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Writer's Direct Dial Number:

March 18, 1991

C330-91-2044

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

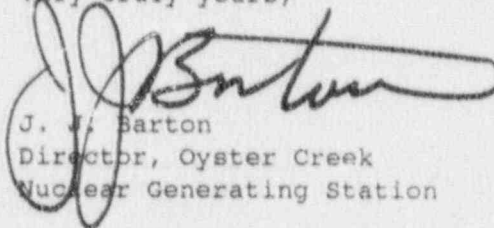
Dear Sir:

Subject: Oyster Creek Nuclear Generating Station (OCNGS)
Docket No. 50-219
Annual Environmental Operating Report

Enclosed are two (2) copies of the 1990 Annual Environmental Operating Report (AEOR) for the OCNGS. The AEOR is submitted in accordance with Section 3.5.1(A) of the Oyster Creek Environmental Technical Specifications (OCETS). Section 3.5.1(A) of the OCETS requires that the AEOR be submitted no later than 90 days after the first of the year.

If you have any questions concerning this submittal, please contact Mr. Joseph D. Lachenmayer of our Environmental Licensing staff at (201) 316-7971.

Very truly yours,



J. J. Barton
Director, Oyster Creek
Nuclear Generating Station

JJB/JDL/amk
Enclosure
Station
(04472A:20)

cc: W. Russell (NRC)
E. Collins (NRC)
A. Dromerick, Jr. (NRC)
K. Stern (NJDEP)

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ANNUAL ENVIRONMENTAL OPERATING REPORT

OYSTER CREEK NUCLEAR

GENERATING STATION

LICENSE NO. DPR-16

DOCKET NO. 50-219

PREPARED BY

GPU NUCLEAR CORPORATION

FEBRUARY 1991

1.0 Introduction

This document is the Oyster Creek Nuclear Generating Station (OCNGS) Annual Environmental Operation Report (AEOR) for 1990. This report is required by Oyster Creek Environmental Technical Specification (OCETS) Section 3.5.1(A).

The OCNGS is a single cycle, forced circulation, boiling water reactor of 620 MWe maximum (summer) dependable net capacity, owned by Jersey Central Power & Light Company and operated by GPU Nuclear Corporation. The OCNGS is located in Lacey Township, Ocean County, New Jersey. The plant is subject to Provisional Operating License No. DPR-16. The date of initial reactor criticality was May 3, 1969 and the commercial generation of power began on December 23, 1969.

This AEOR covers the period from January 1, 1990 through December 31, 1990. The report is organized in the following format:

- Section 1.0 - Introduction
- Section 2.0 - Environmental Monitoring
- Section 3.0 - Special Monitoring and Study Activities
- Section 4.0 - Additional Information

2.0 Environmental Monitoring

This section is intended to address the results of environmental monitoring programs required to be implemented by Section 1.1 of the OCETS during the report period. The Fish Kill Monitoring Program was not initiated during this report period.

3.0 Special Monitoring and Study Activities

This section is intended to present the results of any special monitoring and study activities required by Section 2.0 of the OCETS.

Section 2.0 of the OCETS did not require the performance of any special monitoring or study activities during this report period.

4.0 Additional Information

This section reports any additional information that is required by Section 3.5.1. of the OCETS which includes a summary of:

- a) All OCETS non-compliances (i.e., all NEORs) and the corrective action taken to remedy them.
- b) Changes made to State and Federal Permits and certificates which pertain to the requirements of the OCETS.
- c) Changes in station design which could involve an environmental impact.
- d) Changes to the OCETS

4.1 Summary of OCETS Non-Compliances

There were no NEORs during this reporting period. As part of this report, however, GPUN is including as Attachment I copies of non-compliance reports submitted to the New Jersey Department of Environmental Protection during this reporting period for non-compliance with NJPDES Permit No. NJ 0005550. These permit non-compliances were minor in nature and did not result in an impact to public health or the environment.

Summary of Changes Made to Federal and State Permits and Certificates which Pertain to the Requirements of OCETS

On April 19, 1990 the OCNGS received a corrective action NJPDES discharge to ground water permit (NJ 0076147) for the purpose of removing oil contamination in the "Cape May" aquifer which had resulted from an underground pipe leak.

