UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION I
BOSTON, MASSACHUSETTS 02203

(Permits Branch, Room 2109)

Councilors
City of Cambridge
795 Ms

THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
DIVISION OF WATER POLLUTION CONTROL
LEVERETT SALTONSTALL BUILDING
BOSTON, MASSACHUSETTS 02202

U. S. ENVIRONMENTAL PROTECTION AGENCY
ENFORCEMENT DIVISION, PERMITS BRANCH
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203

JOINT PUBLIC NOTICE OF A PUBLIC HEARING RELATIVE TO PROPOSED COMMONWEALTH OF MASSACHUSETTS/U. S. ENVIRONMENTAL PROTECTION AGENCY ISSUANCE OF NATIONAL POLLUTANT DISCHARGE ELMINATION SYSTEM (NPDES) PERMIT(S) TO DISCHARGE INTO WATERS OF THE COMMONWEALTH OF MASSACHUSETTS UNDER CHAPTER 21, SECTION 43 OF THE MASSACHUSETTS GENERAL LAWS, AS AMENDED BY CHAPTER 546 OF THE ACTS OF 1973 AND UNDER SECTION 402 OF THE FEDERAL WATER POLLUTION CONTROL ACT (FWPCA)

PUBLIC NOTICE NUMBER: MA-92-76

PUBLIC COMMENT PERIOD: January 14, 1976 - February 18, 1976

APPLICANT INFORMATION

(1) APPLICANT NAME: Metropolitan District Commission

MAILING ADDRESS: 20 Somerset Street
Boston, MA 02108

FACILITY ADDRESS: Nut Island Sewage Treatment Plant,
Deer Island Treatment Plant and 19
miscellaneous combined sewer overflows

APPLICATION NUMBERS: MA0102351
State Application No. M44

DRAFT PERMIT AVAILABLE

The Deer Island facility is a primary treatment plant for sanitary sewage (SIC 4952). Average flow from this plant is 403 MGD, consisting of sanitary sewage and digested sludge to Boston Harbor and tributaries, a Class SB water in the Boston Metropolitan area. Class SB waters are defined as suitable for bathing and recreational purposes, including water contact sports, industrial cooling, excellent fish habitat, good aesthetic value, and suitable for certain shellfisheries with depuration.

The Nut Island facility is also a primary treatment plant for sanitary sewage. Average flow from this plant is 180 MGD, consisting of sanitary sewage and digested sludge to Boston Harbor, Quincy Bay and Hingham Bay, all Class SB waters.

The combined sewer overflows and/or stormwater detention and chlorination stations discharge to Boston Harbor and/or its tributaries. The flows are variable depending on rainfall. These overflows discharge to waters of differing classifications (SB, SC, B or C). The uses range from bathing, recreation, cooling water or fishing.

The proposed permit includes an implementation schedule establishing dates for obtaining secondary treatment at the Deer and Nut Island Sewage Facilities (1984), disposal facilities for primary sludge (1979), treatment for combined sewer overflows (1979 - 1986), and possible wastewater treatment plants on the Middle Charles and Upper Neponset Rivers (1984). Effluent limitations, monitoring schedules, and other requirements are also included. The interim effluent limits in the proposed permit reflect current discharges. The expiration date for the proposed permit is June 30, 1977; however, DWPC and EPA intend to extend this date to March 1, 1981 if, at the time of issuance, EPA policy or revisions in the FWPCA authorize the later expiration date.

TENTATIVE DETERMINATIONS

Tentative determinations regarding effluent limitations and other conditions to be imposed on the above NPDES permit(s) have been made by the Massachusetts Division of Water Pollution Control (DWPC) and the United States Environmental Protection Agency (EPA). The limitations and conditions imposed should assure that State water quality standards and applicable State and Federal laws will be met after completion of all projects on the implementation schedule.

PUBLIC HEARING

A public hearing will be held to consider the issuance of a permit to the applicant. This hearing will follow procedures outlined in Section 125.34(b)(2)(3)(4) of Title 40 of the Code of Federal Regulations.

The public hearing will be held on Wednesday, February 18, 1976 at 10:00 a.m. at Fanueil Hall, Boston, Massachusetts.

Some of the issues to be considered at the hearing are as follows:

1. Do the effluent limitations in the proposed permit represent the application of the best practicable control technology currently available, as required by Section 301(b)(1)(A) of the FWPCA?

2. Are the effluent limitations in the proposed permit stringent enough to meet applicable water quality standards, as required by Section 301(b)(1)(C) of the Act?

3. Are the schedules of compliance in the proposed permit reasonable?

All interested parties are invited to be present or to be represented to express their views on these and other issues relating to the above operation. Parties making presentations are urged to address their statements to above stated issues. Oral statements will be heard, but for the accuracy of the record, all important testimony should be submitted in writing. Oral statements should summarize any extensive written material so there will be time for all interested parties to be heard.

Following the hearing, an administrative decision will be made to issue or modify the permit. To appeal the issuance of the proposed permit or its terms, a request for an adjudicatory hearing satisfying the requirements of 40 C.F.R. §125.36(b), must be filed with the Regional Administrator, EPA within 10 days following permit issuance. A similar request should also be filed with the Director, DWPC within thirty (30) days of the date of receipt of the final determinations in accordance with the provisions of the Massachusetts Administrative Procedure Act and the Division's Rules for Conduct of Adjudicatory Proceedings.

Upon issuance of the proposed permit, previous permits to the Metropolitan District Commission (MA0101532 [State M87] and MA0101541 [State M88] dated April 2, 1975) will be revoked.

PUBLIC COMMENTS

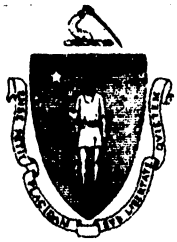
Written public comments are invited anytime prior to the February 18, 1976 public hearing. Comments should be directed to both the Commonwealth of Massachusetts, Water Resources Commission, Division of Water Pollution Control, Leverett Saltonstall Building, Boston, Massachusetts 02202, and the U. S. Environmental Protection Agency, Enforcement Division, Permits Branch, Region I, John F. Kennedy Federal Building, Boston, Massachusetts 02203. The application number should appear next to the above address on the envelope and on the first page of any submitted comments. All comments received prior to the above date will be considered in the formulation of the final determinations.

FURTHER INFORMATION

The draft permit may be obtained at no cost by writing or calling the EPA. The complete application and other information are on file and may be inspected at the DWPC or EPA, Boston offices. Copies, obtained by calling (617)223-5061, will be made at a cost of 20¢ per page from 9:00 a.m. to 5:00 p.m., Monday through Friday.

Thomas C. McMahon, Director
Massachusetts Division of Water
Pollution Control

Leslie Carothers, Director
Enforcement Division
Environmental Protection Agency



U. S. Environmental Protection Agency
Region I
John F. Kennedy Federal Building
Boston, Massachusetts 02203

The Commonwealth Of Massachusetts
Water Resources Commission
Division of Water Pollution Control
Leverett Saltonstall Building
Boston, Massachusetts 02202

DISCHARGE PERMIT

Name and Address of Applicant: Metropolitan District Commission

20 Somerset Street

Boston, Massachusetts 02108

Application No. - Federal MA0102351

- State M44

Date of Application January 15, 1974

Permit No. - Federal MA0102351

- State M180

Date of Issuance _____

Date of Expiration _____

Permits MA0101532 (State M87) and MA0101541 (State M88) dated April 2, 1975, are hereby revoked.

Draft of 1/9/76

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I. AUTHORITY FOR ISSUANCE

Pursuant to Section 402(a)(1) of the Federal Water Pollution Control Act, as amended [Public Law 92-500 (33 USC 1251 et seq.)] and pursuant to authority granted by Chapter 21, Sections 26-53 of the Massachusetts General Laws, as amended, the following permit is hereby issued to:

The Commonwealth of Massachusetts, Metropolitan District Commission

(hereinafter called the "permittee" or "MDC") authorizing discharges from

(a) the Deer Island Sewage Treatment Plant, Discharge Serial Nos. 001-005, to Boston Harbor;

(b) Sewer Overflows, Discharge Serial Nos. 006-023 and 106, to Boston Harbor and tributaries (Attachments A and B);

(c) the Nut Island Sewage Treatment Plant, Discharge Serial Nos. 101-105, to Boston Harbor/Quincy Bay and Hingham Bay (Attachment B);

(d) the Cottage Farm Stormwater Detention and Chlorination Station to the Charles River;

(e) the Somerville Marginal Conduit and Pretreatment Facility, to the Mystic River; and

(f) the Charles River Marginal Conduit Stormwater Control Project, to the Charles River/Inner Harbor;

such authorization being expressly conditional on compliance by the permittee with all terms and conditions of the permit hereinafter set forth.

This permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Division of Water Pollution Control (Division) under Federal and State law, respectively. Permits MA0101532 (State M87) and MA0101541 (State M88) dated April 2, 1975, are hereby revoked.

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 EPA. 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.

II. SPECIAL CONDITIONS

Some of the following sections include effluent limitations and compliance dates extending beyond the expiration date of this permit. The inclusion of such dates is to advise the permittee of effluent limits and compliance dates which the Regional Administrator and the Director expect to include in successor permits and to guide the permittee in obtaining legislation, funding, preparing and designing facilities and meeting the statutory standards of secondary treatment.

A. Effluent Limits

1. Deer Island Sewage Treatment Plant

a. Until expiration of this permit, the permittee is authorized to discharge from Discharge Serial Nos. 001 & 002 from the Deer Island facility an effluent to Boston Harbor whose concentration and combined loading (excluding digested sludge) shall not exceed the values listed below:

	Discharge Limitations		
Effluent Characteristic	Monthly Average	Weekly Average	Maximum Day
Flow, Cu. M/day (MGD)	*		
Biochemical Oxygen Demand, 5-day, 20° C	215,000 kg/day 474,000 lbs/day 140 mg/l (see also (1) below)	145 mg/l	200 mg/l
Total Suspended Solids	139,000 kg/day 306,000 lbs/day 91 mg/l (see also (1) below)	94 mg/l	140 mg/l
Settleable Solids	-	-	1.5 ml/l
Fecal Coliform Bacteria	Provide continuous chlorination		
Total Coliform Bacteria	Provide continuous chlorination		

*For any consecutive 12 month period, the average quantity of effluent discharged shall not exceed 403 MGD (1,500,000 Cu. M/Day). A 12 consecutive month average is used to account for seasonal variations in flow. Historical flow data predating permit issuance will be used initially to determine average flow.

