



**PSE&G**

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, N.J. 08038 609/339-1100

Leon R. Eliason Chief Nuclear Officer & President

Nuclear Business Unit

**CERTIFIED MAIL**

**RETURN RECEIPT REQUESTED**

**ARTICLE NUMBER: Z 217 970 197**

**FEB 06 1996**

**LR-E96019**

Bureau of Discharge Prevention  
New Jersey Department of Environmental Protection  
401 East State Street  
CN-027  
Trenton, New Jersey 08625-0027

Gentlemen:

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY  
SALEM GENERATING STATION  
CASE NO. 96-01-07-0049-18  
DISCHARGE CONFIRMATION REPORT**

In accordance with NJAC 7:1E-5, Public Service Electric and Gas Company (PSE&G) has prepared the attached report confirming the discharge of approximately 115 gallons of sodium hypochlorite to the Delaware River at the Salem Generating Station. The discharge occurred to the 13B circulating water pump bay at the Station's circulating water intake structure. There were no personnel injuries resulting from this discharge.

The discharge was reported to the New Jersey Department of Environmental Protection (NJDEP) Hotline and assigned Case No. 96-01-07-0049-18 by Operator No. 18. In addition, because 115 gallons exceeds the reportable quantity (RQ) for sodium hypochlorite in the Comprehensive Environmental Responsibility Cleanup Liabilities Act (CERCLA, 40 CFR 302), this discharge was also reported to the National Response Center and the Nuclear Regulatory Commission. The National Response Center assigned Case No. 319-223.

In making this notification, PSE&G believes that it acted in accordance with the intent of NJAC 7:1E-5, which requires all major facilities to notify the NJDEP of discharges of petroleum and other potentially hazardous substances in any concentration. Following a detailed investigation of this incident, PSE&G has identified the causes of this discharge and is developing measures to reduce the potential for future occurrences. PSE&G shall provide the Department with these corrective measures in a supplemental report to be issued no later than March 1, 1996.

9602130321 960206  
PDR ADOCK 05000272  
S PDR

The power is in your hands.

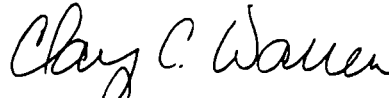
FEB 06 1996

NJDEP  
LR-E96019

2

Should you have any questions concerning this information, or require additional information, please contact Mr. Patrick McCabe of Licensing and Regulation at (609) 339-1245.

Sincerely,



C. C. Warren  
General Manager -  
Salem Operations

Attachment (1)

C Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

US Coast Guard MSO/Group Philadelphia  
1 Washington Avenue  
Philadelphia, PA 19147-4395  
Attention: Petty Officer Scott Roth

Salem County Department of Health  
98 Market Street  
Salem, NJ 08079  
Attention: Mr. James Warner

CERTIFICATION

State of New Jersey:

SS


County of Salem :

I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information.



C. C. Warren  
General Manager -  
Salem Operations

Sworn and subscribed before me  
on this 6 day of February, 1996.

  
Notary Public

BARBARA A. POWELL  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires Dec. 2, 1998  
ID # 2150323

My commission expires \_\_\_\_\_.

DISCHARGE CONFIRMATION REPORT  
CASE NO. 96-01-07-0049-18

INDIVIDUAL REPORTING DISCHARGE:

S. Sauer  
Senior Nuclear Shift Supervisor  
Public Service Electric and Gas  
P. O. Box 236, M/C S01  
Hancocks Bridge, New Jersey 08038  
(609) 339-5200

INDIVIDUAL SUBMITTING CONFIRMATION REPORT:

C. C. Warren  
General Manager - Salem Operations  
Public Service Electric and Gas  
P. O. Box 236, M/C S05  
Hancocks Bridge, New Jersey 08038  
(609) 339-2900

FACILITY OWNER/OPERATOR:

Public Service Electric and Gas Co.  
P. O. Box 570-17G  
Newark, New Jersey 07101-0570  
(201) 430-5868

INDIVIDUAL(S) RESPONSIBLE FOR THE DISCHARGE:

