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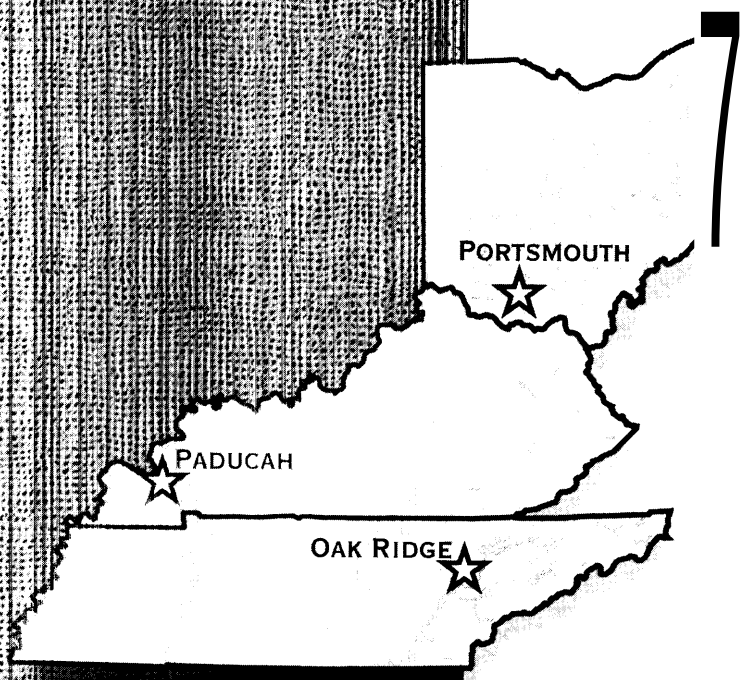
BJC/PAD-278

ENVIRONMENTAL MANAGEMENT
& ENRICHMENT FACILITIES
MANAGEMENT AND INTEGRATION CONTRACT

Final Inventory/Characterization Report for the OS-14 Department of Energy Material Storage Area at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky

D-17514-0001



MANAGED BY
BECHTEL JACOBS COMPANY LLC
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

BJC/PAD-278

Final Inventory/Characterization Report for the OS-14 Department of Energy Material Storage Area (DMSA) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky
Date Completed August 10,2001

Date Issued – August, 2001

Prepared by
WESKEM, LLC
Under subcontract 23900-BA-RMOO5F
Prepared for the
US Department of Energy
Office of Environmental Management

BECTEL JACOBS COMPANY LLC
managing the
Environmental Management Activities at the
East Tennessee Technology Park
Oak Ridge Y-12 Plant Oak Ridge National Laboratory
Paducah Gaseous Diffusion Plant Portsmouth Gaseous Diffusion Plant
Under contract DE-AC05-98OR22700
for the
U.S. DEPARTMENT OF ENERGY

CONTENTS

ACRONYMS……..……..v

EXECUTIVE SUMMARY……..……..vii

1. DMSA OS-14 INVENTORY

2. RFD REPORT

3. RFD FORMS

4. GLOBAL POSITIONING SYSTEM

5. SME INSPECTION

6. HP SURVEY

7. IH SAMPLING DATA

ACRONYMS

1. DMSA – Department of Energy Materials Storage Area
2. DOE – Department of Energy
3. EPA – Environmental Protection Agency
4. GPS – Global Positioning Systems
5. HP – Health Physics
6. IH – Industrial Hygiene
7. Lc – Level Sub C
8. LLW – Low Level Waste
9. NCS – Nuclear Criticality Safety
10. QA – Quality Assurance
11. QC – Quality Control
12. RCRA – Resource Conservation and Recovery Act
13. RFD – Request for Disposal
14. SAA – Satellite Accumulation Area
15. SME – Subject Matter Expert
16. TSCA – Toxic Substance Control Act

EXECUTIVE SUMMARY

The DMSA OS-14 field activities began on July 27,2001 and were completed on August 10,2001. There were nine (9) low level waste (LLW) items identified and inventoried.

LLW

The LLW inventory included a hose cabinet, (5) rail tank cars, and **(3)** rail flat cars. The rail tank cars were all inspected and then verified that they were empty. The items inventoried had a total volume of 12,822 ft^3. All items had barcode labels and **DMSA** inventory tags placed on them and remain in the DMSA.

According to the radiological surveys conducted by Health Physics (HP), all removable contamination areas surveyed were less than Level Sub C (Lc). Because Lc is the lowest level of contamination the instruments can detect based on area background, there were no highest or lowest results. All direct read contamination levels were less than Lc, with the exception of two (2) rail tank cars. Survey number 01-1064-S showed the two (2) rail tank cars had readings of 335dpm/100cm^2 and 160dpm/100cm^2.

The Industrial Hygiene (IH) field data collected concluded that the interior of the rail tank cars at OS-14 were within normal limits.

DMSA OS-14 INVENTORY

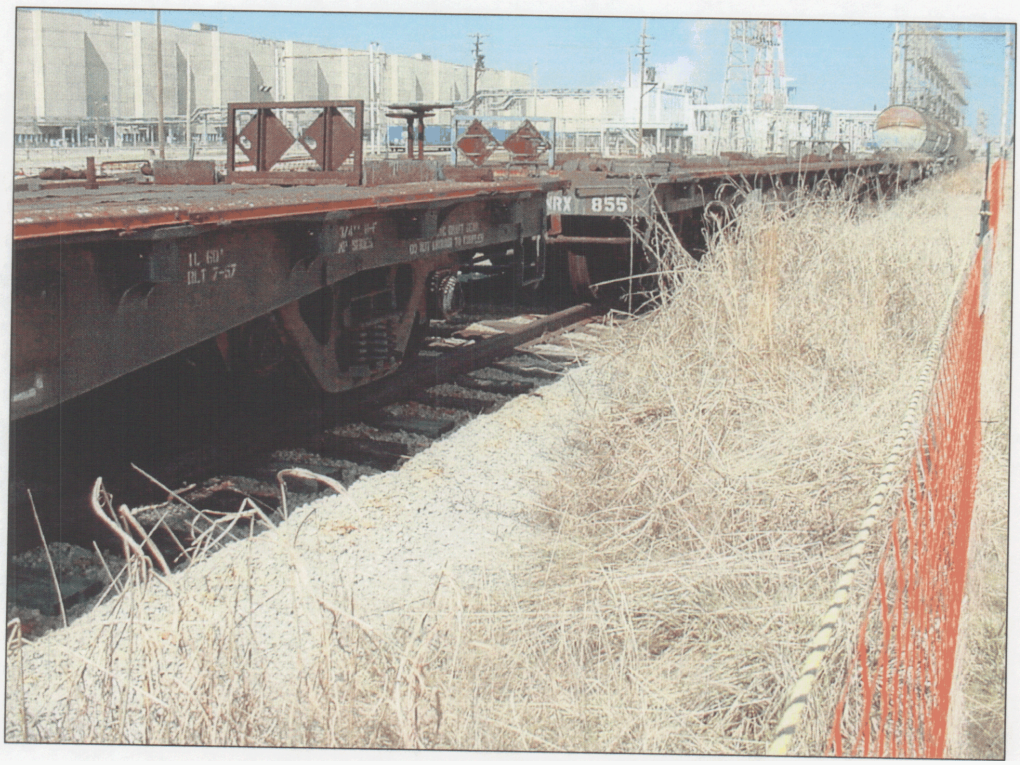
OS-14 DMSA INVENTORY							
Description	Original RFD #	Material Classification	Column #	Barcode	# Items	Volume Cubic Feet	Material Transferred to USEC
Hose Cabinet	110310	LLW	Zone 1	DMSA0110680	1	3	N/A
Rail Tank Cars	110311	LLW	Zone 1	DMSA0110681	1	3203	N/A
Rail Tank Car	110312	LLW	Zone 1	DMSA0110682	1	1448	N/A
Rail Tank Car	110313	LLW	Zone 1	DMSA0110683	1	1440	N/A
Rail Tank Car	110314	LLW	Zone 1	DMSA0110684	1	1448	N/A
Rail Tank Car	110315	LLW	Zone 1	DMSA0110685	1	1440	N/A
Rail Flat Car	110316	LLW	Zone 1	DMSA0110686	1	1280	N/A
Rail Flat Car	110317	LLW	Zone 1	DMSA0110687	1	1280	N/A
Rail Flat Car	110318	LLW	Zone 1	DMSA0110688	1	1280	N/A

*Changes only apply to RFD numbers listed.