(1) The 12 consecutive monthly average concentration of BOD and TSS in the discharge, measured at a point prior to mixing with digested sludge, shall not exceed 74 percent and 58 percent respectively of the 12 consecutive monthly average concentration of BOD and TSS in the influent into the permittee's wastewater treatment facilities. Historical analytical data predating permit issuance will be used initially to determine percent removals.

(2) The pH of the effluent shall not be less than 6.0 nor greater than 9.0 at any time unless these values are exceeded due to natural causes or as a result of the approved treatment processes.

(3) The total chlorine residual of the effluent shall not result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon

promulgation of any such standard, this permit may be revised or amended in accordance with such standards, the permittee being so notified.

(4) The discharge shall not cause visible discoloration of the receiving waters after appropriate mixing.

(5) Until termination of the sludge discharge, digested sludge may be discharged from Discharge Serial Nos. 001 and 002 of the Deer Island facility to Boston Harbor only during the four hour period beginning at high tide. This discharge of sludge shall terminate upon completion of the sludge disposal facilities (see B8a).

b. Until expiration of this permit, the permittee is authorized to discharge chlorinated primary treated effluent from Discharge serial numbers 003, 004 and 005 of the Deer Island facility into Boston Harbor during periods when the influent flow rate exceeds 400, 500 and 600 MGD respectively.

c. After Feb. 1, 1985, the permittee is authorized to discharge from the Deer Island Sewage Treatment Plant an effluent to Boston Harbor whose characteristics shall not exceed the values listed below:

	Discharge Limitations		
Effluent Characteristic	Monthly Average	Weekly Average	Maximum Day
Flow, Cu. M/day (MGD)	-	-	-
Biochemical Oxygen Demand, 5-day, 20° C	30 mg/l (see also (5) below)	45 mg/l	50 mg/l
Total Suspended Solids	30 mg/l (see also (5) below)	45 mg/l	50 mg/l
Settleable Solids		0.1 ml/l	0.3 ml/l
Fecal Coliform Bacteria	200/100 ml	400/100 ml	400/100 ml
Total Coliform Bacteria	1000/100 ml	2000/100 ml	2000/100 ml

(1) The pH of the effluent shall not be less than 6.0 nor greater than 9.0 at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.

(2) The total chlorine residual of the effluent shall not result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards, the permittee being so notified.

(3) The discharge shall not cause visible discoloration of the receiving waters.

(4) The discharge shall not cause a violation of the water quality standards of the receiving waters.

(5) The monthly average concentration of BOD and total suspended solids in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD and total suspended solids in the influent into the permittee's wastewater treatment facilities.

(6) If the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the design flow, the permittee shall submit to the permitting authorities projected loadings and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

2. Sewer Overflows and/or Bypasses

a. Until expiration of this permit, the permittee is authorized to discharge untreated stormwater/sanitary sewage overflow subject to 2 b below from:

(1) Discharge 006 to Belle Isle Inlet
(2) Discharges 007 - 009 to Chelsea Creek
(3) Discharges 010 - 011 to Charles River
(4) Discharge 012 to Meeting House Brook
(5) Discharges 013 - 014 to Mystic River
(6) Discharge 015 to Malden River
(7) Discharge 016 to Saugus Branch Brook
(8) Discharge 017 to Alewife Brook
(9) Discharges 018 - 023 to Charles River
(10) Discharge 106 to Weymouth Back River

b. The diversion or bypass of any flow in permittee's sewage system from waste treatment facilities used to maintain compliance with the terms and conditions of this permit is prohibited, except

(1) where unavoidable to prevent loss of life or severe property damage, or

(2) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the terms and conditions of this permit.

The permittee shall immediately notify the Regional Administrator and the Director by phone and verify in writing of each such diversion or bypass in accordance with the procedure for reporting non-compliance.

c. The permittee in cooperation with its member communities shall operate the treatment works, including the treatment plant and total sewer system, to minimize the discharge of pollutants from combined sewer overflows or bypasses.

d. The Regional Administrator and the Director reserve the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Federal and State Acts in order to bring all such discharges into compliance with these Acts.

3. Nut Island Sewage Treatment Plant

a. Until expiration of this permit, the permittee is authorized to discharge from Discharge Serial Nos. 101, 102 & 103 of the Nut Island facility an effluent to Boston Harbor/Quincy Bay whose concentration and combined loading shall not exceed the values listed below:

	Discharge Limitations		
Effluent Characteristic	Monthly Average	Weekly Average	Maximum Day
Flow, Cu. M/day (MGD)	*		
Biochemical Oxygen Demand, 5-day, 20° C	113,000 Kg/day 248,000 lbs/day 165 mg/l (see also (1) below)	180 mg/l	200 mg/l
Total Suspended Solids	96,000 Kg/day 210,000 lbs/day 140 mg/l (see also (1) below)	150 mg/l	195 mg/l
Settleable Solids	-	-	1.0 ml/l
Fecal Coliform Bacteria	Provide continuous chlorination		
Total Coliform Bacteria	Provide continuous chlorination		

*For any consecutive 12 month period, the average quantity of effluent discharged shall not exceed 180 MGD (680,000 Cu. M/Day). A 12 consecutive month average is used to account for seasonal variations in flow. Historical flow data predating permit issuance will be used initially to determine average flow.

(1) The 12 consecutive monthly average concentration of BOD and TSS in the discharge shall not exceed 78 percent and 56 percent respectively of the 12 consecutive monthly average concentration of BOD and TSS in the influent into the permittee's wastewater treatment facilities. Historical analytical data predating permit issuance will be used initially to determine percent removals.

(2) The pH of the effluent shall not be less than 6.0 nor greater than 9.0 at any time unless these values are exceeded due to natural causes or as a result of the approved treatment processes.

(3) The total chlorine residual of the effluent shall not result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards, the permittee being so notified.

(4) The discharge shall not cause visible discoloration of the receiving waters after appropriate mixing.

b. Until expiration of this permit, the permittee is authorized to discharge from Discharge Serial No. 104 of the Nut Island facility into Hingham Bay during periods when the influent flow rate exceeds 250 MGD and/or periods of abnormally high tides. All flows shall receive preliminary screening and disinfection prior to discharge, and further

(1) When there is a discharge from Serial Number 104 of the Nut Island facility or when a discharge is anticipated, the permittee shall pre-chlorinate the raw waste into the treatment plant.

(2) For all discharges from Serial Number 104 of the Nut Island facility that include any waste that is not treated in the sedimentation basins, the permittee shall notify the permitting authorities immediately by phone followed by written confirmation of such occurrence. During the months of May through September, inclusive, the permittee shall also notify the Quincy Commissioner of Public Health by phone of such occurrence.

c. Until termination of the sludge discharge, digested sludge may be discharged from Discharge Serial No. 105 of the Nut Island facility into Boston Harbor only during the four hour period beginning at high tide. This discharge shall terminate upon completion of the sludge disposal facilities (see B8a).

d. After Feb. 1, 1985 the permittee is authorized to discharge from Nut Island Sewage Treatment Plant an effluent to Boston Harbor/Quincy Bay whose characteristics shall not exceed the values listed below:

	Discharge Limitations		
Effluent Characteristic	Monthly Average	Weekly Average	Maximum Day
Flow, Cu. M/day (MGD)	-	-	-
Biochemical Oxygen Demand, 5-day, 20° C.	30 mg/l (see also (5) below)	45 mg/l	50 mg/l
Total Suspended Solids	30 mg/l (see also (5) below)	45 mg/l	50 mg/l
Settleable Solids		0.1 ml/1	0.3 ml/1
Fecal Coliform Bacteria	200/100 ml	400/100 ml	400/100 ml
Total Coliform Bacteria	1000/100 ml	2000/100 ml	2000/100 ml

(1) The pH of the effluent shall not be less than 6.0 nor greater than 9.0 at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.

(2) The total chlorine residual of the effluent shall not result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards, the permittee being so notified.

(3) The discharge shall not cause visible discoloration of the receiving waters.

(4) The discharge shall not cause a violation of the water quality standards of the receiving waters.

(5) The monthly average concentration of BOD and total suspended solids in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD and total suspended solids in the influent into the permittee's wastewater treatment facilities.

(6) If the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the design flow, the permittee shall submit to the permitting authorities projected loadings and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

4. Cottage Farm Detention Station

a. Until expiration of this permit, the permittee is authorized to discharge treated stormwater/wastewater overflow from the Cottage Farm Detention Station to the Charles River. All flows shall receive, as a minimum, screening, chlorination and detention prior to discharge. All flows discharged shall contain a minimum chlorine residual of 1.0 mg/l at all times.

5. Tide Gates

a. The MDC shall check all tide gates owned and controlled by them at least twice a year to see that they are working properly and repair them, if necessary. A summary of the conditions of the tide gates should be made to the Regional Administrator and Director by the 15th of each July and January for the previous six months indicating number of gates checked, number inoperative, number in good condition, number repaired and numbers to be repaired. On the last item, reasons for non-repair should be given.

6. Somerville Marginal Conduit and Pretreatment Facility

a. Until expiration of this permit, the permittee is authorized to discharge treated stormwater/wastewater overflow from the Somerville Marginal Conduit and Pretreatment Facility to the Mystic River. All flows shall receive, as a minimum, screening and chlorination prior to discharge. All flows discharged shall contain a minimum chlorine residual of 1.0 mg/l at all times.

7. Proposed Combined Sewer Overflow Projects

a. After March 1, 1979, the permittee will be authorized to discharge treated stormwater/wastewater overflow from the Charles River Marginal

Project to the Charles River/Boston Inner Harbor. All flows shall receive, as a minimum, screening, chlorination and detention prior to discharge. All flows discharged shall contain a minimum chlorine residual of 1.0 mg/l at all times.

b. After Oct. 1, 1981, the permittee will be authorized to discharge treated stormwater/wastewater overflow from the Dorchester Bay Combined Sewer Overflow Facility to Dorchester Bay. All flows shall receive, as a minimum, screening, chlorination and detention prior to discharge. All flows discharged shall contain a minimum chlorine residual of 1.0 mg/l at all times.

c. After Feb. 1, 1983, the permittee will be authorized to discharge treated stormwater/wastewater overflow from the Charles River Combined Sewer Overflow Facility to Charles River and/or its tributaries. All flows shall receive, as a minimum, screening, chlorination and detention prior to discharge. All flows discharged shall contain a minimum chlorine residual of 1.0 mg/l at all times.

d. After Feb. 1, 1983, the permittee will be authorized to discharge treated stormwater/wastewater overflow from the Neponset River Combined Sewer Overflow Facility to Neponset River. All flows shall receive, as a minimum, screening, chlorination and detention prior to discharge. All flows discharged shall contain a minimum chlorine residual of 1.0 mg/l at all times.

e. After January 1, 1986, the permittee will be authorized to discharge treated stormwater/wastewater overflow from the Boston Inner Harbor Combined Sewer Overflow Facility to Boston Inner Harbor. All flows shall receive, as a minimum, screening, chlorination and detention prior to discharge. All flows discharged shall contain a minimum chlorine residual of 1.0 mg/l at all times.