C. C. Warren  
General Manager - Salem Operations  
Public Service Electric and Gas  
P. O. Box 236, M/C S05  
Hancocks Bridge, New Jersey 08038  
(609) 339-2900

DISCHARGE SOURCE:

The discharge was caused by an operator closing a valve (1CL78) in the sodium hypochlorite injection system. The valve closure resulted in an increase in the system pressure and the rupture of a filter gasket on the pump discharge strainer. Sodium hypochlorite leaked from the strainer to the floor and drained to the inlet bay of the 13B circulating water pump. The circulating water inlet bays are directly connected to the Delaware River.

The cause of the incident is attributed to human error involving inattention to detail in preparation of the tagging release by Work Control Center personnel. Contributing causes include Operations personnel having overconfidence and misjudgment regarding the proper position of the valve, inadequate maintenance of the sodium hypochlorite pump recirculation system and inadequate design of the chlorine building sump.

DISCHARGE CONFIRMATION REPORT  
CASE NO. 96-01-07-0049-18

DISCHARGE LOCATION:

Salem Generating Station  
End of Alloway Creek Neck Road  
Block No: 26  
Lot No: 4.01  
Municipality: Lower Alloways Creek Township  
County: Salem County  
Zip Code: 08038  
Tax No: 22-1212-800  
EPA ID No: NJD077070811  
(Maps enclosed - See Figures 1 & 2)

CHEMICAL DISCHARGED: Sodium Hypochlorite  
CAS Number: 007681-52-9

QUANTITY DISCHARGED: Approximately 115 gallons

DATE/TIME DISCHARGE BEGAN: Unknown - last surveillance  
of area occurred at 4:25 p.m.  
on January 6, 1996. No  
discharge was observed.

DATE/TIME DISCHARGE ENDED: January 7, 1996 12:35 a.m.

DATE/TIME DISCHARGE DISCOVERED: January 7, 1996 12:35 a.m.

DATE/TIME DISCHARGE REPORTED TO NJDEP HOTLINE: January 7, 1996 12:49 a.m.

MEASURES TAKEN TO CONTAIN, CLEANUP AND REMOVE THE DISCHARGE:

Upon discovery, the discharge was terminated by turning off the sodium hypochlorite pump. The sodium hypochlorite which discharged through the drain was allowed to disperse in the intake bay and River where it was quickly diluted by the tide and River current. The residual chlorine concentration within the intake bay was diluted to 11.0 mg/l, as measured at approximately 2:00 a.m. by Chemistry personnel, and was expected to be undetectable within the next tidal cycle.

DISCHARGE CONFIRMATION REPORT  
CASE NO. 96-01-07-0049-18

CORRECTIVE MEASURES:

Based upon the investigation conducted, PSE&G is developing measures to reduce the potential for future occurrences. PSE&G shall provide the Department with these corrective measures in a supplemental report to be issued no later than March 1, 1996.

TYPE, QUANTITY, LOCATION AND DATE OF SAMPLES:

As discussed above, a single grab sample was obtained at the 13B intake bay at approximately 2:00 a.m. on January 7.

INDIVIDUAL CONDUCTING ANALYSIS:

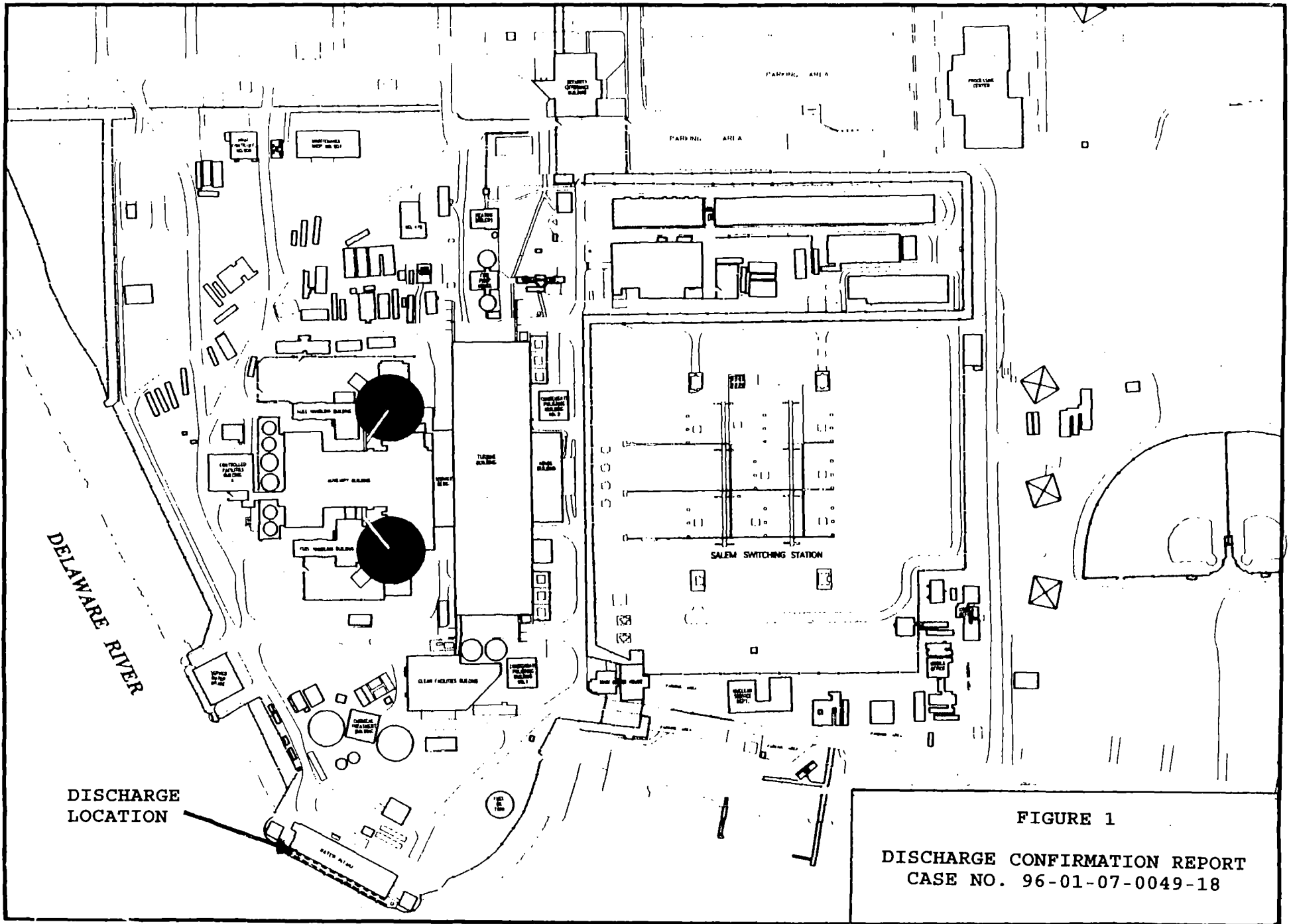
J. A. Zarin  
Chemistry Technician  
Public Service Electric and Gas  
P. O. Box 236, M/C S07  
Hancocks Bridge, New Jersey 08038

SAMPLE METHODOLOGY:

The sample was analyzed for Total Residual Chlorine via amperometric titration (EPA Method 330.1) at the Salem Generating Station (NJ Lab No. 17327).

