



BOSTON EDISON

25 Braintree Hill Park
Braintree, Massachusetts 02184

May 18, 1993

W. C. Rothert
General Manager Technical

BECo 5.93.063

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 April 1993.


W. C. Rothert

WCA/DMR/nas

- 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

9305270146 930430
PDR ADOCK 05000293
R PDR

JEZ

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 1993.

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)
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 point 003 is 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 April 1993.
- G. The following boron and sodium nitrite discharges (ppm) occurred in April 1993 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

4/05/93	9,853	0.1	0.0001
4/11/93	8,350	41.0	0.0500
4/22/93	13,193	18.5	0.0200

Sodium Nitrite

4/05/93	9,853	<1.0	<0.0013
4/11/93	8,350	<1.0	<0.0013
4/22/93	13,193	7.5	0.0100

- H. The following measurements were made in April, 1993 for stormwater yard drain Discharge Points 004, 005, 006 and 007.

<u>Drain #</u>	<u>Date</u>	<u>Suspended Solids (mg/l)</u>	<u>Oil & Grease mg/l</u>	<u>pH(SU)</u>
004	4/22/93	56.4	2.5	7.3
005	4/22/93	144.1	5.3	10.8
006	4/22/93	74.9	4.7	7.4
007	4/22/93	91.6	3.1	7.5

Note: The high suspended solids and pH at Drain #005 may be explained by construction activities in the vicinity of this storm drain.

- I. By telecon on April 27, 1993 (BECO Telecon 4.93.023) the USEPA approved the discharge of 1.0 ppm or less of boron without a circulating water system (CWS) pump in operation, if necessary, from discharge point 001 at PNPS. However, whenever possible a CWS pump should be utilized during boron discharge to assure adequate dilution.
- J. Pilgrim Station Marine Ecology Semi-Annual Report No. 41 was sent to the USEPA (Region I) and Mass. Division of Water Pollution Control (DWPC) on April 23, 1993 as required by the NPDES Permit # 1A 0003557 (BECO Letter 5.93.057).
- K. Approximately 30 cubic yards of sand were removed from the concrete surfaces of the intake structure from March 22 - April 2, 1993. It was pumped into breakwater crevices above the high tide mark. The sand removal was necessary to alleviate concern over its effects on normal operation of mechanical components/traveling screens, and it was expected to have no adverse environmental impact. The removal operation was in accordance with Part I, Paragraph A.1.0. of the NPDES Permit.

ATTACHMENT 2 TO BECo LETTER 5.93.063

DISCHARGE MONITORING REPORT

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

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

MA0003557 (17-19)
 PERMIT NUMBER

001 1 (17-19)
 DISCHARGE NUMBER

MAJOR Form Approved
 (SUBR 5) OMB No. 2040-0004
 F - FINAL
 CONDENSER COOLING WATER

MONITORING PERIOD
 FROM YEAR MO DAY TO YEAR MO DAY
 93 04 01 TO 93 04 30
 (12-21) (12-23) (12-25) (12-27) (12-29) (12-31)

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

ATTN: L.L. SCHMELING, PLANT MANAGER

PARAMETER (32-37)	SAMPLE MEASUREMENT	(1 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-65)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
TEMPERATURE, WATER DEG. FAHRENHEIT 00011 1 0 0	*****	*****	()	*****	*****	71.4	(15) OF	0	99/99	RC	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	102	DAILY MX DEG.F			CONTIN RECORD UOUS	
OXIDANTS, TOTAL RESIDUAL 34044 1 0 0	*****	*****	()	*****	0.01	0.02	(19) MG/L	0	WH/DS	GR	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	0.1	0.1 DAILY MX HG/L			WHEN GRAB DISCHR	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0	*****	121.3	353.4	(03) MGD	*****	*****	***** ()	0	99/99	ES	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	447.0	510.0	DAILY MX MGD	*****	*****	*****			CONTIN ESTIMA UOUS	
TEMP. DIFF. BETWEEN INTAKE AND DISCHARGE 61576 1 0 0	*****	*****	()	*****	*****	26.9	(15) OF	0	99/99	CA	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	32	DAILY MX DEG.F			CONTIN CALCTD UOUS	
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
L.L. SCHMELING
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 \$20,000 and/or maximum imprisonment of between 6 months and 5 years.)

[Signature]
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: **508 747-8100**
 DATE: **93 05/13**
 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 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)

MA0003557 (2-16) PERMIT NUMBER
 002 1 (17-19) DISCHARGE NUMBER

MAJOR (SUBR 5) Form Approved OMB No. 2040-0004
 F - FINAL
 THERMAL BACKWASH

FACILITY
 LOCATION

MONITORING PERIOD
 FROM YEAR 93 MO 04 DAY 01 TO YEAR 93 MO 04 DAY 30
 (12-31) (22-23) (24-25) (26-27) (28-29) (30-31)