RAIL TANK **CARS**

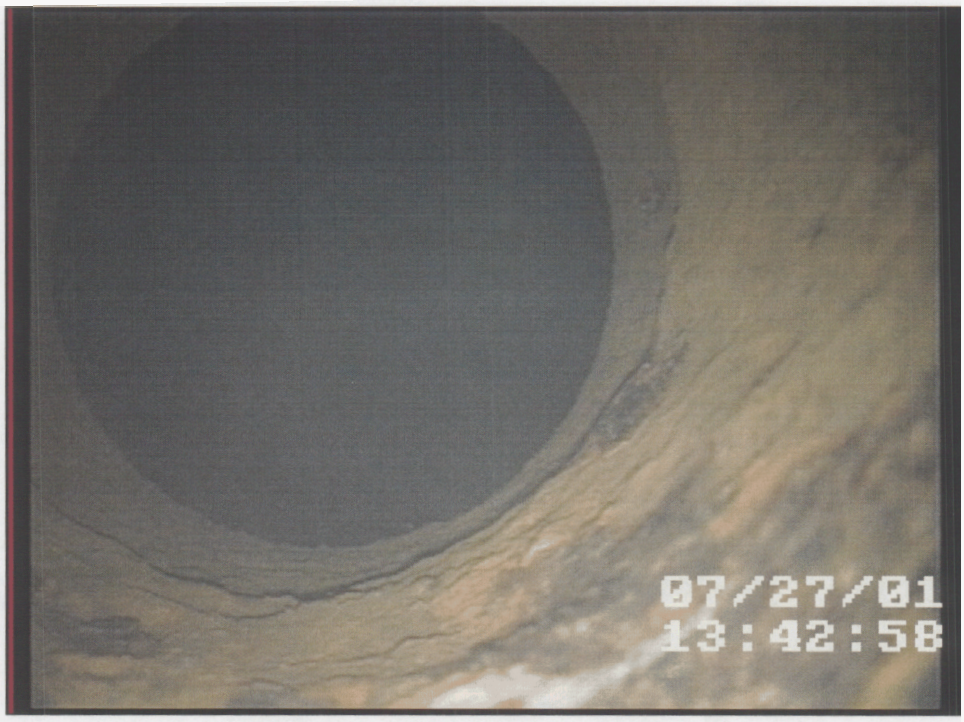
RAIL TANK CAR

RFD-110311-01



RAIL FLAT CARS

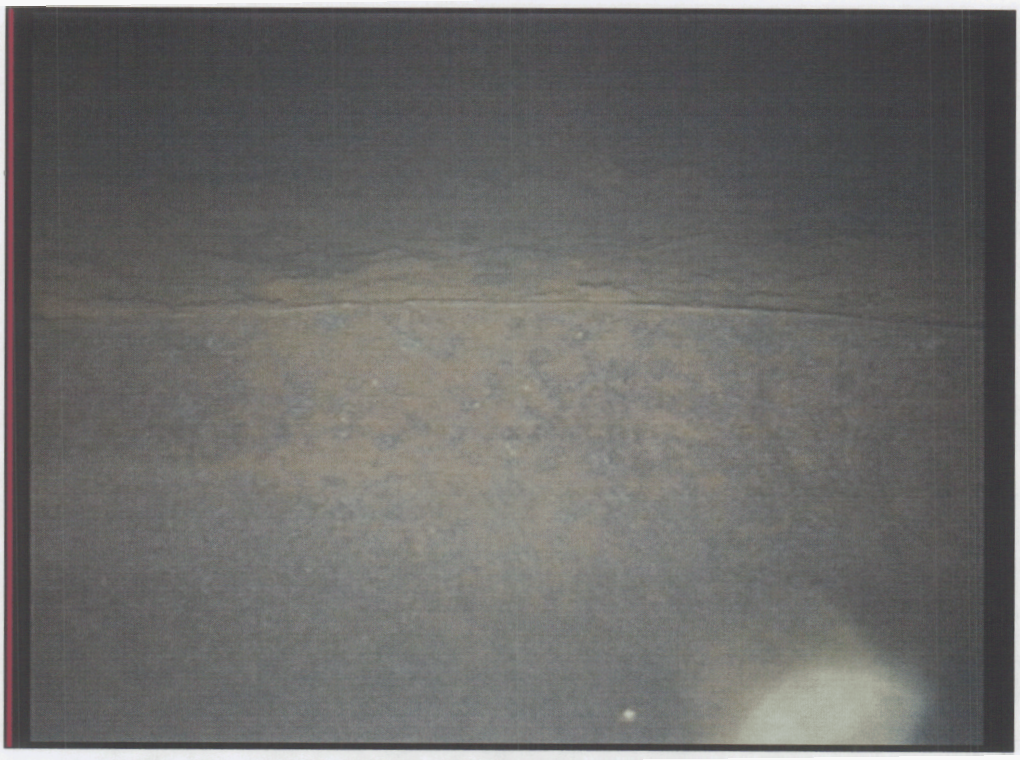
RAIL FLAT CAR
RFD 110317-01



INSIDE FIRE WATER TANK

INSIDE FIRE WATER TANK

INSIDE FIRE WATER TANK



WELD INSIDE FIRE WATER TANK

RFD REPORT

Inventory By DMSA No.

Curr. Zone	RFD #	Barcode #	Description	Vol. ft3	llw	tsca	rcra	mix	asb	fis	lnd	Gen. Date	Char. Date	Transferred To
OS-14														
ZONE 1	110310	DMSA0110680	HOSE CABINET	3	☑	☐	☐	☐	☐	☐	☐	7/30/01	7/30/01	
ZONE 1	110311	DMSA0110681	RAIL TANK CARS	3203	☑	☐	☐	☐	☐	☐	☐	7/30/01	7/30/01	
ZONE 1	110312	DMSA0110682	RAIL TANK CAR	1448	☑	☐	☐	☐	☐	☐	☐	7/30/01	7/30/01	
ZONE 1	110313	DMSA0110683	RAIL TANK CAR	1440	☑	☐	☐	☐	☐	☐	☐	7/30/01	7/30/01	
ZONE 1	110314	DMSA0110684	RAIL TANK CAR	1448	☑	☐	☐	☐	☐	☐	☐	7/30/01	7/30/01	
ZONE 1	110315	DMSA0110685	RAIL TANK CAR	1440	☑	☐	☐	☐	☐	☐	☐	7/30/01	7/30/01	
ZONE 1	110316	DMSA0110686	RAIL FLAT CAR	1280	☑	☐	☐	☐	☐	☐	☐	7/30/01	7/30/01	
ZONE 1	110317	DMSA0110687	RAIL FLAT CAR	1280	☑	☐	☐	☐	☐	☐	☐	7/30/01	7/30/01	
ZONE 1	110318	DMSA0110688	RAIL FLAT CAR	1280	☑	☐	☐	☐	☐	☐	☐	7/31/01	7/31/01	
Summary for OS-14			*(9 RFDs)*	*12822 Ft3*										
Grand Total	*(9 RFDs)*			*12822 Total Ft3*										

RFD FORMS

DOE

LLW

RFD

Document ID Number
110310

Request For Disposal

Generation Process Information (Completed by Generator)

W1. Generator's Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WO
Terri Ross	31871	5325	C7437	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-14	OS-14	☒ Yes ☐ No

W12. Number of Items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachment
MT-007	PGDP	OS-14	OS-14	☒ A ☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen		✓	W27. Friable Asbestos		✓	W30. CERCLA		✓			

Waste Description/ Comments

W32.

B.C. DMSA0110680

OS-14-009 Hose Cabinet on railcar ATMX16612

Zone 1

*This is to certify that the above named material is properly described and in the stated container, which is in **good** condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.*

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	7/30/01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. PPE Requirements

P5. Container-Labeling Requirements

___ RCRA	___ PCB	___ DET PCB (<50ppm & source <50ppm)	___ RAD	___ DOE
___ FISSILE	___ NCS EXEMPT	___ RD CONFIDENTIAL	___ ACID	___ USEC
___ FLAMMABLE	___ COMBUSTIBLE	___ OXIDIZER	___ BASE	___ WESKEM
___ ASBESTOS	___ REACTIVE	___ TRANSURANIC	___ NON-HAZ	

P6. Additional Handling Instructions

Verify labeling, barcode & verify zone

Reference **FWR**

Origin Date

PCB Start Date

RCRA Start Date

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Buckner	34535	8-9-01
P9. Field Supervisor	**Badge**	**Date**	**P10. Data Processing Completed By**	**Badge**	**Date**
Guy Jones	30728	8/15/01	Cay Walker		8-16-01

P11. Waste Item Information

Waste Item No. 110310-01

Container No. (Barcode) DMSA 0110680

Weight 700 lbs

Location and Grid OS-14 Z-1

Container Size 3CF³

P12. Operator Comments

Low level waste remains in DMSA until DOE approval for LLW remediation.

BJCF-515a (03/01)

DMSA

received 8-1-01

LOW-LEVEL RADIOACTIVE WASTE

ATTACHMENT A

DOCUMENT ID NUMBER: 110310

BITED ITEMS

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES ☐ YES ☒ NO	A2. ACTIVE CHELATING AGENTS ☐ YES ☒ NO	A3. TRU RADIOISOTOPES >100 nCi/g ☐ YES ☒ NO	A4. EXPLOSIVE MATERIALS ☐ YES ☒ NO	
A5. ETILOGICAL AGENTS ☐ YES ☒ NO	A6. IGNITION SOURCES ☐ YES ☒ NO	A7. FREE LIQUIDS (Unless Wastewater) ☐ YES ☒ NO	A8. RCRA WASTE ☐ YES ☒ NO	A9. TSCA WASTE ☐ YES ☒ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

A11. CHELATING AGENTS ☐ YES ☒ NO	A12. ION EXCHANGE RESINS ☐ YES ☒ NO	A13. DETECTABLE PCB (Concen. And Source <50 ppm) CONC. ☐ YES ☒ NO ppm	A14. WASTEWATER ☐ YES ☒ NO

RADIOISOTOPE DETERMINATION METHOD

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO. 210	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT ☒ YES ☐ NO	R5. CHEMICAL FORM

DOCUMENT TYPE	DOCUMENT NUMBER
01. ANALYSIS SAMPLE ID NO.	
02. PROCESS KNOWLEDGE FORM NO.	

R8. TRANSFERABLE (Alpha) dpm/100cm2	R9. FIXED (Alpha) dpm/100cm2
R10. TRANSFERABLE (Beta/Gamma) dpm/100cm2	R11. FIXED (Beta/Gamma) dpm/100cm2
R12. EXTERNAL DOSE/PACKAGE CONTACT MREM/HR	R13. DOSE RATE MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

WASTE ITEM CONTAINER LOG

10. ITEM/CONTAINER	OF	DOCUMENT ID NUMBER
1	1	110310

11 WASTE ITEM ID NO	12 ORIGIN DATE	13. RCRA ACCUMULATION START DATE	14. PCB DATE TO STORAGE
110310-01	7-30-01	N/A	N/A

15. WASTE MATERIAL PLACED IN (Or Removed From) CONTAINER	16. QUANTITY	17. DEPOSITOR INITIAL	17. DEPOSITOR DATE	18. COMMENTS (If Waste is removed from container, then final disposition must be noted.)
hose cabinet on rail car	1	JR	7/30/01	OS-14-009 zone 1

19 CONTAINER ID NO (Barcode)	110 ABSORBENT MATERIALS?	QUANTITY	TYPE	111 NMC&A FORM	112 EST. NET VOLUME	113. UNITS
DMSA 0110680	☐ YES ☒ NO				3 CF3	

114 GROSS WEIGHT	115 UNITS	116 INNER CONTAINER TYPE	117 OUTER CONTAINER TYPE	118 TANK SEAL NUMBER
700 lbs				

119 CONTAINER GENERATOR SIGNATURE	DATE
Jim Ross	7/30/01

DOE Material Storage Area (DMSA) Item - NCS Characterization Form

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION				NCS CLASSIFICATIOS
		^{235}U Assay Analysis	^{235}U Mass Analysis	Subcritical Mass Limits	NDA Radiation Surveys	
RFD = 110310 Description: NOSE CABINET ON RAILCAR ATMX T66012 Independent Confirmations: Individual #1: [illegible] Date: 8-2-01 Individual #2: [illegible] Date: 8-02-01 Other Information: Bldg./Col: 05-14 DMSA = 05 14 Origin: NA	~~Historical Documentation:~~ NA Process Knowledge: Not Process Equipment Visual Inspections Completed: ___ External Surfaces Inspection ✓ Internal Surfaces Inspection Completed By: [illegible] 8-2-01	Sample A: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma) Sample B: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma)	Sample A: ___ g ^{235}U Sample B: ___ g ^{235}U	___ kg ^{235}U ___ Moderated Limits ___ Hydrated Limits	Sample A: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: Date: Sample B: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: Date:	Initial Classification: ✓ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: [illegible] Date: 7/27/01 NDA Expert: NA (if NDA is performed) Date: Independent Verifications: Person #1: [illegible] Date: 8-2-01 Person #2: [illegible] Date: [illegible] Reclassification: (if needed) ___ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: Date: NDA Expert: (if NDA is performed) Date: Independent Verifications: Person #1: Date: Person #2: Date:

Comments:

Approved to Relocate: To _____
Further NCS characterization is required. Item does not contain Singularly-Contingent mass.