8. Satellite Wastewater Treatment Plants

If the option to build satellite advanced wastewater treatment plants is selected based on the Environmental Impact Statement, as a minimum, the following should be followed:

a. After May 1, 1984, the permittee, if the project is approved, will be authorized to discharge from the Middle Charles River Wastewater Treatment Plant an effluent to the Charles River whose characteristics shall be capable of meeting load allocations as developed in the water quality management plan for the Charles River, in accordance with section 303(e) of the Federal Act.

b. After May 1, 1984, the permittee, if the project is approved, will be authorized to discharge from the Upper Neponset Wastewater Treatment Plant an effluent to the Neponset River whose characteristics shall be as developed in the Metropolitan Boston areawide wastewater management plan.

B. Implementation Schedule

1. General

There are numerous steps in the pollution abatement program for this system that collects and treats sanitary and stormwater overflows from the Boston Metropolitan Communities. Many of the steps are interrelated and are necessary prerequisites to meeting later compliance deadlines in the same and related projects and to obtaining Federal and State assistance. Where a step is related to qualifying for a Federal or State grant, completion of that step shall be deemed to have occurred when the Federal grant regulations then applicable to that step have been satisfied.

2. State Legislative Requirements

a. By February 1, 1976 or within one week of permit issuance, whichever occurs later, the permittee shall identify, with sufficient particularity, any state legislative requirements necessary to complete the pollution abatement program set forth below. By letter, this same date, the permittee shall inform both the Regional Administrator and the Director of each step which requires state legislative action, the nature of the legislative action required and the date on which legislation will be filed.

b. The permittee has filed with the State legislature a bill to provide, as a minimum, for timely completion of the steps to be accomplished before June 1, 1980.

c. By October 1, 1978, the permittee shall file with the state legislature the necessary bills to provide, as a minimum, for timely completion of the steps to be accomplished before January 1, 1986. By letter, on or before October 1, 1978, the permittee shall inform both the Regional Administrator and the Director that the necessary bills have been filed and shall provide copies of the bills to both agencies.

d. Progress reports on the legislative action concerning the bills identified in paragraphs (b) and (c) shall be submitted to the Regional Administrator and the Director as actions occur through the legislative procedure until enactment of the legislation.

3. a. It has been determined by EPA that the MDC construction program relating to this permit presents several significant environmental issues and alternatives which must be addressed, evaluated and resolved by the procedures applicable under the provisions of the National Environmental Policy Act.

b. It is EPA's expectation and goal that the Environmental Impact Statements will be accomplished by EPA according to the following schedule:

(1) EIS regarding primary sludge management (in preparation):

Started by EPA	July 1, 1975
Completed by EPA	July 1, 1976

(2) EIS regarding all other major projects (as deemed necessary by the Environomental Impact Office of EPA):

Started by EPA	April 1, 1976
Completed by EPA	April 1, 1977

The EPA and the Division recognize that implementation schedules for projects addressed in the above Environmental Impact Statements are dependent on the completion of the statements in accordance with the above dates.

4. Sewer Use Ordinance

a. It is apparent that other pollutants attributable to inputs from major contributing industries using the permittee's system are also present in the facility's discharge. At such time as sufficient information becomes available to establish limitations for such pollutants, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with industrial best practicable control technology requirements or water quality standards by the permitting authorities.

b. By July 1, 1976, the permittee shall provide assurances satisfactory to the Regional Administrator and the Director that the permittee has in full force and effect throughout its sewerage system: (i) rules and regulations, as required below or any other applicable State and Federal laws and regulations (See 40 C.F.R. 35.920-3(b)(2) and (3))specifying the terms and conditions under which connections for the discharge of sewage, drainage, substances or wastes into any sewer under its control or any sewer tributary thereto may be made, maintained, modified or used; and (ii) an acceptable program for implementing and enforcing these rules and regulations against any source public or private by the permittee, its member communities, or any combination thereof.

c. The permittee shall have in effect a sewer use ordinance and/or rules and regulations acceptable to the Regional Administrator and the Director which, as a minimum:

(1) Prohibits the introduction by any discharger into the permittee's sewerage system or treatment facilities of any pollutant which

(a) is a toxic pollutant in toxic amounts, as defined in standards issued from time to time under Section 307(a) of the Federal Act , any applicable State Act or MDC Rules and Regulations governing industrial waste discharges;

(b) creates a fire or explosion hazard in permittee's treatment works;

(c) causes corrosive structural damage to permittee's treatment works, including all wastes with pH lower than 5.0;

(d) contains solid or viscous substances in amounts which would cause obstruction to the flow in sewers or other interference with proper operation of the permittee's treatment works;

(e) in the case of a major contributing industry, as defined herein, contains an incompatible pollutant, as further defined herein,

in an amount or concentration in excess of that allowed under standards or guidelines issued from time to time pursuant to Sections 304, 306 and/or 307 of the Federal Act, or pursuant to any applicable State Act; or

(f) has not been subjected to any pretreatment that may be required under Federal or State Law.

(2) Requires 45 days prior notification to the permittee by any person or persons of a

(a) proposed substantial change in volume or character of pollutant over that being discharged into the permittee's treatment works at the time of issuance of this permit.

(b) proposed new discharges into the permittee's treatment works of pollutants from any source which would be a new source as defined in Section 306 of the Federal Act, if such source were discharging pollutants, or

(c) proposed new discharge into the permittee's treatment works of pollutants from any source which would be subject to Section 301 of the Federal Act if it were discharging such pollutants.

(3) Requires any industry discharging into the permittee's treatment works to perform such monitoring of its discharges as the permittee may reasonably require, including the installation, use, and maintenance of monitoring equipment methods, to keep records of the results of such monitoring, and to report the results of such monitoring to the permittee. Such records shall be made available by the permittee to the Regional Administrator and the Director upon request.

(4) Authorizes the permittee's authorized representative to enter into, upon, or through the premises of any industry discharging into the permittee's treatment works to have access to and copy any records, to inspect any monitoring equipment or method required under subsection (3) above, and to sample any discharge into the permittee's treatment works.

5. Survey of Contributing Industries

a. On the first day of each January and July, the permittee shall submit to the Regional Administrator and the Director a semiannual report summarizing the progress of all known major contributing industries subject to the requirements of Section 307 of the Federal Act towards full compliance with such requirements. Such semiannual reports shall be based in part upon periodic statements to the permittee required to be filed by such major contributing industries at intervals not to exceed six months regarding specific action taken to achieve compliance with the requirements of Section 307. The semiannual report shall include at least the following information:

(1) A narrative summary of actions taken by the permittee to develop, promulgate, and enforce the local industrial waste ordinance and thereby ensure that all major contributing industries comply with the requirements of Section 307.

(2) The number of major contributing industries using the treatment works, divided into SIC group categories.

(3) The number of major contributing industries in full compliance with the requirements of Section 307, or not subject to these requirements (for example, discharge only compatible pollutants).

(4) A list identifying by name those major contributing industries presently in violation of the requirements of Section 307.

b. These semiannual reports must be filed with the permitting authorities until compliance is achieved. Submission would be required again only if a major contributing industry reverts to violating the requirements of Section 307.

c. By July 1, 1978 the permittee shall have completed its survey of all known major contributing industries.

d. By July 1, 1977 the permittee shall establish and have in effect an industrial waste section, fully staffed and equipped, in order to implement sewer use regulations, as well as industrial pretreatment programs, required pursuant to applicable Federal and State laws and regulations.

6. Bypasses and Overflows

a. An operational plan designed to minimize the discharge of pollutants from combined sewer overflows and bypasses must be approved by the permit issuing authorities and be implemented by the permittee by July 1, 1976. The plan shall be submitted to the issuing authorities for approval by March 1, 1976. The plan shall provide for optimum coordinated operation of sewage treatment plants and tributory sewer systems. The plan shall specifically:

(1) Refine the estimate of maximum treatable flow which shall be the least of the following:

(a) The maximum hydraulic flow rate for which the treatment plant was designed,

(b) The flow rate that, based on historic records or theoretical determinations, would cause a treatment plant upset such that other permit conditions could not be achieved, or

(c) The maximum flow rate that can be delivered to the plant.

(2) Report, if applicable, the number, location, types and kinds of regulators and their respective operating history, maintenance program and performance efficiency.

(3) Report the calculated or estimated storage capacities of the sewer system upstream from all control devices, such as pump stations and regulators, or combined sewer discharges.

(4) Provide operational procedures for utilizing at least 80 percent of the available capacity of interceptors and trunk lines upstream of any control devices such as pump stations, or regulators prior to any discharge from a combined sewer overflow or bypass; or provide, if such storage capacity utilization cannot be achieved with existing control devices, the operational procedures for maximizing the use of storage prior to any combined sewer discharge.

(5) Provide a method to determine if the upstream storage capacity was utilized prior to any discharge from the combined sewer system.

7. Infiltration/Inflow Analyses

a. Infiltration/Inflow (I/I) analysis of the system resulting in discharge to the Deer Island Treatment Facility (North System).

(1) By April 1, 1976 initiate the I/I analysis of the North System (see 40 C.F.R. 35.927-1).

(2) By January 1, 1977 submit an interim report summarizing the I/I analysis indicating preliminary results.

(3) By October 1, 1977 complete the I/I analysis of the North System and submit to the Regional Administrator for review and the Director for approval (see 40 C.F.R. 35.927-1).

(4) By January 1, 1978 initiate the sewer system evaluation survey of the metropolitan sewerage system tributary to the Deer Island Treatment Plant (see 40 C.F.R. 35.927-2), if deemed necessary by the Regional Administrator and/or Director.

(5) By April 1, 1979 complete the survey and submit the results and proposed implementation plan with schedule to the Regional Administrator and Director. The permit may be modified to include the plan and its schedule.

(6) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

b. Infiltration/Inflow (I/I) analysis of the system resulting in discharge to the Nut Island Treatment Facility (South System).

(1) By April 1, 1976 initiate the I/I analysis of the South System (see 40 C.F.R. 35.927-1).

(2) By January 1, 1977 submit an interim report summarizing the I/I analysis indicating preliminary results.

