



**BOSTON EDISON**

Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, Massachusetts 02360

October 19, 1995  
BEC0 5.95.081

NPDES Program Operations Section (WCP)  
Environmental Protection Agency  
P.O. Box 8127  
Boston, MA 02114

Massachusetts Division of Water Pollution Control  
Lakeville Hospital  
Lakeville, MA 02346

Discharge Monitoring Report

Dear Sirs:

Enclosed is the Discharge Monitoring Report for Pilgrim Nuclear Power Station (PNPS), NPDES Permit Number MA0003557 (Federal) and Number 359 (State).

The period covered by this report is September, 1995.

Should you have any questions on this report, please direct these to our Principal Marine Biologist, Mr. Robert Anderson, at (508) 830-7935.

Respectfully

H. V. Oheim

RDA/nas/RAP/DMR

Attachments: 1. Summary  
2. Discharge Monitoring Report

cc: U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

U. S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406

Senior NRC Resident Inspector  
Pilgrim Nuclear Power Station

9510250164 950930  
PDR ADDCK 05000293  
R PDR

IE48  
1/1

## SUMMARY

PILGRIM I DISCHARGE MONITORING REPORT

In accordance with the Federal Clean Water Act, as amended (33USC 1251 et seq: the "CWA"), and the Massachusetts Clean Water Act, as amended (M.G.L.; Chap. 21, 26-53), regarding effluent limitations, monitoring requirements and other conditions set forth in the Pilgrim NPDES Permit (Federal Permit Number MA0003557, and State Permit Number 359), Parts I and II, the following information is submitted for the period September, 1995.

I. Discharge Points Covered in this Report

<u>Discharge Point</u>	<u>Discharge Identification</u>
001	Condenser Cooling Water
002	Thermal Backwash for Biofouling Control
003	Intake Screen Wash
004, 005, 006, and 007	Yard Drains (April and September)
008	Sea Foam Suppression
010	Service Cooling Water
011	Makeup Water and Demineralizer Waste Discharge

II. Summary and Notes of Discharge Report

- A. The flow at points 001 and 010 are calculated from system pump capacity and are equal to the total for all pumps in each system running at full capacity for a 24-hour period. The flow at 011 is measured by noting sump levels before and after discharge. Flow at point 002 is a conservative figure obtained by calculating flow if backwashing took place for 24 hours. Flow at points 003 and 008 are calculated from system pump capacity and mean operating time.
- B. The temperatures at points 001 and 002 are measured by resistance temperature detectors (RTD's).
- C. Periodically, total residual chlorine (TRC) concentration in the service cooling water (010) exceeds Permit requirements (0.50 ppm daily average TRC and 1.00 ppm daily maximum TRC) prior to mixing with any other stream, primarily because of the number of service water pumps in operation. Chlorine injection levels are lowered as a corrective measure. The dilution provided by the PNPS circulating water flow keeps total residual chlorine concentrations discharged to Cape Cod Bay below the NPDES Permit limit of 0.1 ppm.
- D. For stormwater outfalls 004, 005, 006 and 007, Sigma 800 SL Portable Composite Samplers are utilized. The samplers are equipped with a "liquid level activator" that commences the sampling when the liquid reaches a predetermined level. This assures a sample is taken "within the first hour of the start of a significant storm event." The intake and collection assemblies of the samplers conform to U.S. EPA requirements for collecting oil and grease samples (USEPA letter to BECo dated 1/7/92). No additional inputs to these stormwater outfalls occur downstream of the composite samplers' sampling locations.

- E. Intake traveling water screens were operated with dechlorination pumps operating at all times.
- F. No sawdust was applied to seek and seal PNPS condenser leaks in September.
- G. The following boron and sodium nitrite discharges (ppm) occurred in September 1995 from discharge point #001. All discharges were below NPDES Permit limits prior to entering Cape Cod Bay.

