



NOV 09 2007

HCH-2007-112

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
ARTICLE NUMBER: 7004 2510 0005 2136 5764

Administrator - Water Compliance and Enforcement
New Jersey Department of Environmental Protection
401 East State Street, 4th Floor East
PO Box 422
Trenton, New Jersey 08625-0422

Attention: Discharge Confirmation Reports

**PSEG NUCLEAR LLC – HOPE CREEK GENERATING STATION
NJPDES PERMIT NO. NJ0025411
NJDEP CASE NO. 07-10-13-1639-45
DISCHARGE CONFIRMATION REPORT
RETRACTION OF REPORTED DISCHARGE TO THE DELAWARE RIVER**

In accordance with N.J.A.C. 7:1E-5.8, PSEG Nuclear LLC (PSEG Nuclear) is submitting the enclosed discharge confirmation report. This report describes the release of approximately 1480 gallons of water containing sodium hypochlorite at the Hope Creek Generating Station ("Hope Creek"). This discharge was reported to the New Jersey Department of Environmental Protection (NJDEP) hotline and assigned case number 07-10-13-1639-45.

The report to the NJDEP hotline included the potential for discharge to the Delaware River through the North Yard Drain (permitted outfall DSN 465), however, as discussed more fully below, samples from the North Yard Drain were analyzed for sodium hypochlorite as residual chlorine, which was not detected. Therefore, PSEG Nuclear is retracting the reported discharge to the Delaware River.

This report contains the following information as known at the time of this report. In accordance with the regulations, any additional information regarding this discharge will be provided to the Department as soon as possible.

IE23

NRK

NJDEP
HCH-2007-112

NOV 09 2007

If you have any questions regarding this information, please contact Ms. Erin West of my staff at (856) 339-5411.

Sincerely,



George P. Barnes
Site Vice President- Hope Creek

NJDEP
HCH-2007-112

Attachments (2)

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

Mr. Jim Werner
Salem County Department of Health
98 Market Street
Salem, NJ 08079

NJDEP
Southern Enforcement Office
One Port Center
2 Riverside Drive, Suite 201
Camden, NJ 08102
Attn: Mr. Steven Mathis

DISCHARGE CONFIRMATION REPORT
SALEM GENERATING STATION
NJDEP Case No. 07-05-24-0259-31

1. Name, Address and Telephone Number of Individual Who Reported

Mr. Daron Zakarian
Operations Shift Manager
PSEG Nuclear LLC – Hope Creek Generating Station
P. O. Box 236, M/C H01
Hancocks Bridge, New Jersey 08038
(856) 339-3059

2. Name, Address and Telephone Number of Person Submitting Report

George P. Barnes
Site Vice President- Hope Creek
PSEG Nuclear LLC – Hope Creek Generating Station
P. O. Box 236, M/C H07
Hancocks Bridge, New Jersey 08038
(856) 339-1952

3. Name, Address and Telephone Number of Owner/Operator of Facility Where Discharge Occurred

PSEG Nuclear LLC
P. O. Box 236
Hancocks Bridge, New Jersey 08038
(856) 339-5411

4. The Communications Center number Assigned by the Department When the Discharge was Reported

07-10-13-1639-45

5. Source of Discharge, If Known

On October 13, 2007 at approximately 1307 hours, personnel observed that the cooling tower basin was full and the wind was causing water to be blown out of the cooling tower basin. At 1322 the Control Room was notified of the water being blown out of the cooling tower basin and on to the ground. PSEG Nuclear had completed a shutdown of Hope Creek at 0941 and the cooling tower was not in service for heat removal. The elimination of the evaporative losses normally

incurred during heat removal increased the volume of water in the cooling tower basin, reducing the normal freeboard available. The high water levels in the basin were attributed to three service water pumps being in service at the time of the event. The high water level in addition to high winds caused water in the cooling tower basin to be blown over the wall of the cooling tower basin and onto the ground. The amount of water bypassed is calculated to be less than 1480 gallons.

6. Location of Discharge

Name: PSEG Nuclear LLC – Hope Creek Generating Station
Street Address: Alloway Creek Neck Road
Lot & Block: Block 26, Lot 4
Municipality: Lower Alloways Creek Township
County: Salem County
Zip Code: 08038-0236
Site Map: The location of the Cooling Tower Basin overflow area has been identified on a map in Attachment A.

7. Common Name and CAS No. of Hazardous Substance Discharged

Sodium Hypochlorite, CAS 7681-52-9

8. Quantity of Hazardous Substances Discharged

The approximate volume of wastewater discharged is 1480 gallons of cooling tower blowdown based upon flow rates and volume estimates during the release. This would equate to approximately 732 milligrams of sodium hypochlorite, about 0.0016 pounds

PSEG Nuclear also obtained samples of cooling tower basin water near the basin, as well as from the inlet of the North Yard drain. The results of all sampling are summarized below. Based on samples taken from the discharge the maximum concentration of the water discharged to the rock and soil surrounding the cooling tower basin was 0.09 ppm Total Residual Chlorine. In contrast, sampling was non-detect in the water that was obtained from the inlet to the North Yard drain. Based upon the sampling that was performed, there is no evidence that residual chlorine or sodium hypochlorite ultimately discharged to the River at detectable levels.