(3) By October 1, 1977 complete the I/I analysis of the South System and submit to the Regional Administrator for review and the Director for approval (see 40 C.F.R. 35.927-1).

(4) By January 1, 1978 initiate the sewer system evaluation survey of the metropolitan sewerage system tributary to the Nut Island Treatment Plant (see 40 C.F.R. 35.927-2), if deemed necessary by the Regional Administrator and/or Director.

(5) By April 1, 1979 complete the survey and submit the results and proposed implementation plan with schedule to the Regional Administrator and Director. The permit may be modified to include the plan and its schedule.

(6) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

8. Construction Projects

The MDC submitted a construction staging program for wastewater management projects (Attachment C). New sequence numbers 16-52 are not covered in this

permit but are included because of their need and relationship to the entire program. The schedules for each project do not include dates for applying for Federal grants. If Federal grants will be relied upon for funding, appropriate Federal regulations which are applicable at the time must be adhered to.

As soon as MDC decides (a) how to group projects for awarding contracts to engineering firms and/or (b) who receives the contract for each project, they should provide the Regional Administrator and Director with this information.

It is recommended that the MDC submit applications for Step I grants at least 3 months prior to the dates given in the following projects for initiation of facility plans.

All Combined Sewer Overflow Projects shall be designed and constructed such that untreated discharges of combined sewage shall not occur at rainfalls less than a storm of 1 year severity and 6 hour duration.

a. Facilities to dispose of primary sludge from Deer and Nut Island Sewerage Facilities.

(1) By September 1, 1976 initiate preparation of final plans and specifications.

(2) By September 1, 1977 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(3) By April 1, 1978 award the construction contract for approved facilities.

(4) By February 1, 1980 complete construction of the approved project.

(5) By May 1, 1980 attain operational level of the approved project.

(6) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

b. Facilities to Control Pollution from Combined Sewer Overflows into Dorchester Bay.

(1) By May 1, 1976 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By May 1, 1977 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By Sept. 1, 1977 initiate preparation of final plans and specifications.

(4) By March 1, 1979 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By Sept. 1, 1979 award the construction contract for approved facilities.

(6) By Oct. 1, 1981 complete construction of the approved project.

(7) By Oct. 1, 1981 attain operational level of the approved project to meet the effluent limits specified in Special Condition A 7b.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

c. Expansion of Nut Island Primary Treatment Plant including outfall.

(1) By May 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By May 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By Sept. 1, 1978 initiate preparation of final plans and specifications.

(4) By June 1, 1980 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By Jan. 1, 1981 award the construction contract for approved facilities.

(6) By Feb. 1, 1984 complete construction of the approved project.

(7) By May 1, 1984 attain operational level of the approved project.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

d. Expansion of Deer Island Primary Treatment Plant.

(1) By May 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By May 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By Sept. 1, 1978 initiate preparation of final plans and specifications.

(4) By June 1, 1980 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By Jan. 1, 1981 award the construction contract for approved facilities.

(6) By Feb. 1, 1984 complete construction of the approved project.

(7) By May 1, 1984 attain operational level of the approved project.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

e. Secondary Treatment Facilities for Nut Island primary effluent.

(1) By May 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By May 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By Sept. 1, 1978 initiate preparation of final plans and specifications.

(4) By Sept. 1, 1980 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By May 1, 1981 award the construction contract for approved facilities.

(6) By Dec. 1, 1984 complete construction of the approved project.

(7) By Feb. 1, 1985 attain operational level of the approved project to meet the effluent limits specified in Special Condition A 3d.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

f. Secondary Treatment Facilities for Deer Island primary effluent.

(1) By May 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By May 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By Sept. 1, 1978 initiate preparation of final plans and specifications.

(4) By Sept. 1, 1980 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By May 1, 1981 award the construction contract for approved facilities.

(6) By Dec. 1, 1984 complete construction of the approved project.

(7) By Feb. 1, 1985 attain operational level of the approved project to meet the effluent limits specified in Special Condition A 1c.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

g. Facilities to Dispose of Secondary Sludge from Deer and Nut Island Sweage Facilities.

(1) By May 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By May 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By Sept. 1, 1978 initiate preparation of final plans and specifications.

(4) By Sept. 1, 1980 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By May 1, 1981 award the construction contract for approved facilities.

(6) By Dec. 1, 1984 complete construction of the approved project.

(7) By Feb. 1, 1985 attain operational level of the approved project.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

h. **Facilities to Control Pollution from Combined Sewer Overflows into the Charles River including the Muddy River and Back Bay Fens.**

(1) By **January 1, 1977** initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By **July 1, 1978** submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By **January 1, 1979** initiate preparation of final plans and specifications.

(4) By **July 1, 1980** submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By **Jan. 1, 1981** award the construction contract for approved facilities.

(6) By **Feb. 1, 1983** complete construction of the approved project.

(7) By **Feb. 1, 1983** attain operational level of the approved project to meet the effluent limits specified in Special Condition A **7c**.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

1. Facilities to Control Pollution from Combined Sewer Overflows into the Neponset River.

(1) By January 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By January 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By January 1, 1979 initiate preparation of final plans and specifications.

(4) By July 1, 1980 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By Jan. 1, 1981 award the construction contract for approved facilities.

(6) By Feb. 1, 1983 complete construction of the approved project.

(7) By Feb. 1, 1983 attain operational level of the approved project to meet the effluent limits specified in Special Condition A 7d.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

j. **Facilities to Control Pollution from Combined Sewer Overflows into the Boston Inner Harbor** including the tidal portions of the Mystic, Charles and Chelsea Rivers.

(1) By January 1, 1978 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By July 1, 1979 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By January 1, 1980 initiate preparation of final plans and specifications.

(4) By January 1, 1982 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By December 1, 1982 award the construction contract for approved facilities.

(6) By January 1, 1986 complete construction of the approved project.

(7) By January 1, 1986 attain operational level of the approved project to meet the effluent limits specified in Special Condition A 7e.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

k. **Facilities to Control Pollution from Combined Sewer Overflows into the Charles River (Charles River Marginal Conduit Project).**

(1) By March 1, 1979 complete construction of the approved project.

(2) By March 1, 1979 attain operational level of the approved project to meet the effluent limits specified in Special Condition A 7a.

(3) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of April and October for the period from the present to completion and attainment of operation level.

1. Extension of Framingham Sewer.

(1) By April 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(2) By April 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(3) By Aug. 1, 1978 initiate preparation of final plans and specifications.

(4) By Aug. 1, 1979 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(5) By Feb. 1, 1980 award the construction contract for approved facilities.

(6) By March 1, 1982 complete construction of the approved project.

(7) By March 1, 1982 attain operational level of the approved project.

(8) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

m. Option of either satellite wastewater treatment plants and/or increased capacity at the Nut Island Sewage Treatment Plant.

(1) By March 1, 1976 the permittee shall submit to the Regional Administrator and Director proposals for specific location(s) for each of the satellite treatment plants being considered.

(2) By May 1, 1977, the permittee shall consider EPA's recommendation based on the Environmental Impact Statement and shall notify the Regional Administrator and Director which of the following options is to be selected:

(a) Construct 2 satellite treatment plants (Special Conditions B8m(3) and (4));

(b) Construct Interceptor Relief for Wellesley Interceptor and New Neponset Valley Sewer (Special Condition B8m(5)) and design additional capacity for the Nut Island Sewage Treatment Plant; or

(c) A combination of the above (appropriate schedules to meet Special Conditions B8m(3), (4) and/or (5)).

(3) Advanced Waste Treatment Facilities on the Middle Charles River (Wellesley Area) (if selected).

(a) By May 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(b) By May 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(c) By Sept. 1, 1978 initiate preparation of final plans and specifications.

(d) By June 1, 1980 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(e) By Jan. 1, 1981 award the construction contract for approved facilities.

(f) By Feb. 1, 1984 complete construction of the approved project.

(g) By May 1, 1984 attain operational level of the approved project to meet the effluent limits specified in Special Condition A 8a.

(h) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

(4) Advanced Waste Treatment Facilities on the Upper Neponset River (Canton Area) (if selected).

(a) By May 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(b) By May 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(c) By Sept. 1, 1978 initiate preparation of final plans and specifications.

(d) By June 1, 1980 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(e) By Jan. 1, 1981 award the construction contract for approved facilities.

(f) By Feb. 1, 1984 complete construction of the approved project.

(g) By May 1, 1984 attain operational level of the approved project to meet the effluent limits specified in Special Condition A 8b.

(h) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

(5) Interceptor Relief for Wellesley Interceptor extension and New Neponset Valley Sewer (if selected).

(a) By May 1, 1977 initiate a facilities plan (including, without limitation, preparation of preliminary plans and engineering reports). This facilities plan may be prepared and submitted with the facilities plans for other projects. (See 40 C.F.R. 35.917-1)

(b) By Feb. 1, 1978 submit the facilities plan to the Regional Administrator for review and the Director for approval.

(c) By June 1, 1978 initiate preparation of final plans and specifications.

(d) By June 1, 1979 submit final plans and specifications to the Regional Administrator for review and the Director for approval.

(e) By Dec. 1, 1979 award the construction contract for approved facilities.

(f) By Jan. 1, 1982 complete construction of the approved project.

(g) By Jan. 1, 1982 attain operational level of the approved project.

(h) Progress reports on the project should be submitted to the Regional Administrator and the Director on the first of each April and October for the period covered by this schedule.

9. Pumping capacity at Deer Island

a. The following information should be submitted monthly with the monitoring reports

(1). The number of pumps fully operational

(2). How many hours each day were the gates choked at the Columbus Park, Ward Street and Chelsea headworks

(3). The flow rates daily through the Columbus Park, Ward Street and Chelsea headworks.

b. The permittee shall study the feasibility of installing alternative or new prime movers on the sewage pumps at the Deer Island facility and report thereon by July 1, 1977 to the Regional Administrator and Director.

