

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

27-48

REGION V

Report No. 80-60

Docket No. 15000046 License No. _____ Safeguards Group _____

Licensee: _____

Facility Name: Nuclear Engineering Company

Inspection at: Richland, Washington

Inspection conducted: May 15, 1980

Inspectors: B. Riedlinger June 9, 1980
B. Riedlinger, Radiation Specialist Date Signed

R. D. Thomas June 9, 1980
G. Kligfield, NMSS - Sr. Mechanical Engineer Date Signed

Approved by: R. D. Thomas June 9, 1980
R. D. Thomas, Chief, Materials Radiological Date Signed
Protection Section

Approved By: H. E. Book June 10, 1980
H. E. Book, Chief, Fuel Facility and Materials Date Signed
Safety Branch

Summary:

Inspection on May 15, 1980 (Report No. 15000046/80-60)

As part of the inspection conducted during May 12-23, 1980, the inspection of trailer 440204, loaded with radioactive waste packages, is detailed in this report. No packages were opened. A representative from the State of Washington was on site and concurred.

Results: One apparent item of noncompliance with DOT/NRC regulations was observed. See paragraph 4.

It appears that the NRC Region III office and the Department of Transportation are the appropriate organizations to take enforcement actions.

8007160721

DETAILS

Persons Contacted

Vern Apple, Site Manager, NECO
Robert Phalen, Asst. Site Manager, NECO
Arden Scroggs, State of Washington DSHS - Radiation Health Physicist

Background

As a part of the waste packaging inspection of May 12-23, 1980 at Richland, Washington, Trailer 440204 was inspected on May 15, 1980.

Inspection

Licensee - Shipper: Honeywell, Inc., Defense Systems
New Brighton, Minnesota
Shipment Inspected: May 15, 1980
Carrier: Tri-State Motor Transit
Trailer: 440204
Freight Bill: 343868

- 1.) This trailer transported 74, fifty-five gallon drums as shown on the enclosed Appendix A (Bill of Lading 343868). This was an exclusive use shipment.
- 2.) Vehicle radiation surveys indicated that the dose rates at the surface of the trailer and in the cab of the trailer were less than 1 mR/hr. The maximum level under the trailer was 1.5 mR/hr.
- 3.) Checks for removable contamination from two drums indicated no significant activity above background levels.
- 4.) The contents of this trailer were off loaded on May 15, 1980. During the off loading, one drum was observed to have a gash about 4 inches in length in its middle portion. Inside the gash, cardboard or some similar solid material was visible. No material was leaking from the drum. A check for removable contamination around the gash showed no significant activity above background. The drum was marked:

Radioactive LSA
Lot 25-8
Gross Wt. 540
DU chips in cement
Lot No. 2-53

The contents of the drum are described on page 1 of the Radioactive Waste Shipment and Disposal Form (Item No. 8), attached as Appendix B. The drum appeared to be in noncompliance with 49 CFR 173.392(c)(1), which requires that materials be packaged in strong, tight packages.

RECEIVED, subject to the classifications and tariffs in effect on the date of issuance of this Bill of Lading.

Freight Bill Number

342118
SHIPPER'S NUMBER

90411

From Henry Well, INC., Defense Systems DATE SHIPPED 5/13/80

At New Brighton, MISSOURI

ORIGINATING CARRIER TR-STATE MOTOR TRANSIT EXECUTIVE OFFICES
 PO BOX 113, JOPLIN, MO 64801

CONSIGNEE TO Nuclear Engineering Co (Mail or street address of consignee - for purposes of notification only)
Richland, Wash COUNTY

DELIVERY ADDRESS (To be filled in only when shipper desires and governing tariffs provide for delivery thereof)

CONNECTING CARRIER(S) DELIVERING CARRIER Tr. state TRACTOR NO. 3875 TRAILER NO. 44024

Subject to Section 7 of conditions of applicable bill of lading, if shipment is to be delivered to consignee without recourse on the part of the shipper, the shipper shall sign the following statement:
 The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
 2952

NUMBER PACKAGES	KIND OF PACKAGE, DESCRIPTION OF ARTICLES, SPECIAL MARKS, AND EXCEPTIONS	WEIGHT (Subject to Correction)	CLASS OR RATE	CK. COL.
74	Drums Radioactive Material - low specific activity. (Exclusive use of Vehicle 1.5) Depleted Uranium Requested Solid Form - Metal Form Curies Total .42367 NET Weight 2,545.00	29,634		
LARGEST SINGLE ARTICLE	LENGTH	WIDTH	HEIGHT	TOTAL TRAILER SPACE OCCUPIED

(Signature of consignor)
 If charges are to be prepaid or stamp here. To be Prepaid.
PREPAID
 Rec'd \$
 apply in prepayment of the charges on the property described herein.
 Agent or Cashier
 Per
 (The signature here acknowledged only the amount prepaid)
 Charges advanced

UNLESS A GREATER VALUE IS DECLARED, THE SHIPPER HEREBY RELEASES THE VALUE TO \$5000.00 PER TON OF 2000 POUNDS FOR EACH ARTICLE.