Sodium hypochlorite disassociates in water to provide chlorine-based ions that act as an oxidizer to provide disinfection in the circulating and service water systems at PSEG Nuclear. The water from the basin, therefore, was disassociated sodium hypochlorite measured as residual chlorine. The minimum detectable concentration of residual chlorine reportable to the NJDEP for compliance monitoring by a certified laboratory is 0.1 ppm. PSEG Nuclear notes

that the maximum concentration detected in the river water during the event was .09 ppm, concentrations that are below the NJPDES detection level for residual chlorine. Therefore, neither sodium hypochlorite nor residual chlorine was discharged at a level detectable using the methods specified in the certified laboratory program.

9. Date and Time Discharge Began, Was Discovered, Ended and Was Reported

Began: October 13, 2007 at approximately 1307 hours
Discovered: October 13, 2007 at approximately 1322 hours
Ended: October 13, 2007 at approximately 1630 hours
Reported: October 13, 2007 at approximately 1639 hours

10. Detailed Description of Containment, Cleanup and Removal Measures, Summary of Costs Incurred

Upon discovery of the discharge, the chemistry technicians isolated the sodium hypochlorite injection system. Operations removed the third service water pump from service. Site Hazmat responders arrived at the scene to control the area by attempting to block storm drains. Samples were taken from points closest to the basin and the discharge point. Due to the compaction of the engineered fill material on the site, minimal penetration into the surrounding soils occurred.

11. Corrective Actions – Preventative Measures

Steps to prevent reoccurrence will include a procedural review to consider the number of Service Water Pumps that should be in service when discharging to the cooling tower basin during a plant outage. Since this event occurred during an outage timeframe, the steps being taken to prevent reoccurrence will not likely be placed in service until the next maintenance/refueling outage.

12. Name, Address and Telephone Number of Cleanup Entities

PSEG Nuclear LLC
P. O. Box 236
Hancocks Bridge, New Jersey 08038-0236
Daron Zakarian
856-339-3059

13. Information Supplementing and Information Previously Provided to the Department if Additional Relevant Information is Discovered

PSEG Nuclear obtained and analyzed the following samples:

Samples:

- 1) Point closest to the basin
Time: 1357 on 10/13/07
Total Residual Chlorine: .09 ppm
- 2) Further discharge point
Time: 1357 on 10/13/07
Total Residual Chlorine: .05 ppm
- 3) Weir sample
Time: 1403 on 10/13/07
Total Residual Chlorine: .06 ppm
- 4) #21 Inlet storm drain
Time: 1615 on 10/13/07
Total Residual Chlorine: Non-Detected
- 5) #21 Inlet storm drain
Time: 1632 on 10/13/07
Total Residual Chlorine: Non-Detected

Samples were required to contain a minimum of 50ml per the station procedure. The results demonstrate that the incident did not cause any adverse health or environmental impact.