C. Monitoring and Reporting

1. Deer Island Sewage Treatment Plant

a. The permittee shall monitor and record the quality and quantity of the discharges of the Deer Island facility (001, 002, and influent where noted) according to the following schedule and other provisions:

Parameter	Minimum Frequency of Analysis	Sample Type
Until termination of this permit		
Influent & Effluent BOD	Daily*	24-hr. Composite
Influent & Effluent TSS	Daily*	24-hr. Composite
Flow	Continuous Recording	Daily Avg.,Max.,Min.
Chlorides (Influent only)	Daily*	24-hr. Composite
Total Coliform	3X Daily*	Grabs
Fecal Coliform	3X Daily*	Grabs
Chlorine Residual	3X Daily**	Grabs
Settleable Solids	Daily*	24-hr. Composite
Total Chromium	Monthly	Composite of 24-hr. composite
pH	Daily*	24-hr. Composite
Total Kjedahl Nitrogen	Monthly	24-hr. Composite
Ammonia Nitrogen	Monthly	24-hr. Composite
Ortho Phosphorus	Monthly	24-hr. Composite
Total Phosphorus	Monthly	24-hr. Composite
Nitrate Nitrogen	Monthly	24-hr. Composite
Nitrite Nitrogen	Monthly	24-hr. Composite
Temperature (Influent only)	3X Daily*	Grabs
Copper	Monthly	Composite of 24-hr. composite

Composite of 24-hour composites would be a combination of daily 24-hour composites collected over the period of one calendar month.

*Daily shall be taken to mean a minimum of 5 times per week.

**7 days per week.

b. The permittee shall monitor and record the quality and quantity of discharge of digested sludge (through 001 and 002 at the Deer Island facility) according to the following schedule and other provisions:

Parameter	Minimum Frequency of Analysis	Sample Type
Until termination of the sludge discharge		
Flow	Daily	Daily Quantity
pH	Monthly	Grab
Total Solids	Monthly	Grab
Volatile Solids	Monthly	Grab
Volatile Acids	Monthly	Grab
Total Chromium	Monthly	Grab
Total Kjedahl Nitrogen	Monthly	Grab
Ammonia Nitrogen	Monthly	Grab
Ortho Phosphorus	Monthly	Grab
Total Phosphorus	Monthly	Grab
Copper	Monthly	Grab

c. Whenever a discharge occurs from Discharges 003, 004, and/or 005, the permittee shall monitor the waste for flow, The waste shall be monitored at least once per each 8 hours or less of discharge.

2. Nut Island Sewage Treatment Plant

a. The permittee shall monitor and record the quality and quantity of the discharges of the Nut Island facility (101, 102, and 103 and influent where noted) according to the following schedule and other provisions:

Parameter	Minimum Frequency of Analysis	Sample Type
Until termination of this permit		
Influent & Effluent BOD	Daily*	24-hr. Composite
Influent & Effluent TSS	Daily*	24-hr. Composite
Flow	Continuous Recording	Daily Avg.,Max.,Min.
Chlorides (Influent only)	Daily*	24-hr. Composite
Total Coliform	3X Daily*	Grabs
Fecal Coliform	3X Daily*	Grabs
Chlorine Residual	3X Daily**	Grabs
Settleable Solids	Daily*	24-hr. Composite
Total Chromium	Monthly	Composite of 24-hr. composite
pH	Daily*	24-hr. Composite
Total Kjedahl Nitrogen	Monthly	24-hr. Composite
Ammonia Nitrogen	Monthly	24-hr. Composite
Ortho Phosphorus	Monthly	24-hr. Composite
Total Phosphorus	Monthly	24-hr. Composite
Nitrate Nitrogen	Monthly	24-hr. Composite
Nitrite Nitrogen	Monthly	24-hr. Composite
Temperature (Influent only)	3X Daily*	Grabs
Copper	Monthly	Composite of 24-hr. composite

Composite of 24-hour composites would be a combination of daily 24-hour composites collected over the period of one calendar month.

*Daily shall be taken to mean a minimum of 5 times per week.

**7 days per week.

b. The permittee shall monitor and record the quality and quantity of discharge of digested sludge (105 of the Nut Island facility) according to the following schedule and other provisions:

Parameter	Minimum Frequency of Analysis	Sample Type
Until termination of the sludge discharge		
Flow	Daily	Daily Quantity
pH	Monthly	Grab
Total Solids	Monthly	Grab
Volatile Solids	Monthly	Grab
Volatile Acids	Monthly	Grab
Total Chromium	Monthly	Grab
Total Kjedahl Nitrogen	Monthly	Grab
Ammonia Nitrogen	Monthly	Grab
Ortho Phosphorus	Monthly	Grab
Total Phosphorus	Monthly	Grab
Copper	Monthly	Grab

c. Whenever a discharge occurs from Discharge 104, the permittee shall monitor the waste for flow, fecal and total coliform, and chlorine residual. The waste shall be monitored at least once per each 8 hours or less of discharge. A recorder shall be installed to indicate when Discharge 104 is being used.

3. Cottage Farm Detention Station

a. The permittee shall monitor and record the quality and quantity of discharge from the Cottage Farm Detention Station according to the following schedule and other provisions:

Parameter	Minimum Frequency of Analysis	Sample Type
Until termination of permit		
Flow	*	Continuous Recording
BOD**	*	Composite
TSS**	*	Composite
pH	*	Composite
Settleable Solids	*	Composite
Chlorine Residual	*	Hourly grabs
Total Coliform	*	Grab
Fecal Coliform	*	Grab

*This monitoring shall be conducted during every discharge period. Composite samples shall be collected over the duration of the discharge period. If the discharge occurs continuously for greater than 24 hours, results shall be recorded in 24-hour intervals plus any additional portion thereof.

**Report both influent and effluent results for these parameters.

4. Somerville Marginal Conduit and Pretreatment Facility

a. The permittee shall monitor and record the quality and quantity of discharge from the Somerville Marginal Conduit and Pretreatment Facility according to the following schedule and other provisions:

Parameter	Minimum Frequency of Analysis	Sample Type
Until termination of permit		
Flow	*	Continuous Recording
BOD**	*	Composite
TSS**	*	Composite
pH	*	Composite
Settleable Solids	*	Composite
Chlorine Residual	*	Hourly grabs
Total Coliform	*	Grab
Fecal Coliform	*	Grab

*This monitoring shall be conducted during every discharge period. Composite samples shall be collected over the duration of the discharge period. If the discharge occurs continuously for greater than 24 hours, results shall be recorded in 24-hour intervals plus any additional portion thereof.

**Report both influent and effluent results for these parameters.

5. Charles River Marginal Conduit Project

a. The permittee shall monitor and record the quality and quantity of discharge from the Charles River Marginal Conduit Project, after completion, according to the following schedule and other provisions:

Parameter	Minimum Frequency of Analysis	Sample Type
Until termination of permit		
Flow	*	Continuous Recording
BOD**	*	Composite
TSS**	*	Composite
pH	*	Composite
Settleable Solids	*	Composite
Chlorine Residual	*	Hourly grabs
Total Coliform	*	Grab
Fecal Coliform	*	Grab

*This monitoring shall be conducted during every discharge period. Composite samples shall be collected over the duration of the discharge period. If the discharge occurs continuously for greater than 24 hours, results shall be recorded in 24-hour intervals plus any additional portion thereof.

**Report both influent and effluent results for these parameters.

6. Sewer Overflows

a. The permittee shall identify and locate all sewer overflows and bypasses (including those indicated in Attachments A and B) and shall, as a minimum, describe the extent and causes of such discharges, estimate the frequency and duration of such discharges, describe the effect on the receiving waters, and include such additional data as is available to the applicant.

(1) The above shall be submitted to the Regional Administrator and the Director by January 1, 1977, and updated on each subsequent January 1.

b. The permittee shall identify to the best of its knowledge those sewer overflows and/or bypasses that will be eliminated and/or reduced by completion of each combined sewer overflow project identified in this permit or proposed by the permittee.

(1) The overflows and/or bypasses of concern may belong to one or more of the member communities.

(2) The above report is to be submitted to the Regional Administrator and the Director by January 1, 1977, and updated semiannually.

7. General Monitoring Requirements

a. Any grab sample or composite sample required to be taken less frequently than daily shall be taken during the period of Monday through Friday inclusive. Eight-hour composites and grab samples shall be taken between 8:00 a.m. and 6:00 p.m.

b. The permittee shall submit all reports of all monitoring on a form acceptable to the Regional Administrator and the Director, properly filled in and signed, on the fifteenth of every month, beginning upon issuance of this permit, to the Regional Administrator and the Director.

c. The permittee shall monitor the discharge from a source such as a treatment plant or combined sewer overflow project if the discharge or project has been specified in either Special Condition A or B and no specific schedule has been given. In addition, the discharge shall be monitored as per Special Condition C1 or C3, whichever is applicable.

d. The permittee shall indicate on the monthly monitoring reports (1) which unit processes of the treatment plants, if any, were not operating, causes and period of inoperation, (2) overflows from pumping stations specifying times and volumes of occurences, and (3) any other major problems within system. An indication of actions taken to eliminate or minimize reoccurrence of problems shall be included.

8. Non-Compliance

a. Schedule

(1) Where a specific action is required in Special Condition B above to be taken by a certain date, the permittee shall submit to the Regional Administrator and the Director a written notice of compliance or non-compliance with each of the above scheduled dates, postmarked no later than 14 days following each elapsed date. Each notice of non-compliance shall include the following information:

(a) A short description of the non-compliance;

(b) A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;

(c) A description of any factors which tend to explain or mitigate the non-compliance; and

(d) An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next schedule requirement on time.

(2) Subsequent compliance shall be reported by:

(a) Submitting the required documents on schedule; or

(b) Indicating in writing that the required action has been taken.

b. Effluent Limits

(1) Where the effluent limits are out of compliance, the permittee shall submit to the Regional Administrator and the Director a written notice of compliance or non-compliance with each of the effluent limits violated, postmarked no later than 14 days following each elapsed date. Each notice of non-compliance shall include the following information:

(a) A short description of the non-compliance;

(b) A description of any actions taken or proposed by the permittee to comply with the limits;

(c) A description of any factors which tend to explain or mitigate the non-compliance; and

(d) An estimate of the date the permittee will comply with the requirement and an assessment of the probability that the permittee will meet the limits in the future.

(2) The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from non-compliance with any effluent limit in this permit.

9. Reporting

a. When specific information is required as a condition of this permit, the permittee shall send it to:

Environmental Protection Agency Region I - Permits Branch P. O. Box 8127 Boston, Massachusetts 02114	Division of Water Pollution Control Leverett Saltonstall Building 100 Cambridge Street Boston, Massachusetts 02202

b. Submittals to other offices in EPA shall not be construed to be a fulfillment of these permit conditions.

III. General Conditions

A. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Federal Act or Section 42 of the State Act. Facility modifications, additions, and/or expansions that increase the plant capacity must be reported to the Regional Administrator and the Director, and this permit then modified or reissued to reflect such changes. No change in the facility discharge, including any new significant industrial discharge or any significant change in the quality or quantity of an existing industrial discharge to the treatment system, that will result in new or increased discharges of pollutants from such treatment system may be made unless reported to the Regional Administration and approved by Director. This permit may be modified accordingly. In no case are new connections, increased flows, or significant changes in influent quantity or quality permitted that will cause violation of the effluent limitations specified herein.

B. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

1. Violation of any terms or conditions of the permit;

2. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; and

3. A change in conditions or the existence of a condtion which requires either a temporary or permanent reduction or elimination of the authorized discharge.

C. The permittee shall permit the Regional Administrator, Director, and other duly authorized Environmental Protection Agency and Division personnel upon the presentation of proper credentials:

1. To enter upon permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit;

2. To have access to and copy any reocrds required to be kept under the terms and conditions of this permit;

3. To inspect any monitoring equipment or monitoring method required in this permit; or

4. To sample at any intake, wastewater treatment facility, and/or outfall.

D. In the event of any change in control or ownership of facilities from which the authorized discharges originate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator and the Director. Succeeding owners or controllers shall be bound by all the conditions of this permit, unless and until a new or modified permit is obtained.

E. All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the Division's "Rules and Regulations for Operation and Maintenance of Sewerage Systems and Waste Treatment Facilities," as most recently amended, and any applicable Federal Regulations and Guidelines, which regulations are hereby incorporated into and made a part of this permit. The permittee shall at all times maintain in good working order and operate as efficiently as possible any facilities or system of control installed or utilized to achieve compliance with the terms and conditions of this permit.

F. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges; nor does it authorize or relieve the permittee of any liability for any

injury to private property or any invasion of personal rights; nor any infringement of Federal, State, or local laws or regulations; nor does it waive the necessity of obtaining any local assent required by law for the discharge authorized herein.

G. This permit shall be subject to such monitoring requirements as may be reasonably required by the Regional Administrator and Director, including the installation, use, and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The permittee shall provide the Regional Administrator and the Director with periodic reports on the proper reporting form of monitoring results obtained by a permittee pursuant to the monitoring requirements contained herein. The permittee shall maintain records of all information resulting from any monitoring activities required herein. Any records of monitoring activities and results shall include for all samples:

1. The date, exact place and time of sampling;

2. The dates and times analyses were performed;

3. Who performed the sampling and analyses;

4. The analytical techniques/methods used, including sampling, handling, and preservation techniques; and

5. The results of each such analysis. Any records of monitoring activities and results including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records, shall be retained for a minimum of three years. This period shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Regional Administrator or the Director.

H. All information and data provided by an applicant or a permittee identifying the nature and frequency of a discharge shall be available to the public without restriction. All other information (other than effluent data) which may be sumitted by an applicant in connection with a permit application or which may be furnished by a permittee in connection with required periodic reports shall also be available to the public unless the applicant or permittee is able to demonstrate that the disclosure of such information or particular part thereof to the general public would divulge methods or processes entitled to protection as trade secrets in accordance with Federal regulations contained in 40 CFR Part 124.35. Where the applicant or permittee is able to so demonstrate, the Director and the Regional Administrator shall treat the information or the particular part (other than effluent data) as confidential and not release it to any unauthorized person. Such information may be divulged to other officers, employees, or authorized representatives of the Commonwealth or the United States Government concerned with carrying out water pollution control laws.

I. All reports and communications required hereunder are to be made or sent to the Director of the Division of Water Pollution Control and the Regional Administrator of the Environmental Protection Agency.

J. Notwithstanding B above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition, and the permittee shall be so notified.

K. The provisions of this permit are severable, and the invalidity of any condition or subdivision thereof shall not make void any other condition or subdivision thereof.

L. Reporting and Monitoring

1. Quality Control

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements or shall ensure that both activities will be conducted. Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period.

a. The permittee shall provide the above records and shall demonstrate the accuracy of the flow measuring device upon request of the Director and the Regional Administrator. The permittee shall identify the effluent sampling point used for each discharge.

b. The permittee shall analyze any additonal samples as may be required by the Director and the Regional Administrator to ensure analytical quality control.

c. If this permittee monitors any pollutant more frequently than is required by this permit, he shall also provide the results of such monitoring to the Director and Regional Administrator.

2. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used must conform to the test procedures guidelines prepared under Section 304(g) of the Federal Act.

3. Reporting

The results of the above mentioned requirements shall be reported as required in Special Condtion IIC. The permittee shall include in this report any previously approved non-standard methods used. Permanent elimination of a discharge should be brought to the attention of the Director and the Regional Administrator within 15 days by a special written notification. A written report should be submitted if there have been any modifications in the waste collection, treatment, and disposal facilities; changes in operational procedures; or other significant activities which alter the nature and frequency of the discharge or otherwise concern the conditions of this permit.

M. Certification of Reports

All reports shall be signed by the chief operator of the treatment facility and

1. In the case of corporations, by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates;

2. In the case of a partnership, by a general partner;

3. In the case of a sole proprietorship, by the proprietor;

4. In the case of a municipal, State, or other public facility, by either a principal executive officer or ranking elected official.

N. Oil Discharges

There shall be no discharge of harmful quantities of oil, as defined pursuant to 40 CFR 110 and Massachusetts Water Quality Standards, including (1) any subsequent amendments or revisions made thereto, or (2) any more restrictive limitations which may be imposed otherwise by law or regulation. The authorization of this permit does not preclude the institution of any legal action nor relieve the permittee from any liabilities, penalties, or responsibilities established by Section 311 of the Federal Act, by Massachusetts General Laws c. 21, §§27(14), and 42 as amended, and the Massachusetts Rules for the Prevention and Control of Oil Pollution in the Waters of the Commonwealth by any subsequent amendments thereto, or by any superseding Federal or State legislation.

O. Other Materials

Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

1. They are not

   a. Designated as toxic or hazardous under provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act, or the Massachusetts General Laws c. 21, §§57, 58 and the Division of Water Pollution Control Hazardous Waste Regulations

   b. Known to be hazardous or toxic by the permittee, except that such materials may be discharged in certain limited amounts with the written approval of, and under special conditions established by the Director and the Regional Administrator or their designated representatives, if the substance will not pose any imminent hazard to the public health or safety;

2. The discharge of such materials will not violate applicable water quality standards; and

3. The permittee is not notified by the Director and the Regional Administrator to eliminate or reduce the quantity of such materials entering the watercourse.

P. Solids Disposal

Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in such a manner as to prevent entry of such materials or leachate therefrom into navigable waters or their tributaries.

Q. Emergency Action - Electric Power Failure

The permittee shall, in the event the primary source of electric power fails, provide, as a minimum, primary treatment (or its equivalent) plus disinfection for all wastes discharged into the waste treatment facility. The alternate power supply, whether from a generating unit located at the plant site or purchased from an independent source of electricity, must be separate from the existing power source used to operate the waste treatment facilities.

R. Changes in Discharges to Treatment Facilities

The permittee shall notify the Regional Administrator and the Director of any discharge specified in Special Condition B4c(2) hereof within 30 days of the date on which it comes to the attention of the permittee. This permit may be modified accordingly.

S. Reapplication

If the permittee desires to continue to discharge after the expiration of this permit, it shall reapply on the application forms then in use at least 180 days before this permit expires.

T. Definitions

For purposes of this permit, the following definitions shall apply:

Regional Administrator - Regional Administrator, Region I, Environmental Protection Agency, John F. Kennedy Federal Building, Government Center, Boston, Massachusetts 02203
Attention: Permits Branch

Director - Director of the Massachusetts Division of Water Pollution Control

Division - Massachusetts Water Resources Commission, Division of Water Pollution Control, Leverett Saltonstall Building, 100 Cambridge Street, Boston, Massachusetts 02202

Mean - The mean value is the arithmetic mean unless used for fecal or total coliform, which would be a geometric mean.

National Pollutant Discharge Elimination System Permit (NPDES) - A permit issued under authority of §402 of the Federal Water Pollution Control Act, as amended (Public Law 92-500).

Grab Sample - An individual sample collected in a period of less than 15 minutes.

North System - That portion of the sewerage system that discharges either directly or indirectly to the Deer Island Sewage Facility. This includes those portions owned by either MDC or its member communities.

South System - That portion of the sewerage system that discharges either directly or indirectly to the Nut Island Sewage Facility. This includes those portions owned by either MDC or its member communities.

Bypass - A bypass is an arrangement of pipes, conduits, gates or valves where all or a portion of the flow is diverted and results in a discharge.

Overflow - An overflow occurs when the volume of water exceeds the capacity of a transport system causing the extra water to be spilled or forced out of the system into a waterway.

Initiation - Initiation of a facilities plan or plans and specifications is that date when the engineer has been contracted and has been given authority to proceed.

The following abbreviations, when used, are defined below:

Cu. M/day or M^3/day	cubic meters per day
mg/l	milligrams per liter
ug/l	micrograms per liter
kgpd or kg/day	kilograms per day
Temp. °C	temperature in degrees Centigrade
Temp. °F	temperature in degrees Fahrenheit
TNFR or TSS	total nonfilterable residue or total suspended solids
DO	dissolved oxygen
BOD	five-day biochemical oxygen demand unless otherwise specified
TKN	total Kjeldahl nitrogen as nitrogen
NH_3-N	ammonia nitrogen as nitrogen
lb/day	pounds per day
Total P	total phosphorus as phosphorus
COD	chemical oxygen demand
TOC	total organic carbon
Surfactant	surface-active agent
pH	a measure of the hydrogen ion concentration
PCB	polychlorinated biphenyl
CFS	cubic feet per second
MGD	million gallons per day
Oil & Grease	hexane extractable material
Total Coliform	total coliform bacteria
Turb.	turbidity measured in Jackson Candle Units (JTU)

Fecal Coliform	total fecal coliform bacteria
ml/l	milliliter(s) per liter
ml	milliliter(s)
SU	standard units
NO_3-N	nitrate nitrogen as nitrogen
NO_2-N	nitrite nitrogen as nitrogen
NO_2&NO_3	combined nitrite and nitrate nitrogen as nitrogen
Cl_2	total residual chlorine

This permit shall become effective 45 days after the date of the signature of the signatories listed below and shall expire on _____.