ARRIVED AT SHIPPER	DATE	TIME	PREARRANGED SCHEDULE	YES/NO	DATE	TIME	LOADING STARTED	DATE	TIME
	5/13/80	8:00 P.M.		<input checked="" type="checkbox"/>	5/13/80	8:00 A.M.		5/13/80	10:00 P.M.
LOADING COMPLETED	DATE	TIME	VEHICLE RELEASED	DATE	TIME	SHIPPER'S SIGNATURE			
	5/13/80	12:45 P.M.		5/13/80	1:00 P.M.	<u>P. W. Pickett</u>			
PERMANENT POST OFFICE ADDRESS OF SHIPPER						SHIPPER, PER		AGENT, PER	
<u>Bldg 50 TCAMP New Brighton Mo</u>						<u>55112</u>		<u>SIGNATURE TALLY RECEIPT</u>	

Must be filled out and signed at origin and each time the shipment changes custody.

DATE SHIPMENT RECEIVED FROM CONSIGNOR	5/13/80	1:00 AM/PM	3RD TIME CARGO CHANGED CUSTODY	DATE	TIME	AM/PM	6TH TIME CARGO CHANGED CUSTODY	DATE	TIME	AM/PM
TRACTOR NO.	3875		DATE				DATE			
DRIVERS SIGNATURE	<u>Dale A Root</u>	<u>Joplin MO</u>	DRIVERS SIGNATURE				DRIVERS SIGNATURE			
HOME TERMINAL			HOME TERMINAL				HOME TERMINAL			

ARRIVED AT CONSIGNEE	DATE	TIME	PREARRANGED SCHEDULE	YES/NO	DATE	TIME	UNLOADING STARTED	DATE	TIME
	5/15/80	9:30 A.M.		<input checked="" type="checkbox"/>	5/15/80	6:30 A.M.			
UNLOADING COMPLETE	DATE	TIME	VEHICLE RELEASED	DATE	TIME	CONSIGNEE'S SIGNATURE			
				5/15/80	6:30 A.M.	<u>Nuclear Engineering Co. Pickett</u>			

RECEIVED THE ABOVE DESCRIBED PROPERTY IN GOOD CONDITION EXCEPT AS NOTED

South Carolina Department of Health and Environmental Control

BOARD
William M. Wilson, Chairman
J. Lorin Mason, Jr., M.D., Vice-Chairman
I. DeQuincey Newman, Secretary
Leonard W. Douglas, M.D.
George G. Graham, D.D.S.
Michael W. Mims
Barbara P. Nuessle

COMMISSIONER
Malcolm U. Dantzler, M.D., M.P.H.
2600 Bull Street
Columbia, S.C. 29201

November 20, 1979

Mr. Gary Wittum
Honeywell Defense
Systems Division
23100 Sugar Bush Rd.
Elk River, MN 55330

Dear Mr. Wittum:

On November 9, 1979, this office conducted an inspection of your Radioactive Shipment Record Nos. 14622, 14623, 14624, when it arrived at the Chem-Nuclear Burial Site in Snelling, SC. The shipment was described as Uranium, solid, containing 31.912 millicuries and 190.84 source pounds in 17H, 55 gallon drums. Your carrier Tri-State Motor Transit, used trailer No. 201006.

The license issued by this office under which Chem-Nuclear operates requires that each shipment received at the site be in compliance with South Carolina Radioactive Material License No. 097, as amended, the effective Barnwell Site Disposal Criteria, and applicable U.S. Department of Transportation Regulations.

Based on this inspection, it was determined that there were certain discrepancies with respect to this particular shipment. They are as follows:

1. Free liquid was found in drum No. 23. This is a violation of S.C. Radioactive Material License No. 097 held by Chem-Nuclear, Barnwell Site Disposal Criteria, and U.S. DOT Regulations 173.393(g) and 172.204(a) of 49CFR.
2. The drums used to ship this material looked as if a torch had been used on their sides, i.e. the paint was burned off of large areas of the drums. The drum lids were warped, distorted, and deformed as though from excessive heat. This violates 49CFR 173.393(n)(2).

3. The RSR's indicated that the shipment was for sole use of the vehicle but no instructions to the carrier were available. This violates 49CFR 173.392(c)(9).

Please be advised that continued discrepancies in proper packaging and transportation of such materials into and through this state will result in proceedings to prohibit all such shipments from your company into the state.

We would accordingly recommend that a review of your company's procedures be conducted and personnel reminded of their duties and responsibilities in assuring your compliance of all applicable provisions of law.

We trust you will understand our position in protecting the public health and safety of the citizens of this state and look forward to your cooperation in this effort.

If you have any questions, please do not hesitate to contact us.

Very truly yours,

William B. House
Health Physicist
Bureau of Radiological Health

WBH:mig

Enclosure

cc: Mr. G. Wayne Kerr, Assistant ✓
Director of State Agreement Programs
Office of State Programs, USNRC

Mr. James S. Itamura
U.S. Department of Transportation

Mr. Bob Fancher, Terminal Manager
Tri-State Motor Transit

Mr. David G. Ebenhack
Chem-Nuclear Systems, Inc.