A renewal application for the NJPDES DSW permit (NJ 0005550) was submitted to the New Jersey Department of Environmental Protection on January 31, 1990. The renewal application also requested the consolidation of the Forked River site DSW permit (NJ 0031097) into permit NJ 0005550. The application was still under review as of December 31, 1990.

Summary of Changes in Station Design Which Could Involve and Environmental Impact

There were no changes in, or modifications of, station design during the reporting period which could involve an environmental impact.

4.2 Summary of Changes to the OCETS

There were no changes to the OCETS during the reporting period.

ATTACHMENT I

NJPDES Permit No. 0005550

Noncompliance Reports

Initial Telephone
Report Date: February 2, 1990

Date of
Occurrence: February 2, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/01

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part II, Page 3, Condition D (Dilution Pump Operations) of the permit.

CAUSE OF NONCOMPLIANCE:

Due to mechanical failure, Dilution Pump #1 tripped off line at 1324 hours on February 2, 1990 and Dilution Pump #3 tripped off line at 1348 hours on February 2, 1990. Dilution Pump #2 was down for repair at time of failure. Dilution Pump #2 was returned to service at 2317 on February 2, 1990 and Dilution Pump #3 was returned to service at 2029 on February 3, 1990.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 40 minute period when the ambient intake water temperature at the OCNGS is less than 60°F.

DURATION OF NONCOMPLIANCE:

30 hours and 25 minutes; 1404 hours on February 2, 1990 to 2029 hours on February 3, 1990.

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution Pump #2 was returned to service at 2317 hours on February 2, 1990 and Dilution Pump #3 was returned to service at 2029 hours on February 3, 1990.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued maintenance of dilution pumps.

Prepared By: Barry Durham/Mike Kennish

Date: March 20, 1990

Initial Telephone

Report Date: March 23, 1990

Date of

Occurrence: March 22, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES

PERMIT NO. NJ 000 5550

REPORT NUMBER 000 5550/90/02

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part II, Page 3, Condition D (Dilution Pump Operations) of the permit.

CAUSE OF NONCOMPLIANCE:

Dilution Pump #2 tripped off line at 1759 hours on March 22, 1990 due to the failure of a switch. It could not be restarted until 1400 hours on March 23, 1990. Dilution pump #1 was out of service at the time of switch failure. Dilution pump #3 operated for the entire time period.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 40 minute period when the ambient intake water temperature at the OCNCS is less than 60°F. Note: Dilution pump #3 operated for the entire time period of noncompliance.

DURATION OF NONCOMPLIANCE:

19 hours and 21 minutes; 1839 hours on March 22, 1990 to 1400 hours on March 23, 1990.

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution Pump #2 was returned to service at 1400 hours on March 23, 1990.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued maintenance of dilution pumps.

Prepared By: Harry Durham/Mike Kennish

Date: April 18, 1990

0146A(1)

Initial Telephone
Report Date: May 23, 1990

Date of
Occurrence: May 22, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/03

IDENTIFICATION OF OCCURRENCE:

Noncompliance with the delta temperature limitation at DSN-002 (Heat Exchanger Cooling Water); Part III, Page 3 of the permit.

CAUSE OF NONCOMPLIANCE:

Excessive-debris accumulation on the intake pump strainer caused a reduction of cooling water flow which resulted in a temperature increase of the effluent water and corresponding delta temperature.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

The delta temperature between the intake and discharge of the Heat Exchanger Cooling Water (DSN 002) exceeded the permit limit of 33°F. The temperature difference was measured at 38°F. It is important to note that this effluent stream is brought back into the plant and discharged again through DSN 001, where no violations occurred.

DURATION OF NONCOMPLIANCE:

Duration of noncompliance was approximately one hour.

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The pump was removed from service and the strainer cleaned. The reserve intake water pump was placed in service.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Use of two heat exchangers and maximum cooling water flow to minimize the delta temperature. Continued intake pump strainer maintenance.