_____ _____

Thomas C. McMahon, Director
Division of Water Pollution Control
Commonwealth of Massachusetts

Date

_____ _____

Leslie Carothers, Director
Enforcement Division
Environmental Protection Agency

Date

Attachment A

Discharge Serial Number	Description	Latitude	Longitude	Frequency	Receiving Water
001	Plant Outfall #1	42°20'14"	70°57'07"	Continuous	Boston Harbor
002	Plant Outfall #2	42°20'19"	70°57'20"	Continuous	Boston Harbor
003	Plant Relief #1	42°20'28"	70°57'20"	Flow rates above 400 MGD	Boston Harbor
004	Plant Relief #2	42°20'35"	70°57'25"	Flow rates above 500 MGD	Boston Harbor
005	Plant Relief #3	42°20'55"	70°57'41"	Flow rates above 600 MGD	Boston Harbor
006	E. Boston Overflow #1	42°23'00"	71°59'39"	Rare	Belle Isle Inlet
007	E. Boston Overflow #2	42°23'08"	71°01'22"	Rare	Chelsea Creek
008	E. Boston Overflow #3	42°23'08"	71°01'22"	Rare	Chelsea Creek
009	Chelsea Overflow	42°23'11"	71°01'23"	Rare	Chelsea Creek
010	Brookline Overflow	42°21'09"	71°06'20"	Rare	Charles River
011	Brighton Overflow	42°21'36"	71°09'30"	Rare	Charles River
012	Medford Overflow #1	42°25'03"	71°06'20"	Rare	Meeting House Brook
013	Medford Overflow #2	42°24'50"	71°05'20"	Rare	Mystic River
014	Medford Overflow #3	42°24'58"	71°07'00"	Rare	Mystic River
015	Medford Overflow #4	42°24'32"	71°04'23"	Rare	Malden River

Attachment A (Continued)

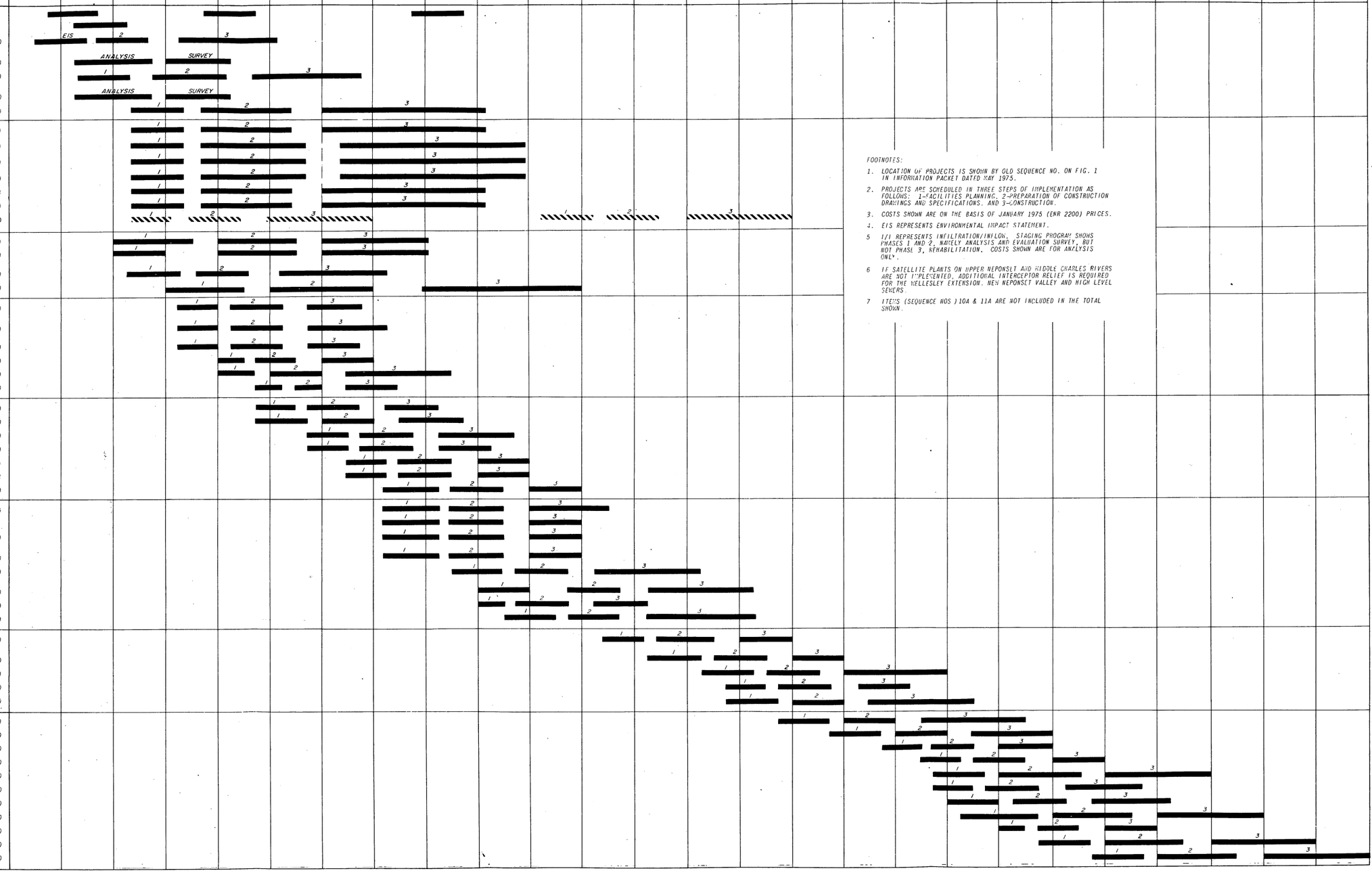
Discharge Serial Number	Description	Latitude	Longitude	Frequency	Receiving Water
016	Malden Overflow	42°25'12"	71°04'18"	Rare	Saugus Branch Brook
017	Somerville Overflow	42°24'46"	71°07'51"	Rare	Alewife Brook
018	Gloucester St. Overflow	42°21'12"	71°05'14"	Rare	Charles River
019	Exeter St. Overflow	42°21'17"	71°05'00"	Rare	Charles River
020	Berkely St. Overflow	42°21'23"	71°04'34"	Rare	Charles River
021	Mt. Vernon St. Overflow	42°21'32"	71°04'30"	Rare	Charles River
022	Cambridge St. Overflow	42°21'44"	71°04'30"	Rare	Charles River
023	Fens Gate House Overflow	42°21'09"	71°05'30"	Rare	Charles River

Attachment B

Discharge Serial Number	Description	Latitude	Longitude	Frequency	Receiving Water
101	Plant Outfall #1	42°17'37"	70°57'04"	Continuous	Boston Harbor/ Quincy Bay
102	Plant Outfall #2	42°17'38"	70°57'21"	Continuous	Boston Harbor/ Quincy Bay
103	Plant Outfall #3	42°17'03"	70°57'25"	Continuous	Boston Harbor/ Quincy Bay
104	Emergency Relief	42°16'47"	70°57'06"	Flow rates above 250 MGD and/or high tides	Hingham Bay
105	Sludge Outfall	42°19'54"	70°57'12"	Intermittent	Boston Harbor
106	Overflow from Weymouth pumping station	42°14'53"	70°55'48"	Intermittent	Weymouth Back River

MDC CONSTRUCTION STAGING PROGRAM FOR WASTEWATER MANAGEMENT PROJECTS

SEQUENCE NO. NEW	SEQUENCE NO. OLD[1]	DESCRIPTION[2]	SEWER SECTION NO.	COST $ [3]
		AUTHORIZATION BY LEGISLATURE		
		EIS ON MAJOR STUDY PROJECTS[4]		
1	1	SLUDGE MANAGEMENT (PRIMARY)		25,573,000
2	2	I/I ANALYSIS (SOUTH SYSTEM)[5]		983,000
3	14	DORCHESTER BAY COMB. S. OVERFLOWS		77,000,000
4	15	I/I ANALYSIS (NORTH SYSTEM)[5]		1,012,000
5	5 & 6	N.I. PRIMARY EXT. (INCL. OUTFALL)		50,536,000
6	33	D.I. PRIMARY EXP.		41,900,000
7	42	N.I. SECONDARY EXT		86,700,000
8	43	D.I. SECONDARY EXT.		150,000,000
9	44	SLUDGE MANAGEMENT (SECONDARY)		28,094,000
10	3	MIDDLE CHARLES R. W.W.T.P.		49,600,000
11	4	UPPER NEPONSET R. W.W.T.P.		41,100,000
10A & 11A	–	INTERCEPTOR RELIEF IN LIEU OF (SEQUENCE NOS.) 10 & 11[6]		64,700,000
12	28	CHARLES R. COMB. S. OVERFLOWS		84,000,000
13	27	NEPONSET R. COMB. S. OVERFLOWS		23,000,000
14	7	FRAMINGHAM EXT. S.	134, 1338, 132	22,461,000
15	53	INNER HARBOR COMB. S. OVERFLOWS		86,000,000
16	8	LOWER BRAINTREE COMB. S.	125 BRANCH	400,000
17	9	BRAINTREE WEYMOUTH P.S.		2,920,000
18	10	HINGHAM T.T.		534,000
19	11	STOUGHTON EXT. S	115, 119, 121	1,090,000
20	12	WALPOLE EXT. S.	116, 117, 118	11,894,000
21	13	NO. CHARLES METRO. S.	62	1,271,000
22	16	MILLBROOK VALLEY S.	84, 85	3,771,000
23	17	QUINCY P.S. & F.M.		2,220,000
24	18	NORTH METRO. S.	17	1,165,000
25	19	CHELSEA BRANCH S.	52	145,000
26	20	STONEHAM EXT. S.	51	349,000
27	21	STONEHAM TRUNK S.	42	145,000
28	22	EAST BOSTON STEAM P.S.		1,460,000
29	23	CHARLESTOWN P.S.		6,000,000
30	24	ALEWIFE BROOK P.S.		712,000
31	25	EAST BOSTON ELECTRIC P.S.		365,000
32	26	HOUGHS NECK P.S.		203,000
33	29	SOMERVILLE MEDFORD BRANCH S.	35	4,500,000
34	30	SOUTH CHARLES REL. S.	4A, 4-H	2,670,000
35	31	WAKEFIELD BRANCH S.	50-60, 60-49, 59-49	838,000
36	32	SOUTH CHARLES RIVER S.	5-A, 5-B	8,428,000
37	34	CUMMINGSVILLE BRANCH S.	47-86	1,012,000
38	35	HINGHAM P.S.		890,000
39	36	REVERE EXT. S.	57A, 62	3,413,000
40	37	LYNNFIELD EXT. S.		367,000
41	38	ASHLAND-HOPKINTON EXT. S.		4,459,000
42	39	WESTON-LINCOLN EXT. S.		3,832,000
43	40	SOUTHBORO EXT. S.		2,421,000
44	41	SHARON EXT. S.		1,218,000
45	45	STOUGHTON EXT. S.	119, 120, 121	827,000
46	46	WILMINGTON EXT. S.	89, 90	2,964,000
47	47	NORTH METRO S.	44.5, 67, 112	475,000
48	48	WESTWOOD EXT. S.	135, 136	2,350,000
49	49	WAKEFIELD TRUNK S.	59-41, 58-41, 87-40	4,754,000
50	50	WAKEFIELD BRANCH S.	50-60	177,000
51	51	SO. CHARLES RELIEF S.	4-H, 4-G, 4-F, 3-F, 3-E	2,911,000
52	52	SO. CHARLES RIVER S.	5-C	4,250,000
		TOTAL		855,359,000[7]



