment MA70-02), and the Chelsea River (Segment MA71-06), as Class SB (CSO) waters. Outfall CHE002 discharges to the Boston Inner Harbor and Outfalls CHE003, CHE004, and CHE008 discharge to the Chelsea River.

Class SB waters are described in the MA SWQS (314 CMR 4.05(4)(b)) and designated as a habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation. In certain waters, habitat for fish, other aquatic life and wildlife may include, but is not limited to, seagrass. Where designated in the tables to 314 CMR 4.00 for shellfishing, these waters shall be suitable for shellfish harvesting with depuration (Restricted and Conditionally Restricted Shellfish Areas). These waters shall have consistently good aesthetic value. Waters with a B(CSO) or SB(CSO) designation are occasionally subject to short-term impairment of swimming or other recreational uses due to untreated CSO discharges in a typical year [314 CMR 4.06(11)]. The B(CSO) designation for these waters was adopted by MassDEP and approved by EPA, based on information included in MWRA's July 1997 Combined Sewer Overflow Plan and Environmental Impact Report. See Section V.A below for detailed information regarding this process.

The Chelsea River is an urban tidal river flowing from the mouth of Mill Creek, between Chelsea and Revere, to Boston's Inner Harbor, between East Boston and Chelsea. For centuries, the Chelsea River has been flanked by working industries, many of which used the channel to transport raw materials and finished goods. The Chelsea River is officially classified as a Designated Port Area: a stretch of waterfront set aside primarily for industrial and commercial use. Chelsea River, which is also locally known as Chelsea Creek, is designated as a Class SB (CSO) water body by the State of Massachusetts.

Sections 305(b) and 303(d) of the CWA require that States complete a water quality inventory and develop a list of impaired waters. Specifically, Section 303(d) of the CWA requires States to identify those water bodies that are not expected to meet surface water quality standards after the implementation of technology-based controls, and as such, require the development of a Total Maximum Daily Load (TMDL) for each pollutant that is prohibiting a designated use(s) from being attained. In Massachusetts, these two evaluations have been combined into an Integrated List of Waters. The integrated list format provides the status of all assessed waters in a single, multi-part list.

Boston Inner Harbor is listed on the *Final Massachusetts Year 2010 Integrated List of Waters*[2] and on the *Proposed Massachusetts Year 2012 Integrated List of Waters*[3] as a Category 5 waterbody, which are those classified as "Waters requiring a TMDL". The pollutants and conditions contributing to this impairment are as follows: fecal coliform, *Enterococcus*, dissolved oxygen, and Polychlorinated Biphenyls (PCBs) in fish tissue.

The Chelsea River is listed on the *Final Massachusetts Year 2010 Integrated List of Waters* and on the *Proposed Massachusetts Year 2012 Integrated List of Waters*, as a Category 5 waterbody. The pollutants and conditions contributing to this impairment are turbidity, taste and odor, petroleum hydrocarbons, dissolved oxygen, PCBs in fish tissue, fecal coliform, unionized ammonia, and floatables/debris. Primary and secondary contact uses are also impaired in this waterbody. Shellfishing is also impaired for the entire stretch of this segment due to a Massachusetts Division of Marine Fisheries (MarineFisheries) prohibition. These impairments are due mainly to historic spills of petroleum, the continued use of above ground storage tanks in the adjacent communities and associated cargo loading and unloading, and the general conditions of a high density urbanized area.

MassDEP is required under the CWA to develop a TMDL for waterbodies that are identified as impaired. A TMDL is essentially a pollution budget designed to restore the health of a water body. A TMDL first identifies the source(s) of the pollutant from direct and indirect discharges in order to next determine the maximum amount of pollutant (including a margin of safety) that can be discharged to a specific water body while maintaining water quality standards for designated uses. It then outlines a plan to meet the goal. No TMDLs have been drafted or finalized for either of these river segments.

IV. Permit Basis - Statutory and Regulatory Authority

A. Regulatory Background

The Clean Water Act (CWA) prohibits the discharge of pollutants to waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality-based effluent limitations and other requirements including monitoring and reporting. The draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and applicable State regulations. The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122, 124, 125, and 136. In this permit EPA considered (a) technology-based requirements, (b) water quality-based requirements, and (c) all limitations and requirements in the current/existing permit, when developing the permit limits.

