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

REGION V

Report No. 99990005/79-09 State of Nevada
Docket No. 99990005 License No. 13-11-0043-02 Safeguards Group _____
State of Nevada
Licensee: Nuclear Engineering Company
P. O. Box 578
Beatty, Nevada
Facility Name: Beatty Facility
Inspection at: Beatty, Nevada
Inspection conducted: August 28-30, 1979
Inspector: P. R. Zurakowski 24 Sept 79
P. R. Zurakowski, Radiation Specialist Date Signed

Date Signed

Date Signed
Approved By: H. E. Book 9/24/79
H. E. Book, Chief, Fuel Facility and Materials Date Signed
Safety Branch

Summary:

Inspection on August 28-30, 1979 (Report No. 99990005/79-09)

The purpose of this special inspection, which involved one inspector on-site for two and seven-eighths days, was to confirm that shipments by truck arriving at NECO's Beatty facility were in compliance with NRC and DOT regulations.

Radiation level measurements, checks for removable contamination and visual checks for proper placarding, labeling and packaging were conducted on 11 trucks that arrived at the site during the inspection.

No violations of NRC and DOT requirements or good health physics practices were noted during the inspection. Each truck that arrived at the site was designated as an "Exclusive Use Vehicle." Eight of the 11 trucks carried very low level depleted uranium mixed in soil from Chino, California. The trucks were calked and sealed so that none of the loose soil could leak out. Many more shipments of this depleted uranium soil mixture (spent U-238 ordnance) are expected.

RV Form 219(2)

POOR ORIGINAL

7910110 730

Persons Contacted

Mr. Brian Thayer, Acting Site Assistant Manager, NECO; Mr. Walter Hipsher, Deputy Chief Corporate RSO, NECO; and Ms. Pat Thayer, Secretary, NECO.

Background

NRC Region V IE Inspection Reports 79-03, 79-04, 79-05, and 79-06 should be consulted for detailed background information.

Report Details

Eleven trucks arrived at the site during the inspection. Each truck was designated as an "Exclusive Use Vehicle." Eight of the 11 trucks carried very low level depleted uranium mixed in soil from an ordnance test range in Chino, California. The contaminated soil originated from the test firing of uranium tipped ordnance through targets into earth berm shielding. The earth berms are now being dismantled, and the contaminated soil is shipped to Beatty via caked and sealed dump trucks. External surface measurements and dose rate measurements at six feet from the trucks were made with a Minimonitor II (G-M Type) meter with NRC No. 000358. No significant readings above background were noted around these eight trucks. Wipes of approximately 300 cm² were taken on each dump trailer where the soil is released. A preliminary check made with NRC instrument No. 004280, a Technical Associates Model PUG 1AB fitted with a P-11 pancake probe, showed no significant removable contamination above background. The wipes were again counted on Region V's NMC PC-55 gas flow proportional counter with the same results. A visual check of the trucks indicated that the calking and the plastic covered plywood top seals were retaining the contaminated soil without leaking. As many as 60 more truck loads of material are expected. Because the paperwork for each of the eight trucks is identical (except for minor differences in weight), the documents accompanying Truck No. 2 are included as Annex A to demonstrate compliance with Federal and State of Nevada requirements. In the order of appearance during the inspection, the trucks carrying the contaminated soil were Nos. 1, 2, 3, 6, 7, 8, 9 and 10. Three trucks (with the same drivers) were attempting to make daily round trips from Chino, California to Beatty, Nevada. Because of mechanical problems, one truck was not able to meet the schedule on August 29, 1979. The problem was repaired, and the truck appeared at the site the next morning.

Truck No. 4 (Tri-State No. 135) arrived at approximately 8:00 a.m. August 29, 1979 loaded with fourteen 17H, 55-gallon drums in an L-3 overpack. The shipment was Type "A". The L-3 cask was used only as shielding to reduce the external radiation levels from the 55-gallon drums. The shipment, originating at the Cooper Nuclear Station in Brownville, Nebraska (See Annex B), contained both Co-60 and Cs-137. Because both of these isotopes are strong gamma emitters, some extra shielding was desirable.

The survey procedure outlined for Truck No. 1 was redone with the same instruments. A high reading of .5 mR/hr at contact with the overpack was observed. This reading agreed well with those obtained by the NECO RSO at the disposal site (See Annex C). However, the reading was much less than those observed on the

"Radioactive Waste Shipment and Disposal Form" because of the shielding effect of the L-3 overpack. The maximum reading at six feet was less than .1 mR/hr. All readings inside the cab were at background. The trailer and cab were resurveyed after unloading. All readings were at background.