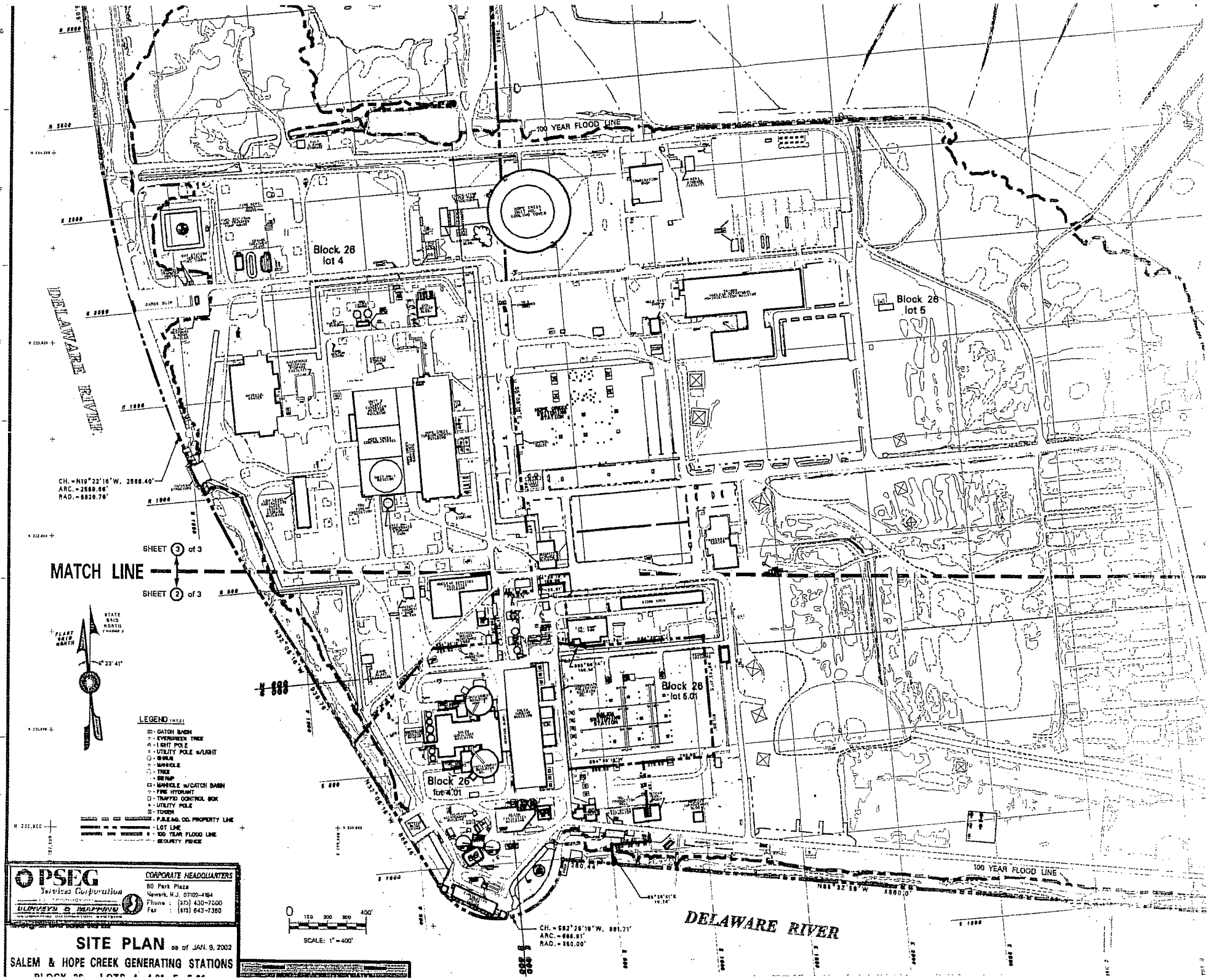
14. Other Information Concerning the Discharge Requested by the Department

Not Applicable.

16. Certification

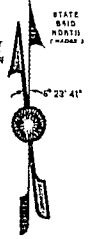
The Certification of George P. Barnes, Hope Creek Site Vice President, is included as Attachment B hereto.

ATTACHMENT A



CH. - N19°22'16" W, 2888.40'
 ARC. = 2589.86'
 RAD. = 6826.78'

MATCH LINE
 SHEET 3 of 3
 SHEET 2 of 3

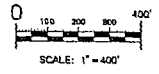


- LEGEND (INSET)**
- CATCH BASIN
 - EVERGREEN TREE
 - LIGHT POLE
 - UTILITY POLE W/LAHT
 - W/OLA
 - MANHOLE
 - TREE
 - SWAMP
 - MANHOLE w/CATCH DRAIN
 - FIRE HYDRANT
 - TRANSFORMER CONTROL BOX
 - UTILITY POLE
 - TOWER
 - P.B.E.M.G. CO. PROPERTY LINE
 - LOT LINE
 - 100 YEAR FLOOD LINE
 - SECURITY PERCE

OPSEG
 Services Corporation
 80 Park Plaza
 Newark, N.J. 07102-4184
 Phone: (973) 430-7500
 Fax: (973) 643-7380

SITE PLAN 00 of JAN. 9, 2002

SALEM & HOPE CREEK GENERATING STATIONS



CH. - S82°24'16" W, 881.71'
 ARC. = 846.91'
 RAD. = 282.00'

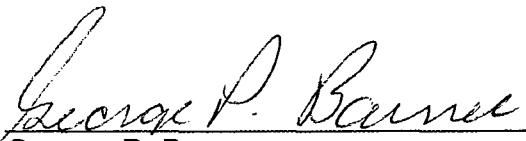
DELAWARE RIVER

ATTACHMENT B

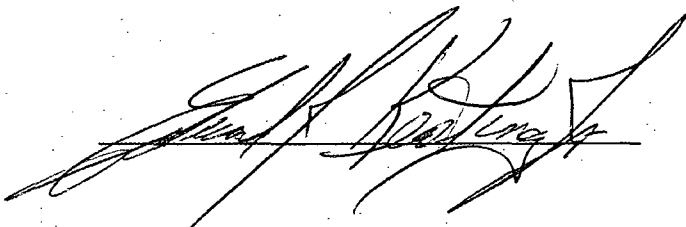
Confirmation Report Certification as per NJAC 7:1E-4.11(a)

I, George P. Barnes, of full age, being duly sworn according to law, upon my oath depose and say:

1. I am the Site Vice President for Hope Creek Generating Station;
2. I certify under penalty of law that the information provided in this document is, to the best of my knowledge, true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fines or imprisonment or both, for submitting false, inaccurate or incomplete information.


George P. Barnes
Site Vice President
Hope Creek Generating Station

Sworn and subscribed before me
this 9TH day of NOVEMBER 2007.


EDWARDS J. KEATING JR.
NJ LICENSED ATTORNEY
1699-2003