



FEB 07 2005

LR-E05-0086

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Article Number: 7004 2510 0005 2135 7998

Administrator of 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

**RE: PSEG Nuclear LLC - Salem Generating Station  
NJPDES Permit No. NJ0005622  
NJDEP Case No. 05-02-02-1047-55  
Five Day Report**

Dear Sir/Madam:

In accordance with N.J.A.C. 7:14A-6.10 Noncompliance Reporting, PSEG Nuclear LLC is submitting this report concerning the observation of a visible sheen of oil at Discharge Serial Number (DSN) 489. The discharge was reported to the New Jersey Department of Environmental Protection (NJDEP) hotline and assigned case number 05-02-02-1047-55. This discharge was also reported to the Nuclear Regulatory Commission and the National Response Center and assigned case number 748950. This report contains the following information as known at the time of this report. In accordance with the regulations, additional information regarding this discharge will be provided as it becomes available.

**1. A description of the discharge, including the time of the discharge, the location of discharge, the volume of the discharge, the concentration of pollutants discharged, and the receiving water of the discharge;**

On February 2, 2005 at approximately 1034 hours, while performing routine duties, a chemistry technician observed a light sheen in the effluent chamber of the Oil Water Separator (OWS) treatment system. Upon further investigation the technician observed two silvery grey sheens of oil approximately ten feet by five feet and ten feet by ten feet on the receiving waters in close proximity to the outfall of the OWS (DSN 489) at Salem

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Generating Station. It is estimated that the total amount of oil that produced the sheens was approximately two ounces. DSN 489 is the outfall of the OWS, which discharges to the Delaware River.

## **2. Steps being taken to determine the cause of the permit noncompliance;**

The OWS treatment system is comprised of two separate (designated Units 1 and 2) American Petroleum Institute (API) parallel plate separators utilizing a series of coalescer packs for final treatment prior to discharge. The influent to the system consists of flow from various yard drains, internal sumps and transformer containments. The waste stream to the OWS is gravity fed and after passing through the treatment system collects in a final lift station where it is pumped to the outfall based on automatic level indication.

In order to determine the cause of the noncompliance, samples were obtained from the river between outfall DSN 489 and the absorbent boom that was put in place as a precautionary measure (Sample #1), the river outside of the absorbent boom (Sample #2), from a catch basin upstream of the OWS (Sample #3), and from the influent collection chamber of the OWS (Sample #4). These samples were analyzed for total petroleum hydrocarbons with the following results;

Sample #1 – 0.42 mg/l

Sample #2 – 0.42 mg/l

Sample #3 – 0.51 mg/l

Sample #4 – 3.81 mg/l

All the sample results are well below the established permit limit of 10 mg/l as a monthly average and are not likely to have contributed to the observed sheen.

Observations have been made of the various catch basins feeding the OWS and no sheens were noted. The coalescer packs of the Unit 1 separator have been removed and inspected with no deficiencies noted. Plans are underway to remove and inspect Unit 2's coalescer packs. Additionally, a team of site personnel has been assembled to investigate the potential cause of this noncompliance.

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**3. Steps being taken to reduce, remediate, and eliminate the noncomplying discharge and any damage to the environment, and the anticipated time frame to initiate and complete the steps to be taken;**

After discovering the sheen on the receiving waters, the chemistry technician immediately isolated the discharge from the OWS at approximately 1037 hours effectively eliminating the discharge. Spill response personnel evaluated the sheen and determined that due to its characteristics, the oil was not recoverable. As a preventive measure, oil absorbent boom was placed at the outfall. Based upon visual observation and in light of the small amount of oil observed, it is estimated there was little to no threat to the environment.

**4. The duration of the discharge, including the dates and times of the commencement and, for an unanticipated bypass, the dates and times of the end or anticipated end of the discharge, and if the discharge has not been corrected, the anticipated time when the permittee will correct the situation and return the discharge to compliance;**

It is unknown when the actual discharge began, however no sheen had been observed on the days immediately preceding the event. The discharge was discovered at 1034 hours on February 2, 2005 and stopped at 1037 hours on February 2, 2005.

**5. The cause of the noncompliance;**

The cause of the noncompliance is currently under investigation. In accordance with the regulations the results of the investigation will be transmitted to the NJDEP within ten days after they become available.

**6. Steps being taken to reduce, eliminate, and prevent reoccurrence of the noncomplying discharge;**

The noncomplying discharge has been eliminated. Currently the OWS remains out of service pending results of the investigation. Steps to prevent reoccurrence are dependant upon the results from the cause investigation and in accordance with the regulations will be transmitted to the NJDEP within ten days after they become available.

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7. An estimate of the threat to human health or the environment posed by the discharge;  
and

Based upon visual observation and in light of the small amount of oil observed, it is estimated there was little to no threat to human health or the environment.

8. The measures the permittee has taken or is taking to remediate the problem and any damage or injury to human health or the environment, and to avoid a repetition of the problem.

To date the permittee has eliminated the discharge, deployed oil absorbent boom at the outfall as a preventive measure and is currently investigating the cause of the noncomplying discharge. As stated above, spill response personnel evaluated the sheen and determined that due to its characteristics, the oil was not recoverable.

If you have any questions regarding this information, please contact Mr. David K. Hurka of my staff at (856) 339-1275.

Sincerely,



Christina L. Perino  
Director - Regulatory Assurance

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