



Boston Edison

Pilgrim Nuclear Power Station
Rocky Hill Road
Plymouth, Massachusetts 02360

Henry V. Oheim
General Manager - Technical Section

January 20, 1997
BECO Ltr. 5.97.001

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 December, 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/dmc/radmisc/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 240098
475 Allendale Road
King of Prussia, PA 19406

Senior NRC Resident Inspector
Pilgrim Nuclear Power Station

9701240290 961231
PDR ADOCK 05000293
PDR

125/11

ATTACHMENT 1 TO BECo LETTER 5.97.001

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 December, 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, samples are collected by grab sampling. Samples are handled and stored in accordance with 40 CFR 136. No additional inputs to these stormwater outfalls occur downstream of the 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 December 1996.
- G. The following boron and sodium nitrite discharges (ppm) occurred in December 1996 from discharge point #001. All discharges were below NPDES permit limits prior to entering Cape Cod Bay.

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

Boron

None

Sodium Nitrite

None

ATTACHMENT 2 TO BECo LETTER 5.97.001

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

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

MA0003557
 PERMIT NUMBER

001 1
 DISCHARGE NUMBER

CONDENSER COOLING (SUBRS)
 F - FINAL MAJOR
 Form Approved DMR 82-40-0004
 Approval Expires 05-31-98
 12345

FACILITY LOCATION

| MONITORING PERIOD | | | | | | | | | | | |
|-------------------|----|---------|----|---------|----|---------|--|---------|--|---------|--|
| YEAR | MO | DAY | TO | YEAR | MO | DAY | | | | | |
| 98 | 12 | 01 | TO | 98 | 12 | 31 | | | | | |
| (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) | X | (3 Card Only) QUANTITY OR LOADING (46-53) | | | (4 Card Only) QUANTITY OR CONCENTRATION (38-45) (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 | ***** | ***** | | ***** | ***** | 80.0 | (15) | 0 | 99/99 | RC |
| EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | **** | ***** | ***** | 132 | OF | | CONTINUED | UDUS |
| OXIDANTS, TOTAL RESIDUAL 34044 1 0 0 | SAMPLE MEASUREMENT | ***** | ***** | | ***** | 0.02 | 0.04 | (19) | 0 | WH/OS | GR |
| EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | **** | ***** | 0.1 | 0.1 | MG/L | | WHEN GRAB | DISCHR |
| FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 | SAMPLE MEASUREMENT | 446.4 | 446.4 | (03) | ***** | ***** | ***** | | 0 | 99/99 | ES |
| EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | 447.0 | 510.0 | MGD | ***** | ***** | ***** | **** | | CONTINUED | UDUS |
| TEMP. DIFF. BETWEEN INTAKE AND DISCHARGE 61576 1 0 0 | SAMPLE MEASUREMENT | ***** | ***** | | ***** | ***** | 30.4 | (15) | 0 | 99/99 | CA |
| EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | **** | ***** | ***** | 32 | OF | | CONTINUED | UDUS |
| | 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.)

W. J. Legg for T.A.S.
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
 508 830-8100 97 1 13
 AREA CODE NUMBER YEAR MO 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 MBN 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
 RFD #1
 PLYMOUTH MA 02360

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)
 (12-16) (17-19)

MA0003557 PERMIT NUMBER
 0021 DISCHARGE NUMBER

Form Approved. OMB No. 2040-0004
 THERMAL BACKWASH (SUBRS)
 F - FINAL MAJOR
 Approval Expires 05-31-98
 12545

FACILITY LOCATION
 ATTN: T.A. SULLIVAN, PLANT MANAGER

MONITORING PERIOD
 FROM YEAR 96 MO 12 DAY 01 TO YEAR 96 MO 12 DAY 31
 (20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

*** 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 | | | |
| TEMPERATURE, WATER DEG. FAHRENHEIT 00011 1 0 0 | SAMPLE MEASUREMENT | ***** | ***** | | ***** | ***** | | | (15) OF | 0 | 99/99 RC |
| EFFLUENT GROSS VALUE FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 | PERMIT REQUIREMENT | ***** | ***** | **** | ***** | ***** | ***** | 120 DAILY MX | DEG. F | | CONTINUOUS RECORDS |
| EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | ***** | no discharge | (033) MGD | ***** | ***** | ***** | | | 0 | WH/DS ES |
| | PERMIT REQUIREMENT | ***** | 255.0 DAILY MX | MGD | ***** | ***** | ***** | **** | | | WHEN ESTIMATED DISCH |
| | 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.)

W. J. [Signature] for T.A.S.
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
 508 830-8100 97 1 13
 AREA CODE NUMBER 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.

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

INTAKE SCREEN

(SUBRS)

F - FINAL

MAJOR

Form Approved

WQAP No. 2040-0004

Approval expires 05-31-98

12385

MONITORING PERIOD

FROM 96 12 01 TO 96 12 31
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

*** NO DISCHARGE ***

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | X | (3 Card Only) (46-53) QUANTITY OR LOADING (54-61) | | | (4 Card Only) (38-45) QUANTITY OR CONCENTRATION (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 | 1.2 | 3.2 | (03) MGD | ***** | ***** | ***** | | 0 | 01/01 | ES |
| | PERMIT REQUIREMENT | 4.1 MO AVG | 4.1 DAILY MX | MGD | ***** | ***** | ***** | **** | | DAILY | ESTIM |
| | 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.)