Prepared By: Barry Durham/Mike Kennish

Date: June 21, 1990

Initial Telephone
Report Date: July 5, 1990

Date of
Occurrence: July 5, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/04

IDENTIFICATION OF OCCURRENCE:

Noncompliance with part II, page 3 (D.) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 1301 hours on July 5, 1990 dilution pump #3 tripped off as a result of high, lube oil temperature. The reserve dilution pump (#2) could not be started until 1321 hours.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 15-minute period when the water temperature in Oyster Creek at the U.S. Route 9 bridge exceeded 87°F.

DURATION OF NONCOMPLIANCE:

Five minutes (1316 to 1321 hours).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution pump #2 was started at 1321 hours.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued periodic maintenance of the dilution pumps.

Prepared By: Patricia Chizmadia/Barry W. Durham

Date: August 22, 1990

0146A(1)

Initial Telephone
Report Date: July 9, 1990

Date of
Occurrence: July 8, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/05

IDENTIFICATION OF OCCURRENCE:

Noncompliance with part II, page 3 (D.) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 0303 hours on July 8, 1990 dilution pump #2 was taken out of service after the trash rack in front of pump #2 collapsed from an accumulation of organic debris (primarily eel grass). The reserve dilution pump (#3) could not be started. It was 0331 hours before dilution pump #2 could be returned to service.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 15-minute period when the water temperature in Oyster Creek at the U.S. Route 9 bridge exceeded 87°F.

DURATION OF NONCOMPLIANCE:

The non compliance continued for 13 minutes (0318 to 0331).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution pump #2 was restarted at 0331 hours.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued vigilance in the removal of debris from the trash racks especially during periods when debris loading is high.

Prepared By: Patricia Chizmadia/Barry W. Durham

Date: August 22, 1990

0146A(1)

Initial Telephone _____
Report Date: July 9, 1990

Date of _____
Occurrence: July 8, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/06

IDENTIFICATION OF OCCURRENCE:

Noncompliance with part II, page 3 (D.) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 0815 hours on July 8, 1990 dilution pump #1 tripped off as a result of lube oil cooling problems. The reserve dilution pump (#3) was out of service and could not be started. Dilution pump #1 was returned to service at 0915. During the period of time that the #1 dilution pump was off, the #2 dilution pump tripped off at 0831. The #2 pump was returned to service at 0837. This resulted in a six minute period (0831 to 0837) when no dilution pumps were operating.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 15-minute period when the water temperature in Oyster Creek at the U.S. Route 9 bridge exceeded 87°F.

DURATION OF NONCOMPLIANCE:

The non compliance continued for 45 minutes (0830 to 0915).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution pump #1 was restarted at 0915 hours.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued maintenance of of the dilution pumps.

Prepared By: Patricia Chizmadia/Barry W. Durham

Date: August 22, 1990

Initial Telephone
Report Date: August 6, 1990

Date of
Occurrence: August 4, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/07

IDENTIFICATION OF OCCURRENCE:

Noncompliance with part II, page 3 (D.) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 1106 hours on August 4, dilution pumps #2 and #3 were operating when pump #2 was shut off so that the trash rake, which had become stuck in front of pump #2, could be removed. After the rake was removed, the #2 dilution pump could not be restarted until 1126 hours as the result of a faulty oil pressure switch.

DESCRIPTION OF NONCOMPLIANT DISCHARGE:

Failure to have two dilution pumps operating for more than a 15-minute period when the water temperature in Oyster Creek at the U.S. Route 9 bridge exceeded 87°F.

DURATION OF NONCOMPLIANCE:

Five minutes (1121 to 1126).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution pump #2 was restarted at 1126 hours.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Repair of the oil pressure switch and continued maintenance of the dilution pumps.

Prepared By: Patricia Chizmadia/Barry W. Durham

Date: September 20, 1990

Initial Telephone

Report Date: September 7, 1990

Date of

Occurrence: September 6, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES

PERMIT NO. NJ 000 5550

REPORT NUMBER 000 5550/90/08

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part I, number 1, paragraph A (page 1 of 16) of the permit.

