

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

REGION V

Report No. 70-1257/81-03 (State of Nevada Report dated March 12-13, 1981)

Docket No. 70-1257 License No. SNM-1227 Safeguards Group 1

Licensee: Exxon Nuclear Company  
2101 Horn Rapids Road  
Richland, WA 99352

Facility Name: Richland Facility

Inspection at: Beatty, Nevada Burial Site

Inspection conducted: March 12-13, 1981

Inspectors: Bert Gray, Jr.  
Nevada State Inspector

Reviewed by: William J. Cooley 4/8/81  
W. J. Cooley, Fuel Facilities Inspector Date Signed

Approved by: R. D. Thomas 4/15/81  
R. D. Thomas, Chief Materials Radiation Protection Date Signed  
Section

Approved by: H. E. Book 4/16/81  
H. E. Book, Chief, Radiological Safety Branch Date Signed

Summary:

Inspection on March 12-13, 1981 (Report 70-1257/81-03) (State of Nevada Report dated March 12-13, 1981)

Areas Inspected: An onsite inspection conducted by the State of Nevada resident inspector consisted of a review of shipping papers, placarding, marking and labeling requirements, radiation measurements, selective contamination surveys, and examination of packages and tractor-trailer. An in-office review of the State of Nevada inspection report and its attachments was made by a Region V-based NRC Inspector.

Results: One apparent item of noncompliance with NRC/DOT regulations was identified. Violation-the licensee delivered radioactive materials to a carrier in four packages which were not strong, tight packages. See paragraph 2 of the State of Nevada inspection report dated 3/12-13/81.

8106020 542

## DETAILS

### 1. State of Nevada Report

A copy of the report dated March 12-13, 1981 which was prepared by the State of Nevada resident inspector concerning the shipment of radioactive waste from the licensee's site to the Beatty, Nevada burial site is attached. The shipment left the licensee's site at Richland, Washington on March 10, 1981 and arrived at the Beatty, Nevada burial site on March 12, 1981. During unloading of the boxes at the burial site, the State inspector noted that four of those boxes (identified as box numbers 2, 12, 15, and 18) had cracks between the box lids and the body of the boxes. That package condition appears to be contrary to the requirements of 49 CFR 173.392(c)(1) which states that materials must be packaged in strong, tight containers so that there will be no leakage of radioactive material under conditions normally incident to transportation.

### 2. In-Office Examination of the State of Nevada Report and Attached Licensee's Shipping Papers

During the in-office examination of the State of Nevada inspection report and the attached licensee shipping papers, the following observation was made. The total low level waste shipment consisted of 10 large wooden boxes containing 0.107 millicuries of low enriched uranium. Four of those boxes were found by the state inspector to have lids which had parted from the body of the boxes due to deterioration of the lids. Copies of photographs numbers 1, 2, and 5 attached to the State of Nevada Inspection Report are clear enough to indicate warping (swelling) of box lids. The report indicates that the gaps created by that swelling were about equal to the diameter of coat hanger wire. The total activity contained in those four boxes was 0.044 millicuries of uranium.

No significant contamination was found external to the boxes.

Any inner packaging of the contaminated waste which may have existed was not observed prior to repair of the packages and their burial by US Ecology.

### 3. US NRC Citation of DOT Regulation 49 CFR 173.392(c)(1)

NRC Region V takes the position that a citation of 49 CFR 173.393(n)(2) does not apply in this case because of the exemption from the requirements of 49 CFR 173.393 as presented in 49 CFR 173.392(b). The NRC Region V position is that DOT regulation 49 CFR 173.392(c)(1) does apply in this case. It is further observed that the shipment contained less than a limited quantity of enriched uranium as defined in 49 CFR 173.391(a), which section also requires that the materials shipped are packaged in strong, tight packages such that there will be no leakage of radioactive materials under conditions normally incident to transportation. That wording is identical to the requirement of 49 CFR 173.392(c)(1).

RECEIVED

MAR 23 1981

Date: 03-12-81

To: U.S. Ecology Transportation File

From: Bert Gray

Consumer Health  
Protection Services

Subject: Shipment of radioactive waste shipped by  
Exxon Nuclear. Nevada state use permit  
number 359



During inspection of shipment of radioactive waste shipped by Exxon Nuclear the following violation was observed:

① CFR 49-173-392-N-2 which states: The packaging is in unimpaired physical condition except for superficial marks.

