

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-277/85-39  
50-278/85-40

Docket No. 50-277  
50-278

License No. DPR-44  
DPR-56 Priority -- Category C

Licensee: Philadelphia Electric Company  
2301 Market Street  
Philadelphia, Pennsylvania 19101

Facility Name: Peach Bottom Atomic Power Station

Inspection At: Barnwell, South Carolina

Inspection Conducted: October 18, 1985

Inspector: H. Bicehouse 10/25/85  
H. Bicehouse, Radiation Specialist date

Approved by: W. J. Pasciak 10/25/85  
W. J. Pasciak, Chief, date  
BWR Radiation Protection Section, EP&RPB

Inspection Summary:

Inspection on October 18, 1985, by a Representative of the  
State of South Carolina Department of Health and Environmental Control

Areas Inspected: Philadelphia Electric Company was the originator of a waste shipment which was inspected at the Chem-Nuclear Systems, Inc., burial site in Barnwell, South Carolina.

Results: One problem was identified (lifting cables apparently improperly attached)

### DETAILS

On or about October 16, 1985, Philadelphia Electric Company (PECO) shipped radioactive waste material in Radioactive Waste Shipment No. 1085-197-4, classified as Radioactive Material, LSA, n.o.s., described as centrifuged resin, packaged in 14 palletized PECO high integrity containers (HIC). The shipment was made by an Exclusive Use Carrier on a tractor-trailer containing Cask Model No. HN-100-2-7. On October 18, 1985, a representative of the South Carolina Department of Health and Environmental Control (SCDHEC) inspected the shipment. The inspection consisted of a review of shipping papers, placarding, marking and labeling, radiation measurements, selective contamination surveys and examination of the packages and the vehicle.

10 CFR 71.87(f) requires that packages be loaded and closed in accordance with written procedures. Philadelphia Electric Company Procedure HPO/CO-71C, Appendix A, dated June 12, 1984, for Peach Bottom Units 2 and 3, "Loading and Closing the HN-100 Series 2 or 3 Radioactive Waste Shipping Cask," requires that the cask loading operator assure easy access to the pallet lifting slings for removal of the pallets at the burial site. According to a SCDHEC representative, when the cask was opened at the burial site the lifting cables for the top pallet were entangled with the packages and therefore not easily accessible.

The Philadelphia Electric Company Station Superintendent was informed of this problem and apparent violation of NRC requirements in a telephone conversation with Dr. Walter J. Pasciak and Mr. Robert Gallo of the Region I Office on October 24, 1985.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
Bureau of Radiological Health  
Division of Radioactive Material Licensing and Compliance  
Radioactive Shipment Inspection Report

A. General Information:

Report No. 85-10-02

Peach Bottom Nuclear Station  
1. Shipper Philadelphia Electric Company Address Delta, Pennsylvania  
2. Carrier Hirshman Tractor # 82235 Trailer # 72237 Type Special Load  
3. Type Package/Cask HN-100-2-7 Cask Containing HIC drums of centrifuge resin

B. Shipping Documentation:

1. AS# 41366 Volume Allocation # 1085-147-S Permit # 0035-37-85-X  
2. Shipping Name & Class: Radioactive Material, LSA, n.o.s. HM Id. # IN 2912 (172.202(a))  
3. Total Burial Vol.: 105 ft<sup>3</sup> (172.202(c)) Total Curies: 10.6048 (172.203(d))  
4. Radionuclides: Cr-51, Mn-54, Co-58/60, Zn-65, Ce-134 & 137, Nb-95 (172.203(d))  
5. Describe chem./phy. media: Solid oxides on centrifuge resin (172.203(d))  
6. Chelating Agents(%) None Shippers Certification: State DOT (172.204)  
7. Exclusive Use Instructions (173.425(b)) Total T.I. NA (177.842(a))  
8. Check for: Radiation Survey (173.441) Contamination Levels (173.443)  
9. Compare: Radionuclides w/resin analysis Rad/Contamination Levels w/CNSI/BRH

C. Shipment Inspection Check List:

<u>7/7/77</u> Shipment Braced/Blocked (173.425(b)(6)) <u>7/7/77</u> Visible Leakage (173.425(B)(1)) <u>7/7/77</u> Package Labeling: W-I, Y-II, III (172.403) <u>7/7/77</u> (b) & (c) or "Radioactive LSA" (173.425) <u>7/7/77</u> Waste Class. Marked <u>(A)(B)(C) Stable/Unstable</u> <u>7/7/77</u> Gross Weight Marked (172.310) <u>7/7/77</u> [LSA Exclusive Use Exempt] <u>7/7/77</u> Type A Type B Package Marked (172.310) <u>7/7/77</u> Trailer/Tractor Defects <u>7/7/77</u> Packages banded/reinforced, <u>palletized</u>	<u>7/7/77</u> Lide (Drum, box, <u>cask</u> secure (173.425)(b)) <u>7/7/77</u> Visible Damage (173.425) <u>7/7/77</u> Cask Defects/Missing Parts <u>7/7/77</u> Radiation Survey: Cab/sleeper, trailer/truck (173.441) <u>7/7/77</u> Contamination Levels (173.443) <u>7/7/77</u> Vehicle Placards (173.425(c)) (172.507) <u>7/7/77</u> Tiedowns Secure/Adequate <u>X</u> Offloading Discrepancies
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D. Radiation/Contamination Survey: (transport vehicle or package)

(mR/hr) Surface: 15.0 2 meters: \_\_\_\_\_  
Surface: \_\_\_\_\_ Cab/sleeper \_\_\_\_\_ Surface: \_\_\_\_\_  
2 meters: \_\_\_\_\_ 0.4 \_\_\_\_\_ 2 meters: \_\_\_\_\_  
Surface: 30.0 2 meters: 2.0  
Highest contamination detected: Arrival 6 Alpha dpm/100cm<sup>2</sup> Release \_\_\_\_\_ dpm/100cm<sup>2</sup>  
20 beta gamma dpm/100cm<sup>2</sup> \_\_\_\_\_ dpm/100cm<sup>2</sup>

E. Results of Inspection: Summary of violations and discrepancies

During offloading, it was found that the lifting cables for the top pallet were entangled with the HIC packages preventing removal from the cask. This is contrary to the requirements of Condition 6A of S.C. Radioactive Material License 097, Amendment 41, issued to Chem-Nuclear Systems, Inc., and constitutes a violation of Section 1.2, Department Regulation 61-83.

This shipment was returned to Philadelphia Electric Co.

Date: October 18, 1985

Inspector's Signature s/Richard S. Sappington