CAUSE OF NONCOMPLIANCE:

The concrete floors of the Diesel Generator Building were being cleaned with a solution of trisodium phosphate and water when a small volume of the solution accidentally reached a stormwater floor drain in the building which discharges onto the OCNGS discharge canal embankment. Approximately 50 gallons of this solution with a measured pH ranging from 9-12 was discharged to the discharge canal.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

A pollutant not specifically authorized by the NJPDES permit was discharged.

DURATION OF NONCOMPLIANCE:

Two hours (1330 - 1530 hours).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The cleaning operation was temporarily stopped and absorbant socks were used to contain as much of the solution as possible.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

The cleaning operation continued with all of the solution being contained for proper off-site disposal.

Prepared By: Barry W. Durham/Patricia Chizmadia

Date: October 22, 1990

0146A(1)

Initial Telephone
Report Date: September 13, 1990

Date of
Occurrence: September 12, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/09

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part I, number 1, paragraph A (page 1 of 16) of the permit.

CAUSE OF NONCOMPLIANCE:

The concrete walls of the Diesel Generator Building were being cleaned with high pressure water when a small volume of water reached a stormwater floor drain in the building which discharges onto the OCNGS discharge canal embankment. A very slight oil sheen was observed on the surface of the discharged water (prior to it reaching the station's discharge canal). Approximately 25 gallons of this water was discharged to the discharge canal where it should be noted that no visible sheen was observed.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

A pollutant not specifically authorized by the NJPDES permit was discharged.

DURATION OF NONCOMPLIANCE:

30 minutes (1530 hours to 1600 hours).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The cleaning operation was temporarily stopped and absorbant socks were used to contain as much of the water as possible.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

The cleaning operation continued with all of the water being contained for proper off-site disposal.

Prepared By: Barry W. Durham

Date: October 22, 1990

Initial Telephone
Report Date: N/A

Date of
Occurrence: Reporting Period

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550 DGW
REPORT NUMBER 000 5550/90/10

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part III, DGW-I, Page 1 of 1, failure to obtain a pH sample during the reporting period.

CAUSE OF NONCOMPLIANCE:

As the data was prepared for this Discharge Monitoring Report, it was observed that a Ph sample was not obtained and measured at the time of sampling on September 27, 1990. A pH sample was measured on October 6, 1990. However this sample date was beyond the collection period for this report (September 30, 1990).

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

N/A

DURATION OF NONCOMPLIANCE:

N/A

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

N/A

CORRECTIVE ACTION TO PREVENT RECURRENCE:

The requirement to obtain and measure a Ph sample at the time of collection will be added to the appropriate procedure to ensure continued compliance with this permit requirement.

Prepared By: Barry W. Durham

Date: October 30, 1990

Initial Telephone
Report Date: November 5, 1990

Date of
Occurrence: November 2, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/11

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part II, Page 3(D) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 1732 hours on November 2, 1990, dilution pump #2 had to be taken out of service as a result of high bearing temperatures. A hold-down device internal to the bearing was loose and had to be tightened. The #1 dilution pump could not be started since it was out of service for major repairs. The maintenance on dilution pump #2 which included tightening the loose screw and checking the motor was completed on November 4, 1990.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 40 minute period when the intake water temperature is less than 60°F.

DURATION OF NONCOMPLIANCE:

Thirty nine hours and 53 minutes (1812 on November 2, 1990 to 1005 on November 2, 1990).

Please note that one dilution pump remained in service during this entire period.

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The #2 dilution pump was returned to service at 1005 on November 2, 1990.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

The screw on the hold-down device was lock-tightened. Maintenance personnel will investigate this problem with the vendor as this unit is new.

Prepared By: Patricia Chizmadia/Barry Durham

Date: December 20, 1990

Initial Telephone

Report Date: November 20, 1990

Date of

Occurrence: November 20, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/12

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part II, Page 3(D) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 0409 hours on November 20, 1990, dilution pump #3 tripped as the result of the failure of a cooling water switch. The #1 dilution pump was out of service for major repairs. Attempts to start the #1 pump caused the tripping of the #2 pump, the other dilution pump which was in operation. The failed switch was replaced and the #3 pump was returned to service at 1917 hours. The #2 pump was out of service for a total of 39 minutes during this period of noncompliance.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 40 minute period when the intake water temperature is less than 60°F.