CSO outfalls are point source discharges subject to NPDES permit requirements, including technology-based and water quality-based requirements of the CWA. Pursuant to a federal court decision, (Montgomery Environmental Coalition vs. Costle [646F.2d 568 (D.C. Cir 1980)] CSOs

[2] http://www.mass.gov/dep/water/resources/10list6.pdf
[3] http://www.mass.gov/dep/water/resources/12list2.pdf

are not subject to secondary treatment standards found in Section 301(b)(1)(B) of the CWA. Rather, CSOs are subject to technology-based requirements applicable to discharges other than publicly owned treatment works, found in Sections 301(b)(1)(B), 301(b)(2)(A) and 301(b)(2)(D). Pursuant to Section 301(b)(1)(C) of the CWA, CSOs are also subject to effluent limitations based on water quality standards.

On April 19, 1994 EPA published the National CSO Control Policy (59 FR 18688). The purpose of the National CSO Control Policy (the CSO Policy) was to establish a consistent national approach for controlling discharges from CSOs to the Nation's waters. The CSO Policy reiterates the goals of the 1989 National Combined Sewer Overflow (CSO) Control Strategy, which were:

- To ensure that if the CSO discharges occur, they are only as a result of wet weather;
- To bring all wet weather CSO discharge points into compliance with the technology based requirements of the CWA and applicable federal and state water quality standards; and
- To minimize water quality, aquatic biota, and human health impacts from wet weather flows.

To achieve these goals, the CSO Control Policy recommended technology–based limits developed using best professional judgment[4] (BPJ) and also recommended that each combined sewer system develop and implement a long-term CSO control plan (LTCP) that will ultimately result in compliance with the requirements of the CWA.

In 2001, Congress added Section 402(q) to the CWA to specifically address CSOs by stating that "Each permit, order, or decree issued pursuant to this Act after the date of enactment of this subsection for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994."

The CSO conditions in the draft permit are consistent with the National CSO Control Policy.

B. Technology-based requirements

As discussed above, EPA's CSO Policy recommended technology-based effluent limitations for CSOs using best professional judgment. The policy establishes the minimum technology-based requirement as the implementation of the nine minimum controls (NMCs). The NMCs are:

1. Proper operation and regular maintenance programs for the sewer system and the CSOs;
2. Maximize use of the collection system for storage;
3. Review and modification of pretreatment requirements to assure CSO impacts are minimized;

[4] Section 402(a)(1)(B) of the CWA provides the authority to establish case-by case technology–based limitations. 40 CFR 125.3 establishes requirements and factors to be considered in establishing case-by-case technology–based limits using best professional judgment (BPJ). See specifically 125.3 (c)(2) and 125.3(d).

4. Maximization of the 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 CSO Policy required CSO communities to submit documentation of their implementation of the NMCs by January 1, 1997. The City of Chelsea submitted its documentation on December 31, 1996 as part of MWRA's submittal. The draft permit requires continued implementation of the NMC program, which was last updated in the City's CSO Annual Report in April of 2012, which encompassed the 2011 calendar year. The draft permit also requires that the City review and update its program no later than April 30th following the first full year of the permit and authorizes modifications to the NMC program during the term of the permit to enhance its effectiveness, while requiring that certain minimum controls be maintained in any such modifications. Part I.C. of the permit, the minimum implementation levels, provides specific minimum requirements that the permittee must fulfill in order to be in compliance with each of the NMCs.

C. Water Quality Based Requirements

Water quality-based limitations are required in NPDES permits when EPA and the State determine that effluent limits more stringent than technology-based limits are necessary to maintain or achieve state or federal water quality standards (WQS). See Section 301(b)(1)(C) of the CWA.

Receiving water requirements are established according to numerical and narrative standards adopted under state law for each water quality classification. When using chemical-specific numeric criteria to develop permit limits, both the acute and chronic aquatic-life criteria, expressed in terms of maximum allowable in-stream pollutant concentration, are used. Acute aquatic-life criteria are considered applicable to daily time periods (maximum daily limit) and chronic aquatic-life criteria are considered applicable to monthly time periods (average monthly limit). Chemical-specific limits are allowed under 40 CFR § 122.44(d)(1) and are implemented under 40 CFR § 122.45(d).

Narrative criteria from the State's WQS are often used to limit toxicity in discharges where (a) a specific pollutant can be identified as causing or contributing to the toxicity but the state has no numeric standard; or (b) toxicity cannot be traced to a specific pollutant.