Packages number 12, 15, 18, and 2 failed to comply in that the plywood boxes were warped, causing cracks in the seams, giving access to the inside. A wire coat hanger was stuck through these accesses, to show these packages were not sealed. This was witnessed by Jim Cruickshank, Radiation Safety Officer for U.S. Ecology.

Package number 2 was damaged on the bottom, apparently from inside force. (Refer to photo #3.) Photographs number 1, 2, 4, and 5 show damage to packages number 12, 15, and 18.

The shipment was placed in storage, Exxon Nuclear was notified of the violation, State of Nevada was notified of violation.

Date: 03-13-81

To: U.S. Ecology Transportation File

From: Bert Gray

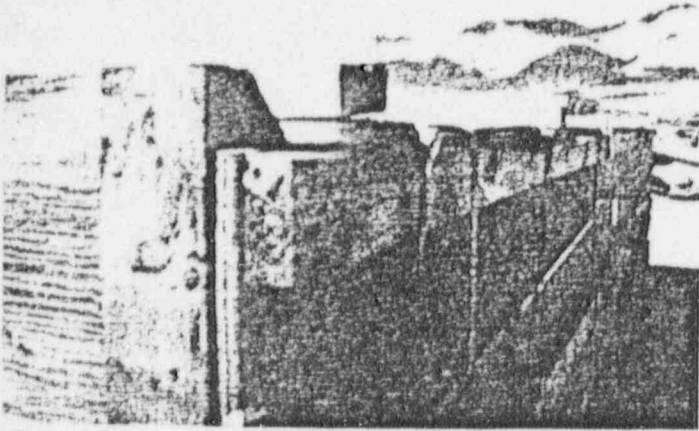
Subject: Shipment of radioactive waste shipped by  
Exxon Nuclear Nevada State use permit  
Number - 354.

Mr. Terry Smith, Exxon Nuclear, arrived burial  
site. Mr. Terry Smith was shown the shipment in  
violation, and using a piece of wire, Mr. Smith checked  
each crack, and agreed that the packages did not  
comply with the regulations set forth by E.O. 1. This  
was witnessed by myself and Mark Parier, asst. Mgr.  
U.S. Ecology.

The State of Nevada was notified, and U.S. Ecology was  
instructed to repair packages, and bury them.

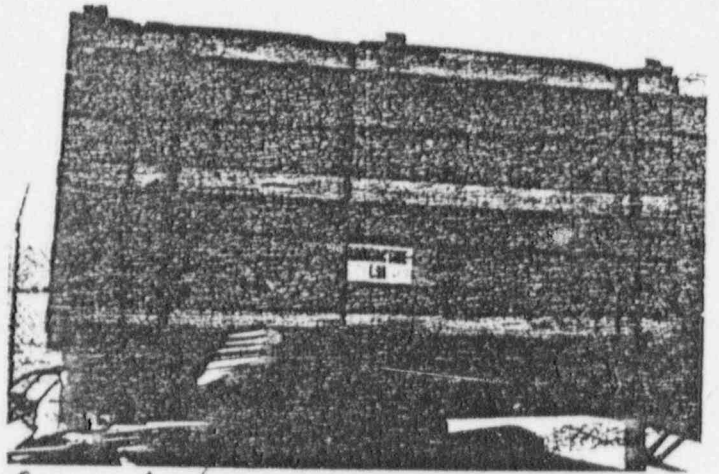
Exxon Nuclear was informed their use permit was  
suspended.

①



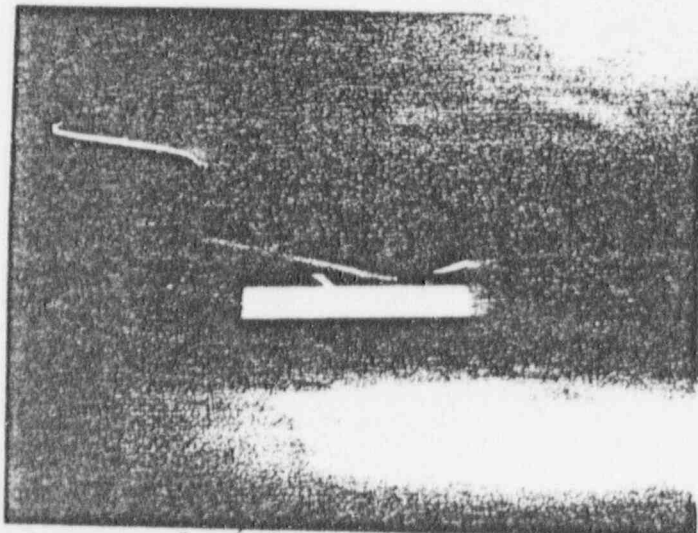
Epperson Nuclear 03-12-81 B.H.  
Package #12  
"Note Raised Lid"