DURATION OF NONCOMPLIANCE:

Fourteen hours and 28 minutes (0449 to 1917 on 11/20/90).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The #3 dilution pump was returned to service at 1917 after the flow switch was replaced.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Plant Engineering is evaluating methods to enhance the operation of the dilution pump cooling water and seal water systems.

Prepared By: Patricia Chizmadia/Barry Durham

Date: December 20, 1990

(C3302021/5)

1990

ANNUAL ENVIRONMENTAL OPERATING REPORT

OYSTER CREEK NUCLEAR

GENERATING STATION

LICENSE NO. DPR-16

DOCKET NO. 50-219

PREPARED BY

GPU NUCLEAR CORPORATION

FEBRUARY 1991

1.0 Introduction

This document is the Oyster Creek Nuclear Generating Station (OCNGS) Annual Environmental Operation Report (AEOR) for 1990. This report is required by Oyster Creek Environmental Technical Specification (OCETS) Section 3.5.1(A).

The OCNGS is a single cycle, forced circulation, boiling water reactor of 620 MWe maximum (summer) dependable net capacity, owned by Jersey Central Power & Light Company and operated by GPU Nuclear Corporation. The OCNGS is located in Lacey Township, Ocean County, New Jersey. The plant is subject to Provisional Operating License No. DPR-16. The date of initial reactor criticality was May 3, 1969 and the commercial generation of power began on December 23, 1969.

This AEOR covers the period from January 1, 1990 through December 31, 1990. The report is organized in the following format:

Section 1.0 - Introduction
Section 2.0 - Environmental Monitoring
Section 3.0 - Special Monitoring and Study Activities
Section 4.0 - Additional Information

2.0 Environmental Monitoring

This section is intended to address the results of environmental monitoring programs required to be implemented by Section 1.1 of the OCETS during the report period. The Fish Kill Monitoring Program was not initiated during this report period.

3.0 Special Monitoring and Study Activities

This section is intended to present the results of any special monitoring and study activities required by Section 2.0 of the OCETS.

Section 2.0 of the OCETS did not require the performance of any special monitoring or study activities during this report period.

4.0 Additional Information

This section reports any additional information that is required by Section 3.5.1. of the OCETS which includes a summary of:

- a) All OCETS non-compliances (i.e., all NEORs) and the corrective action taken to remedy them.
- b) Changes made to State and Federal Permits and certificates which pertain to the requirements of the OCETS.
- c) Changes in station design which could involve an environmental impact.
- d) Changes to the OCETS

4.1 Summary of OCETS Non-Compliances

There were no NEORs during this reporting period. As part of this report, however, GPUN is including as Attachment I copies of non-compliance reports submitted to the New Jersey Department of Environmental Protection during this reporting period for non-compliance with NJPDES Permit No. NJ 0005550. These permit non-compliances were minor in nature and did not result in an impact to public health or the environment.

Summary of Changes Made to Federal and State Permits and Certificates which Pertain to the Requirements of OCETS

On April 19, 1990 the OCNGS received a corrective action NJPDES discharge to ground water permit (NJ 0076147) for the purpose of removing oil contamination in the "Cape May" aquifer which had resulted from an underground pipe leak.

A renewal application for the NJPDES DSW permit (NJ 0005550) was submitted to the New Jersey Department of Environmental Protection on January 31, 1990. The renewal application also requested the consolidation of the Forked River Site DSW permit (NJ 0031097) into permit NJ 0005550. The application was still under review as of December 31, 1990.

Summary of Changes in Station Design Which Could Involve and Environmental Impact

There were no changes in, or modifications of, station design during the reporting period which could involve an environmental impact.

4.2 Summary of Changes to the OCETS

There were no changes to the OCETS during the reporting period.

ATTACHMENT I

NJPDES Permit No. 0005550

Noncompliance Reports

Initial Telephone
Report Date: February 2, 1990

Date of
Occurrence: February 2, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/01

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part II, Page 3, Condition D (Dilution Pump Operations) of the permit.