Truck No. 5 (Heavy Transport No. 198) arrived at approximately 9:00 a.m. August 29, 1979 loaded with nine boxes and three steel drums containing 183 mci of Cs-137 and Sr-90 from Energy Systems Group, Canoga Park, California (See Annex D). The survey procedure outlined for Truck No. 1 was again followed. A high reading of 50 mR/hr was noted at contact with the outside of the enclosed trailer. A maximum reading of 5 mR/hr was observed at six feet. All readings inside the truck cab were at background. Wipe tests of representative containers and the exit survey of the empty truck again showed no significant activity. All readings agreed well with the survey results of the NECO RSO (See Annex E), again, because of shielding, placing the hotter drums toward the inside, etc., the results did not agree with the survey results on the "Radioactive Waste Shipment and Disposal Form."

Truck No. 11 (Tri-State No. 1993) arrived in the early afternoon of August 30, 1979 loaded with six wood boxes and 57, 55-gallon drums containing mainly LSA concentrations of U-238, U-235, Th-232, Co-60 and Cs-137 from General Atomic, San Diego. This truck, which was not accompanied by the certifications required by the State of Nevada, was held up at the gate until the document was teletyped to the site. After the document was received, the truck was processed normally. Again, the survey procedure outlined for Truck No. 1 was followed. A maximum of 9 mR/hr was noted at contact with the enclosed trailer. A maximum reading of .2 mR/hr was observed at six feet from the trailer. These readings agreed well with those obtained by the NECO RSO (See Annex F). Wipe tests of representative packages and the exit survey of the empty truck showed no significant contamination.

Attachments:
Annex A-G

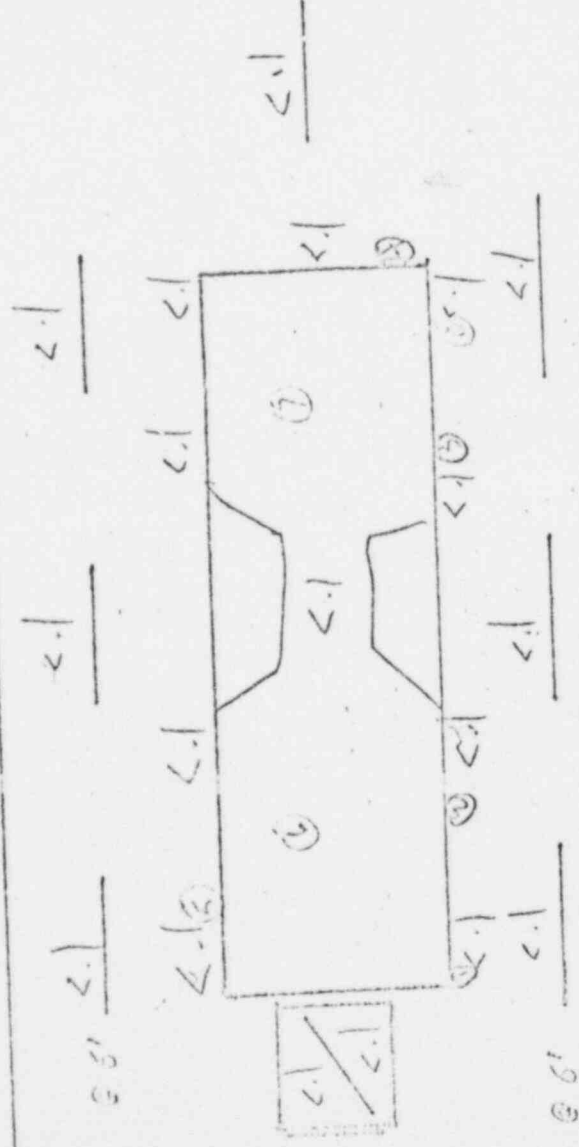
757

140.

no. 8/28/79 Time: 1:00 P

AVIC INC, Vehicle I.D. T2ACT 112 TBAIC 8 317106

Customer: AWC TNC. Driver (s): JIM BRADLEY



East Side of T-iler (m/hr) ≈ 1

Max. Contact 220 m/sec
Max. Contact 220 m/sec
Contact of Conductor (mR/hr), .08

[illegible]

Dore Rare 10-15 ft. tall
c. 107-110-120 in (cm/bkg)
L 100 cm

ALL:tical Collection:

Remarks: note that together they are "Nation Level" requires the immediate circle in red and unless otherwise noted, each of the H & SO. nation level: one in Miami/now, and many locations are

Delta 220 DYN/100 cm²
Alpha 220 DYN/100 cm²

Swamp Sparrow, 10 miles
2 - 1000 ft. 1/1000000

[illegible]