②



Epperson Nuclear 03-12-81 B.H.  
Package #12  
"Note Raised Lid"

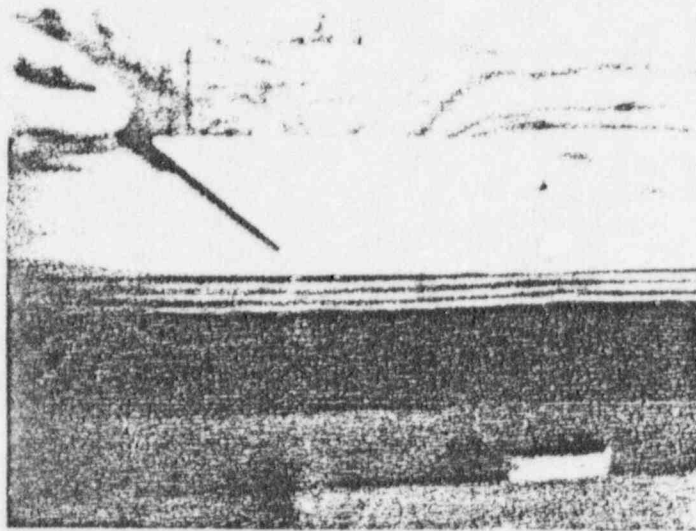
③



Epperson Nuclear 03-12-81 B.H.  
Package #2  
"Note Damage to Bottom."

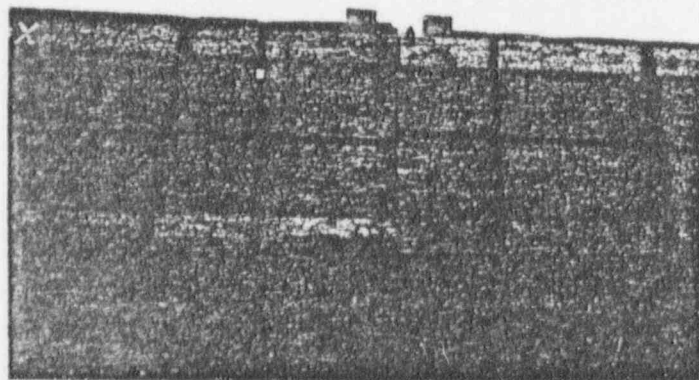


4



Egypton Nuclear 03-12-81 84  
Package #15  
"Note crack in bottom"

5



Egypton Nuclear 03-12-81 84  
Box 15 on left - Box 18 on right  
Note: Solid floor

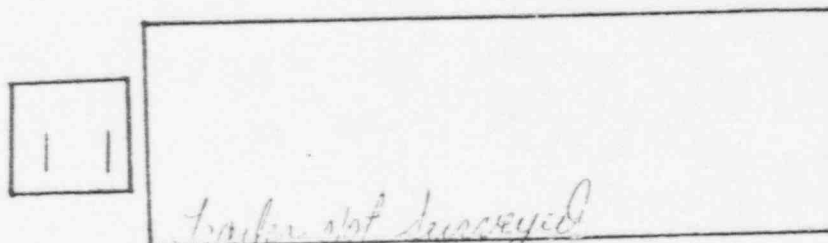
STATE OF NEVADA  
RADIOLOGICAL HEALTH  
TRANSPORTATION SURVEY

Date: 12-12-81 Time: 1300 hrs

Customer: Orton Nuclear Vehicle I.D.: 5202 840640

Carrier: T.S.M.T. Driver(s): Singleton

6' \_\_\_\_\_ 6' \_\_\_\_\_ 6' \_\_\_\_\_



6' \_\_\_\_\_ 6' \_\_\_\_\_ 6' \_\_\_\_\_  
*Trailer not surveyed  
Placed in storage  
Before survey could be done*

Max. Contact Side of Trailer/Underneath (MR/HR): \_\_\_\_\_  
Max. Contact of Containers (MR/HR): 3 m fr  
Dose Rate Inside Cab/Sleeper (MR/HR): Not Surveyed  
Scan of Trailer Empty (CPM/BKG): Trailer placed in storage  
Placards: as required  
Shipping Papers: Examine use  
Labels: ship out in LSA  
State Use Permit Number: 359

Remarks: Packages number 12, 15, 18, and 2 does not  
comply with D.O.T. CFR. 49-123-393-N-2