CAUSE OF NONCOMPLIANCE:

Due to mechanical failure, Dilution Pump #1 tripped off line at 1324 hours on February 2, 1990 and Dilution Pump #3 tripped off line at 1348 hours on February 2, 1990. Dilution Pump #2 was down for repair at time of failure. Dilution Pump #2 was returned to service at 2317 on February 2, 1990 and Dilution Pump #3 was returned to service at 2029 on February 3, 1990.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 40 minute period when the ambient intake water temperature at the OCNGS is less than 60°F.

DURATION OF NONCOMPLIANCE:

30 hours and 25 minutes; 1404 hours on February 2, 1990 to 2029 hours on February 3, 1990.

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution Pump #2 was returned to service at 2317 hours on February 2, 1990 and Dilution Pump #3 was returned to service at 2029 hours on February 3, 1990.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued maintenance of dilution pumps.

Prepared By: Barry Durham/Mike Kennish

Date: March 20, 1990

Initial Telephone

Report Date: March 23, 1990

Date of

Occurrence: March 22, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/02

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part II, Page 3, Condition D (Dilution Pump Operations) of the permit.

CAUSE OF NONCOMPLIANCE:

Dilution Pump #2 tripped off line at 1759 hours on March 22, 1990 due to the failure of a switch. It could not be restarted until 1400 hours on March 23, 1990. Dilution pump #1 was out of service at the time of switch failure. Dilution pump #3 operated for the entire time period.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 40 minute period when the ambient intake water temperature at the OCNCS is less than 60°F. Note: Dilution pump #3 operated for the entire time period of noncompliance.

DURATION OF NONCOMPLIANCE:

19 hours and 21 minutes; 1839 hours on March 22, 1990 to 1400 hours on March 23, 1990.

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution Pump #2 was returned to service at 1400 hours on March 23, 1990.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued maintenance of dilution pumps.

Prepared By: Barry Durham/Mike Kennish

Date: April 18, 1990

0146A(1)

Initial Telephone
Report Date: May 23, 1990

Date of
Occurrence: May 22, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/03

IDENTIFICATION OF OCCURRENCE:

Noncompliance with the delta temperature limitation at DSN-002 (Heat Exchanger Cooling Water); Part III, Page 3 of the permit.

CAUSE OF NONCOMPLIANCE:

Excessive debris accumulation on the intake pump strainer caused a reduction of cooling water flow which resulted in a temperature increase of the effluent water and corresponding delta temperature.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

The delta temperature between the intake and discharge of the Heat Exchanger Cooling Water (DSN 002) exceeded the permit limit of 33°F. The temperature difference was measured at 38°F. It is important to note that this effluent stream is brought back into the plant and discharged again through DSN 001, where no violations occurred.

DURATION OF NONCOMPLIANCE:

Duration of noncompliance was approximately one hour.

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The pump was removed from service and the strainer cleaned. The reserve intake water pump was placed in service.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Use of two heat exchangers and maximum cooling water flow to minimize the delta temperature. Continued intake pump strainer maintenance.

Prepared By: Barry Durham/Mike Kennish

Date: June 21, 1990

Initial Telephone

Report Date: July 5, 1990

Date of

Occurrence: July 5, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES

PERMIT NO. NJ 000 5550

REPORT NUMBER 000 5550/90/04

IDENTIFICATION OF OCCURRENCE:

Noncompliance with part II, page 3 (D.) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 1301 hours on July 5, 1990 dilution pump #3 tripped off as a result of high, lube oil temperature. The reserve dilution pump (#2) could not be started until 1321 hours.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 15-minute period when the water temperature in Oyster Creek at the U.S. Route 9 bridge exceeded 87°F.

DURATION OF NONCOMPLIANCE:

Five minutes (1316 to 1321 hours).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution pump #2 was started at 1321 hours.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued periodic maintenance of the dilution pumps.

Prepared By: Patricia Chizmadia/Barry W. Durham

Date: August 22, 1990

0146A(1)

Initial Telephone
Report Date: July 9, 1990

Date of
Occurrence: July 8, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/05

IDENTIFICATION OF OCCURRENCE:

Noncompliance with part II, page 3 (D.) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 0303 hours on July 8, 1990 dilution pump #2 was taken out of service after the trash rack in front of pump #2 collapsed from an accumulation of organic debris (primarily eel grass). The reserve dilution pump (#3) could not be started. It was 0331 hours before dilution pump #2 could be returned to service.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 15-minute period when the water temperature in Oyster Creek at the U.S. Route 9 bridge exceeded 87°F.