NDA Expert #1: _____
Date: _____

NDA Expert #2: _____

I have independently confirmed the identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: _____
Date: _____

Independent Person #2: _____
Date: _____

I have independently confirmed the destination for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: _____
Date: _____

Independent Person #2: _____
Date: _____

DOE

LLW

RFD

Document ID Number
110311

Request For Disposal

Generation Process Information (Completed by Generator)

W1. Generator's Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WO
Terri Ross	31871	5325	C7BT1	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-14	OS-14	☑ Yes ☐ No

W12. Number of items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachment
MT007	PGDP	OS-14	OS-14	☑ A ☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen		✓	W27. Friable Asbestos		✓	W30. CERCLA		✓			

Waste Description/ Comments

W32. DMSA-OS-14-001 DMSA-0110681

Railcar ATMX 16612 width tanks CV-44-4, CV-76 + CV58
Zone 1

This is to certify that the above named material is properly described and in the stated container, which is in good condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	7-30-01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. **PPE** Requirements

P5. Container-Labeling Requirements

___ RCRA	___ PCB	___ DET PCB (<50ppm & source <50ppm)	___ RAD	___ DOE
___ FISSILE	___ NCS EXEMPT	___ RD CONFIDENTIAL	___ ACID	___ USEC
___ FLAMMABLE	___ COMBUSTIBLE	___ OXIDIZER	___ BASE	___ WESKEM
___ ASBESTOS	___ REACTIVE	___ TRANSURANIC	___ NON-HAZ	

P6. Additional Handling Instructions

Verify labeling, barcode + verify zone

Reference FWR
Origin Date
PCB Start Date
RCRA Start Date

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Bunker	345-35	8-9-01

P9. Field Supervisor	Badge	Date	P10. Data Processing Completed By	Badge	Date
[illegible]	30728	8/9/01	Chris Wolfe		

P11. Waste Item Information

Waste Item No. 110311-01
Container No. (Barcode) DMSA 0 10681
Weight 57,500 lbs
Location and Grid OS-14 3-1
Container Size 3203 CF3

Low level waste remains in DMSA until DOE approval for LLW remediation.

BJCF-515a (03/01)

DMSA

received 8/1/01

LOW-LEVEL RADIOACTIVE WASTE

ATTACHMENT A

DOCUMENT ID NUMBER 110311

IBITED ITEMS

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES	A2. ACTIVE CHELATING AGENTS	A3. TRU RADIOISOTOPES>100 nCi/g	A4. EXPLOSIVE MATERIALS	
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
A5. ETILOGICAL AGENTS	**A6. IGNITION SOURCES**	**A7. FREE LIQUIDS (Unless Wastewater)**	**A8. RCRA WASTE**	**A9. TSCA WASTE**
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

ADDITIONAL WASTE CHARACTERISTICS

A11. CHELATING AGENTS	A12. ION EXCHANGE RESINS	A13. DETECTABLE PCB (Concen. And Source <50 ppm) CONC.	A14. WASTEWATER
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO ppm	☐ YES ☒ NO

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO. 810	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT	R5. CHEMICAL FORM
		☒ YES ☐ NO	

OTHER SAMPLE ANALYSIS

DOCUMENT TYPE	DOCUMENT NUMBER
O1. ANALYSIS SAMPLE ID NO.	
O2. PROCESS KNOWLEDGE FORM NO.	

RADIATION DATA FROM HEALTH PHYSICS SURVEY SURFACE CONTAMINATION (Data Supplied by HP)

R7. HP SURVEY REQUIRED

☐ YES ☐ NO

R8. TRANSFERABLE (Alpha) dpm/100cm2	R9. FIXED (Alpha) dpm/100cm2
R10. TRANSFERABLE (Beta/Gamma) dpm/100cm2	R11. FIXED (Beta/Gamma) dpm/100cm2
R12. EXTERNAL DOSUPACKAGE CONTACT MREM/HR	R13. DOSE RATE MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

WASTE ITEM CONTAINER LOG

10. ITEM/CONTAINER	OF	DOCUMENT ID NUMBER
	1	

I1 WASTE ITEM ID NO	I2. ORIGIN DATE	I3. RCRA ACCUMULATION START DATE	I4. PCB DATE TO STORAGE
110311-01	7/30/01	N/A	N/A

I5. WASTE MATERIAL PLACED IN (Or Removed From) CONTAINER	I6. QUANTITY	INITIAL		(If Waste is removed from container, then final
Railcar ATMX 16612 width tanks CV44, CV-76 + CV-58	1	JR	7/30/01	DMSA-05-14-001 Zone 1

I9. CONTAINER ID NO. (Barcode)	I10. ABSORBENT MATERIALS? QUANTITY TYPE	I11. NMC&A FORM	I12. EST. NET VOLUME	I13. UNITS
DMSA 0110681	[ ] YES [X] NO		3203	CF3

I14. GROSS WEIGHT	I15 UNITS	I16 INNER CONTAINER TYPE	I17. OUTER CONTAINER TYPE	I18. TANK SEAL NUMBER
57,500 lbs				

I19. CONTAINER GENERATOR SIGNATURE	DATE
Terri Ross	7-30-01

DOE **Material Storage Area (DMSA) Item - NCS Characterization** Form

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION: ^{235}U Assay Analysis	^{235}U Mass Analysis	Subcritical Mass Limits	NDA Radiation Surveys	NCS CLASSIFICATION
RFD # 110311 Description: RAILCAR ATMX 166012 WITH TANKS CV-44, CV-76, & CV-58 Independent Confirmations: Individual #1 D.W. Stamb Date 7/30/01 Individual #2 CW Walter Date 8-2-01 • • • • • • • • • • • Other Information: Bldg./Col.: 05-K DMSA #: 05-K Origin: N/A	Historical Documentation: N/A Process Knowledge: 1944 PROCESS EQUIPMENT Visual Inspections Completed: ✓ External Surfaces Inspection ✓ Internal Surfaces Inspection Completed By: D.W. Stamb Date: 8/02/01	Sample A: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma) Sample B: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma)	Sample A: ___ g ^{235}U Sample B: ___ g ^{235}U	___ kg ^{235}U ___ Moderated Limits ___ Hydrated Limits	Sample A: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___ Sample B: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___	Initial Classification: ✓ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: D.W. Stamb Date: 7/27/01 NDA Expert: N/A (if NDA is performed) Date: ___ Independent Verifications: Person #1: CW Walter Date: 8-02-01 Person #2: [illegible] Date: 8-2-01 • • • • • • • • • • Reclassification: (if needed) ___ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: ___ Date: ___ NDA Expert: ___ (if NDA is performed) Date: ___ Independent Verifications: Person #1: ___ Date: ___ Person #2: ___ Date: ___

Comments:

Approved to Relocate: To ___
Further NCS characterization is required. Item does not contain Singularly-Contingent mass.

NDA Expert #1 ___
Date ___

NDA Expert #2 ___
Date ___

I have independently confirmed the Identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

I have independently confirmed the destination for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

DOE

LLW

RFD

Request For Disposal

Document ID Number 110312

Generation Process Information (Completed by Generator)

W1. Generator's Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WO
Terri Ross	31871	5325	C-743T1	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-14	OS-14	☒ Yes ☐ NO

W12. Number of Items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachment
MT007	PGDP	OS-14	OS-14	☒ A ☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen		✓	W27. Friable Asbestos		✓	W30. CERCLA		✓			

Waste Description / Comments

W32. OS-14-002
Rail tank car OROX-? (1102)
far South railcar

DMSA 0110682
Zone 1

This is to certify that the above named material is properly described and in the stated container, which is in good condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	7-30-01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. PPE Requirements

P5. Container-Labeling Requirements

___ RCRA	___ PCB	___ DET PCB (<50ppm & source <50ppm)	___ RAD	___ DOE
___ FISSILE	___ NCS EXEMPT	___ RD CONFIDENTIAL	___ ACID	___ USEC
___ FLAMMABLE	___ COMBUSTIBLE	___ OXIDIZER	___ BASE	___ WESKEM
___ ASBESTOS	___ REACTIVE	___ TRANSURANIC	___ NON-HAZ	

P6. Additional Handling Instructions
Verify labeling, barcode & verify zone

Reference FWR	
Origin Date	
PCB Start Date	
RCRA Start Date	

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Brubaker	34535	8-9-01

P9. Field Supervisor	Badge	Date	P10. Data Processing Completed By	Badge	Date
[illegible]	30728	8/9/01	Jim Walker		8-16-01

P11. Waste Item Information
Waste Item No. 110312-01
Container No. (Barcode) DMSA 0110682
Weight 65,900 lbs
Location and Grid OS-14 3-1
Container Size 1448 CF 30

P12. Operator Comments
Low level waste remains in DMSA until DOE approval for LLW remediation.

BJCF-515a (03/01)

DMSA

received 8/1/01

LOW-LEVEL RADIOACTIVE WASTE

DOCUMENT ID NUMBER
110312

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES	A2. ACTIVE CHELATING AGENTS	A3. TRU RADIOISOTOPES >100 nCi/g	A4. EXPLOSIVE MATERIALS
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A5. ETILOGICAL AGENTS	A6. IGNITION SOURCES	A7. FREE LIQUIDS (Unless Wastewater)	A8. RCRA WASTE	A9. TSCA WASTE
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

ADDITIONAL WASTE CHARACTERISTICS

A11. CHELATING AGENTS	A12. ION EXCHANGE RESINS	A13. DETECTABLE PCB (Concen. And Source <50 ppm)	A14. WASTEWATER
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO CONC. ppm	☐ YES ☒ NO

RADIOISOTOPE DETERMINATION METHOD

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO 210	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT	R5. CHEMICAL FORM
		☒ YES ☐ NO	

DOCUMENT TYPE	DOCUMENT NUMBER
01. ANALYSIS SAMPLE ID NO.	
02. PROCESS KNOWLEDGE FORM NO.	

RADIATION DATA FROM HEALTH PHYSICS SURVEY SURFACE CONTAMINATION (Data Supplied by HP)

R7. HP SURVEY REQUIRED

☐ YES ☐ NO

R8. TRANSFERABLE (Alpha)	R9. FIXED (Alpha)
dpm/100cm2	dpm/100cm2
dpm/100cm2	dpm/100cm2
R12. EXTERNAL DOSUPACKAGE CONTACT MREM/HR	R13. DOSE RATE MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

1 OF 1 | 110312

11 WASTE ITEM ID NC	ORIGIN DATE	13 RCRA ACCUMULATION START DATE	14 PCB DATE TO STORAGE
110312-01	7/30/01	N/A	N/A

15. WASTE MATERIAL PLACED IN (Or Removed From) CONTAINER	16. QUANTITY	17. DEPOSITOR INITIAL	17. DEPOSITOR DATE	18. COMMENTS (If Waste is removed from container, then final disposition must be noted.)
Rail tankcar OROX-? (1102)	1	JR	7/30/01	DM

TYPE	111. NMC&A FORM	112. LOCATION
		1208 CF3

114. GROSS WEIGHT	115. UNITS	116. INNER CONTAINER TYPE	117. OUTER CONTAINER TYPE	118
65,900 lbs			JR 7/30/01	

119. CONTAINER GENERATOR SIGNATURE: Steve Ross DATE: 7/30/01

PAGE

DOE Material Storage Area (DMSA) Item - NCS Characterization Form

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION: ^{235}U Assay Analysis	ANALYTICAL CHARACTERIZATION: ^{235}U Mass Analysis	ANALYTICAL CHARACTERIZATION: Subcritical Mass Limits	ANALYTICAL CHARACTERIZATION: NDA Radiation Surveys	NCS CLASSIFICATION
RFD = 110312 Description: RAIL TANK CAR 20ROX(1102) Independent Confirmations: Individual #1: [signature] Date: 7/30/01 Individual #2: [signature] Date: 9-2-01 Other Information: Bldg Col DMSA OS 14 DMSA # OS 14 Origin N/A Comments:	~~Historical Documentation:~~ N/A Process Knowledge: NOT PROCESS EQUIPMENT Visual Inspections Completed: ✓ External Surfaces Inspection ✓ Internal Surfaces Inspection Completed By: [signature] Date: 8-2-01	Sample A: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma) Sample B: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma)	Sample A: ___ g ^{235}U Sample B: ___ g ^{235}U	___ kg ^{235}U ___ Moderated Limits ___ Hydrated Limits	Sample A: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___ Sample B: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___	Initial Classification: ✓ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: [signature] Date: 7/27/01 NDA Expert: N/A (if NDA is performed) Date: ___ Independent Verifications: Person #1: [signature] Date: 8-02-01 Person #2: [signature] Date: 8-02-01 Reclassification: (if needed) ___ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: ___ Date: ___ NDA Expert: ___ (if NDA is performed) Date: ___ Independent Verifications: Person #1: ___ Date: ___ Person #2: ___ Date: ___

Approved to Relocate: To ___
Further NCS characterization is required. Item does not contain Singularly-Contingent mass.