SMEAR SURVEY RESULTS  
DPM/100CM<sup>2</sup>

| Arrival |      |       | Departure |      |      |
|---------|------|-------|-----------|------|------|
| No.     | Beta | Alpha | No.       | Beta | Alph |
| 1       | 58.0 | 3.0   |           |      |      |
| 2       | <MCA | 34.0  |           |      |      |
| 3       | 244  | 6.2   |           |      |      |
| 4       | 244  | <MCA  |           |      |      |
| 5       | <MCA | 6.2   |           |      |      |
| 6       | 244  | <MCA  |           |      |      |
|         |      |       |           |      |      |
|         |      |       |           |      |      |
|         |      |       |           |      |      |

Alpha Background 3921  
Alpha Efficiency 338  
Beta Background 134111  
Beta Efficiency 338

INSTRUMENTS USED

|                | Cont.        | Ra           |
|----------------|--------------|--------------|
| Type           | <u>Scint</u> | <u>Scint</u> |
| Serial #       | <u>13453</u> | <u>999</u>   |
| Response Check | <u>OK</u>    | <u>OK</u>    |

Surveyor: Scott Hays

Reviewed By : \_\_\_\_\_

## CONTAINERIZATION INSPECTION DATA SHEET

COMPANY V. J. Edalagy LOCATION Bentley, Nev. DATE 03-12-81 TIME 1300 hrs  
 INSTRUMENT: TYPE Gamma 2200 SERIAL NO. 13453 CALIB. DATE 12-18-81 BACKGROUND A - 20491  
B - 134CPM

| SHIPPER & ORDER NO.      | TYPE OF<br>I.G. CONT | CONTENTS |          | LABELS        |     |      | RADIATION<br>LEVELS |         | MR<br>HR | CONTAINER   |              |                    |     | RMKS |
|--------------------------|----------------------|----------|----------|---------------|-----|------|---------------------|---------|----------|-------------|--------------|--------------------|-----|------|
|                          | NO. PKGS.<br>IN CONT | ISOT.    | m/<br>Ci | LIST<br>T. I. | NO. | TYPE | SURFACE             | @ 3 FT. | SEAL     | GWT<br>SIZE | SWIPE<br>NO. | REMOV.<br>CONT.    | NO. |      |
| <del>Exxon Nuclear</del> | 1                    | U-235    | .017     | .1            | 1   | L8A  | .2                  | .05     | None     | 128         | 12<br>1      | A 30<br>B 55.0     | (1) |      |
|                          | 1                    | U-235    | .017     | .1            | 1   | L8A  | .2                  | .05     | None     | 128         | 12<br>2      | A 34.0<br>B 40.7   | (5) |      |
|                          | 1                    | U-235    | .006     | .1            | 1   | L8A  | .3                  | .05     | None     | 128         | 2<br>3       | A 6.2<br>B 24.4    | (3) |      |
|                          | 1                    | U-235    | .006     | .1            | 1   | L8A  | .2                  | .05     | None     | 128         | 4<br>15      | A < 10.9<br>B 34.4 | (4) |      |
|                          | 1                    | U-235    | .007     | .1            | 1   | L8A  | .2                  | .05     | None     | 128         | 5<br>15      | A 6.2<br>B < 10.9  | (5) |      |
|                          | 1                    | U-235    | .014     | .1            | 1   | L8A  | .2                  | .05     | None     | 128         | 13<br>6      | A 20.9<br>B 210.4  | (6) |      |
|                          |                      |          |          |               |     |      |                     |         |          |             |              |                    |     |      |
|                          |                      |          |          |               |     |      |                     |         |          |             |              |                    |     |      |
|                          |                      |          |          |               |     |      |                     |         |          |             |              |                    |     |      |
|                          |                      |          |          |               |     |      |                     |         |          |             |              |                    |     |      |
|                          |                      |          |          |               |     |      |                     |         |          |             |              |                    |     |      |

REMARKS: (1) Taken at opening at top of Box 12 (2) Taken at opening in side of Box 12 (3) Floor under  
 Damaged area of Box #2 (4) Damaged area of Box #12 (5) Top side of #15  
 (6) Bottom of #18



# STRAIGHT BILL OF LADING - SHORT FORM

Original - Not Negotiable

CARRIER: ONE-STATE MOTOR TRANSIT -

Shipper's No. RBL- 1411

Carrier's No. TLA 100 5742

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

At Richland, Washington 3-19-61 FROM EXXON NUCLEAR COMPANY, Inc.  
AN AFFILIATE OF EXXON CORPORATION

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every receipt to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Southern, Western and Illinois Freight Classifications in effect on the date hereof. If this is a rail or a rail-car shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back hereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to U.S. ECOLOGY (NECO) ATTENTION: STEVE CARPENTER

Destination BEATTY State NEVADA County  Delivery Address \*  
(Mail or street address of consignee - For purposes of notification only.)