DURATION OF NONCOMPLIANCE:

The non compliance continued for 13 minutes (0318 to 0331).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution pump #2 was restarted at 0331 hours.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued vigilance in the removal of debris from the trash racks especially during periods when debris loading is high.

Prepared By: Patricia Chizmadia/Barry W. Durham

Date: August 22, 1990

Initial Telephone

Report Date: July 9, 1990

Date of

Occurrence: July 8, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES

PERMIT NO. NJ 000 5550

REPORT NUMBER 000 5550/90/06

IDENTIFICATION OF OCCURRENCE:

Noncompliance with part II, page 3 (D.) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 0815 hours on July 8, 1990 dilution pump #1 tripped off as a result of lube oil cooling problems. The reserve dilution pump (#3) was out of service and could not be started. Dilution pump #1 was returned to service at 0915. During the period of time that the #1 dilution pump was off, the #2 dilution pump tripped off at 0831. The #2 pump was returned to service at 0837. This resulted in a six minute period (0831 to 0837) when no dilution pumps were operating.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 15-minute period when the water temperature in Oyster Creek at the U.S. Route 9 bridge exceeded 87°F.

DURATION OF NONCOMPLIANCE:

The non compliance continued for 45 minutes (0830 to 0915).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution pump #1 was restarted at 0915 hours.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Continued maintenance of of the dilution pumps.

Prepared By: Patricia Chizmadia/Barry W. Durham

Date: August 22, 1990

Initial Telephone

Report Date: August 6, 1990

Date of

Occurrence: August 4, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES

PERMIT NO. NJ 000 5550

REPORT NUMBER 000 5550/90/07

IDENTIFICATION OF OCCURRENCE:

Noncompliance with part II, page 3 (D.) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 1106 hours on August 4, dilution pumps #2 and #3 were operating when pump #2 was shut off so that the trash rake, which had become stuck in front of pump #2, could be removed. After the rake was removed, the #2 dilution pump could not be restarted until 1126 hours as the result of a faulty oil pressure switch.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 15-minute period when the water temperature in Oyster Creek at the U.S. Route 9 bridge exceeded 87°F.

DURATION OF NONCOMPLIANCE:

Five minutes (1121 to 1126).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

Dilution pump #2 was restarted at 1126 hours.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Repair of the oil pressure switch and continued maintenance of the dilution pumps.

Prepared By: Patricia Chizmadia/Barry W. Durham

Date: September 20, 1990

Initial Telephone
Report Date: September 7, 1990

Date of
Occurrence: September 6, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/08

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part I, number 1, paragraph A (page 1 of 16) of the permit.

CAUSE OF NONCOMPLIANCE:

The concrete floors of the Diesel Generator Building were being cleaned with a solution of trisodium phosphate and water when a small volume of the solution accidentally reached a stormwater floor drain in the building which discharges onto the OCNGS discharge canal embankment. Approximately 50 gallons of this solution with a measured pH ranging from 9-12 was discharged to the discharge canal.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

A pollutant not specifically authorized by the NJPDES permit was discharged.

DURATION OF NONCOMPLIANCE:

Two hours (1330 - 1530 hours).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The cleaning operation was temporarily stopped and absorbant socks were used to contain as much of the solution as possible.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

The cleaning operation continued with all of the solution being contained for proper off-site disposal.

Prepared By: Barry W. Durham/Patricia Chizmadia

Date: October 22, 1990

Initial Telephone
Report Date: September 13, 1990

Date of
Occurrence: September 12, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/09

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part I, number 1, paragraph A (page 1 of 16) of the permit.