WJ Rygo for T.A.S.
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
508 830-8100 97 1 13
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 DISTAN FORM INTAKE STRUCTURES TO PREVENT REIMPTNGEMENT.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)
 NAME BOSTON ED #1 PILGRIM PLANT
 ADDRESS ROCKY HILL ROAD
 RFD #1
 PLYMOUTH MA 02560

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

MA0003557
 PERMIT NUMBER

008 A
 DISCHARGE NUMBER

SEA FOAM SUPPRESSION (SUBS)
 F - FINAL
 MAJOR

Form Approved
 Approval Expires 05-31-98

FACILITY LOCATION
 ATTN: T.A. SULLIVAN, PLANT MANAGER

| MONITORING PERIOD | | | | | |
|-------------------|----|---------|------|---------|-----|
| YEAR | MO | DAY | YEAR | MO | DAY |
| 96 | 12 | 01 | 96 | 12 | 31 |
| (20-21) | | (22-23) | | (24-25) | |
| | | (26-27) | | (28-29) | |
| | | (30-31) | | | |

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

| PARAMETER (32-37) | SAMPLE MEASUREMENT | (3 Card Only) QUANTITY OR LOADING (46-53) | | | (4 Card Only) QUANTITY OR CONCENTRATION (46-53) | | | NO. OF ANALYSIS (67-70) | FREQUENCY OF ANALYSIS (67-70) | SAMPLE TYPE (69-70) |
|--|--------------------|---|----------|----------|---|---------|---------|-------------------------|-------------------------------|---------------------|
| | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | | | |
| FLOW IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE | no discharge | 0.73 | 0.93 | (03) MGD | ***** | ***** | ***** | 0 | DAILY | ESTIMATE |
| | PERMIT REQUIREMENT | 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 | | | | | | | | | |

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.)

W.J. Kygg for T.A.S.
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
 508.830-8100 97 1 13
 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

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

WAD003557
 PERMIT NUMBER

010 A
 DISCHARGE NUMBER

PLANT SERVICE CODE (SUBR S)
 F - FINAL
 MAJOR

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98
 12345

FACILITY
 LOCATION

ATTN: T.A. SULLIVAN, PLANT MANAGER

MONITORING PERIOD
 FROM YEAR 96 MO 12 DAY 01 TO YEAR 96 MO 12 DAY 31
 (20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

*** 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) (46-53) (54-61) | | | | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|--|-----------------------|---|---------|-------------|---|---------------|-----------------|--------------|----------------------|--|---------------------------|
| | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | | | |
| OXIDANTS, TOTAL RESIDUAL 34044 1 0 0 | SAMPLE MEASUREMENT | ***** | ***** | | ***** | 0.19 | 0.62 | (19) MG/L | 0 | 01/01 | GR |
| EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | ***** | ***** | **** | ***** | 0.5 MD AVG | 1.0 DAILY MX | MG/LI | | CONTINUOUS | CDRDR |
| FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 | SAMPLE MEASUREMENT | 7.2 | ***** | (03) MGD | ***** | ***** | ***** | | 0 | 99/99 | ES |
| EFFLUENT GROSS VALUE | PERMIT REQUIREMENT | 19.4 MD AVG | ***** | MGD | ***** | ***** | ***** | **** | | CONTINUOUS | ESTIMA |
| | 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.)

W. J. Papp Sr. T.A.S.
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
 508 830-8100 97 1 13
 AREA CODE NUMBER YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 CONTINUOUS CHLDRINATION OF SERVICE WATER SYSTEM MAY BE USED FOR MACROINVERTEBRATE CONTROL. FLDW RATE SHALL BE ESTIMATED FROM PUMP CAPACITY CURVES AND OPERATIONAL HOURS.

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
011 A DISCHARGE NUMBER

MONITORING PERIOD
 FROM **96 12 01** TO **96 12 31**
 (20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

Form Approved. **01/19/90**
 MAKE UP WATER AND **05-31-98**
 (SUBS) APPROVAL
F - FINAL
 MAJOR

*** 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) (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 EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | ***** | ***** | | ***** | <i>no discharge</i> | | (19) MG/L | 0 | 01/BA | GR |
| | PERMIT REQUIREMENT | ***** | ***** | *** | ***** | 30 MO AVG | 100 DAILY MX | MG/L | | ONCE/BATCH | GRAB |
| FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | <i>no discharge</i> | | (03) MGD | ***** | ***** | ***** | | 0 | WH/DS | ES |
| | PERMIT REQUIREMENT | 0.015 MO AVG | 0.06 DAILY MX | MGD | ***** | ***** | ***** | *** | | WHEN DISCH | ESTIMATE |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
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| | SAMPLE MEASUREMENT | | | | | | | | | | |
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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.)

WJ Rygo for T.A.S.
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE **508 830-8100**
 DATE **97 1 13**
 AREA CODE NUMBER YEAR MO DAY

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