EPA regulations require NPDES permits to contain effluent limits more stringent than technology-based limits where more stringent limits are necessary to maintain or achieve state or federal WQS. The permit must address any pollutant or pollutant parameter (conventional, non-conventional, toxic and whole effluent toxicity) that is or may be discharged at a level that

causes or has "reasonable potential" to cause or contribute to an excursion above any water quality criterion. See 40 CFR Section 122.44(d)(1). An excursion occurs if the projected or actual in-stream concentration exceeds the applicable criterion. In determining reasonable potential, EPA considers (a) existing controls on point and non-point sources of pollution; (b) pollutant concentration and variability in the effluent and receiving water as determined from the permit application, Monthly Discharge Monitoring Reports (DMRs), and State and Federal Water Quality Reports; (c) sensitivity of the species to toxicity testing; (d) known water quality impacts of processes on wastewater; and, where appropriate, (e) dilution of the effluent in the receiving water.

WQS consist of three parts: (a) beneficial designated uses for a water body or a segment of a water body; (b) numeric and/or narrative water quality criteria sufficient to protect the assigned designated use(s); and (c) antidegradation requirements to ensure that once a use is attained it will not be degraded. The Massachusetts Surface Water Quality Standards (MA SWQS), found at 314 CMR 4.00, include these elements. These standards require the state to "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." [314CMR4.03 (1)(a)]. These standards also include requirements for the regulation and control of toxic constituents and require that EPA criteria, established pursuant to Section 304(a) of the CWA, shall be used unless a site-specific criterion is established. The conditions of the permit reflect the goal of the CWA and EPA to achieve and then to maintain WQS.

The WQS may also assign restrictions to receiving waters, 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 overflow events to waters identified as impacted by CSOs provided that:

(1) an approved Final CSO Facilities Plan under 310 CMR 44.00 provides justification for the overflows (note – in this case the CSO Facilities Plan as defined by MassDEP and an LTCP, as defined by EPA, are the same document) ;

(2) the MassDEP finds through a Use Attainability Analysis (UAA), 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);

(3) existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected; and

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

Conversely, if a Final CSO 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 designed 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, in accordance with National and State CSO Policy.

D. Antibacksliding

A permit may not be renewed, reissued or modified with less stringent limitations or conditions than those contained in the previous permit unless in compliance with the anti-backsliding requirements of the CWA [see Sections 402(o) and 303(d)(4) of the CWA and 40 CFR §122.44(l)(1 and 2)]. EPA's antibacksliding provisions prohibit the relaxation of permit limits, standards, and conditions except under certain circumstances. Effluent limits based on BPJ, water quality, and state certification requirements must also meet the antibacksliding provisions found at Section 402(o) and 303(d)(4) of the CWA.

E. Antidegradation

Federal regulations found at 40 CFR Section 131.12 require states to develop and adopt a statewide antidegradation policy which maintains and protects existing instream water uses and the level of water quality necessary to protect the existing uses, and maintains the quality of waters which exceed levels necessary to support propagation of fish, shellfish, and wildlife and to support recreation in and on the water. The Massachusetts Antidegradation Regulations are found at 314 CMR 4.04. There are no new or increased discharges being proposed with this permit reissuance.

F. State Certification

Under Section 401 of the CWA, EPA is required to obtain certification from the state in which the discharge is located that all water quality standards or other applicable requirements of state law, in accordance with Section 301(b)(1)(C) of the CWA, are satisfied. EPA permits are to include any conditions required in the state's certification as being necessary to ensure compliance with state water quality standards or other applicable requirements of state law. See CWA Section 401(a) and 40 CFR §124.53(e). Regulations governing state certification are set out at 40 CFR §124.53 and §124.55. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 CFR §122.44(d).

V. Explanation of Permit's Effluent Limitations

A. MWRA CSO Facilities Plan/Water Quality Standards

EPA's CSO Policy recommended that each combined sewer system prepare and implement an LTCP that would result in attainment of CWA requirements. In 1987, MWRA stipulated to responsibility and legal liability for all combined sewer overflows hydraulically connected to its collection system[5], which in addition to discharges owned and operated by MWRA includes CSOs owned and operated by the communities of Boston, Cambridge, Chelsea, and Somerville. The CSO planning conducted by MWRA subsequent to 1987 addressed all of these CSO outfalls, in accordance with the stipulation, and MWRA has funded the planning, design, and construction of the recommended CSO control facilities.