NDA Expert #1 ___
Date: ___

NDA Expert #2 ___
Date: ___

I have independently confirmed the identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

I have independently confirmed the destination for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

Rev 3 (10/2000)

DOE
Request For Disposal

LLW

RFD

Document ID Number
110313

Generation Process Information (Completed by Generator)

W1. Generator's Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WO
Terri Ross	31871	5325	C-743T1	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-14	OS-14	☒ Yes ☐ No

W12. Number of Items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachment
MT007	PGDP	OS-14	OS-14	☒ A ☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen		✓	W27. Friable Asbestos		✓	W30. CERCLA		✓			

Waste Description / Comments

W32. OS-14-003
Rail tank car OROX-1606 (1103)
and car from far south end

DMSA0110683
Zone 1

This is to certify that the above named material is properly described and in the stated container, which is in good condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	7/30/01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. PPE Requirements

P5. Container-Labeling Requirements

P6. Additional Handling Instructions
Verify labeling, barcode + verify

Reference FWR
Origin Date
PCB Start Date
RCRA Start Date

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Buckles	345-35	8-9-01

P9. Field Supervisor	Badge	Date	P10. Data Processing Completed By	Badge	Date
Guy Jones	30728	8/9/01	Amy Walker		8-16-01

P11. Waste Item Information
Waste Item No. 110313-01
Container No. (Barcode) DMSA 0110683
Weight 666,100 lbs
Location and Grid OS-14 3-1
Container Size 1440 CF3

P12. Operator Comments
Low level waste remains in DMSA until DOE approval for LLW remediation.

BJCF-515a (03/01)

DMSA

received
8/1/01

LOW-LEVEL RADIOACTIVE WASTE

ATTACHMENT A

DOCUMENT ID NUMBER 110313

PROHIE

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES	A2. ACTIVE CHELATING AGENTS	A3. TRU RADIOISOTOPES >100 nCi/g	A4. EXPLOSIVE MATERIALS
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A5. ETILOGICAL AGENTS	A6. IGNITION SOURCES	A7. FREE LIQUIDS (Unless Wastewater)	A8. RCRA WASTE	A9. TSCA WASTE
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

ADDITIONAL WASTE CHARACTERISTICS

A11. CHELATING AGENTS	A12. ION EXCHANGE RESINS	A13. DETECTABLE PCB (Concen. And Source <50 ppm) CONC.	A14. WASTEWATER
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO ppm	☐ YES ☒ NO

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO. 210	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT	R5. CHEMICAL FORM
		☒ YES ☐ NO	

OTHER SAMPLE ANALYSIS

DOCUMENT TYPE	DOCUMENT NUMBER
01. ANALYSIS SAMPLE ID NO.	
02. PROCESS KNOWLEDGE FORM NO.	

RADIATION DATA FROM HEALTH PHYSICS SURVEY SURFACE CONTAMINATION (Data Supplied by HP)

R7. HP SURVEY REQUIRED

☐ YES ☐ NO

R8. TRANSFERABLE (Alpha)	R9. FIXED (Alpha)
dpm/100cm2	dpm/100cm2
R10. TRANSFERABLE (Beta/Gamma)	R11. FIXED (Beta/Gamma)
dpm/100cm2	dpm/100cm2
R12. EXTERNAL DOSE/PACKAGE CONTACT	R13. DOSE RATE
MREM/HR	MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

WASTE ITEM CONTAINER LOG

I0. ITEM/CONTAINER				DOCUMENT ID NUMBER
	1	1		
OROX-1606 (1103)				Zone 1

I9. CONTAINER ID NO. (Barcode)	I10. ABSORBENT MATERIALS? QUANTITY TYPE	I11. NMC&A FORM	I12. EST. NET VOLUME	I13. UNITS
DMSA011068 3	☐ YES ☒ NO		~~1208 CF~~ 1440 gal 7-30	

I14. GROSS WEIGHT	I15. UNITS	I16. INNER CONTAINER TYPE	I17. OUTER CONTAINER TYPE	I18. TANK SEAL NUMBER
66,100 lbs				

I19. CONTAINER GENERATOR SIGNATURE Terri Ross

DATE 7/30/01

DOE Material Storage Area (DMSA) Item - NCS Characterization Form

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION: ^{235}U Assay Analysis	^{235}U Mass Analysis	Subcritical Mass Limits	NDA Radiation Surveys	SCS CLASSIFICATION
RFD = 110313 Description: RAIL TANK CAR OROX (606 (1103) Independent Confirmations: Individual #1: [illegible] Date: 7/30/01 Individual #2: [illegible] Date: 8-2-01 . . . . . . Other Information: Bldg./Col.: DMSA 05-14 DMSA #: 05-14 Origin: NA	Historical Documentation: NA Process Knowledge: NOT PROCESS EQUIPMENT Visual Inspections Completed: ✓ External Surfaces Inspection al Surfaces Inspection Completed By: [illegible] Date: 8-2-01	Sample A: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma) Sample B: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma)	Sample A: ___ g ^{235}U Sample B: ___ g ^{235}U	___ kg ^{235}U ___ Moderated Limits ___ Hydrated Limits	Sample A: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___ Sample B: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___	Initial NCS-Exempt: ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: [illegible] Date: 7/27/01 NDA Expert: NA (if NDA is performed) Date: ___ Independent Verifications: Person #1: [illegible] Date: 8-2-01 Person #2: [illegible] Date: 8-2-01 . . . . . . Reclassification: (if needed) ___ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: ___ Date: ___ NDA Expert: ___ (if NDA is performed) Date: ___ Independent Verifications: Person #1: ___ Date: ___ Person #2: ___ Date: ___

Comments:

Approved to Relocate: To ___
Further NCS characterization is required. Item does not contain Singularly-Contingent mass.

NDA Expert #1: ___
Date: ___

NDA Expert #2: ___
Date: ___

I have independently confirmed the identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

I have independently confirmed the destination for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

DOE

LLW

RFD

Document ID Number 110314

Request For Disposal

Generation Process Information (Completed by Generator)

W1. Generator's Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WO
Terri Ross	31871	5325	C743T1	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-14	OS-14	☒ Yes ☐ No

W12. Number of Items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachment
MT007	PGDP	OS-14	OS-14	☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen			W27. Friable Asbestos		✓	W30. CERCLA		✓			

Waste Description / Comments

W32. OS-14-004
3rd railcar from south
Railtank car ORDX 1600 (1101)

B.C. DMSA0110684
zone 1

This is to certify that the above named material is properly described and in the stated container, which is in good condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	7-30-01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. PPE Requirements

P5. Container-LabelingRequirements

___ RCRA	___ PCB	___ DET PCB (<50ppm & source <50ppm)	___ RAD	___ DOE
___ FISSILE	___ NCS EXEMPT	___ RD CONFIDENTIAL	___ ACID	___ USEC
___ FLAMMABLE	___ COMBUSTIBLE	___ OXIDIZER	___ BASE	___ WESKEM
___ ASBESTOS	___ REACTIVE	___ TRANSURANIC	___ NON-HAZ	

P6. Additional Handling Instructions
Verify labeling, barcode & verify zone.

Reference FWR
Origin Date
PCB Start Date
RCRA Start Date

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Brubaker	34535	8-9-01

P9. Field Supervisor	Badge	Date	P10. Data Processing Completed By	Badge	Date
Guy Jones	30728	8/9/01	Guy Walker		8-16-01

P11. Waste Item Information
Waste Item No. 110314-01
Container No. (Barcode) DMSA 0110684
Weight 65,700 lbs
Location and Grid OS-14 3-1
Container Size 1448 CF3

P12. Operator Comments
Low level waste remains in DMSA until DOE approval for LLW remediation.

BJCF-515a (03/01)

DMSA

received 8-1-01

LOW-LEVEL RADIOACTIVE WASTE

ATTACHMENT A

DOCUMENT ID NUMBER 110314

PROHIBITED ITEMS

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES	A2. ACTIVE CHELATING AGENTS	A3. TRU RADIOISOTOPES >100 nCi/g	A4. EXPLOSIVE MATERIALS
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A5. ETILOGICAL AGENTS	A6. IGNITION SOURCES	A7. FREE LIQUIDS (Unless Wastewater)	A8. RCRA WASTE	A9. TSCA WASTE
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

☐ YES ☒ NO	☐ YES ☒ NO	(Concen. And Source <50 ppm) ☐ YES ☒ NO	ppm ☐ YES ☒ NO

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO. 210	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT	R5. CHEMICAL FORM
		☒ YES ☐ NO	

OTHER SAMPLE ANALYSIS

DOCUMENT TYPE	DOCUMENT NUMBER
01. ANALYSIS SAMPLE ID NO.	
02. PROCESS KNOWLEDGE FORM NO.	

RADIATION DATA FROM HEALTH PHYSICS SURVEY SURFACE CONTAMINATION (Data Supplied by HP)

R7. HP SURVEY REQUIRED

R8. TRANSFERABLE (Alpha)	R9. FIXED (Alpha)
dpm/100cm2	dpm/100cm2
dpm/100cm2	dpm/100cm2
R12. EXTERNAL DOSE/PACKAGE CONTACT	R13. DOSE RATI
MREM/HR	MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

WASTE ITEM CONTAINER LOG

I0. ITEM/CONTAINER			DOCUMENT ID NUMBER
1 OF 1			110314
I1. WASTE ITEM ID NO.	I2. ORIGIN DATE	I3. RCRA ACCUMULATION START DATE	I4. PCB DATE TO STORAGE
110314-01	7-30-01	N/A	N/A

I5. WASTE MATERIAL PLACED IN (Or Removed From) CONTAINER	I6. QUANTITY	I7. DEPOSITOR INITIAL	I7. DEPOSITOR DATE	I8. COMMENTS (If Waste is removed from container, then final disposition must be noted.)
Railtank car OROX 1600 (1101)	JR 7/30/01 ~~JR~~ 1	JR	7/30/01	DMSA 05-14-004 Zone 1

I9. CONTAINER ID NO. (Barcode)	I10. ABSORBENT MATERIALS? QUANTITY TYPE	I11. NMC&A FORM	I12. NET VOLUME	I13. UNITS
DMSA 0110684	☐ YES ☒ NO		JR 7-30-01 ~~1208~~ 1408	CF3