<u>Date</u> <u>Discharged</u>	<u>Gallons</u> <u>Discharged</u>	<u>Concentration</u> <u>Before Discharge</u>	<u>Concentration</u> <u>Discharged</u>
----------------------------------	-------------------------------------	---	---

Boron

9/9/95	13,026	<1.0	<0.0013
9/21/95	11,690	<1.0	<0.0013

Sodium Nitrite

9/9/95	13,026	4.5	0.0058
9/21/95	11,690	1.5	0.0019

- H. On September 8-9, 1995, approximately 1,818 alewife were collected from Pilgrim Station intake traveling screens resulting in an impingement rate of 318 fish/hour. Applying this rate to the entire period during which the fish impingement occurred results in an approximate alewife impingement total of 13,100. The fish averaged about 110mm in total length.

As required by the NPDES Permit, the U.S. EPA and Mass. Dept. of Environmental Protection (DEP) were informed of this high impingement incident (BEC0 Telecon 4.95.012). The Mass. Div. of Marine Fisheries (DMF) was also notified and consulted. As a mitigative measure during the height of the impingement incident, the Control Room ran the traveling water screens continuously (alternating paired screen operation) to improve fish survival probability. The reasons for the large number of alewives impinged are unknown but could have involved pursuit by predators; a strong year class making more individuals available; and/or the influence of strong easterly winds on September 8, 1995.

ATTACHMENT 2 TO BECo LETTER 5.95.081

DISCHARGE MONITORING REPORT

NAME POSITION RD #1 PILGRIM PLANTADDRESS ROCKY HILL ROADRED #1PLYMOUTH MA 02360

FACILITY

LOCATION

ATTN: T. A. SULLIVAN, PLANT MANAGER

## DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

MA0003557

PERMIT NUMBER

001 1

DISCHARGE NUMBER

## MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	95	09	01		95	09	30

(20-21) (22-23) (24-25)

(26-27) (28-29) (30-31)

MAJOR

(SUBR S ) Form Approved.

F - FINAL OMB No. 2040-0004

CONDENSER COOLING WATER Approval Expires 10-31-94

\*\*\* NO DISCHARGE 1-1 \*\*\*

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (46-53)			NO. EX	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
TEMPERATURE, WATER DEG. FAHRENHEIT 00011 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	*****	95.1	(15)	0	99/99 RC
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	102	OF		CONTINRCORDR
OXIDANTS, TOTAL RESIDUAL 34044 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	0.01	0.02	(19)	0	WH/PS GR
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	0.1	0.1	MG/L		WHEN GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0	SAMPLE MEASUREMENT	443.9	446.4	(03) MGD	*****	*****	*****		0	99/99 ES
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	447.0	510.0	MGD	*****	*****	*****	****		CONTINESTIMA
TEMP. DIFF. BETWEEN INTAKE AND DISCHARGE 61576 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	*****	29.6	(15)	0	99/99 CA
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	32	OF		CONTINICALCTD
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY KNOWLEDGE OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

T. A. SULLIVAN  
PLANT MANAGER

TYPED OR PRINTED

SIGNATURE OF PRINCIPAL EXECUTIVE

OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

508 747-8100 95 10 14

AREA  
CODE

NUMBER

YEAR

MO

DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PH SHALL NOT VARY MORE THAN 0.5 PH STANDARD UNITS FROM INTAKE WATER. SEE PERMIT PAGE 5 PARAGRAPHS M&N FOR BORON AND SODIUM NITRATE REPORTING REQUIREMENTS. ATTACH ALL RELATED REPORTS TO THIS FORM. A BARRIER NET SHALL BE MAINTAINED AT THE THERMAL END OF DISCHARGE CANAL AT ALL TIMES.



