



**Boston Edison**

Pilgrim Nuclear Power Station  
Rocky Hill Road  
Plymouth, Massachusetts 02360

**Henry V. Oheim**  
General Manager - Technical Section

May 15, 1996  
BEC0 Ltr. 5.96.031

NPDES Programs (SPA)  
U.S. Environmental Protection Agency  
P.O. Box 8127  
Boston, MA 02114-8127

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 April, 1996.

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

Respectfully,

  
H. V. Oheim

RDA/pkk/RAP96/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

9605200075 960430  
PDR ADOCK 05000293  
R PDR

JE231

## 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 April, 1996.

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 flows 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. Flows 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. Sawdust was applied to seek and seal PNPS condenser leaks on April 18 (300 pounds) and 22 (180 pounds), 1996.
- G. The following boron and sodium nitrite discharges (ppm) occurred in April 1996 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>
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Boron

No Discharge

Sodium Nitrite

No Discharge

- H. Pilgrim Station Marine Ecology Semi-Annual Report No. 47 was sent to the USEPA and the Mass. Department of Environmental Protection (DEP) on April 25, 1996 as required by the NPDES Permit #MA0003557 (BEC0 Letter 5.96.025).
- I. April 1996 yard drain monitoring showed pH values of 5.4 at yard drain #007 and 5.7 at yard drain #006 which are below the lower NPDES Permit Limit of 6.0. This may be attributable to a low natural rainwater pH of 4.5 at that time.

ATTACHMENT 2 TO BECo LETTER 5.96.031

DISCHARGE MONITORING REPORT

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

NAME BOSTON ED #1 PILGRIM PLANT

ADDRESS ROCKY HILL ROAD

RFD #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

0011

DISCHARGE NUMBER

CONDENSER COOLING WATER

(SUBR S)

F - FINAL

MAJOR

Form Approved.

EPA 40-0004

Approval Expires 05-31-98

12345

## MONITORING PERIOD

YEAR	MO	DAY	YEAR	MO	DAY
98	04	01	98	04	30

FROM	(20-21)	(22-23)	(24-25)	(26-27)	(28-29)	(30-31)
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\*\*\* 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) QUANTITY OR CONCENTRATION (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	SAMPLE MEASUREMENT	*****	*****		*****	*****	72.5	(15)	0	99/99	RC
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	132	OF		CONTIN	CORR
OXIDANTS, TOTAL RESIDUAL 34044 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	0.02	0.04	(19)	0	WH/DS	GR
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	0.1 MO AVG	0.1 DAILY MX	MG/L MG/LI		WHENI	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0	SAMPLE MEASUREMENT	402.5	446.4	(03) MGD	*****	*****	*****		0	99/99	ES
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	447.0 MO AVG	510.0 DAILY MX	MGD	*****	*****	*****	****		CONTIN	ESTINA
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		CONTIN	CALCYD
	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

AREA  
CODE

NUMBER

96

YEAR

5

MO

14

DAY

COMMENTS 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 MEN FO  
R 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

RFD #1

PLYMOUTH

MA 02360

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

MA0003557

PERMIT NUMBER

002 1

DISCHARGE NUMBER

THERMAL BACKWASH

(SUBR S)

F - FINAL

MAJOR:

Form Approved.

OMB No. 2040-0004

Approval expires 05-31-98

12585

MONITORING PERIOD

FROM YEAR 96 MO 04 DAY 01 TO YEAR 96 MO 04 DAY 30  
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

\*\*\* 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) QUANTITY OR CONCENTRATION (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	SAMPLE MEASUREMENT	*****	*****		*****	*****	109.4	( 15)	0	99/99	RC
EFFLUENT GROSS VALUE FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0	PERMIT REQUIREMENT	*****	*****	****	*****	*****	120	OF		CONFIRMED	UDS
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	79.98	( 03)	*****	*****	*****		0	WH/DS	ES
	PERMIT REQUIREMENT	*****	255.0	MGD	*****	*****	*****	****		WHEN ESTIMATED	DISCH
			DAILY MX	MGD							
	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.)

*A. E. McSherry*

SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

TELEPHONE

508-747-8100

AREA  
CODE

NUMBER

DATE

96 5 14

YEAR MO DAY

COMMENTS 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.