In 1994, MWRA completed a Conceptual CSO Control Plan that formed the basis of its final Combined Sewer Overflow Plan and Environmental Impact Report ("Facilities Plan"), completed in July 1997. The recommended CSO control projects included sewer separation, hydraulic relief, and floatables control projects. The MWRA also estimated the activation frequency and volume for the remaining CSOs under baseline (1992) conditions and after completion of the projects recommended by the Facilities Plan.

For those CSOs that MWRA believed could not be eliminated, the plan included information to support a 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, including the Chelsea River; a B-CSO designation for the Muddy River; and a tentative determination for the issuance of WQS variances for the Lower Charles River, the Alewife Brook, and the Upper Mystic River due to CSO discharges. Variance conditions for CSOs discharging to the Lower Charles River were issued on September 2, 1998 and variance conditions for CSOs discharging to the Alewife/Upper Mystic sub-basin were issued on March 5, 1999.

On March 15, 2006, MWRA and the United States supplanted the 1987 Stipulation defining responsibilities for CSO abatement and CWA compliance with a "Second Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflow Control" (Second Stipulation). In the Second Stipulation, the MWRA accepted "legal liability to … meet the levels of CSO control (including as to CSO activation and as to volume of CSO discharge) described in the Authority's Long-Term CSO Control Plan". The most current estimates of CSO discharge frequency and volume expected in a typical year after full implementation of the CSO abatement projects required by the court order are documented in Exhibit B of the "Second Stipulation". The figures for the four Chelsea CSO outfalls are shown in Table 1 as follows:

[5] Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflows

Table 1

Outfall	Typical Year	
	Activation Frequency	**Volume (MG)**
CHE002	4	0.22
CHE003	3	0.04
CHE004	3	0.32
CHE008	0	0.00

In 2000-2001, the MWRA and the City of Chelsea completed several projects that cost approximately $30 million. The Chelsea Trunk Sewer Replacement replaced an 18-inch diameter city–owned trunk sewer with a 30 inch pipe. The Chelsea Branch Sewer Relief project relieved the Chelsea Branch and Revere Extension Sewers with 48-inch to 66-inch diameter pipe. In addition, all four (4) CSOs were either repaired or rebuilt and underflow baffles were installed at all four (4) CSOs for floatables control. In 2003, the City installed CSO metering and telemetry at all of its CSO structures from which the City derives the CSO activation frequency and volume amounts for its Annual Reports.

As detailed in its 2011 Annual Report submittal, the City is currently in the evaluation, design, and construction phases of various sewer separation projects to further reduce the quantity of stormwater discharged to its combined sewer system.

B. Water Quality-Based Effluent Limitations

The discharges from the City of Chelsea's CSOs into the Chelsea River and Boston Inner Harbor have been limited in accordance with the activation frequency and discharge volume estimates that are presented in Exhibit B of the Second CSO Stipulation incorporated into the Federal Court Order on April 27, 2006. These limits can be seen in **Attachment A** of the draft permit.

The draft permit continues the Annual Report requirement, which is due by April 30th of each year. In the Annual Reports submitted following the first and third full calendar years under this permit, the permittee is required to compare the metered CSO activation and discharge volume data with the data predicted by MWRA's model for each CSO outfall. The Agencies believe that this analysis will be timely under this permit since the major CSO projects in MWRA's Facilities Plan have been completed in accordance with the Federal Court Order.

The last few years of Annual Reports have shown many activations (CSO discharges), particularly at Outfalls CHE004 and CHE008, where MWRA's model had predicted few if any activations based on actual rainfall for those years. For example, for the year 2011, there were 16 activations for Outfall CHE004 and 15 activations for Outfall CHE008. MWRA's modeling had predicted that there would be no activations at either of these outfalls based on actual 2011 rainfall or "typical year" rainfall. See results in Table 2 below.

Table 2

	2011 Rainfall Under 2011 System Conditions [6]		2011 Metered Data reported by permittee	
Outfall	Activation Frequency	Volume (MG)	Activation Frequency	Volume (MG)
CHE002	0	0.0	0	0.0
CHE003	0	0.0	0	0.0
CHE004	0	0.0	16	0.59
CHE008	0	0.0	15	0.42

If, following completion of all abatement projects recommended by the MWRA Facilities Plan the metered discharge flow and frequency under "typical year" conditions exceed the authorized "typical year" flows and frequency authorized by the permit, the permittee, working with the MWRA, will either be required to conduct further CSO abatement or must seek an adjustment of the water quality standards.