Air Activity in 1 ml

11. Time Volume Beta

17

Instruments Used

Contamination

E140

No.	323
-----	-----

505

Supervisor: *W.D. Munn*

Prized by

AS REQUIRED BY EXECUTIVE ORDER, DATED July 79, ISSUED BY THE GOVERNOR OF

THE STATE OF NEVADA, THE FOLLOWING CERTIFICATION, AS APPLICABLE, IS MADE TO THE STATE OF
NEVADA: NECO BATES#
332472

SECTION A:

GENERATOR/PACKAGER: ABC Inc
(Company Name)

CERTIFICATION IS HEREBY MADE TO THE STATE OF NEVADA THAT SHIPMENT NO. C 30 OF LOW-
LEVEL RADIOACTIVE WASTE HAS BEEN INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNOR
OF NEVADA'S EXECUTIVE ORDER, DATED July 79, PRIOR TO ITS SHIPMENT AND FURTHER CERTIFI-
CATION IS MADE THAT THE INSPECTION HAS REVEALED NO ITEMS OF NON-COMPLIANCE WITH ALL APPLICABLE
LAWS, RULES AND REGULATIONS.

BY: Auth. Person

DATE: Aug 27/79

TITLE: R.50

SECTION B:

BROKER: ABC Inc
(Company Name)

CERTIFICATION IS HEREBY MADE TO THE STATE OF NEVADA THAT SHIPMENT NO. C.30 OF LOW-
LEVEL RADIOACTIVE WASTE HAS BEEN INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNOR
OF NEVADA'S EXECUTIVE ORDER, DATED July 79, PRIOR TO ITS SHIPMENT AND FURTHER CERTIFI-
CATION IS MADE THAT THE INSPECTION HAS REVEALED NO ITEMS OF NON-COMPLIANCE WITH ALL APPLICABLE
LAWS, RULES AND REGULATIONS.

BY: Auth. Person

DATE: 8/27/79

TITLE: R.S.O.

SECTION C:

CARRIER: ABC Inc
(Company Name)

CERTIFICATION IS HEREBY MADE TO THE STATE OF NEVADA THAT THE VEHICLE TRANSPORTATION SHIP-
MENT NO. C 30 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 (US DOT) HAVE BEEN PROPERLY EXECUTED AND DELIVERED.

BY: Auth. Person

DATE: 8/27/79

COMPANY NAME: _____

BY: _____

DATE: _____

COMPANY NAME: _____

BY: _____

DATE: _____

COMPANY NAME: _____

insured at NECO 8/28/79 B. D. Hagan ANNEX A (page 23)

CERTIFICATION

This is to certify that I have read and understand the requirements of license number 13-11-0043-02 issued to Nuclear Engineering Company (NECo) by the Nevada Department of Human Resources for the receipt and disposal of Radioactive Materials at Beatty, Nevada as described in paragraphs 5.1.1.3, 5.1.1.4, 5.1.1.6, 5.4.6.1 and 5.4.6.2 of the NECo Site Operations Manual and I further certify that the material in this shipment are in conformity with those requirements.

NEC Inc
Company

Authorized Signature
Authorized Signature

RSO
Title

8/27/79
Date

Driver:

This shipment is an exclusive use only type shipment. The load is radioactive material, ISA, NOS. Hence, no other material is to be hauled with this shipment.

During any and all stops check the placards to assure that they are in place and secure. If you have lost a placard please replace it with the spare provided. Because of some persons apprehensions concerning radiation and radioactive material, discretion shall be used when parking the truck either temporarily or overnight. The cab of your truck has been surveyed and radiation levels of background noted.

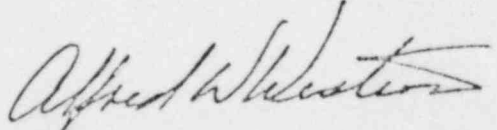
If either your vehicle or the radioactive material becomes involved in a mishap, immediately contact::

James W "Bill" Ayres or Carl Coombs
(702) 876-4348 or (702) 735-3837 (702) 878-2288

and

Alfred W Western
(714) 528-7281 EXT. 213 or (714) 628-6021 EXT. 212

Collect calls will be accepted at any hour.
Attached is a copy of Title 49 Code of Federal Regulations for your information.


Alfred W Western
Radiation Safety Officer

Annex A (page 4)

Agent's No. _____

5/15 1928

(Mail or street address of consignee for purchase of additional sets)

Copyright © 1964 by NEC L. R. Inc. 500 S. Highland, Los Angeles, N.Y. 8740

Destination N.C. Parity State of North Carolina County of Durham

IN PROBATE State of Florida County of Alachua

~~Box 11 - 10, 15, 27, 19, 95 and return~~

Car Initials: 17246 Car No: 17246

Subject to Section 2 of regulation, if this shipment is to be delivered to the carrier's agent, recourse on the condition, the signor shall sign the following statement:

The carrier shall not make delivery of the shipment without payment of freight and all other late charges.

