



Entergy Nuclear Generation Company
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

J. F. Alexander
Director
Nuclear Assessment

October 18, 1999
ENGCLtr. 5.99.154

Water Technical Unit (SEW)
U.S. Environmental Protection Agency
P.O. Box 8127
Boston, MA 02114-8127

Massachusetts Dept. of Environmental Protection
Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347

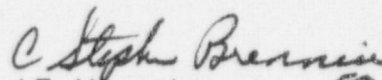
Discharge Monitoring Report

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, 1999.

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


J.F. Alexander

RDA/sc

Attachments: 1. Summary
2. Discharge Monitoring Report

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

Senior NRC Resident Inspector
Pilgrim Nuclear Power Station

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

9910290300 990930
PDR ADOCK 05000293
R PDR

IE251/1

ATTACHMENT 1 TO ENGC LETTER 5.99.154

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, 1999.

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 on in September.
- F. No sawdust was applied to seek and seal PNPS condenser leaks in September 1999.
- G. The following boron and sodium nitrite discharges (ppm) occurred in September 1999 from discharge point #001.

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

None

Sodium Nitrite

None

- H. On September 18, 1999, approximately 722 Atlantic menhaden were collected from Pilgrim Station intake traveling screens resulting in an impingement rate of 288.80 fish/hour. Applying this rate to the entire period during which the fish impingement occurred results in approximate menhaden impingement total of 4,910. The fish averaged about 85mm 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 (ENG C Telecon 4.99.009). The Mass. Div. of Marine Fisheries (DMF) was also notified and consulted. The reasons for the large number of menhaden impinged are unknown but could have involved pursuit by predators; a strong year class making more individuals available; and/or the influence of strong winds from tropical storm Floyd.

ATTACHMENT 2 to ENGC LETTER 5.99.154

DISCHARGE MONITORING REPORT

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

MA 02360
FACILITY PILGRIM NUCLEAR POWER STATION
LOCATION PLYMOUTH
ATTN: C.S. GODDARD, PLANT MANAGER

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

MA0003557
PERMIT NUMBER

003 A
DISCHARGE NUMBER

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

MAJOR
(SUBR S)
P - FINAL
INTAKE SCREEN WASH

MONITORING PERIOD
YEAR MO DAY YEAR MO DAY
99 09 01 99 09 30
FROM (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 (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
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NAME
BOSTON ED #1 PILGRIM PLANT

ADDRESS ROCKY HILL ROAD

APD 21

PLYMOUTH
MA 02360

PILGRIM NUCLEAR POWER STATION
FACILITY

LOCATION PLYMOUTH WA 02360

ATTN: C.S. GODDARD, PLANT MANAGER

MA0003557
PERMIT NUMBER

004	A
DISCHARGE NUMBER	

MAJOR
(SUBRS)
P - FINAL
YARD DRAV

MONITORING PERIOD

YEAR	MO	DAY	TO	YEAR	MO	DAY
99	09	01		99	09	30
FROM						

*** NO DISCHARGE ! ***

NOTE: Read Instructions before completing this form.

[illegible]

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

*** NO DISCHARGE | ***
NOTE: Read Instructions before completing this

[illegible]

MAJOR
(SUBS)
F - PINAL

*** NO DISCHARGE ***

MONITORING PERIOD									
FROM		YEAR	MO	DAY	TO		YEAR	MO	DAY
		99	09	01			99	09	30
		(20-21)	(22-23)	(24-25)			(26-27)	(28-29)	(30-31)

[illegible]

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
W. J. DiCroce
PLANT MANAGER
TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED ANY INFORMATION I HAVE PROVIDED TO THE ABOVE NAMED INDIVIDUALS AND I 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 AND CONSEQUENCES FOR PROVIDING FALSE INFORMATION AND THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. 1001 AND 18 U.S.C. 1319. (Penalties under these statutes may include fines up to \$10,000 and a maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE	DATE
508-830-8100	99 10
AREA NUMBER	YEAR MONTH

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