I14. GROSS WEIGHT	I15. UNITS	I16. INNER CONTAINER TYPE	I17. OUTER CONTAINER TYPE	I18. TANK SEAL NUMBER
65,700 lbs				

I19. CONTAINER GENERATOR SIGNATURE	DATE
Cherri Ross	7-30-01

DOE **Material Storage Area (DMSA) Item - NCS Characterization** Form

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION				NCS CLASSIFICATION
		^{235}U Assay Analysis	^{235}U Mass Analysis	Subcritical Mass Limits	NDA Radiation surveys	
RFD # 110314 Description: RAIL TANK CAR CROX-1600 (1101) Independent Confirmations: Individual #1: [signature] Date 7/30/01 Individual #2 Date 8-2-01	Historical Documentation: NA Process Knowledge: NOT PROCESS EQUIPMENT	Sample A: % ^{235}U 1 sigma (% ^{235}U) 2 sigma (% ^{235}U) Total (^{235}U + 2 sigma)	Sample A: g ^{235}U Sample B: g ^{235}U	kg ^{235}U Moderated Limiu Hydrated Limits	Sample A: Date & Time Performed: / / am pm Date & Time Results Rec'd: / / am pm Assumed Assay: % ^{235}U Mass: ^{235}U Submitted By: Date:	Initial Classification: ✓ NCS-Exempt Spacing-Controlled Singularly-Contingent DMSA Inspector: [signature] Date: 7/27/01 NDA Expert: NA (if NDA is performed) Date: Independent Verifications: Person #1: [signature] Date: 8-2-01 Person #2: [signature] Date: 8-2-01
Other Information: Bldg./Col.: DMS-05-14 DMSA #: 05-14 Origin: NA	Visual Inspections Completed: ✓ External Surfaces Inspection Internal Surfaces Inspection Completed By: HC Anderson Date: 8-2-01	Sample B: % ^{235}U 1 sigma (% ^{235}U) 2 sigma (% ^{235}U) Total (^{235}U + 2 sigma)			Sample B: Date & Time Performed: / / am pm Date & Time Results Rec'd: / / am pm Assumed Assay: % ^{235}U Mass: g ^{235}U Submitted By: Date:	Reclassification: (if needed) NCS-Exempt Spacing-Controlled Singularly-Contingent DMSA Inspector: Date: NDA Expert: (if NDA is performed) Date: Independent Verifications: Person #1: Date: Person #2: Date:

Comments:

Approved to Relocate: To _____
Further NCS characterization is required. Item does not contain Singularly-Contingent mass.

NDA Expert #1: _____
Date _____
Date _____

NDA Expert #2: _____
Date _____

I have independently confirmed the identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match,

Independent Person #1: _____
Date: _____
Date: _____

Independent Person #2: _____
Date: _____

I have independently confirmed the destination for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: _____
Date: _____

Independent Person #2: _____
Date: _____

Rev 3 (10/2000)

DOE

LLW

RFD

Document ID Number
110315

Request For Disposal

Generation Process Information (Completed by Generator)

W1. Generator's Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WO
Terri Ross	31871	5325	C743T1	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-1	OS-14	☒ Yes ☐ No

W12. Number of Items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachment
MT007	PGDP	OS-14	OS-14	☒ A ☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen		✓	W27. Friable Asbestos		✓	W30. CERCLA		✓			

Waste Description / Comments

W32. OS-14-005 DMSA 0110685

Railtank car OROX 1607 (1104)

~~far north~~ far north railtank car

This is to certify that the above named material is properly described and in the stated container, which is in good condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	7-30-01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. PPE Requirements

P5. Container-Labeling Requirements

___ RCRA	___ PCB	___ DET PCB (<50ppm & source <50ppm)	___ RAD	___ DOE
___ FISSILE	___ NCS EXEMPT	___ RD CONFIDENTIAL	___ ACID	___ USEC
___ FLAMMABLE	___ COMBUSTIBLE	___ OXIDIZER	___ BASE	___ WESKEM
___ ASBESTOS	___ REACTIVE	___ TRANSURANIC	___ NON-HAZ	

P6. Additional Handling Instructions

Verify labeling, barcode + verify zone

Reference FWR	
Origin Date	
PCB Start Date	
RCRA Start Date	

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Butler	34535	8-9-01

P9. Field Supervisor	Badge	Date	P10. Data Processing Completed By	Badge	Date
Guy Jones	30728	8/9/01	Chi Walker		8-16-01

P11. Waste Item Information

Waste Item No. 110315-01

Container No. (Barcode) DMSA 0110685

Weight 66,300 lbs

Location and Grid OS-14 3-1

Container Size 1440 CF3

P12. Operator Comments

Low level waste remains in DMSA until DOE approval for LLW remediation.

BJCF-515a (03/01)

DMSA

received 8-1-01

LOW-LEVEL RADIOACTIVE WASTE

ATTACHMENT A

DOCUMENT ID NUMBER 110315

PROHIBITED ITEMS

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES	A2. ACTIVE CHELATING AGENTS	A3. TRU RADIOISOTOPES >100 nCi/g	A4. EXPLOSIVE MATERIALS
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A5. ETILOGICAL AGENTS	A6. IGNITION SOURCES	A7. FREE LIQUIDS (Unless Wastewater)	A8. RCRA WASTE	A9. TSCA WASTE
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

A11. CHELATING AGENTS	A12. ION EXCHANGE RESINS	A13. DETECTABLE PCB (Concen. And Source <50 ppm) CONC.	A14. WASTEWATER
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO ppm	☐ YES ☒ NO

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO. 210	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT	R5. CHEMICAL FORM
		☒ YES ☐ NO	

OTHER SAMPLE ANALYSIS

DOCUMENT TYPE	DOCUMENT NUMBER
01. ANALYSIS SAMPLE ID NO.	
02. PROCESS KNOWLEOGE FORM NO.	

RADIATION DATA FROM HEALTH PHYSICS SURVEY SURFACE CONTAMINATION (Data Supplied by HP)

R7. HP SURVEY REQUIRED

☐ YES ☐ NO

R8. TRANSFERABLE (Alpha) dpm/100cm2	R9. FIXED (Alpha) dpm/100cm2
R10. TRANSFERABLE (Beta/Gamma) dpm/100cm2	R11. FIXED (Beta/Gamma) dpm/100cm2
R12. EXTERNAL DOSE/PACKAGE CONTACT MREM/HR	R13. DOSE RATE MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

WASTE ITEM CONTAINER LOG

1 OF 1 | 110315

I1 WASTE ITEM ID NO.	I2 ORIGIN DATE	I3 RCRA ACCUMULATION START DATE	I4 PCB DATE TO STORAGE
110315-01			

I5. WASTE MATERIAL PLACED IN (Or Removed From) CONTAINER	I6. QUANTITY	I7. DEPOSITOR INITIAL	I7. DEPOSITOR DATE	I8. COMMENTS (If Waste is removed from container, then final disposition must be noted.)
Railtank car OROX 1607 (1104)	1	JR	7/30/01	DMSA OS-14-005 zone 1 (not moved)

I9 CONTAINER ID NO (Barcode)	I10 ABSORBENT MATERIALS?	QUANTITY	TYPE	I11 NMC&A FORM	I12. EST. NET VOLUME	I13. UNITS
DMSA 0110685	[ ] YES [X] NO			JR 7-30-01 11440	—	

I14 GROSS WEIGHT	I15 UNITS	I16 INNER CONTAINER TYPE	I17 OUTER CONTAINER TYPE	I18. TANK SEAL NUMBER
66,300				

I19 CONTAINER GENERATOR SIGNATURE: Gerri Rosso

DATE: 7/30/01

UCN-20700 PAGE 2

DOE Material Storage Area (DMSA) Item - **NCS** Characterization Form

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION: ^{235}U Assay Analysis	^{235}U Mass Analysis	Subcritical Mass Limits	NDA Radiation Surveys	NCS CLASSIFICATIOS
RFD # 110315 Description: Rail Tank Car ORO-X-1607 (1104) Independent Confirmations: Individual #1: D.W. Hunt Date: 7/30/01 Individual #2: CW Walker Date: 8-2-01 * Other Information: Bldg./Col.: DMSA-14 DMSA #: 05-14 Origin: NA	Historical Documentation: NA Process Knowledge: Not Process Equipment Visual Inspections Completed: ✓ External Surfaces Inspection ✓ Internal Surfaces Inspection Completed By: HC Anderson Date: 8-2-01	Sample A: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma) Sample B: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma)	Sample A: ___ g ^{235}U Sample B: ___ g ^{235}U	___ kg ^{235}U ___ Moderated Limits ___ Hydrated Limits	Sample A: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: Date: Sample B: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: Date:	Initial Classification: ✓ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: D.W. Hunt Date: 7/27/01 NDA Expert: NA (if NDA is performed) Date: Independent Verifications: Person #1: CW Walker Date: 8-02-01 Person #2: Joe Thy Date: 8-2-01 Reclassification: (if needed) ___ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: Date: NDA Expert: (if NDA is performed) Date: Independent Verifications: Person #1: Date: Person #2: Date:

Comments:

Approved to Relocate: To ___ Further NCS characterization is required. Item does not contain Singularly-Contingent mass. NDA Expert #: ___ Date: ___ NDA Expert #2: ___ Date: ___	I have independently confirmed the identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match. Independent Person #1: ___ Date: ___ Independent Person #2: ___ Date: ___	I have independently confirmed the destination for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match. Independent Person #1: ___ Date: ___ Independent Person #2: ___ Date: ___

Rev. 3 (10/2000)

DOE

LLW

RFD

Document ID Number 110316

Request For Disposal

Generation Process Information (Completed by Generator)

W1. Generator's Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WO
Terri Ross	31871	5325	C743T2	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-14	OS-14	☒ Yes ☐ No

W12. Number of Items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachment
MT007	PGDP	OS-14	OS-14	☒ A ☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen		✓	W27. Friable Asbestos		✓	W30. CERCLA		✓			

Description / Comments

DMSA0110686
Zone 1

for North flat car

This is to certify that the above named material is properly described and in the stated container, which is in good condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	7/30/01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. PPE Requirements

P5. Container-Labeling Requirements

P6. Additional Handling Instructions

Verify labeling, barcode + verify zone

Reference FWR	
Origin Date	
PCB Start Date	
RCRA Start Date	

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Gulden	34535	8-9-01
P9. Field Supervisor	**Badge**	**Date**	**P10. Data Processing Completed By**	**Badge**	**Date**
Sue Jones			Pat Walker		8-16-01

P11. Waste Item Information

Waste Item No. 110316-01

DMSA

received 8-1-01

LOW-LEVEL RADIOACTIVE WASTE

ATTACHMENT A

DOCUMENT ID NUMBER 110316

PROHIBITED ITEMS

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES	A2. ACTIVE CHELATING AGENTS	A3. TRU RADIOISOTOPES >100 nCi/g	A4. EXPLOSIVE MATERIALS
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A5. ETILOGICAL AGENTS	A6. IGNITION SOURCES	A7. FREE LIQUIDS (Unless Wastewater)	A8. RCRA WASTE	A9. TSCA WASTE
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

A11. CHELATING AGENTS	A12. ION EXCHANGE RESINS	A13. DETECTABLE PCB (Concen. And Source <50 ppm) CONC.	A14. WASTEWATER
☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO ppm	☐ YES ☒ NO

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO. 210	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT	R5. CHEMICAL FORM
		☒ YES ☐ NO	

OTHER SAMPLE ANALYSIS

DOCUMENT TYPE	DOCUMENT NUMBER
01. ANALYSIS SAMPLE ID NO.	
02. PROCESS KNOWLEDGE FORM NO.	