VI. Essential Fish Habitat Determination (EFH)

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Services (NMFS) if EPA's action or proposed actions that it funds, permits, or undertakes, may adversely impact any essential fish habitat such as: waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (16 U.S.C. § 1802 (10)). Adversely impact means any impact which reduces the quality and/or quantity of EFH (50 C.F.R. § 600.910 (a)). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

[6] These are estimated CSO activations and volumes for storms during the calendar year 2011. The estimated were developed using the MWRA InfoWorks sewer system model by simulating each of the rainfall events and respective system operations in 2011. For the simulations, MWRA updated the model to account for new information and known changes to the system, including CSO projects and other system improvements completed during the year. From April 30, 2012 letter of M. Hornbrook (MWRA) to T. Borci (EPA) and K. Brander (MassDEP).

EFH is only designated for species for which federal fisheries management plans exist (16 U.S.C. § 1855(b) (1) (A)). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999. The following is a list of the EFH species and applicable lifestage(s) for the area that includes Massachusetts Bay, to which the Chelsea River and Boston Inner Harbor discharge:

Species	Eggs	Larvae	Juveniles	Adults
Atlantic cod (*Gadus morhua*)	X	X	X	X
haddock (*Melanogrammus aeglefinus*)	X	X		
pollock (*Pollachius virens*)	X	X	X	X
whiting (*Merluccius bilinearis*)	X	X	X	X
red hake (*Urophycis chuss*)	X	X	X	X
white hake (*Urophycis tenuis*)	X	X	X	X
winter flounder (*Pseudopleuronectes americanus*)	X	X	X	X
yellowtail flounder (*Pleuronectes ferruginea*)	X	X	X	X
windowpane flounder (*Scopthalmus aquosus*)	X	X	X	X
American plaice (*Hippoglossoides platessoides*)	X	X	X	X
ocean pout (*Macrozoarces americanus*)	X	X	X	X
Atlantic halibut (*Hippoglossus hippoglossus*)	X	X	X	X
Atlantic sea scallop (*Placopecten magellanicus*)	X	X	X	X
Atlantic sea herring (*Clupea harengus*)		X	X	X
long finned squid (*Loligo pealei*)	n/a	n/a	X	X
short finned squid (*Illex illecebrosus*)	n/a	n/a	X	X
Atlantic butterfish (*Peprilus triacanthus*)	X	X	X	X
Atlantic mackerel (*Scomber scombrus*)	X	X	X	X
summer flounder (*Paralicthys dentatus*)				X
scup (*Stenotomus chrysops*)	n/a	n/a	X	X
black sea bass (*Centropristus striata*)	n/a		X	X

surf clam (*Spisula solidissima*)	n/a	n/a	X	X
bluefin tuna (*Thunnus thynnus*)			X	X

A review of the relevant essential fish habitat information provided by NMFS indicates that EFH has been designated for 23 managed species within the NMFS boundaries encompassing Massachusetts Bay. It is possible that a number of these species utilize these receiving waters for spawning, while others are present seasonally.

Based on the available information, EPA has determined that these CSO discharges, as restricted by the draft permit conditions, will not directly or indirectly cause adverse effects to EFH species or their habitat, because the draft permit contains conditions (NMCs) that are protective of the aquatic species in both receiving waters.

VII. Endangered Species Act (ESA)

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA) grants authority to and imposes requirements upon Federal agencies regarding endangered or threatened species of fish, wildlife, or plants ("listed species") and habitat of such species that has been designated as critical (a "critical habitat"). The ESA requires every Federal agency, in consultation with and with the assistance of the Secretary of Interior, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) typically administer Section 7 consultations for bird, terrestrial, and freshwater aquatic species. The NMFS typically administers Section 7 consultations for marine species and anadromous fish.

EPA has reviewed the federal endangered or threatened species of fish, wildlife, and plants to see if any such listed species might potentially be impacted by the reissuance of this NPDES permit and has not found any such listed species. EPA has determined that there are no species of concern present in the vicinity of Chelsea's CSO discharges. Therefore, EPA does not need to formally consult with NMFS or USFWS in regard to the provisions of the ESA.

EPA has structured the proposed limits to be sufficiently stringent to assure that Water Quality Standards will be met. The effluent limits and conditions established in this permit ensure the protection of aquatic life and maintenance of the receiving water as an aquatic habitat. During the public comment period, EPA has provided a copy of the Draft Permit and Fact Sheet to both NMFS and USFWS.