FINANCIAL RESPONSIBILITY:

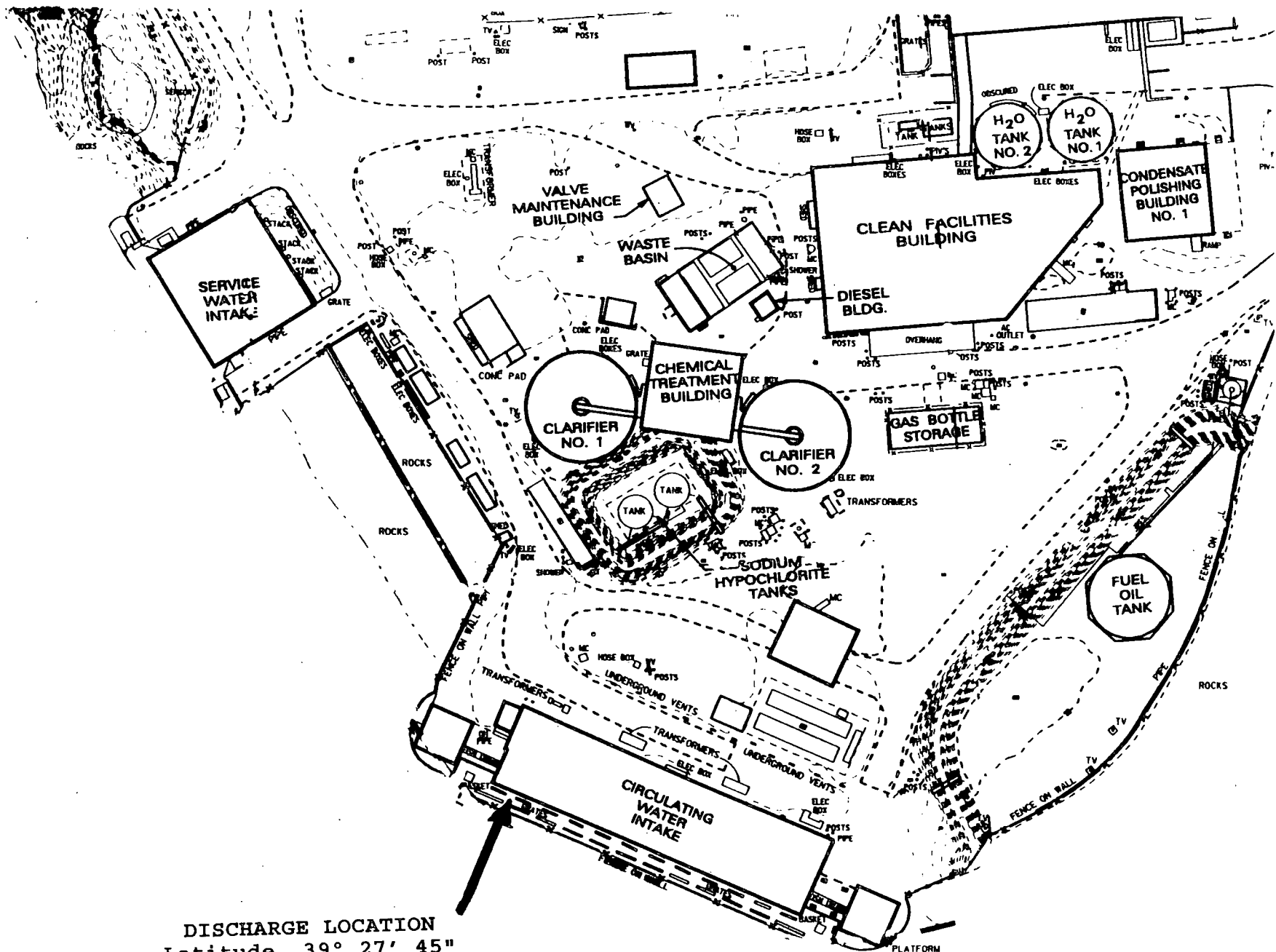
PSE&G satisfies the requirements for self-insurance established by NJAC 7:1E-4.5(g) and has included appropriate documentation of this in its Discharge Cleanup and Removal (DCR) Plan as required by NJAC 7:1E-4.4(a)9.



DISCHARGE  
LOCATION

FIGURE 1

DISCHARGE CONFIRMATION REPORT  
CASE NO. 96-01-07-0049-18



DISCHARGE LOCATION  
 Latitude 39° 27' 45"  
 Longitude 75° 32' 00"

FIGURE 2  
 DISCHARGE CONFIRMATION REPORT  
 CASE NO. 96-01-07-0049-18