(2) μ -formal deformation of $\pi^*\omega$.

If changed one by 1000
with at stamp book "The
past."

Receiver is
to apply in person
charges on the party's
behalf.

August 3, 1937

For _____
This report is to be released only to
authorized personnel

(c) $\lim_{n \rightarrow \infty} \frac{1}{n} \log \frac{1}{n} = 0$.

The large boxes used for this shipment contain the following:
 two motor's certificate thereon, and all other requirements of the
 Classification.

Figure 1

ANNEX A (Page 5)

[illegible]

RADIOACTIVE WASTE SHIPMENT & DISPOSAL FORM

NUCLEAR ENGINEERING COMPANY, INC.

EXECUTIVE OFFICE: (623) 426-7150

P.O. BOX 72-5 • LOUISVILLE, KENTUCKY 40207

APPROVED FOR RELEASE
DATE 8-27-79
BY (402) 826-3111
AGENT NO. 79-33 APPROX 77-35
OF SHIPMENT: 8-27-79
EQ. TPI-SJL-T

PAGE 1 OF 2

NO. 2874

TOTAL WEIGHT
IN POUNDS

STANDARD CLASS

PROPER SHIPPING -

1000

GENERAL CLIPPING

(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Cubic Feet	Gallons	Weight (Pounds)	Physical Form	Chemical Form	Radionuclide	Special Nuclear Material (Grams)	Source Material (Kilograms)	Activity Curves (Microcuries)	Radiation Levels (MR-HR) Surface 3 Feet	Transport Group	Transport Index	Label	Radioactive Class	Type of Container
7.35	—	400	solid	Poly-Bu	T-131	—	—	7.04E-1	300	III	—	Radioactive - LSA	—	17H
					Ca-137	—	—	1.62E-1	—	III	—	Radioactive -	—	
					Co-58	—	—	8.09E-1	—	IV	—	Radioactive -	—	
					Mn-54	—	—	4.40	—	IV	—	Radioactive -	—	
					Co-60	—	—	9.11	—	III	—	Radioactive -	—	
					Ba-140	—	—	9.27E-2	—	III	—	Radioactive -	—	
					La-140	—	—	8.25E-2	—	IV	—	Radioactive -	—	
					Ca-134	—	—	1.20E-1	—	III	—	Radioactive -	—	
9 7.35	—	400	solid	Poly-Bu	same as 79-8-8	same as 79-8-8	same	same	same	same	—	Radioactive - LSA	—	17H
10												Radioactive -	—	
11												Radioactive -	—	
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17	Y					Y	Y		Y	Y	Y	Radioactive -	—	Y
												Radioactive -	—	
												Radioactive -	—	
												Radioactive -	—	

THE EFFECT OF A LOW-DOSE, LONG-TERM, ORAL CONTRACEPTIVE REGULATION ON THE REPRODUCTIVE AND SEXUAL BEHAVIOR OF WOMEN

73.50	44.00	TOTAL \$		113.50
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Robert M. Dorel

Physician Signature

1. West O m. Apr. 10
 2. Health Physicist
 3. THIS
 4. Enrollment Station

RADIOACTIVE WASTE SEPARATION & DISPOSAL FORM
NUCLEAR ENGINEERING COMPANY, INC.
EXECUTIVE OFFICE: (502) 428-7150
P.O. BOX 7245 • LOUISVILLE, KENTUCKY 40207

No. 2875

TOTAL QUANTITY

BOOK OF PRAYERS FOR THE LIVING
PER. 90 PER 172.101

PAGE 2 OF 2

TOTAL WEIGHT 11

	PER. % OF	172.101
RAD	Reactive Device, N.O.S.	
RAD	Active Material, Explosive, N.O.S.	- Reactive Material
RAD	Active Material, Low Specific Activity, N.O.S.	- Radioactive Material
RAD	Active Material, N.O.S.	- Radioactive Material
RAD	Inert Material, Limited Quantity, N.O.S.	- Radioactive Material
RAD	Active Material, Special Form, N.O.S.	- Radioactive Material