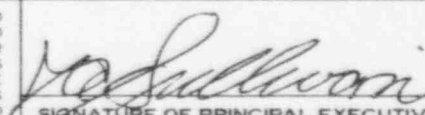
PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)  
NAME BOSTON ED #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
ED #1  
PLYMOUTH MA 02360  
FACILITY \_\_\_\_\_  
LOCATION \_\_\_\_\_  
ATTN: T.A. SULLIVAN, PLANT MANAGER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)  
(2-16) (17-19)  
MA0003557  
PERMIT NUMBER  
002 1  
DISCHARGE NUMBER  
MONITORING PERIOD  
FROM YEAR MO DAY TO YEAR MO DAY  
95 09 01 TO 95 09 30  
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

MAJOR (SUBR S) Form Approved.  
F - FINAL OMB No. 2040-0004  
THERMAL BACKWASH Approval expires 10-31-94

\*\*\* NO DISCHARGE \*\*\*  
NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
TEMPERATURE, WATER DEG. FAHRENHEIT 00011 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	*****	108.9	(15) OF	0	99/99	RC
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	120	DAILY MX DEG.F		CONTINUOUS	RECORD
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	69.7	(03) MGD	*****	*****	*****		0	WH/RS	ES
	PERMIT REQUIREMENT	*****	255.0 DAILY MX	MGD	*****	*****	*****	****		WHEN DISCHRG	ESTIMATE
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE	
T.A. SULLIVAN PLANT MANAGER TYPED OR PRINTED				508 747-8100	95	10	14

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
THE PH SHALL NOT VARY MORE THAN 0.5 STANDARD UNITS FROM THAT OF THE INTAKE WATER. FLOW RATE IS TO BE ESTIMATED AS IF BACKFLUSHING TOOK PLACE FOR 24 CONTINUOUS HOURS. SEE PERMIT PAGE 8 FOR CONDITIONS REGARDING THE FREQUENCY OF DISCHARGE.

## DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

MA0003557

003 A

PERMIT NUMBER

DISCHARGE NUMBER

## MONITORING PERIOD

FROM

YEAR MO DAY  
95 09 01

TO

YEAR MO DAY  
95 09 30

(20-21) (22-23) (24-25)

(26-27) (28-29) (30-31)

MAJOR

(SUBR S ) Form Approved.

F - FINAL OMB No. 2040-0004

INTAKE SCREEN Approval Expires 10-31-94

\*\*\* NO DISCHARGE \*\*\*

NOTE: Read instructions before completing this form.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)  
 NAME BOSTON ED #1 PILGRIM PLANT  
 ADDRESS ROCKY HILL ROAD  
RED #1  
PLYMOUTH MA 02360  
 FACILITY \_\_\_\_\_  
 LOCATION \_\_\_\_\_  
 ATTN: T.A. SULLIVAN, PLANT MANAGER


PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.73	2.02	(03) MGD	*****	*****	*****		0	01/01	ES
	PERMIT REQUIREMENT	4.1 MO AVG	4.1 DAILY MX	MGD	*****	*****	*****	**** ****		DAILY	ESTIMA
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

T.A. SULLIVAN  
PLANT MANAGER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

  
 SIGNATURE OF PRINCIPAL EXECUTIVE  
 OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA  
CODE

NUMBER

YEAR

MO

DAY

508 747-8100 95 10 04

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

THE TEMPERATURE OF THIS DISCHARGE SHALL AT NO TIME EXCEED THE TEMPERATURE OF THE INTAKE WATER.  
 ALL FISH SHELLFISH AND OTHER ORGANISMS COLLECTED OR TRAPPED ON INTAKE SCREEN SHOULD BE RETURNED TO WATER  
 OF AMBIENT TEMP. SUFFICIENTLY DISTANT FROM INTAKE STRUCTURES TO PREVENT REIMPINGEMENT.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)  
NAME WOSTON RD #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
RED #1  
PLYMOUTH MA 02360  
FACILITY  
LOCATION  
ATTN: T.A. SULLIVAN, PLANT MANAGER

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

## DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

MA0003557

PERMIT NUMBER

004 A

DISCHARGE NUMBER

## MONITORING PERIOD

FROM			TO		
YEAR	MO	DAY	YEAR	MO	DAY
95	09	01	95	09	30

(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

MAJOR

(SUBR S ) Form Approved.