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

ATTN: L.L. SCHEMELING, PLANT MANAGER

PARAMETER (32-37)	SAMPLE MEASUREMENT	(1 Card Only) QUANTITY OR LOADING (46-51)			(4 Card Only) QUALITY OR CONCENTRATION (46-51)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-65)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
TEMPERATURE OF WATER DEG. FAHRENHEIT 00011 1 0 0	*****	*****	()	*****	*****	109.0	(15)	0	99/99	RC	
EFFLUENT GROSS VALUE FLOW IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0	*****	*****	****	*****	*****	120	DEG.F	0	CONTINUOUS	CORDR	
EFFLUENT GROSS VALUE	*****	37.2	(03)	*****	*****	*****	()	0	WH/DS	ES	
	*****	255.0	MGD	*****	*****	*****	****	0	WHEN ESTIMATED	DISCHR	
	*****	DAILY MX	MGD	*****	*****	*****	****				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
L.L. SCHEMELING
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]
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 508 747 8100
 DATE 93 05 13
 AREA CODE NUMBER YEAR MO DAY

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

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

NAME BOSTON ED #1 PILGRIM PLANT

ADDRESS ROCKY HILL ROAD

RD #1

PLYMOUTH MA 02360

FACILITY

LOCATION

ATTN: L.L. SCHEMELING, PLANT MANAGER

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

(2-18)

(17-19)

MA0003557
PERMIT NUMBER

003 A
DISCHARGE NUMBER

MAJOR

Form Approved

(SUBR S)

OMB No. 2040-0004

F - FINAL

INTAKE SCREEN WASH

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	93	04	01		93	04	30

*** NO DISCHARGE ***

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	QUANTITY OR LOADING (3 Card Only) (46-52)			QUALITY OR CONCENTRATION (4 Card Only) (38-43)				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 0 EFFLUENT GROSS VALUE	0.163	2.02	(03)	MGD	*****	*****	*****	()	0	01/01	ES
	PERMIT REQUIREMENT	2.1 NO AVG	2.1 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
L.L. SCHEMELING
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 \$100,000 and/or maximum imprisonment of between 6 months and 5 years.

[Signature]
LLS
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: 508 747-8100
DATE: 93 05 13

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
ON AMBIENT TEMPERATURE SUFFICIENTLY DISTANT FROM INTAKE STRUCTURES TO PREVENT RE-IMPINGEMENT.

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

NAME BOSTON ED #1 PILGRIM PLANT

ADDRESS ROCKY HILL ROAD

RD #1

PLYMOUTH

MA 02360

FACILITY

LOCATION

ATTN: L.L. SCHMELING, PLANT MANAGER

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

(2-18)

(17-19)

MA0003557

PERMIT NUMBER

010 A

DISCHARGE NUMBER

MAJOR (SUBR 5)
F - FINAL

Form Approved

OMB No. 2040-0004

PLANT SERVICE COOLING WATER

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	93	04	01		93	04	30
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

*** NO DISCHARGE [] ***

NOTE: Read instructions before completing this form.

PARAMETER (52-57)	SAMPLE MEASUREMENT	(3 Card Only) QUANTITY OR LOADING (46-51)			(4 Card Only) QUALITY OR CONCENTRATION (46-51)				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	*****	*****	()	*****	0.03	0.21	(19) MG/L	0	99/99	RC	
EFLUENT GROSS VALUE FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0	*****	*****	*** ****	*****	0.5 NO AVG	1.0 DAILY RX	MG/L			CONTIN UOUS	
EFLUENT GROSS VALUE	5.03	*****	(03)	*****	*****	*****	()	0	99/99	ES	
	19.4 NO AVG	*****	MGD	*****	*****	*****	*** ****			CONTIN UOUS	

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
L.L. SCHMELING
PLANT MANAGER

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.

Jean Bellefleur
US
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE
508 747-8100
DATE
93 05 13

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 BOSTON ED #1 PILGRIM PLANT
ADDRESS ROCKY HILL ROAD
 RED #1
 PLYMOUTH MA 02360

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

MA0003557
 PERMIT NUMBER

011 A
 DISCHARGE NUMBER

MAJOR (SUBR 5) F - FINAL
 MAKE UP WATER AND DEMINERALIZE

Form Approved
 OMB No. 2040-0004

FACILITY LOCATION

MONITORING PERIOD
 FROM YEAR 93 MO 04 DAY 01 TO YEAR 93 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.

ATTN: L.L. SCHEMLING, PLANT MANAGER

PARAMETER (32-37)	X	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)				NO. EX (62-65)	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	*****	*****	()	*****	1.0	1.9	(19)	0	01/BA GR	
	PERMIT REQUIREMENT	*****	*****	***	*****	30 NO AVG	100 DAILY MX	MG/L MG/L		ONCE/ GRAB BATCH	
FLOW IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.00035	0.00044	(03)	*****	*****	*****	()	0	WH/DS ES	
	PERMIT REQUIREMENT	0.015 NO 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
 L.L. SCHEMLING
 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.)

J. Bellfante Jr
 LLJ
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 508 747-8100
 DATE 93 05 13
 AREA CODE NUMBER YEAR MO DAY

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

SEE PAGE 5 OF PERMIT PARAGRAPH N FOR SODIUM N. RATE REPORTING REQUIERMENTS. ATTACH ALL RELATED REPORTS TO THIS FORM