Route

Delivering Carrier  Car or Vehicle Initials  No.

| No. Packages | KIND OF PACKAGE, DESCRIPTION OF ARTICLES, SPECIAL MARKS, AND EXCEPTIONS | WEIGHT (Sub to Car.) | Class or Rate | Ck. Col. |  |
|--------------|---|----------------------|---------------|----------|--|
| 10           | RADIOACTIVE MATERIAL, NON-FISSILE, N.O.S.                               | 14,900 LBS.          |               |          | <small>Subject to Section 7 of Conditions of applicable bill of lading if this shipment is to be delivered to the consignee without receipt on the consignment, the consignee shall sign the following receipt hereon:</small><br><small>The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.</small><br><br><small>Signature of consignee:</small><br><small>If charges are to be prepaid, write or stamp here: "To Be Prepaid"</small><br><br><u>TO BE PREPAID</u><br><br><small>Received \$</small><br><small>to apply in payment of the charges on the property described hereon.</small><br><br><small>Agent or Cashier</small><br><br><small>Per</small><br><small>(The signature here acknowledges only the amount prepaid.)</small><br><br><small>Charges advanced \$</small> |
|              | SOLID 102 CONTAMINATED EQUIPMENT  |                      |               |          |  |
|              | (2.0 gms U-235) DOT 7A BOXES  |                      |               |          |  |
|              | TRANSPORT GROUP III TRANSPORT INDEX 1.0                                 |                      |               |          |  |
|              | CURIE CONTENT 107 millicuries   |                      |               |          |  |
|              | RADIOACTIVE LSA LABELS  |                      |               |          |  |
|              |   |                      |               |          |  |
|              |   |                      |               |          |  |
|              | - TRUCK MUST BE PLACARDED RADIOACTIVE -                                 |                      |               |          |  |
|              |   |                      |               |          |  |
|              | (Per individual contents per box see attachments 1 - 10)                |                      |               |          |  |

\*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

**EXXON NUCLEAR COMPANY, Inc.**  
AN AFFILIATE OF EXXON CORPORATION

Shipper, Per [Signature] Agent [Signature] Per

Permanent business address of shipper:



made to the State of Nevada:

SECTION A:

GENERATOR/PACKAGER:

EXXON NUCLEAR CO., INC.  
(Company Name)

Certification is hereby made to the State of Nevada that shipment no. H-10 of low-level radioactive waste has been inspected in accordance with requirements of the Governor of Nevada's Executive Order dated July 24, 1979, prior to its shipment and further certification is made that the inspection has revealed no items of non-compliance with all applicable laws, rules and regulations. It is further certified that in the case of solidified waste, there is no free-standing liquid in any container in this shipment.

BY:

Roland J. Ekhus

DATE:

3/10/81

TITLE:

Mgr Purchasing & Logistics

SECTION B:

BROKER:

None

(Company Name)

Certification is hereby made to the State of Nevada that shipment no. H-10 of low-level radioactive waste has been inspected in accordance with the requirements of the Governor of Nevada's Executive Order dated July 24, 1979, prior to its shipment and further certification is made that the inspection has revealed no items of non-compliance with all applicable laws, rules and regulations.

BY:

[Signature]

DATE:

3-10-81

TITLE:

SUPERVISOR - SHIPPING/RECEIVING

SECTION C:

CARRIER:

TRI-STATE MOTOR TRANSIT CO.  
(Company Name)

Certification is hereby made to the State of Nevada that the vehicle transportation shipment no. H-10 of low-level radioactive waste is properly placarded and that the load is secure for transport and that all shipping papers as required by the United States Department of Transportation (U. S. DOT) have been properly executed and delivered.