CAUSE OF NONCOMPLIANCE:

The concrete walls of the Diesel Generator Building were being cleaned with high pressure water when a small volume of water reached a stormwater floor drain in the building which discharges onto the OCNGS discharge canal embankment. A very slight oil sheen was observed on the surface of the discharged water (prior to it reaching the station's discharge canal). Approximately 25 gallons of this water was discharged to the discharge canal where it should be noted that no visible sheen was observed.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

A pollutant not specifically authorized by the NJPDES permit was discharged.

DURATION OF NONCOMPLIANCE:

30 minutes (1530 hours to 1600 hours).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The cleaning operation was temporarily stopped and absorbant socks were used to contain as much of the water as possible.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

The cleaning operation continued with all of the water being contained for proper off-site disposal.

Prepared By: Barry W. Durham

Date: October 22, 1990

Initial Telephone

Report Date: N/A

Date of

Occurrence: Reporting Period

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES

PERMIT NO. NJ 000 5550 DGW

REPORT NUMBER 000 5550/90/10

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part III, DGW-I, Page 1 of 1, failure to obtain a pH sample during the reporting period.

CAUSE OF NONCOMPLIANCE:

As the data was prepared for this Discharge Monitoring Report, it was observed that a Ph sample was not obtained and measured at the time of sampling on September 27, 1990. A pH sample was measured on October 6, 1990. However this sample date was beyond the collection period for this report (September 30, 1990).

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

N/A

DURATION OF NONCOMPLIANCE:

N/A

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

N/A

CORRECTIVE ACTION TO PREVENT RECURRENCE:

The requirement to obtain and measure a Ph sample at the time of collection will be added to the appropriate procedure to ensure continued compliance with this permit requirement.

Prepared By: Barry W. Durham

Date: October 30, 1990

0146A(1)

Initial Telephone
Report Date: November 5, 1990

Date of
Occurrence: November 2, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/11

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part II, Page 3(D) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 1732 hours on November 2, 1990, dilution pump #2 had to be taken out of service as a result of high bearing temperatures. A hold-down device internal to the bearing was loose and had to be tightened. The #1 dilution pump could not be started since it was out of service for major repairs. The maintenance on dilution pump #2 which included tightening the loose screw and checking the motor was completed on November 4, 1990.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 40 minute period when the intake water temperature is less than 60°F.

DURATION OF NONCOMPLIANCE:

Thirty nine hours and 53 minutes (1812 on November 2, 1990 to 1005 on November 2, 1990).

Please note that one dilution pump remained in service during this entire period.

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The #2 dilution pump was returned to service at 1005 on November 2, 1990.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

The screw on the hold-down device was lock-tightened. Maintenance personnel will investigate this problem with the vendor as this unit is new.

Prepared By: Patricia Chismadia/Barry Durham

Date: December 20, 1990

Initial Telephone
Report Date: November 20, 1990

Date of
Occurrence: November 20, 1990

REPORT OF NONCOMPLIANCE WITH CONDITIONS OF NJPDES
PERMIT NO. NJ 000 5550
REPORT NUMBER 000 5550/90/12

IDENTIFICATION OF OCCURRENCE:

Noncompliance with Part II, Page 3(D) of the permit (Dilution Pump Operations).

CAUSE OF NONCOMPLIANCE:

At 0409 hours on November 20, 1990, dilution pump #3 tripped as the result of the failure of a cooling water switch. The #1 dilution pump was out of service for major repairs. Attempts to start the #1 pump caused the tripping of the #2 pump, the other dilution pump which was in operation. The failed switch was replaced and the #3 pump was returned to service at 1917 hours. The #2 pump was out of service for a total of 39 minutes during this period of noncompliance.

DESCRIPTION OF NONCOMPLIANCE DISCHARGE:

Failure to have two dilution pumps operating for more than a 40 minute period when the intake water temperature is less than 60°F.

DURATION OF NONCOMPLIANCE:

Fourteen hours and 28 minutes (0449 to 1917 on 11/20/90).

CORRECTIVE ACTION TO REDUCE NON-COMPLYING DISCHARGE:

The #3 dilution pump was returned to service at 1917 after the flow switch was replaced.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

Plant Engineering is evaluating methods to enhance the operation of the dilution pump cooling water and seal water systems.

Prepared By: Patricia Chizmadia/Barry Durham

Date: December 20, 1990