1600

U.S. SPECIAL FORM NO. 5 - Radioactive Material																
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	(13)	(14)	(15)	(16)
	Cubic Feet	Gallons	Weight (Pounds)	Physical Form	Chemical Form	Radionuclide	Special Nuclear Material (Gross)	Source Material (Kilograms)	Activity (Curie)	Radiation Levels (MR/hr)		Transport Group	Transport Index	Label	Class of Hazard	Type of Container
										Surface	3 Feet					
18	7.35	—	400	solid	Ref. in	I-131	—	—	930E-1	400	80	III	—	Radioactive - LSA	—	17H
						Cs-137	—	—	1.97E+1			III		Radioactive -		
						Co-58	—	—	9.9E-1			IV		Radioactive -		
						Ma-54	—	—	5.35E-1			IV		Radioactive -		
						Co-60	—	—	1.02E+1			III		Radioactive -		
						Co-140	—	—	1.14E-1			III		Radioactive -		
						Co-140	—	—	1.00E-1			IV		Radioactive -		
						Cs-134	—	—	1.46E+1			III		Radioactive -		
19	7.35	—	400	solid	Ref. in	same as #	77-8-18	—	400	400	80	some	—	Radioactive - LSA	—	17H
20	↓		↓	↓	↓		↓			↓	↓	↓		Radioactive -		↓
21	↓		↓	↓	↓									Radioactive -		
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0. CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION, ACCORDING TO APPLICABLE RULES OF THE DEPARTMENT OF TRANSPORTATION.

TOTAL \$ 16.00

THIS IS TO CERTIFY THAT ARTICLES ARE IN COMPLIANCE WITH ALL REGULATIONS AND DESIGNATED DISPOSAL SITE

Health Physicist

Authorized Signature _____

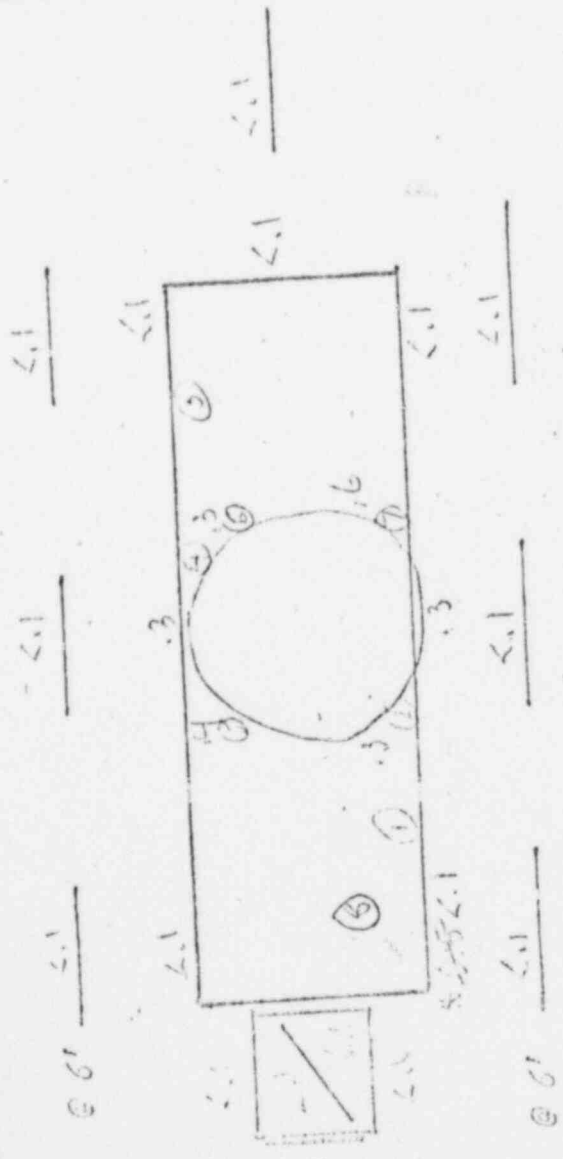
COPY Received from Mr. B. B. B. B. B.

Authorized Signature

11

Bentley Site Survey Sheet

No. 232476
Type of Survey: Contamination Vehicle Date: 23 April 77 Time: 08 00-09 00
Customer: Vehicle I.D. 115 Truck 228 146
Carrier: Driver (s) Thom



Max. Contact Side of Trailer (mR/hr) 0.6 mrem/hr
Max. Contact of Containers (mR/hr) 4.1 mrem/hr
Dose Rate Inside Cab/Sleeper (mR/hr) < 0.1 / < 0.1
Scan of Trailer Entry (cpm/bkg) < 100 cpm
Additional Information:

Remarks: none were greater than the "Action Levels" require the immediate notification of the R & SO. Circle in red ink. Unless otherwise noted, radiation levels are in mrem/hour, and mean locations are

Beta 2200 0.1/100 c/s ²		Alpha 220 0.1/100 c/s ²	
Survey Survey Results			
Annual 0.1/100 c/s ² Dose Rate			
No. Beta	Alpha	No. Beta	Alpha
1 2200	ND	5 2200	ND
2	1	6 2200	1
3	1	7 2200	1
4 2200	ND	8 2200	ND
Air Activity in 100 c/s ²			
No. Time Volume		Beta	
		A	
Instruments Used			
Contamination		Radiation	
Type	Serial No.	Type	Serial No.
SAF	323	SAF	323
Response Check			
Surveyor: W. H. H. H.			
Reviewed by:			