RADIATION DATA FROM HEALTH PHYSICS SURVEY SURFACE CONTAMINATION (Data Supplied by HP)

R7. HP SURVEY REQUIRED

☐ YES ☐ NO

R8. TRANSFERABLE (Alpha) dpm/100cm2	R9. FIXED (Alpha) dpm/100cm2
R10. TRANSFERABLE (Beta/Gamma) dpm/100cm2	R11. FIXED (Beta/Gamma) dpm/100cm2
R12. EXTERNAL DOSE/PACKAGE CONTACT MREM/HR	R13. DOSE RATE MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

WASTE ITEM CONTAINER LOG

10. ITEM/CONTAINER	I OF 1	DOCUMENT ID NUMBER 110316

11 WASTE ITEM ID NC	12 ORIGIN DATE	13 RCRA ACCUMULATION START DATE	14 PCB DATE TO STORAGE
110316-01	7-30-01	N/A	N/A

			DATE	18. COMMENTS (If Waste is removed from container, then final disposition must be noted.)
rail flatcar ENRX 850 (far north flat car)	1	JR	7/30/01	DMSA-05-14-006
				Zone 1

19. CONTAINER ID NO. (Barcode)	110. ABSORBENT MATERIALS?	QUANTITY	TYPE	111. NMC&A FORM	112. EST. NET VOLUME	113. UNITS
DMSA011D686	☐ YES ☒ NO				1280	CF3

114. GROSS WEIGHT	115. UNITS	116. INNER CONTAINER TYPE	117. OUTER CONTAINER TYPE	118. TANK SEAL NUMBER
37,500 lbs				

119. CONTAINER GENERATOR SIGNATURE	DATE
Jerri Ross	7/30/01

UCN 20700 PAGE 2

DOE Material Storage Area (DMSA) Item - NCS Characterization Form

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION: ^{235}U Assay Analysis	^{235}U Mass Analysis	Subcritical Mass Limits	NDA Rndlation Surveys	NCS CLASSIFICATION
RFD = 110316 Description: RAILFLATCAR Independent Confirmations: Individual #1: [illegible] Date 7/30/01 Individual #2: [illegible] Other Information: Bldg./Col.: DMSA 05-14 DMSA #: 05-14 Origin NA	Historical Documentation: DMSA Process Knowledge: Not Process Equipment Visual Inspections Completed: ✓ External Surfaces Inspection ✓ Internal Surfaces Inspection Completed By: [illegible] Date: 8-2-01	Sample A: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma) Sample B: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma)	Sample A: ___ g ^{235}U Sample B: ___ g ^{235}U	___ kg ^{235}U ___ Moderated Limits ___ Hydrated Limits	Sample A: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___ Sample B: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___	Initial Classification: ✓ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: [illegible] Date: 7/27/01 NDA Expert: NA (if NDA is performed) Date: ___ Independent Verifications: Person #1: [illegible] Date: 8-2-01 Person #2: [illegible] Date: 8-2-01 Reclassification: (if needed) ___ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: ___ Date: ___ NDA Expert: ___ (if NDA is performed) Date: ___ Independent Verifications: Person #1: ___ Date: ___ Person #2: ___ Date: ___

Comments:

Approved to Relocate: To ___
Further NCS characterization is required. Item does not contain Singularly-Contingent mass.

NDA Expert #1: ___
Date: ___

NDA Expert #2: ___
Date: ___

I have independently confirmed the identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

I have independently confirmed the destination for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

DOE

LLW

RFD

.Request For Disposal

Document ID Number- 110317

W1. Generator Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WC
Terri Ross	31871	5325	C743T2	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-14	OS-14	☑ Yes ☐ No

W12. Number of Items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachmen
MT007	PGDP	OS-14	OS-14	☑ A ☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen		✓	W27. Friable Asbestos		✓	W30. CERCLA		✓			

Waste Description / Comments

W32. OS-14-007 DMSA110687

Rail flatcar ENRX 855 zone 1

center flatcar

This is to certify that the above named material is properly described and in the stated container, which is in good condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	7-30-01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. PPE Requirements

P5. Container-Labeling Requirements

___ RCRA	___ PCB	___ DET PCB (<50ppm & source <50ppm)	___ RAD	___ DOE
___ FISSILE	___ NCS EXEMPT	___ RD CONFIDENTIAL	___ ACID	___ USEC
___ FLAMMABLE	___ COMBUSTIBLE	___ OXIDIZER	___ BASE	___ WESKEM
___ ASBESTOS	___ REACTIVE	___ TRANSURANIC	___ NON-HAZ	

P6. Additional Handling Instructions

Verify labeling, barcode & verify zone.

Reference FWR	
Origin Date	
PCB Start Date	
RCRA Start Date	

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Butler	34535	8-9-01
P9. Field Supervisor	**Badge**	**Date**	**P10. Data Processing Completed By**	**Badge**	**Date**
Guy Jones	30728	8/9/01	Chris Walker		8-16-01

P11. Waste Item information

Waste Item No. 110317-01

Container No. (Barcode) DMSA 110687

Weight 39,400 lbs

Location and Grid OS-14 3-1

Container Size 1230 CF3

P12. Operator Comments

Low level waste remains in DMSA until DOE approval for LLW remediation.

BJCF-515a (03/01)

DMSA

received 8-1-01

LOW-LEVEL RADIOACTIVE WASTE

ATTACHMENT A

DOCUMENT ID NUMBER 110317

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES ☐ YES ☒ NO	A2. ACTIVE CHELATING AGENTS ☐ YES ☒ NO	A3. TRU RADIOISOTOPES>100 nCi/g ☐ YES ☒ NO	A4. EXPLOSIVE MATERIALS ☐ YES ☒ NO
A5. ETILOGICAL AGENTS ☐ YES ☒ NO	A6. IGNITION SOURCES ☐ YES ☒ NO	A7. FREE LIQUIDS (Unless Wastewater) ☐ YES ☒ NO	A8. RCRA WASTE ☐ YES ☒ NO / A9. TSCA WASTE ☐ YES ☒ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

A11. CHELATING AGENTS ☐ YES ☒ NO	A12. ION EXCHANGE RESINS ☐ YES ☒ NO	A13. DETECTABLE PCB (Concen. And Source <50 ppm) ☐ YES ☒ NO CONC. ppm	A14. WASTEWATER ☐ YES ☒ NO

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO 210	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT ☒ YES ☐ NO	R5. CHEMICAL FORM

OTHER SAMPLE ANALYSIS

DOCUMENT TYPE	DOCUMENT NUMBER
O1. ANALYSIS SAMPLE ID NO.	
02. PROCESS KNOWLEDGE FORM NO.	

RADIATION DATA FROM HEALTH PHYSICS SURVEY SURFACE CONTAMINATION (Data Supplied by HP)

R7. HP SURVEY REQUIRED ☐ YES ☐ NO

R8. TRANSFERABLE (Alpha) dpm/100cm2	R9. FIXED (Alpha) dpm/100cm2
R10. TRANSFERABLE (Beta/Gamma) dpm/100cm2	R11. FIXED (Beta/Gamma) dpm/100cm2
R12. EXTERNAL DOSE/PACKAGE CONTACT MREM/HR	R13. DOSE RATE MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

WASTE ITEM CONTAINER LOG

10. ITEM/CONTAINER		DOCUMENT ID NUMBER
1 OF 1		110317

11 WASTE ITEM ID NO	12 ORIGIN DATE	13 RCRA ACCUMULATION START DATE	14 PCB DATE TO STORAGE
110317-01	7/30/01	N/A	N/A

15. WASTE MATERIAL PLACED IN (Or Removed From) CONTAINER	16. QUANTITY	17. DEPOSITOR INITIAL	17. DEPOSITOR DATE	18. COMMENTS (if Waste is removed from container, then final disposition must be noted.)
rail flatcar ENRX 8.55	1	JR	7/30/01	UMSA-US-14.007 Zone 1

19 CONTAINER ID NO (Barcode)	110 ABSORBENT MATERIALS?	QUANTITY	TYPE	111 NMC&A FORM	112 EST NET VOLUME	113 UNITS
UMS9101687	[ ] YES [X] NO				1280 CF3	

114. GROSS WEIGHT	115. UNITS	116 INNER CONTAINER TYPE	117 OUTER CONTAINER TYPE	118 TANK SEAL NUMBER
39,400 lbs				

119. CONTAINER GENERATOR SIGNATURE	DATE
Jeni Ross	7/30/0

DOE **Material Storage Area (DMSA) Item - NCS Characterization Form**

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION: ^{235}U Assay Analysis	^{235}U Mass Analysis	Subcritical Mass Limits	NDA Radiation Surveys	NCS CLASSIFICATIOS
RFD = 160317 Description: RAIL FLAT CAR ENRX 855 Independent Confirmations: Individual #1: [signature] Date: 7/30/01 Individual #2: [signature] Date: 8-2-01 Other Information: DMSA #: 05-14 Origin: NA	Historical Documentation: NA Process Knowledge: Not Process Equipment Visual Inspections Completed: External Surfaces Inspection Internal Surfaces Inspection Completed By: [signature] Date: 8-2-01	Sample A: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma) Sample B: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma)	Sample A: ___ g ^{235}U Sample B: ___ g ^{235}U	___ kg ^{235}U ___ Moderated Limits ___ Hydrated Limits	Sample A: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___ Sample B: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___	Initial Classification: ✓ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: [signature] Date: 7/27/01 NDA Expert: NA (if NDA is performed) Date: ___ Independent Verifications: Person #1: [signature] Date: 8-2-01 Person #2: [signature] Date: 8-2-01 Reclassification: (if needed) ___ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: ___ Date: ___ NDA Expert: ___ (if NDA is performed) Date: ___ Independent Verifications: Person #1: ___ Date: ___ Person #2: ___ Date: ___

Comments:

Approved to Relocate: To ___
Further NCS characterization is required. Item does not contain Singularly-Contingent mass.

Date: ___

NDA Expert #2 ___
Date: ___

I have independently confirmed the identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

I have independently confirmed the destination for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

DOE

LLW

RFD

Document ID Number 210318

Request For Disposal

Generation Process Information (Completed by Generator)

W1. Generator's Name (Print)	W2. Badge No.	W3. Generator's Phone No.	W3. Mail Stop	W5. Charge No. / WO
Terri Ross	31871	5325	C743T2	

W6. Generator's Company	W7. Corp Owner	W8. Origin Site	W9. Origin Facility	W10. Origin Area	W11. Rad Area?
WESKEM	DOE	PGDP	OS-14	OS-14	☒ Yes ☐ No

W12. Number of Items	W13. Process Category (GCC)	W14. Process Activity Code	W15. AWA Number	W16. Physical Form
1	LEG	A93	N/A	Solid

W17. Material Type(s)	W18. Holding Site	W19. Holding Facility	W20. Holding Area	W21 RFD Attachment
MT007	PGDP	OS14	OS14	☒ A ☐ B ☐ C

Waste Subcategories (Check all that apply)

	Yes	No		Yes	No		Yes	No		Yes	No
W22. Biological		✓	W25. Const. Debris		✓	W28. Non-Friable Asbestos		✓	W31. DMSA	✓	
W23. Accountable		✓	W26. Classified		✓	W29. TRU Waste		✓			
W24. Carcinogen		✓	W27. Friable Asbestos		✓	W30. CERCLA		✓			

Waste Description / Comments

W32. OS-14-008 DMSA 0110688
Rail flatcar ENRX 853
far south car

This is to certify that the above named material is properly described and in the stated container, which is in good condition, marked with the RFD number, content, appropriate generation date, source location, and at the stated location.