EPA Form 3320-1 (08-96) Previous editions may be used.

(REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

003787260119-1705

PAGE 1 OF

PERMITTEE NAME/ADDRESS (Include Facility Name/ Location (if Different))  
NAME BOSTON ED #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
RFD #1  
PLYMOUTH

FACILITY  
LOCATION

MA 02360

ATTN: T.A. SULLIVAN, PLANT MANAGER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)  
(2-16) (17-19)

MA0003557  
PERMIT NUMBER

003 A  
DISCHARGE NUMBER

INTAKE SCREEN # 1048 No. 2040-0004  
(SUBR S)  
F - FINAL  
MAJOR: 12585  
Approval expires 05-31-98

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
96	04	01	96	04	30
(20-21) (22-23) (24-25)			(26-27) (28-29) (30-31)		

\*\*\* NO DISCHARGE 1-1-1 \*\*\*  
NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUANTITY OR CONCENTRATION (38-45) (46-53) (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (54-58) (54-58)	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	1.3	3.2	( 03 )	*****	*****	*****		0	01/01	ES
	PERMIT REQUIREMENT	4.1 NO AVG	4.1 DAILY MX	MGD	*****	*****	*****	****		DAILY	ESTIMATE
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
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	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. § 1318. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

*A. McArthur*  
SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

TELEPHONE  
508 747-8100  
DATE  
96 5 14  
AREA CODE NUMBER YEAR MO DAY

COMMENTS 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.  
EPA Form 3320-1 (08-95) Previous editions may be used. (REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.) 00390/960119-1705 PAGE 1 OF 1

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

NAME BOSTON ED #1 PILGRIM PLANT

ADDRESS ROCKY HILL ROAD

RFD #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

YARD DRAINS

(SUBR S)

F - FINAL

MAJOR:

Form Approved.

OMB No. 2040-0004

Approval Expires 05-31-98

12345

MONITORING PERIOD

YEAR MO DAY

YEAR MO DAY

FROM 96 04 01 TO 96 04 30

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

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	X	(3 Card Only) (46-53) QUANTITY OR LOADING			(4 Card Only) (38-45) QUANTITY OR CONCENTRATION				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	*****	*****		*****	10.8	10.8	(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 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

508-747-8100

DATE

96 5 14

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

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

*T.A. Sullivan*



PERMITTEE NAME/ADDRESS (Include Facility Name, Location if Different)  
NAME BOSTON ED #1 PILGRIM PLANT  
ADDRESS ROCKY HILL ROAD  
RFD #1  
PLYMOUTH MA 02360

FACILITY  
LOCATION

ATTN: T.A. SULLIVAN, PLANT MANAGER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)  
(2-16)

MA0003557  
PERMIT NUMBER

005 A  
DISCHARGE NUMBER

YARD DRAINS  
(SUBR S)  
F - FINAL  
MAJOR

Form Approved.  
OMB No. 2040-0004  
Approval expires 05-31-98  
12345

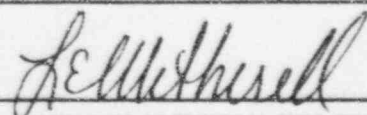
MONITORING PERIOD

FROM YEAR 98 MO 04 DAY 01 TO YEAR 98 MO 04 DAY 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) QUANTITY OR CONCENTRATION (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 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	10.8	10.8	( 19) MG/L	0	02/YR	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	30 MD 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) MG/L	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	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	96	5	14

COMMENTS 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

RFD #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

006 A

DISCHARGE NUMBER

YARD DRAINS

(SUBR S)

F - FINAL

MAJOR

Form Approved.