ANNEX

Site Survey Sheet

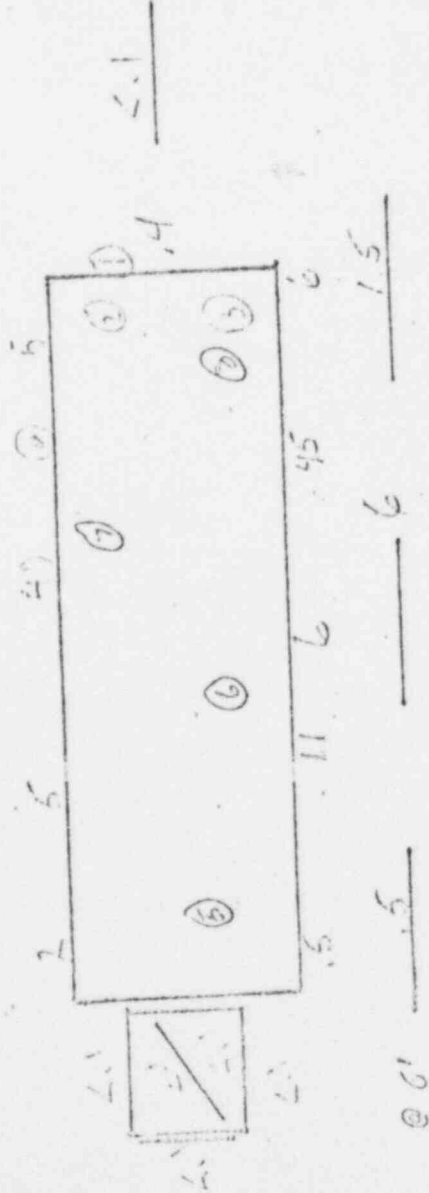
No. 2-7177

Type of Survey: Contamination Vehicle Date: 29 April 79 Time: 6:17 PM

Customer: Truck Vehicle I.D. Truck 67

Carrier: Truck Driver (a) Truck

0' 0.5' 7' 1'



0' 1.5' 6' 1.5'

Max. Contact Side of Trailer (mR/hr) 45 mR/hr
 Max. Contact of Contaminant (mR/hr) 400 mR/hr
 Dose Rate Inside Cab/Sleeper (mR/hr) 2.1 / 1.1
 Scan of Trailer Inside (cpm/kg) 100 cpm
 Additional Information:

Remarks: Activities greater than the "action level" require the immediate notification of the RC 50. Circle in red ink. Unless otherwise noted, radiation level are in mR/hr and mass locations are

NO. 2-7177

Beta 2200 DPM/100 cm²
 Alpha 250 DPM/100 cm²

Survey Results
 Arrival DPM/100cm² Departure

No.	Beta	Alpha	No.	Beta	Alpha
1	2200	ND	5	2200	ND
2	1	1	6	2200	1
3	1	1	7	2200	1
4	2200	ND	8	2200	ND

No.	Time	Volume	Beta	Alpha

Instruments Used	
Contamination	Radiation
Type E-141N	E-141N
Serial num. 313	E-141N
Response	SAF
Check	SAF

Surveyors: W. M. Smith

Reviewed by:

ANNEX E

2209 D. 7/100 6

 $AL_{12} = 229.9894(15) \text{ cm}^{-1}$

ANNEX F

1202

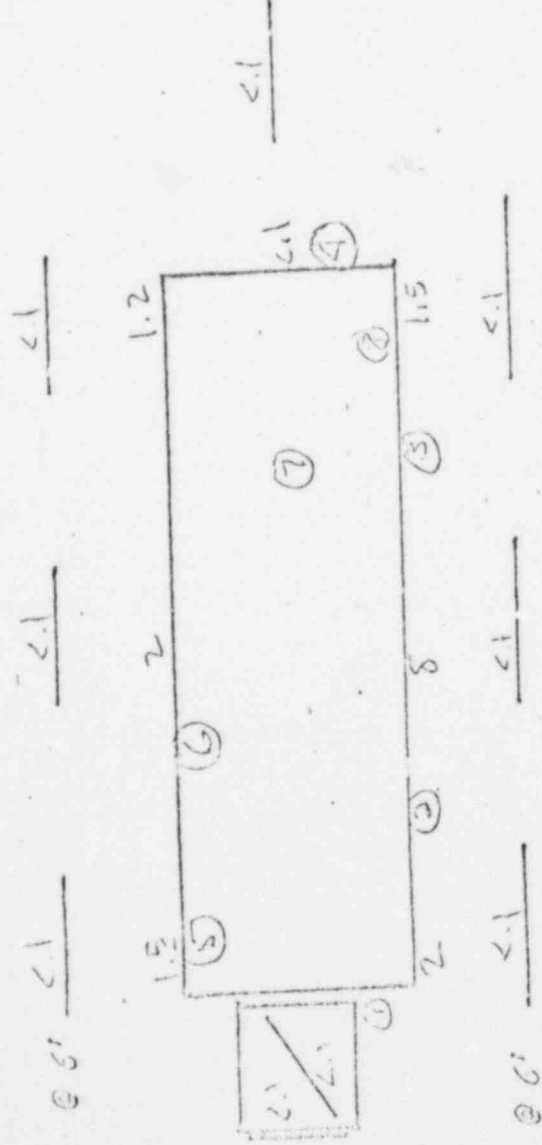
•

Page 22 of 23

James M. Smith

Vehicle I.D. 2913311

WILSON, D. BARDEN

[illegible]

Name	Max. Contact of Cores (hr/hr)	hr
	13 hr	13 hr

$\max(\text{converge}) \leq \frac{1}{\epsilon} \log \left(\frac{\|x_0 - x^*\|}{\epsilon} \right) + 1$

5 - 27-11 - 5000 (com/bha) 4 100 com

Scan of inner
411-1: total calibration

Remarks: notation is poorer than the "Action Levels" require the immediate notification of the PC & SO. Circle in red ink. Unless otherwise noted, Action Levels are in mi/mph, and creek locations are

Surveyor: W. A. A. A.

REVISED BY

Instrument Used

Condensation

10/11/19

No.	323
-----	-----

10	10
----	----

5	8
---	---

Surveyor: W. D. Miller

○

PO BOX 136
SHEPHERD, W. VA. 26034
915-454-2024

RADIOACTIVE MATERIALS
NUCLEAR ENGINEERING CORPORATION, INC.
EXECUTIVE OFFICE (502) 425-7180
P.O. BOX 7246 • LOUISVILLE, KENTUCKY 40207

SENT NO. 1993
OF SHIPMENT
PER: T.S.M.

ANNEX G (Page 1)

(1) P.O. BOX 633
RICHMOND, VA 23262
502-377-0411

(1) P.O. BOX 136
SAN RAMON, CA. 94583
415-857-1561

PAGE 1 OF 1

TOTAL WEIGHT
IN POUNDS

1

PROPER SHIPPING NAME - HAZARD CLASS
PER 49 CFR 172.101

NO. 1993

TOTAL QUANTITY

REGIONAL DISTRIBUTION - RADIOACTIVE MATERIALS
RADIOACTIVE MATERIAL, FORM, N.O.S. - RADIOACTIVE MATERIAL
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY, N.O.S. - RADIOACTIVE MATERIAL
RADIOACTIVE MATERIAL, N.O.S. - RADIOACTIVE MATERIAL
RADIOACTIVE MATERIAL, LIMITED QUANTITY, N.O.S. - RADIOACTIVE MATERIAL
RADIOACTIVE MATERIAL, SPECIAL FORM, N.O.S. - RADIOACTIVE MATERIAL

(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Cubic Feet	Gauges	Weight (Pounds)	Physical Form	Chemical Form	Radioisotope	Special Nuclear Material (Grams)	Source Material (Kilograms)	Activity (Curies)	Radiation Levels (mR/hr)	Transport Class	Transport Index	Label	Free Form	Type of Container
7.5		1.1	SOLID	U-235	U-235	1.13	0.01	1.1	<2	III		Radioactive - LSA		
7.5		1.2		U-235	U-235	3.51	0.14	1.2	<2	III		Radioactive - LSA		
7.5		2.02		U-235	U-235	5.27	0.43	1.3	<2	III		Radioactive - LSA		
7.5		2.3		U-235	U-235	0.96	0.04	1.1	<2	III		Radioactive - LSA		
7.5		2.1		U-235	U-235	11.13	-	1.7	<2	III		Radioactive - LSA		
7.5		1.53		U-235	U-235	1.60	0.057	1.1	<2	III		Radioactive - LSA		
7.5		7.1		U-235	U-235	1.19	0.05	1.1	<2	III		Radioactive - LSA		
7.5		1.30		U-235	U-235	14.03	1.04	1.9	<2	III		Radioactive - LSA		
7.5		2.14		U-235	U-235	1.66	0.22	1.1	<2	III		Radioactive - LSA		
7.5		1.97		U-235	U-235	3.84	0.65	1.2	<2	III		Radioactive - LSA		
7.5		1.92		U-235	U-235	16.67	0.65	1.1	<2	III		Radioactive - LSA		
7.5		5.2		U-235	U-235	5.16	0.20	1.3	<2	III		Radioactive - LSA		
7.5		2.16		U-235	U-235	-	5.240	2.0	<2	III		Radioactive - LSA		
7.5		2.05		U-235	U-235	4.70	-	1.3	<2	III		Radioactive - LSA		
7.5		2.16		U-235	U-235	1.58	0.031	1.1	<2	III		Radioactive - LSA		
7.5		2.04		U-235	U-235	14.07	0.69	1.9	<2	III		Radioactive - LSA		
7.5		2.23		U-235	U-235	2.76	0.30	1.1	<2	III		Radioactive - LSA		
7.5		2.26		U-235	U-235	4.81	0.33	1.3	<2	III		Radioactive - LSA		
7.5		2.20		U-235	U-235	-	11.266	3.9	<2	III		Radioactive - LSA		
7.5		2.25		U-235	U-235	-	14.906	5.1	<2	III		Radioactive - LSA		
150.0		5.72		TOTAL		93.12	5.502	16.9						