BY:

[Signature]

DATE:

3/10/81

TITLE:

BY:

TITLE:

BY:

TITLE:

CERTIFICATION

THIS IS TO CERTIFY THAT I HAVE READ AND UNDERSTAND THE REQUIREMENTS OF LICENSE #13-11-0043-02 ISSUED TO NUCLEAR ENGINEERING COMPANY (NECO) BY THE NEVADA DEPARTMENT OF HUMAN RESOURCES FOR THE RECEIPT AND DISPOSAL OF RADIO-ACTIVE MATERIALS AT BEATTY, NEVADA, AS DESCRIBED IN PARAGRAPHS 5.1.1.3; 5.1.1.4; 5.1.1.5; 5.1.1.6 and 5.4.6.1 OF THE NECO SITE OPERATIONS MANUAL, AND I FURTHER CERTIFY THAT THE MATERIALS IN THIS SHIPMENT ARE IN CONFORMITY WITH THOSE REQUIREMENTS:

Exxon Nuclear Company  
COMPANY

Roland J. Ekman  
AUTHORIZED SIGNATURE

MGC, Purchasing & Logistics  
TITLE

3/10/81  
DATE

**EXXON NUCLEAR COMPANY, Inc.**

2101 Horn Rapids Road

P. O. Box 130, Richland, Washington 99352

Phone: (509) 375-8100 Telex: 15-2878

49CFR173.392(c)(9);  
SPECIFIC INSTRUCTIONS FOR  
MAINTENANCE OF EXCLUSIVE USE/SOLE USE  
SHIPMENTS FROM ENC

1. No additional materials, radioactive or otherwise, are to be transported on this vehicle.
2. This shipment loaded by the Consignor (ENC) must be unloaded only by the Consignee (49CFR173.392(c)(4)).
3. This shipment must be braced so as to prevent leakage or shifting of this lading under conditions normally incident to transportation (49CFR173.392(c)(6)).
4. This vehicle must be placarded on all four (4) sides with the applicable placard (49CFR172.500).
5. External radiation level must not exceed:
  - a. 200 millirem-per hour at any point on the external surface of the transport vehicle.
  - b. 10 millirem-per hour at any point 2 meters (six feet) from the verticle places projected by the outer lateral surfaces of the vehicle.
  - c. 2 millirem-per hour in any normally occupied position in the vehicle. (49CFR173.392(c)(3))
6. The outside of each outside package must be stenciled or otherwise marked "RADIOACTIVE-LSA" (49CFR173.392(c)(8)).
7. All packages of this lading must be at least Strongtight containers" 49CFR173.392(c)(1).

*Ronald King*  
3/10/81  
5MT  
5708



LOW-LEVEL RADIOACTIVE WASTE SHIPMENT  
EXXON NUCLEAR INTERNAL INSPECTION AND CERTIFICATION

A radioactive material checklist is attached and is a part of this form which is to be used as a guide to avoid frequently found errors associated with packaging of radioactive waste. The appropriate sections in Title 49 CFR are cited to ensure compliance with respect to packaging, marking, and labeling.

Shipment No.: H- 10 or R- \_\_\_\_\_

1. • The contents of the packages in this shipment are correctly and accurately described, including the types, forms and quantities of radioactive materials.
- There are no free-standing liquids contained in any of the packages.

Certified By: *[Signature]* Date: 3-10-81 Time: 1530  
\_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_


2. • The packages in this shipment have been properly surveyed for external contamination and radiation levels within 48 hours of shipment, and these values are properly documented. The measured values are in compliance with DOT and NRC regulations.

Certified By: *R. L. Miles* Date: 3-10-81 Time: 1530  
Radiological Safety

3. • Notification of U.S. Ecology of shipment date, number, mode of transport and date of arrival at U.S. Ecology's Beatty Facility has been made prior to shipment.
- The packages in this shipment are in compliance with U.S. DOT and U.S. NRC rules and regulations and the packages are authorized for shipment of the type and quantity of radioactive material contained.
- The packages in this shipment are not adversely damaged and are properly closed and sealed to undergo transportation without incident.
- The contents of this shipment, both as individual packages and as shipment, are within the limits of U.S. Ecology's license(s).
- The packages in this shipment are marked and labeled in accordance with DOT regulations.
- The shipment is properly loaded on the transport vehicle and the vehicle is placarded in accordance with DOT regulations.
- A radioactive Waste Shipment and Disposal Record form is completed in detail and accompany the shipment.
- The carrier's bill of lading is prepared in accordance with DOT regulations and presented to the driver at the time of shipment.

RADIOACTIVE MATERIAL CHECKLIST

Radioactive Waste Shipment and Disposal Record Form (RSR)

- \_\_\_ A. Radiation levels at the surface and at three feet must be recorded.  
If the actual reading is "0", indicate "0" on the RSR.
-  B. Signature(s) must be at the bottom of the RSR.
- \_\_\_ C. RSR is legible and completely filled out.