W33. Generation Plan No.	W34. Generator's Signature	Date
	Terri Ross	~~8/2/01~~ 7/31/01

Handling / Pickup Information (Completed by Waste Management)

P1. Pick-up Site	P2. Pick-up Facility	P3. Pick-up Room/Area

P4. PPE Requirements

P5. Container-Labeling Requirements

___ RCRA	___ PCB	___ DET PCB (<50ppm & source <50ppm)	___ RAD	___ DOE
___ FISSILE	___ NCS EXEMPT	___ RD CONFIDENTIAL	___ ACID	___ USEC
___ FLAMMABLE	___ COMBUSTIBLE	___ OXIDIZER	___ BASE	___ WESKEM
___ ASBESTOS	___ REACTIVE	___ TRANSURANIC	___ NON-HAZ	

P6. Additional Handling Instructions

Verify labeling, barcode & verify zone

Reference FWR

Origin Date

PCB Start Date

RCRA Start Date

P7. Waste Coordinator (Issued By)	Badge	Date	P8. Disposal/Storage Completed By	Badge	Date
Terri Ross	31871	8/6/01	Martha Buckler	34535	8-9-01
P9. Field Supervisor	Badge	Date	P10. Data Processing Completed By	Badge	Date
Guy Jones	30728	8/9/01	Chris Walker		8-16-01

P11. Waste Item Information

Waste Item No. 110318-01
Container No. (Barcode) DMSA 0110688
Weight 38,600 lbs
Location and Grid OS-14 3-1
Container Size 1280 CF3

P12. Operator Comments

Low level waste remains in DMSA until DOE approval for LLW remediation.

BJCF-515a (03/01)

DMSA

received 8-1-01

LOW-LEVEL RADIOACTIVE WASTE

ATTACHMENT A

DOCUMENT ID NUMBER 110318

A1. PYROPHORIC MATERIALS -OTHER THAN RADIOACTIVE FORMS OF ISOTOPES	A2. ACTIVE CHELATING AGENTS	A3. TRU RADIOISOTOPES >100 nCi/g	A4. EXPLOSIVE MATERIALS
☐ YES ☑ NO	☐ YES ☑ NO	☐ YES ☑ NO	☐ YES ☑ NO

A5. ETILOGICAL AGENTS	A6. IGNITION SOURCES	A7. FREE LIQUIDS (Unless Wastewater)	A8. RCRA WASTE	A9. TSCA WASTE
☐ YES ☑ NO	☐ YES ☑ NO	☐ YES ☑ NO	☐ YES ☑ NO	☐ YES ☑ NO

A10. WASTE VARIANCE REQUEST NUMBER(S)

A11. CHELATING AGENTS	A12. ION EXCHANGE RESINS	A13. DETECTABLE PCB (Concen. And Source <50 ppm) CONC.	A14. WASTEWATER
☐ YES ☑ NO	☐ YES ☑ No	☐ YES ☑ NO ppm	☐ YES ☑ NO

RADIOISOTOPE DETERMINATION METHOD

DOCUMENT TYPE	DOCUMENT NUMBER
R1. ANALYSIS SAMPLE ID NO.	
R2. PROCESS KNOWLEDGE FORM NO 210	

R3. FISSILE CONTENT (Wt% U-235)	R4. GRAMS U-235	R5. NCS EXEMPT	R5. CHEMICAL FORM
		☑ YES ☐ NO	

DOCUMENT TYPE	DOCUMENT NUMBER
01. ANALYSIS SAMPLE ID NO.	
02. PROCESS KNOWLEDGE FORM NO.	

RADIATION DATA FROM HEALTH PHYSICS SURVEY SURFACE CONTAMINATION (Data Supplied by HP)

R7. HP SURVEY REQUIRED ☐ YES ☐ NO

R8. TRANSFERABLE (Alpha)	R9. FIXED (Alpha)
dpm/100cm2	dpm/100cm2
R10. TRANSFERABLE (Beta/Gamma)	R11. FIXED (Beta/Gamma)
dpm/100cm2	dpm/100cm2

R13. DOSE

MREM/HR	MREM/HR @ METERS (B/G)
R14. HP SIGNATURE	R15. SURVEY NUMBER

WASTE ITEM CONTAINER LOG

10. ITEM/CONTAINER	OF	DOCUMENT ID NUMBER
1		110318

11 WASTE ITEM ID NO	12 ORIGIN DATE	13 RCRA ACCUMULATION START DATE	14 PCB DATE TO STORAGE
110318-01	1/30/01	N/A	N/A

15. WASTE MATERIAL PLACED IN (Or Removed From) CONTAINER	16. QUANTITY	17. DEPOSITOR INITIAL	17. DEPOSITOR DATE	18. COMMENTS (If Waste is removed from container, then final disposition must be noted.)
rail flatcar ENRX 853 far south car	1	JR	7/30/01	OS-14-008 zone 1

19. CONTAINER ID NO. (Barcode)	110. ABSORBENT MATERIALS? QUANTITY TYPE	111. NMC&A FORM	112. EST. NET VOLUME	113 UNITS
DMSA0110688	☐ YES ☒ NO		1280 CF3	

114. GROSS WEIGHT	115. UNITS	116. INNER CONTAINER TYPE	117. OUTER CONTAINER TYPE	118 TANK SEAL NUMBER
38,600 lbs				

119. CONTAINER GENERATOR SIGNATURE	DATE
Jim Ross	7/30/01

DOE **Material Storage Area (DMSA)** Item - **NCS Characterization** Form

ITEM	INITIAL CHARACTERIZATION	ANALYTICAL CHARACTERIZATION: ^{235}U Assay Analysis	^{235}U Mass Analysis	Subcritical Mass Limits	NDA Radiation Surveys	NCS CLASSIFICATION
RFD # 110318 Description: RAIL FLATCAR ENTRX-853 Independent Confirmations: Individual #1: [illegible] Date: 7/30/01 Individual #2: [illegible] Date: 8-2-01 Other Information: Bldg./Col.: DMSA 05 14 DMSA #: 05-14 Origin NA	Historical Documentation: NA Process Knowledge: Not Process EQUIPMENT Visual Inspections Completed: ✓ External Surfaces Inspection ✓ Internal Surfaces Inspection Completed By: [illegible] Date: 8-2-01	Sample A: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma) Sample B: ___ % ^{235}U ___ 1 sigma (% ^{235}U) ___ 2 sigma (% ^{235}U) ___ Total (^{235}U + 2 sigma)	Sample A: ___ g ^{235}U Sample B: ___ g ^{235}U	___ kg ^{235}U ___ Moderated Limits ___ Hydrated Limits	Sample A: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___ Sample B: Date & Time Performed: __/__/__ __am __pm Date & Time Results Rec'd: __/__/__ __am __pm Assumed Assay: ___ % ^{235}U Mass: ___ g ^{235}U Submitted By: ___ Date: ___	Initial Classification: ✓ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: [illegible] Date: 7/27/01 NDA Expert: NA (if NDA is performed) Date: ___ Independent Verifications: Person #1: Date: ___ Person #2: ___ Final classification: (if needed) ___ NCS-Exempt ___ Spacing-Controlled ___ Singularly-Contingent DMSA Inspector: ___ Date: ___ NDA Expert: ___ (if NDA is performed) Date: ___ Independent Verifications: Person #1: ___ Date: ___ Person #2: ___ Date: ___

Comments:

Approved to Relocate: To ___
Further NCS characterization is required. Item does not contain Singularly-Contingent mass.

NDA Expert #1: ___
Date: ___

NDA Expert #2: ___
Date: ___

I have independently confirmed the identification and description for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

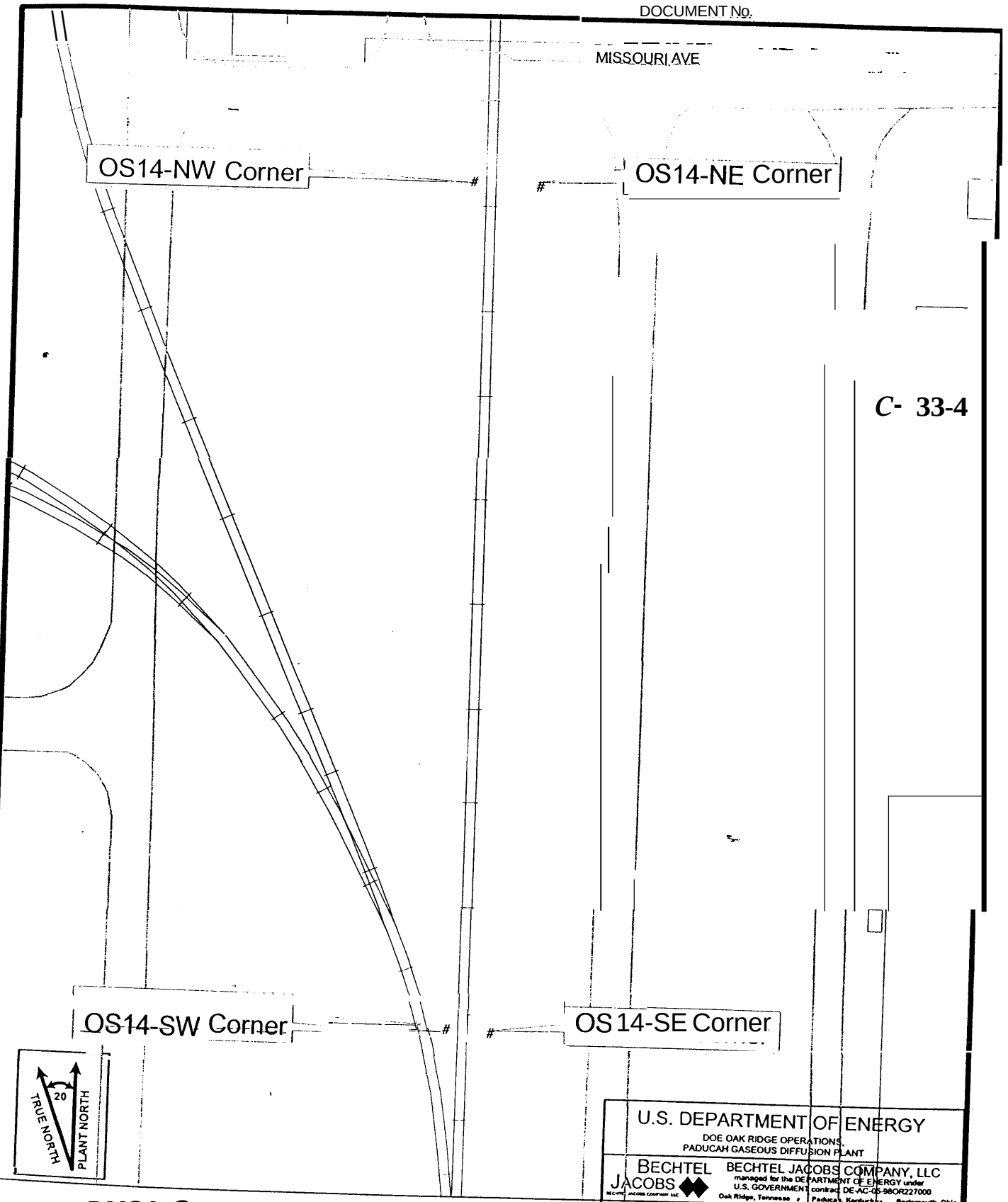
I have independently confirmed the destinrtion for this NCS-Exempt or Spacing-Controlled Item against the written instructions and find this information to match.