F - FINAL OMB No. 2040-0004

YARD DRAINS Approval expires 10-31-94

\*\*\* NO DISCHARGE ☒ \*\*\*

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)				NO EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
SOLIDS, TOTAL SUSPENDED 00530 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	2.3	2.3	(19) MG/L	0	02/YR	GR
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	30 MO AVG	100 DAILY MX	MG/L		SEMI-GRAB ANNUAL	
OIL AND GREASE FREON EXTR-GRAV METH 00556 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	<4.0	<4.0	(19) MG/L	0	02/YR	GR
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	15 DAILY MX	MG/L		SEMI-GRAB ANNUAL	
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

T.A. SULLIVAN  
PLANT MANAGER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE

OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

508  
AREA CODE

NUMBER

YEAR

MO

DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME POSITION RD #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
RED #1  
PLYMOUTH MA 02360  
FACILITY \_\_\_\_\_  
LOCATION \_\_\_\_\_

MA0003557  
PERMIT NUMBER

005 A  
DISCHARGE NUMBER

MAJOR (SUBR S) Form Approved.  
F - FINAL OMB No. 2040-0004  
YARD DRAINS Approval expires 10-31-94


MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
95	09	01		95	09	30
(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

\*\*\* NO DISCHARGE !!!  
NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	1.2	1.2	(19) 0	02/YR	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	30 MO AVG	100 DAILY MX	MG/L		SEMI-GRAB ANNUAL
OIL AND GREASE FREON EXTR-GRAV METH 00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	<4.0	<4.0	(19) 0	02/YR	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	15 DAILY MX	MG/L		SEMI-GRAB ANNUAL
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
**T.A. SULLIVAN**  
**PLANT MANAGER**  
TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

  
SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

TELEPHONE  
508 747-8100  
AREA CODE NUMBER  
DATE  
95 10 14  
YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)  
NAME BOSTON EQ #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
BED #1  
PLYMOUTH MA 02350  
FACILITY  
LOCATION  
ATTN: T.A. SULLIVAN, PLANT MANAGER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)  
(2-16) (17-19)  
MA0003557 006 A  
PERMIT NUMBER DISCHARGE NUMBER  
MONITORING PERIOD  
FROM YEAR 95 MO 09 DAY 01 TO YEAR 95 MO 09 DAY 30  
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

MAJOR (SUBR S) Form Approved.  
F - FINAL OMB No. 2040-0004  
YARD DRAINS approval expires 10-31-94

\*\*\* NO DISCHARGE \*\*\*  
NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	1.8	1.8	(19)	0	02/YR GR
	PERMIT REQUIREMENT	*****	*****	****	*****	30 MO AVG	100 DAILY MX	MG/L		SEMI- GRAB ANNUAL
OIL AND GREASE FREON EXTR-GRAV METH 00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	<4.0	<4.0	(19)	0	02/YR GR
	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT	15 DAILY MX	MG/L		SEMI- GRAB ANNUAL
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

T.A. SULLIVAN  
PLANT MANAGER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

508 747-8100 95 10 14  
AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)  
NAME BOSTON ED #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
RED #1  
PLYMOUTH MA 02350  
FACILITY  
LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)  
(2-16) (17-19)  
MA0003557  
PERMIT NUMBER  
007 A  
DISCHARGE NUMBER  
MONITORING PERIOD  
FROM YEAR MO DAY TO YEAR MO DAY  
95 09 01 95 09 30  
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

MAJOR (SUBR S ) Form Approved.  
F - FINAL OMB No. 2040-0004  
YARD DRAINS Approval expires 10-31-94

\*\*\* NO DISCHARGE \*\*\*  
NOTE: Read instructions before completing this form.