General Areas of Packaging Instructions

- \_\_\_ A. No package shall have any surface contamination (173.389(f) Radioactive Material Definitions.)
- \_\_\_ B. Each package of radioactive material in excess of 110 pounds (50 kilograms) must have its gross weight plainly and durably marked on the outside of the packages (172.310 Radioactive Material.)
- \_\_\_ C. Each package which conforms to the requirements for TYPE A or TYPE B will be marked on the outside as "TYPE A" or "TYPE B" as appropriate (172.310 Radioactive Material.)
- \_\_\_ D. All manual markings will be at least 1/2 inch (13 mm) high and in a durable, contrasting color (172.304(a) Marking Requirements.)
- \_\_\_ E. Labels or markings must be displayed on at least two sides or two ends (excluding bottom of package) (172.406(e) Placement of Labels); i.e., RADIOACTIVE, TYPE-A WHITE I LABELS, etc.
- \_\_\_ F. An inspection shall be conducted to determine if the package is sealed and tight and to determine the worthiness of the package to undergo transport without incident (173.391(a)(1), 173.392(c)(1), 173.393(d).)
- \_\_\_ G. Radioactive labels require specific information to be displayed on them:
1. WHITE I: radionuclide contents and number of curies.
  2. YELLOW II and III: radionuclide contents, number of curies and transport index (172.403(g).)
- \_\_\_ H. Radioactive packages must be properly loaded onto the transport vehicle heaviest packages on the bottom, boxes on top of barrels. Loaded packages must be shored if appropriate to prevent movement during transit to prevent damage to the package.

Marking and Labeling

Each package must bear one of the following labels or markings:

- ☐ A. RADIOACTIVE - (1) limited quantity (less than TYPE A curie quantity), (2) must not exceed 0.5 millirem/hour on contact reading (173.391(a).)
- ☒ B. RADIOACTIVE LSA - (1) must be LSA material, (2) not to exceed 200 millirem/hour on contact reading nor exceed transport index of 10 (10 millirem/hour at 3 feet.)
- ☐ C. RADIOACTIVE WHITE I - (1) Radiation material that has greater than limited quantity (i.e., TYPE A or B,) (2) not to exceed 0.5 millirem/hour on contact nor exceed background at 3 feet, (3) not Fissile Class II or III (172.403(b).)
- ☐ D. RADIOACTIVE YELLOW II - (1) Measuring more than 0.5 but less than 50 millirem/hour on any surface and not exceeding one (1.0) millirem/hour at 3 feet from any external surface, (2) Fissile Class II (172.403(c).)
- ☐ E. RADIOACTIVE YELLOW III - (1) measuring more than 50 millirem/hour on any surface or exceeds one (1.0) millirem/hour at 3 feet from any external surface, (2) Fissile Class III, (3) contains large quantity of radioactive material.

- The transport vehicle is roadworthy by evidence of passing a Washington State Highway Patrol Critical List Inspection.
- A fully executed Low-Level Radioactive Waste Shipment Certification form is included with the shipping documents.
- The above inspections have been made within 48 hours of shipment.

Certified by:



Logistics

Date: 7-10-81 Time: 1530

EXXON NUCLEAR COMPANY, INC.  
2101 HORN RAPIDS ROAD  
RICHLAND STATE WA  
(509) 375-8100 EXT. 8226  
SHIPPED MARCH 10, 1981 SHIPMENT NO. H-10  
TRI-STATE MOTOR TRANSIT

RADIOACTIVE WASTE SHIPMENT & DISPOSAL FORM  
US ECOLOGY, INC.  
EXECUTIVE OFFICE: (502) 426-7160  
P.O. BOX 7246 • LOUISVILLE, KENTUCKY 40207  
Illinois Office: (815) 454-2376

NO. 09772

PAGE 1 OF 1

✕ P. O. Box 578  
Beatty, NV 89003  
(702) 553-2203

Permit Number 359

□ P. O. Box 638  
Richland, WA 99352  
(509) 377-2411

Permit Number

| TOTAL QUANTITY | PROPER SHIPPING NAME & HAZARD CLASS<br>(PER 49 CFR 172.101)                      | IDENTIFICATION<br>NUMBER | TOTAL WEIGHT<br>IN POUNDS |
|----------------|--|--------------------------|---------------------------|
|                | Waste Radioactive Device, N.O.S. — Radioactive Material                          | UN2911                   |                           |
|                | Waste Radioactive Material, Fissile, N.O.S. — Radioactive Material               | UN2918                   |                           |
| 10             | Waste Radioactive Material, Low Specific Activity, N.O.S. — Radioactive Material | UN2912                   | 14,900                    |
|                | Waste Radioactive Material, N.O.S. — Radioactive Material                        | NA9181                   |                           |
|                | Waste Radioactive Material, Limited Quantity, N.O.S. — Radioactive Material      | UN2910                   |                           |
|                | Waste Radioactive Material, Special Form, N.O.S. — Radioactive Material          | NA9182                   |                           |