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

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

Signature

Title

COPY Received - NRC 8/19/93

NUCLEAR ENGINEERING COMPANY, INC.

EXECUTIVE OFFICE (502) 426-7160

P.O. BOX 7246 • LOUISVILLE, KENTUCKY 40207

(1) P.O. BOX 156
SAN RAMON, CA. 94583
415-837-1501

(1) P.O. BOX 637
RICHLAND, WA 99352
509-377-2411

NO. 3741/1993 PAGE 2 OF 4

PROPER SHIPPING NAME - HAZARD CLASS
PER 49 CFR 172.101

TOTAL WEIGHT
IN POUNDS

- Radioactive Decay, N.O.S. - Radioactive Material
- Radioactive Material, Fissile, N.O.S. - Radioactive Material
- Radioactive Material, Low Specific Activity, N.O.S. - Radioactive Material
- Radioactive Material, N.O.S. - Radioactive Material
- Radioactive Material, Limited Quantity, N.O.S. - Radioactive Material
- Radioactive Material, Special Form, N.O.S. - Radioactive Material

TOTAL QUANTITY

(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Cubic Feet	Gallons	Weight (pounds)	Physical Form	Chemical Form	Radioactive	Special Nuclear Material (grams)	Source Material (kilograms)	Activity (Curie)	Radiation Levels (mR/hr)	Transport Group	Transport Index	Label	Fish	Type of Container
7.5	23.0	23.0	SOLID	Uranium	U235	16.46	1.064	1.2	<2	II	<1	Radioactive - LSA		
7.5	274	274		Plutonium	U235	0.75	1.003	.1	<2	II	<1	Radioactive - LSA		
7.5	323	323		Gadolinium	U235	1.12	1.004	.1	<2	II	<1	Radioactive - LSA		
7.5	233	233		Plutonium	U235	-	1.001	.1	<2	II	<1	Radioactive - LSA		
7.5	244	244		Scandium	U235	1.07	1.004	.1	<2	II	<1	Radioactive - LSA		
7.5	292	292		Plutonium	U235	0	0	.1	<2	II	<1	Radioactive - LSA		
7.5	327	327		Plutonium	U235	0.28	1.001	.1	<2	II	<1	Radioactive - LSA		
7.5	275	275		Uranium	U235	9.40	0.036	.6	<2	II	<1	Radioactive - LSA		
7.5	266	266		Uranium	U235	0.20	1.001	.1	<2	II	<1	Radioactive - LSA		
7.5	285	285		Plutonium	U235	0.20	1.001	.1	<2	II	<1	Radioactive - LSA		
7.5	263	263		Plutonium	U235	1.25	1.008	.1	<2	II	<1	Radioactive - LSA		
7.5	265	265		Plutonium	U235	0	0	.1	<2	II	<1	Radioactive - LSA		
7.5	275	275		Plutonium	U235	0	0	.1	<2	II	<1	Radioactive - LSA		
7.5	222	222		Uranium	U235	0.45	1.002	.1	<2	II	<1	Radioactive - LSA		
7.5	272	272		Uranium	U235	0.70	1.003	.1	<2	II	<1	Radioactive - LSA		
7.5	255	255		Uranium	U235	0	0	.1	<2	II	<1	Radioactive - LSA		
7.5	258	258		Uranium	U235	1.20	1.005	.1	<2	II	<1	Radioactive - LSA		
7.5	300	300		Uranium	U235	1.10	1.004	.1	<2	II	<1	Radioactive - LSA		
7.5	270	270	SOLID	Uranium	U235	-	10.500	4.0	<2	II	<1	Radioactive - LSA		
142.5	5115	5115				34.88	10.637	7.4				Radioactive -		

TOTAL S

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

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

Authorized Signature: *[Signature]*
Title: *Director*

Authorized Signature: *[Signature]*
Title: *Director*

COPY Received Dec 10/79 *[Signature]*