VIII. State Certification Requirements

EPA may not issue a permit unless the MassDEP 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 MassDEP have 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.

IX. Public Comment Period, Public Hearing, 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 George Papadopoulos, U.S. EPA, Office of Ecosystem Protection**,** Industrial Permits Branch, Mail Code OEP 06-1, 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 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 meeting may be held if the criteria stated in 40 C.F.R. § 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. Within 30 days following the notice of the Final Permit decision, any interested person may submit a petition for review of the permit to EPA's Environmental Appeals Board consistent with 40 C.F.R. § 124.19.

X. EPA and MassDEP 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 the EPA and MassDEP contacts below:

George Papadopoulos, Industrial Permits Branch
5 Post Office Square - Suite 100 - Mailcode OEP 06-1
Boston, MA 02109-3912
Papadopoulos.george@epa.gov
Telephone: (617) 918-1579 FAX: (617) 918-1505

Cathy Vakalopoulos, Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
1 Winter Street, Boston, Massachusetts 02108
catherine.vakalopoulos@state.ma.us
Telephone: (617) 348-4026; FAX: (617) 292-5696

February 27, 2013
Date

Ken Moraff, Acting Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency

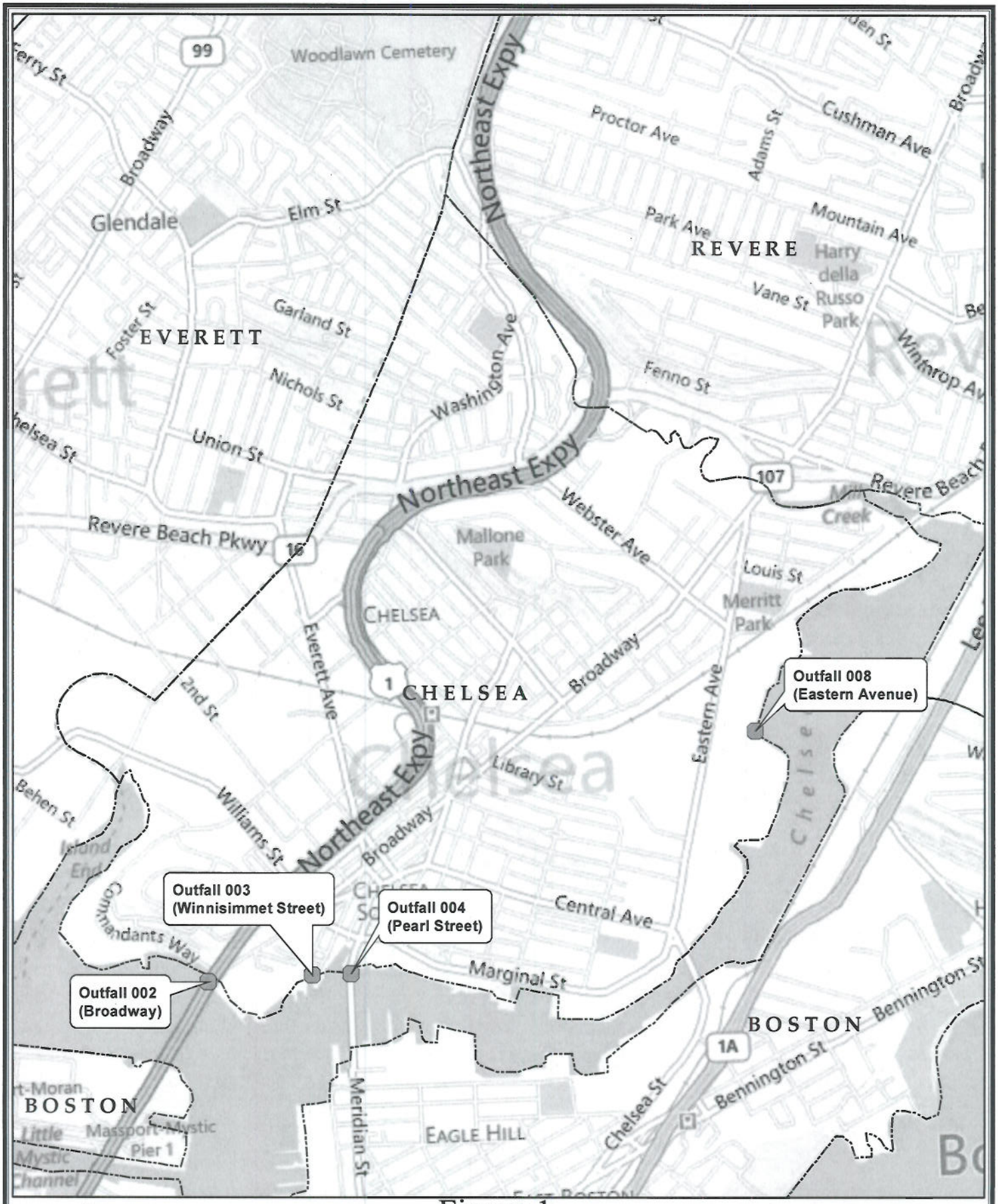

Figure 1
City of Chelsea
4 Combined Sewer Overflows

EPA

Map created by EPA Region 1 GIS Center
Map Tracker ID 8961 December 18, 2012
Data Sources: Base Map Data: (c) 2010 Microsoft Corporation and its data suppliers

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
COMMONWEALTH OF MASSACHUSETTS
1 WINTER STREET
BOSTON, MASSACHUSETTS 02108

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ECOSYSTEM PROTECTION
REGION I
BOSTON, MASSACHUSETTS 02109

JOINT PUBLIC NOTICE OF A DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE INTO THE WATERS OF THE UNITED STATES UNDER SECTION 301 AND 402 OF THE CLEAN WATER ACT (THE "ACT"), AS AMENDED, AND REQUEST FOR STATE CERTIFICATION UNDER SECTION 401 OF THE ACT.

DATE OF NOTICE: March 20, 2013

PERMIT NUMBER: **MA0101877**

PUBLIC NOTICE NUMBER: MA-009-13

NAME AND MAILING ADDRESS OF PERMITTEE:

City of Chelsea
Department of Public Works
380 Beecham Street
Chelsea, Massachusetts 02150

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

4 Combined Sewer Overflow (CSO) Outfalls (See Figure 1 of fact sheet)

RECEIVING WATERS**: Chelsea River and Boston Inner Harbor**
USGS Hydrologic Code #01090001, Mystic River Watershed and Boston Harbor