| (1)         | (2)           | (3)                | (4)              | (5)              | (6)          | (7)                                       | (8)                               | (9)                                    | (10)  | (11)               | (12)               | (13)              | (14)             | (15)                    |
|-------------|---------------|--------------------|------------------|------------------|--------------|---|-----------------------------------|--|---|--------------------|--------------------|-------------------|------------------|-------------------------|
| Line<br>No. | Cubic<br>Feet | Weight<br>(Pounds) | Physical<br>Form | Chemical<br>Form | Radionuclide | Special<br>Nuclear<br>Material<br>(Grams) | Source<br>Material<br>(Kilograms) | Activity<br>Curies<br>X<br>Millicuries | Radiation Levels<br>mR/HR<br>Surface 3 Feet | Transport<br>Group | Transport<br>Index | Label             | Fissile<br>Class | Type<br>of<br>Container |
| 1           | 128           | 1485               | SOLID            | UO2              | U-235        | 0.03                                      |                                   | 0.002mCi                               | 0.2 0.05                                    | III                | .1                 | Radioactive — LSA | NON              | 7A                      |
| 2           | "             | 1465               | "                | "                | "            | 0.26                                      |                                   | 0.014 "                                |   | "                  | .1                 | Radioactive — "   | "                | "                       |
| 3           | "             | 1100               | "                | "                | "            | 0.03                                      |                                   | 0.002 "                                |   | "                  | .1                 | Radioactive — "   | "                | "                       |
| 4           | "             | 1160               | "                | "                | "            | 0.38                                      |                                   | 0.020 "                                |   | "                  | .1                 | Radioactive — "   | "                | "                       |
| 5           | "             | 1840               | "                | "                | "            | 0.12                                      |                                   | 0.006 "                                | 24  | "                  | .1                 | Radioactive — "   | "                | " 2                     |
| 6           | "             | 1430               | "                | "                | "            | 0.11                                      |                                   | 0.006 "                                | 3-10-81                                     | "                  | .1                 | Radioactive — "   | "                | "                       |
| 7           | "             | 1460               | "                | "                | "            | 0.23                                      |                                   | 0.012 "                                |   | "                  | .1                 | Radioactive — "   | "                | "                       |
| 8           | "             | 2000               | "                | "                | "            | 0.32                                      |                                   | 0.017 "                                |   | "                  | .1                 | Radioactive — "   | "                | " 12                    |
| 9           | "             | 1800               | "                | "                | "            | 0.39                                      |                                   | 0.021 "                                |   | "                  | .1                 | Radioactive — "   | "                | "                       |
| 10          | "             | 1160               | "                | "                | "            | 0.13                                      |                                   | 0.007 "                                | 0.2 0.05                                    | "                  | .1                 | Radioactive — "   | "                | " 10                    |
|             |               |                    |                  |                  |              |   |                                   |  |   |                    |                    | Radioactive —     |                  |                         |
|             |               |                    |                  |                  |              |   |                                   |  |   |                    |                    | Radioactive —     |                  |                         |
|             |               |                    |                  |                  |              |   |                                   |  |   |                    |                    | Radioactive —     |                  |                         |
|             |               |                    |                  |                  |              |   |                                   |  |   |                    |                    | Radioactive —     |                  |                         |
|             |               |                    |                  |                  |              |   |                                   |  |   |                    |                    | Radioactive —     |                  |                         |
|             | 1280          | 14,900             | TOTALS           |                  |              | 2.0                                       |                                   | 0.107mCi                               |   |                    |                    |                   |                  |                         |

I CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED,  
ED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE  
LATIONS OF THE DEPARTMENT OF TRANSPORTATION.

*[Signature]*  
Authorized Signature  
SUPERVISOR - SHIPPING/RECEIVING  
Title

DISPOSAL SITE COPY

THIS IS TO CERTIFY THAT ARTICLES ARE IN COMPLIANCE WITH ALL REGULATIONS APPLICABLE AT THE  
DESIGNATED DISPOSAL SITE.

*[Signature]*  
Authorized Signature  
SPECIALIST  
Title  
3/10/81