FOOTNOTES:

1. LOCATION OF PROJECTS IS SHOWN BY OLD SEQUENCE NO. ON FIG. 1 IN INFORMATION PACKET DATED MAY 1975.
2. PROJECTS ARE SCHEDULED IN THREE STEPS OF IMPLEMENTATION AS FOLLOWS: 1-FACILITIES PLANNING, 2-PREPARATION OF CONSTRUCTION DRAWINGS AND SPECIFICATIONS, AND 3-CONSTRUCTION.
3. COSTS SHOWN ARE ON THE BASIS OF JANUARY 1975 (ENR 2200) PRICES.
4. EIS REPRESENTS ENVIRONMENTAL IMPACT STATEMENT.
5. I/I REPRESENTS INFILTRATION/INFLOW. STAGING PROGRAM SHOWS PHASES 1 AND 2, NAMELY ANALYSIS AND EVALUATION SURVEY, BUT NOT PHASE 3, REHABILITATION. COSTS SHOWN ARE FOR ANALYSIS ONLY.
6. IF SATELLITE PLANTS ON UPPER NEPONSET AND MIDDLE CHARLES RIVERS ARE NOT IMPLEMENTED, ADDITIONAL INTERCEPTOR RELIEF IS REQUIRED FOR THE WELLESLEY EXTENSION, NEW NEPONSET VALLEY AND HIGH LEVEL SEWERS.
7. ITEMS (SEQUENCE NOS.) 10A & 11A ARE NOT INCLUDED IN THE TOTAL SHOWN.

(INITIAL ISSUE AUGUST 28, 1975)

(REVISED JANUARY 6, 1976 IN ACCORDANCE WITH PROPOSED NPDES PERMIT)

ATTACHMENT D

List by Dates of Reports Due

This attachment lists those reports that are due based on the various conditions of this permit. It is not intended to replace the conditions of the permit but to supplement and simplify them and present an overview. However, it is the responsibility of the permittee to check all dates for errors or omissions and submit reports as required in the various conditions of the permit.

1. There are several regular reporting requirements, such as

   a. Monitoring of Deer and Nut Island effluent and sludge - monthly.

   b. Industrial waste survey - January and July.

   c. Progress reports on construction projects and infiltration/inflow analyses - April and October.

   d. Tide gate surveys and repairs - January and July.

   e. Sewer overflow identification and elimination - January and July (beginning January 1, 1977).

2. There are also reports due when an event occurs, such as

   a. Filing of legislation.

   b. Discharge from Cottage Farm Stormwater Station.

   c. Non-compliance.

   d. Discharge from Serial No. 104 at Nut Island.

   e. Discharge from other combined sewer overflow projects.

3. Finally, there are other specific reporting events listed throughout the permit. These are indicated below in chronological order. It should be noted that the permittee should award contracts for construction 30 days prior to commencement of construction of each project. The permittee shall also apply for Federal and/or State grants at least 90 days prior to the related action listed below.

   a. February 1, 1976 (or within one week of permit issuance)
      (1) Identify legislative requirements.

   b. March 1, 1976

      (1) Site selection for W.W.T.P's.
      (2) Submit sewer overflow plan.

c. April 1, 1976

(1) Initiate I/I analysis of the North System.
(2) Initiate I/I analysis of the South System.

d. May 1, 1976

(1) Initiate facilities plan for Dorchester Bay Combined sewers.

e. July 1, 1976

(1) Sewer use ordinance.
(2) Implement sewer overflow plan

f. September 1, 1976

(1) Initiate final plans and specifications for disposal of primary sludge.

g. January 1, 1977

(1) Interim report on I/I analysis of the North System.
(2) Interim report on I/I analysis of the South System.
(3) Initiate facilities plan for the following projects:

(a) Neponset River combined sewers
(b) Charles River Combined sewers

h. April 1, 1977

(1) Initiate facilities plan for the Framingham interceptor.

i. May 1, 1977

(1) Submit facilities plan for the Dorchester Bay Combined Sewers.
(2) Initiate facilities plan for the following projects:

(a) Nut Island primary expansion
(b) Deer Island primary expansion
(c) Nut Island secondary
(d) Deer Island secondary
(e) Secondary sludge management
(f) Middle Charles W.W.T.P.
(g) Upper Neponset W.W.T.P.
(h) Interceptor relief

(3) Option of satellite W.W.T.P's.

j. July 1, 1977

(1) Selection of option of satellite plants or increase capacity for Nut Island and Interceptor Relief.
(2) Establish Industrial Waste Section.
(3) Feasibility of new prime movers on sewage pumps at Deer Island.

k. September 1, 1977

(1) Submit final plans and specifications for the disposal of primary sludge.
(2) Initiate final plans and specifications on Dorchester Bay Combined Sewers.

(d) Deer Island secondary
(e) Secondary sludge management
(f) Middle Charles W.W.T.P.
(g) Upper Neponset W.W.T.P.

u. October 1, 1978

(1) File legislation for middle projects (bimonthly reports due afterwards).

v. January 1, 1979

(1) Initiate final plans and specifications for the following projects

(a) Charles River Combined sewers.
(b) Neponset River combined sewers.

w. March 1, 1979

(1) Complete construction of the Charles River Marginal Conduit Project.
(2) Submit final plans and specifications for the Dorchester Bay combined sewers.

x. April 1, 1979

(1) Complete I/I evaluation survey of North Metropolitan System.
(2) Complete I/I evaluation survey of South Metropolitan System.

y. June 1, 1979

(1) Submit final plans and specifications for the Interceptor Relief.

z. July 1, 1979

(1) Submit facilities plan for the Inner Harbor combined sewers.

aa. August 1, 1979

(1) Submit final plans and specifications for the Framingham interceptor.

bb. September 1, 1979

(1) Award construction contract for the Dorchester Bay combined sewers.

cc. December 1, 1979

(1) Award construction contract for the Interceptor relief.

l. October 1, 1977

(1) Complete I/I analysis of the North System.
(2) Complete I/I analysis of the South System.

m. January 1, 1978

(1) Initiate facilities plan for the Inner Harbor combined sewers.
(2) Initiate sewer system evaluation of the North Metropolitan System.
(3) Initiate sewer system evaluation of the South Metropolitan System.
(4) Submit facilities plan for Neponset River combined sewer.

n. February 1, 1978

(1) Submit facilities plan for the Interceptor Relief.

o. April 1, 1978

(1) Submit facilities plan for the Framingham Interceptor.
(2) Award construction contract for primary sludge disposal.

p. May 1, 1978

(1) Submit facilities plan for the following projects:

(a) Nut Island primary expansion
(b) Deer Island primary expansion
(c) Nut Island secondary
(d) Deer Island secondary
(e) Secondary sludge management
(f) Middle Charles W.W.T.P.
(g) Upper Neponset W.W.T.P.

q. June 1, 1978

(1) Initiate final plans and specifications for the Interceptor relief.

r. July 1, 1978

(1) Submit facilities plan for the Charles River Combined sewers.
(2) Completion of Industrial Waste Survey.

s. August 1, 1978

(1) Initiate final plans and specifications for the Framingham Interceptor.

t. September 1, 1978

(1) Initiate final plans and specifications for the following projects:

(a) Nut Island primary expansion
(b) Deer Island primary expansion
(c) Nut Island secondary

dd. January 1, 1980

(1) Initiate final plans and specifications for the Inner Harbor combined sewers.

ee. February 1, 1980

(1) Complete construction of primary sludge disposal.
(2) Award construction contract for the Framingham interceptor.

ff. June 1, 1980

(1) Submit final plans and specifications for the following projects:

(a) Nut Island primary expansion
(b) Deer Island primary expansion
(c) Middle Charles W.W.T.P.
(d) Upper Neponset W.W.T.P.

gg. July 1, 1980

(1) Submit final plans and specifications for the following projects:

(a) Charles River Combined sewers
(b) Neponset River combined sewers

hh. September 1, 1980

(1) Apply for new permit.
(2) Submit final plans and specifications for the following projects:

(a) Nut Island secondary
(b) Deer Island secondary
(c) Secondary sludge management

ii. January 1, 1981

(1) Award construction contract for the following projects:

(a) Charles River Combined sewers
(b) Neponset River Combined sewers
(c) Nut Island primary expansion
(d) Deer Island primary expansion
(e) Middle Charles W.W.T.P.
(f) Upper Neponset W.W.T.P.

jj. May 1, 1981

(1) Award construction contract for the following projects:

(a) Nut Island secondary
(b) Deer Island secondary
(c) Secondary sludge management

kk. July 1, 1981

(1) Complete construction for the Interceptor relief.

ll. October 1, 1981

(1) Complete construction for the Dorchester Bay combined sewers.

mm. January 1, 1982

(1) Submit final plans and specifications for the Inner Harbor combined sewers.
(2) Complete construction for interceptor Relief.

nn. March 1, 1982

(1) Complete construction for the Framingham interceptor.

oo. December 1, 1982

(1) Award construction contract for Inner Harbor combined sewers.

pp. February 1, 1983

(1) Complete construction for the following projects:

(a) Charles River Combined sewers
(b) Neponset River combined sewers

qq. February 1, 1984

(1) Complete construction for the following projects:

(a) Nut Island primary expansion
(b) Deer Island primary expansion
(c) Middle Charles W.W.T.P.
(d) Upper Neponset W.W.T.P.

rr. December 1, 1984

(1) Complete construction for the following projects:

(a) Nut Island secondary
(b) Deer Island secondary
(c) Secondary sludge management

ss. January 1, 1986

(1) Complete construction for the Inner Harbor combined sewers.

City of Cambridge

1. S-29

Notice of a public hearing to be held on Feb. 18, 1976 at 10 am at Fanueil Hall by the U.S. Environmental Protection Agency, Permits Branch, re: to the issuance of permits to discharge into waters of the Commonwealth.

In City Council,

Feb. 2, 1976

2/2/76

- Placed on File -