PREPARATION OF THE DRAFT PERMIT:

The U.S. Environmental Protection Agency, (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) have cooperated in the development of a permit for the above identified facility. The effluent limits and permit conditions imposed have been drafted to assure that State Water Quality Standards and provisions of the Clean Water Act will be met. EPA has formally requested that the State certify this draft permit pursuant to Section 401 of the Clean Water Act and expects that the draft permit will be certified.

INFORMATION ABOUT THE DRAFT PERMIT:

A fact sheet or a statement of basis (describing the type of facility; type and quantities of wastes; a brief summary of the basis for the draft permit conditions; and significant factual, legal and policy questions considered in preparing this draft permit) and the draft permit may be obtained at no cost at: http://www.epa.gov/region1/npdes/draft_permits_listing_ma.html or by writing or calling EPA's contact person named below:

George Papadopoulos, US EPA
5 Post Office Square
Suite 100 (OEP 06-1)
Boston, MA 02109-3912
Telephone: (617) 918-1579

The administrative record containing all documents relating to this draft permit is on file and may be inspected at the EPA Boston office mentioned above between 9:00 a.m. and 5:00 p.m., Monday through Friday, except holidays.

PUBLIC COMMENT AND REQUEST FOR PUBLIC HEARING:

All persons, including applicants, who believe any condition of this draft permit is inappropriate, must raise all issues and submit all available arguments and all supporting material for their arguments in full by **April 18, 2013**, to the U.S. EPA, George Papadopoulos, 5 Post Office Square, Suite 100, Mailcode OEP 06-1, Boston, Massachusetts 02109-3912. Any person, prior to such date, may submit a request in writing to EPA and the MassDEP for a public hearing to consider this draft permit. 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 forty five days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on this draft permit the Regional Administrator will respond to all significant comments and make the responses available to the public at EPA's Boston office.

FINAL PERMIT DECISION AND APPEALS:

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. Within 30 days following the notice of the final permit decision any interested person may submit petition to the Environmental Appeals Board to reconsider or contest the final decision.

David Ferris, Director
MASACHUSETTS WASTE WATER PROGRAM
MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

Ken Moraff, Acting Director
OFFICE OF ECOSYSTEM PROTECTION
ENVIRONMENTAL PROTECTION AGENCY