ATTN: T.A. SULLIVAN, PLANT MANAGER

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				QUALITY OR CONCENTRATION (46-53)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS						
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	****	*****	2.6	2.6	( 19 )	0	02/YR	GR			
	PERMIT REQUIREMENT	*****	*****		*****	30	100	MG/L				SEMI- GRAB		
OIL AND GREASE FREON EXTR-GRAV METH 00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	****	*****	<4.0	<4.0	( 19 )	0	02/YR	GR			
	PERMIT REQUIREMENT	*****	*****		*****	REPORT	15	MG/L				SEMI- GRAB		
	SAMPLE MEASUREMENT													
	PERMIT REQUIREMENT													
	SAMPLE MEASUREMENT													
	PERMIT REQUIREMENT													
	SAMPLE MEASUREMENT													
	PERMIT REQUIREMENT													
	SAMPLE MEASUREMENT													
	PERMIT REQUIREMENT													
	SAMPLE MEASUREMENT													
	PERMIT REQUIREMENT													
	SAMPLE MEASUREMENT													
	PERMIT REQUIREMENT													

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319 (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)	TELEPHONE	DATE
T.A. SULLIVAN PLANT MANAGER		508 747-8100	95 10 14
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different) NAME <u>BOSTON ED #1 PILGRIM PLANT</u> ADDRESS <u>ROCKY HILL ROAD</u> <u>REF #1</u> <u>PLYMOUTH</u> <u>MA 02360</u> FACILITY _____ LOCATION _____		NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) <b>DISCHARGE MONITORING REPORT (DMR)</b> (2-16) (17-19)				MAJOR (SUBR S) Form Approved. F - FINAL OMB No. 2040-0004 SEA FOAM SUPPRESSION DISCHARGE															
		MA0003557 PERMIT NUMBER		008 A DISCHARGE NUMBER																	
		MONITORING PERIOD FROM <table border="1" style="display: inline-table;"><tr><td>YEAR</td><td>MO</td><td>DAY</td></tr><tr><td>95</td><td>09</td><td>01</td></tr></table> TO <table border="1" style="display: inline-table;"><tr><td>YEAR</td><td>MO</td><td>DAY</td></tr><tr><td>95</td><td>09</td><td>30</td></tr></table> (20-21) (22-23) (24-25) (26-27) (28-29) (30-31)				YEAR	MO	DAY	95	09	01	YEAR	MO	DAY	95	09	30				
YEAR	MO	DAY																			
95	09	01																			
YEAR	MO	DAY																			
95	09	30																			
ATTN: T.A. SULLIVAN, PLANT MANAGER																					
PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53) (54-61)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)										
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS													
FLOW IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	<i>No Discharge</i> (03) MGD			*****	*****	*****														
50050 1 0 0	PERMIT REQUIREMENT				0.73	0.73	*****	*****				*****	****								
EFFLUENT GROSS VALUE		MO AVG	DAILY MX	MGD																	
	SAMPLE MEASUREMENT																				
	PERMIT REQUIREMENT																				
	SAMPLE MEASUREMENT																				
	PERMIT REQUIREMENT																				
	SAMPLE MEASUREMENT																				
	PERMIT REQUIREMENT																				
	SAMPLE MEASUREMENT																				
	PERMIT REQUIREMENT																				
	SAMPLE MEASUREMENT																				
	PERMIT REQUIREMENT																				
	SAMPLE MEASUREMENT																				
	PERMIT REQUIREMENT																				
	SAMPLE MEASUREMENT																				
	PERMIT REQUIREMENT																				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER <div style="font-size: large; font-weight: bold; margin-top: 10px;">T.A. SULLIVAN</div> <div style="font-weight: bold; margin-top: 5px;">PLANT MANAGER</div>	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)	TELEPHONE <div style="font-size: large; font-weight: bold; margin-top: 10px;">508 747-8100</div>	DATE <div style="font-size: large; font-weight: bold; margin-top: 10px;">95 10 14</div>
TYPED OR PRINTED	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER



PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)  
NAME BOSTON ED #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
REF #1  
PLYMOUTH MA 02360  
FACILITY \_\_\_\_\_  
LOCATION \_\_\_\_\_

## NATIONAL DISCHARGE ELIMINATION SYSTEM (NPDES)

## DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

MA00003557

PERMIT NUMBER

010 A

DISCHARGE NUMBER

MAJOR

(SUBR S)

Form Approved.