OMB No. 2040-0004

Approval expires 05-31-98

12585

MONITORING PERIOD

YEAR MO DAY

YEAR MO DAY

FROM 98 04 01 TO

98 04 30

(120-21) (122-23) (124-25)

(126-27) (128-29) (130-31)

\*\*\* 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) QUANTITY OR CONCENTRATION (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	*****	*****		*****	6.4	6.4	(19) MG/L		0	02/YR GR
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	30 NO 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 U.S.C. § 1001 AND 33 U.S.C. § 1318. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

TELEPHONE

508-747-8100

DATE

96 5 14

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

*L. M. Therrell*

AREA CODE

NUMBER

YEAR

MO

DAY

COMMENTS 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  
RFD #1  
PLYMOUTH MA 02360

FACILITY  
LOCATION

ATTN: T.A. SULLIVAN, PLANT MANAGER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)  
(2-16)

MA003557  
PERMIT NUMBER

007 A  
DISCHARGE NUMBER

YARD DRAINS  
(SUBR S)  
F - FINAL  
MAJOR:

Form Approved.  
OMB No. 2040-0004  
Approval Expires 05-31-98  
12985

MONITORING PERIOD

FROM YEAR 98 MO 04 DAY 01 TO YEAR 98 MO 04 DAY 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) QUANTITY OR CONCENTRATION (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 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	3.3	3.3	(19) MG/L	0	02/YR	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	30 NO 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) MG/L	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.)

*Handwritten Signature*

SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

508.747-8100

AREA  
CODE

NUMBER

96 5 14

YEAR

MO

DAY

COMMENTS 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  
RFD #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

003 A  
DISCHARGE NUMBER

SEA FOAM SUPPRESSION NO DISCHARGE  
(SUBS)  
F - FINAL  
MAJOR

Form Approved.  
EPA 823-B-88-001  
Approval Expires 05-31-88  
12345

MONITORING PERIOD

FROM YEAR 98 MO 04 DAY 01 TO YEAR 98 MO 04 DAY 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) QUANTITY OR CONCENTRATION (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	no discharge (03)			*****	*****	*****			
	PERMIT REQUIREMENT	0.73 MO AVG	0.73 DAILY MX	MGD	*****	*****	*****	****		ES
	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.)

*John Mithrell*  
SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

508.747-8100 96 5 14  
AREA CODE NUMBER YEAR MO DAY

COMMENTS 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  
RFD #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)

MA003557  
PERMIT NUMBER

010 A  
DISCHARGE NUMBER

Form Approved  
PLANT SERVICE CODE 204004  
(SUBR S)  
F - FINAL  
MAJOR:  
Approval 05-31-98  
12545

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
98	04	01	98	04	30
FROM (20-21) (22-23) (24-25)			TO (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) QUANTITY OR CONCENTRATION (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXIDANTS, TOTAL RESIDUAL 34044 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	0.16	0.53	(19)	0	01/01 GR
	PERMIT REQUIREMENT	*****	*****	****	*****	0.5	1.3	MG/L		CONTINUOUS
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 3 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	6.6	*****	(03) MGD	*****	*****	*****		0	99/99 ES
	PERMIT REQUIREMENT	19.4 MG AVG	*****	MGD	*****	*****	*****	****		CONTINUOUS
	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. § 1318. (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 96 5 14  
AREA CODE NUMBER YEAR MO DAY

COMMENTS 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 BOSTON ED #1 PILGRIM PLANT

ADDRESS ROCKY HILL ROAD

2FD #1

PLYMOUTH

MA 02360

FACILITY

LOCATION

ATTN: T.A. SULLIVAN, PLANT MANAGER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-18)

(17-19)

MA0003557

PERMIT NUMBER

011 A

DISCHARGE NUMBER

MONITORING PERIOD

 YEAR MO DAY  
96 04 01

 YEAR MO DAY  
96 04 30

FROM

TO

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

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

MAKE UP WATER AND... (SUBR S) F - FINAL MAJOR

Form Approved.

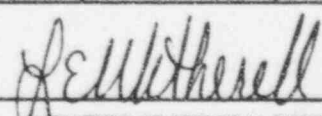
Approval expires 05-31-98

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	X	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUANTITY OR CONCENTRATION (38-45)				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	*****	*****		*****	no discharge		(17) MG/L	0	01/BA	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	30 NO 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	no discharge			(03) MGD	*****	*****	*****	0	WH/DS	ES
	PERMIT REQUIREMENT	0.015 NO AVG	0.06 DAILY MX	MGD	*****	*****	*****	****		WHEN/	ESTIM DISCH
	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 6 years.)  
  
  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE  
 508-747-8100  
 AREA CODE NUMBER  
 DATE  
 96 5 14  
 YEAR MO DAY

COMMENTS 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