F - FINAL

OMB No. 2040-0004

PLANT SERVICE COOLING WATER

Approval expires 10-31-04

## MONITORING PERIOD

FROM

YEAR MO DAY  
95 09 01

TO

YEAR MO DAY  
95 09 30

(20-21) (22-23) (24-25)

(26-27) (28-29) (30-31)

\*\*\* NO DISCHARGE 1-1 \*\*\*

NOTE: Read instructions before completing this form.

ATTN: T.A. SULLIVAN, PLANT MANAGER

PARAMETER (32-37)	<div></div>	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				(46-53)			(54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS					
OXIDANTS, TOTAL RESIDUAL 34044 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	0.12	0.50	(19)	0	99/99	RC						
	PERMIT REQUIREMENT	*****	*****	****	*****	0.5 MO AVG	1.0 DAILY MX	MG/L		CONTINRCORDR							
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	11.8	*****	(03) MGD	*****	*****	*****		0	99/99	ES						
	PERMIT REQUIREMENT	19.4 MO AVG	*****	MGD	*****	*****	*****	****		CONTINESTIMA							
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

T.A. SULLIVAN  
PLANT MANAGER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE

OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

508 747-8100 95 10 14  
AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

CONTINUOUS CHLORINATION OF SERVICE WATER SYSTEM MAY BE USED FOR MACROINVERTEBRATE CONTROL. FLOW RATE SHALL BE ESTIMATED FROM PUMP CAPACITY CURVES AND OPERATIONAL HOURS.



PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)  
NAME POSITION ED #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
RED #1  
PLYMOUTH MA 02360  
FACILITY \_\_\_\_\_  
LOCATION \_\_\_\_\_  
ATTN: T.A. SULLIVAN, PLANT MANAGER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)  
(2-16) (17-19)  
MA0003557  
PERMIT NUMBER  
011 A  
DISCHARGE NUMBER  
MONITORING PERIOD  
FROM YEAR MO DAY TO YEAR MO DAY  
95 09 01 95 09 30  
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

MAJOR (SUBR S ) Form Approved.  
F - FINAL OMB No. 2040-0004  
Approval expires 10-31-94  
MAKE UP WATER AND DEMINERALIZE  
\*\*\* NO DISCHARGE \*\*\*  
NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				(46-53)			(54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS					
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	**** ****	*****	0.55	0.70	(19) MG/L									0 01/BA BR
	PERMIT REQUIREMENT	*****	*****		*****	30 MO AVG	100 DAILY MX	MG/L									ONCE/ GRAB BATCH
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.00027	0.00043	(03) MGD	*****	*****	*****										0 WH/DS ES
	PERMIT REQUIREMENT	0.015 MO AVG	0.06 DAILY MX	MGD	*****	*****	*****	**** ****									WHEN ESTIMA DISCHR
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																
	SAMPLE MEASUREMENT																
	PERMIT REQUIREMENT																

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER <u>T.A. SULLIVAN</u> <u>PLANT MANAGER</u> TYPED OR PRINTED	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT <u>T.A. Sullivan</u>	TELEPHONE <u>508 747-8100</u>	DATE <u>95 10 14</u>
			AREA CODE <u>508</u>	NUMBER <u>747-8100</u>

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
SEE PAGE 5 OF PERMIT PARAGRAPH N FOR SODIUM NITRATE REPORTING REQUIREMENTS. ATTACH ALL RELATED REPORTS TO THIS FORM