Independent Person #1: ___
Date: ___

Independent Person #2: ___
Date: ___

GLOBAL POSITIONING SYSTEM

DOCUMENT No.



C- 33-4

U.S. DEPARTMENT OF ENERGY
DOE OAK RIDGE OPERATIONS,
PADUCAH GASEOUS DIFFUSION PLANT

BECHTEL JACOBS
BECHTEL JACOBS COMPANY, LLC
managed for the DEPARTMENT OF ENERGY under
U.S. GOVERNMENT contract DE-AC-05-98OR227000
Oak Ridge, Tennessee · Paducah, Kentucky · Portsmouth, Ohio

DMSA OS-14 Outline of 4 Corners

BECHTEL JACOBS

FIGURE! No. c5ac90003sk03.apr

DATE 07-23-01

SME INSPECTION

SAMPLING SUMMARY (OS-14) 8-06-01

RFD NUMBER	DMSA	CONTENTS	FROM ZONE	TO ZONE	RCRA CHAR	RCRA METAL	RCRA VOA	RCRA SVOA	PCB	ASB	WIPE	LIQUID	SOLID	SLUDGE	NO SAMPLING REQUIRED	NCS CONTROLLED	Comments
110310	OS-14-009	HOSE T)N RAIL ATMX16612	1	1											X		
110311	OS-14-001	RAILCAR ATMX 16612 WIDTH ,TANKS, DV/44, CV-76 &CV58	1	1											X		Inspected by WESKEM Tanks are empty
110312	OS-14-002	RAIL TANKCAR OROX-7 (1102), FAR SOUTH RAILCAR	1	1											X		Inspected by WESKEM Tanks are empty.
110313	OS-14-003	RAIL TANKCAR OROX-1606 (1103), 2ND CAR FROM FAR SOUTHEND	1	1											X		iInspected by WESKEM. Tanks are empty
110314	OS-14-004	RAIL TANKCAR OROX 1600 (1101), 3RD RAILCAR FROM SOUTH	1	1											X		Inspected by WESKEM Tanks are empty.
110315	OS-14-005	RAIL TANKCAR OROX 1607 (1104), FAR NORTH RAIL TANKCAR	1	1											X		Inspected by WESKEM Tanks are empty
110316	OS-14-006	RAIL FLATCAR ENRX 850, FAR NORTH FLATCAR	1	1											X		
110317	OS-14-007	RAIL FLATCAR ENRX 855, CENTER FLATCAR	1												X		
110318	OS-14-008	RAIL FLATCAR ENRX 853, FAR SOUTH CAR	1	1											X		

08/14/01

HP SURVEY

Radiation Survey Form

Survey No.: 01-ER-1125-S Date: 8-9-01 Time: 1405 RWP NO: NA

COPY

Location of Survey – General (Site/Bldg.)/Specific (Room/Area): Outside DMSA-14

Purpose of Survey: Characterization (General Area & Dose Rate) Material Description: (Area Around & Rail Cars)

Technician: John McGee Badge: 636100 Technician: VINCENT L. PIKE Badge: 489374

MODEL #: Bicron Micro-R	INST #: B342V	PROBE NO.: N/A	CAL DUE DATE: 12-21-01	BCF: LLD- 2 uR/hr			
MODEL #: Eberline ESP	INST #: 3412	PROBE NO.: SPA-8	CAL DUE DATE: 12-4-01	BCF: NA			
MODEL #: N/A	INST #: N/A	PROBE NO.: N/A	CAL DUE DATE: N/A	BCF: N/A			
MODEL #: N/A	INST #: N/A	PROBE NO.: N/A	CAL DUE DATE: N/A	BCF: N/A			

	Beta				Gamma				Neutron	
Survey Location or Number (Provide sketch or provide description of location)	Background (µR/hr) or (mR/hr)	β & γ Open Window (mR/hr)	γ Closed Window (mR/hr)	(Open-Closed) X BCF (mrad/hr)	Contact (µR/hr) or (mR/hr)	@ 30 cm (µR/hr) or (mR/hr)	@ 1 meter (µR/hr) or (mR/hr)	General Area (µR/hr) or (mR/hr)	Contact (mrem/hr)	General Area Or @30 cm (mrem/hr)
				N/A						

Comments See map (page 2) for all Survey results. N/A

PAD/RCO-082 (Page 1 of 2) Rev.1 (2/01)

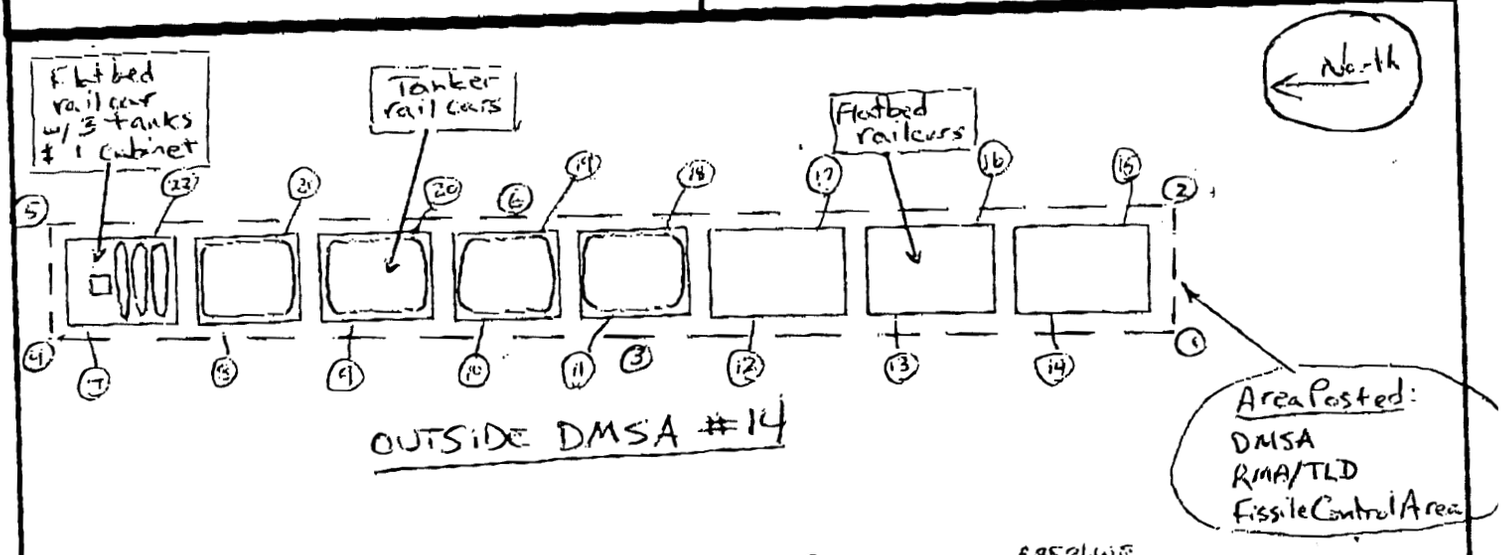
HP Supervisor Review: _____ / _____
Signature/ Date

RADIOLOGICAL SURVEY MAP FORM

COPY

SEC RADCON

SURVEY MAP	SURVEY NO.: 01 - 68 - 1125 - 5



Survey Location	Bicron Micro Rem	Eberline ESP w/SPA-3	Survey location	Bicron Micro-Rem	Eberline ESP w/SPA-3
1	12 μR/hr	14400 cpm	12	6 μR/hr	12600 cpm
2	13 μR/hr	15900 cpm	13	8 μR/hr	14500 cpm
3	11 μR/hr	8280 cpm	14	10 μR/hr	17400 cpm
4	7 μR/hr	7070 cpm	15	11 μR/hr	19300 cpm
5	6 μR/hr	7200 cpm	16	9 μR/hr	15900 cpm
6	7 μR/hr	7410 cpm	17	7 μR/hr	13900 cpm
7	2 μR/hr	6550 cpm	18	6 μR/hr	5200 cpm
8	4 μR/hr	7500 cpm	19	7 μR/hr	3970 cpm
9	5 μR/hr	8010 cpm	20	5 μR/hr	6100 cpm
10	5 μR/hr	6500 cpm	21	4 μR/hr	4920 cpm
11	7 μR/hr	7590 cpm	22	6 μR/hr	3300 cpm

Radiological Survey Form

Survey No.: 01-ER-1064-5 Date: 7/31/01 Time: 1600 RWP NO: N/A

Location of Survey – General (Site/Bldg.)/Specific (Room/Area): O/S 14 DMSA

Purpose of Survey: Investigative

Material Description: N/A

Technician: John Gaw / John Gaw Badge: 635941 Technician: N/A Badge:

Model #: Ludlum 2221 α	Serial #: 95435	Cal. due date: 04/03/02	Probe Model #: 43-5	CF Pt.: 7.28	CF Plane: 14.56		
Model #: Ludlum 12 BX	Serial #: 168804	Cal. due date: 03/21/02	Probe Model #: 44-9	CF Pt.: 5.29	CF Plane: 34.15		
Model #:	Serial #:	Cal. due date:	Probe Model #:	CF Pt.:	CF Plane:		
Model #: N/A	Serial #: N/A	Cal. due date: N/A	Probe Model #: N/A	CF Pt.: N/A	CF Plane: N/A		
Model #:	Serial #:	Cal. due date:	α CF: N/A	β/γ CF:			
Model #: Ludlum 2929	Serial #: 126141	Cal. due date: 12/22/01	α CF: 2.81	β/γ CF: 2.89			

Tennelec: Yes ____ No ✓ (If yes, see attached results)

Smear or Item No.	Sample Location	BKGD α / L_c	Removable α dpm/100cm²	BKGD α / L_c	Total α dpm/100cm²	BKGD β/γ / L_c	Removable β,γ dpm/100cm²	BKGD β/γ / L_c	Total β,γ dpm/100cm²	Remarks
1-4	RFD 110312-01	0 / 2.93	<Lc	1 / 26.67	<Lc	72 / 57.22	<Lc	50 / 562.56	<Lc	N/A
5	RFD 110312-01				335					
6-10	RFD 110313-01				<Lc					
11-15	RFD 110314-01									
16-19	RFD 110315-01									
20	RFD 110315-01				160					

NP

COMMENTS: This survey was done N/A

Released to:

PAD/RCO-081 (Page 1 of 3) Rev. 1 (2101) 01)

HP Supervisor Review: Signature/ Date

Signature/ Date

COPY

IH SAMPLING DATA

Joycelyn Lightfoot

From: Chris Wagner [CWagner@weskem.com]
Sent: Thursday, August 16,2001 3:29 PM
To: Jerome Ellington (E-mail)
Cc: David Hayden (E-mail); Joycelyn Lightfoot (E-mail)
Subject: OS-14 IH Sampling

Jerome,

The only IH data collected at OS-14 was direct reading measurements (O2, CO, H2S, LEL, VOC) inside the tank cars. No other sampling was performed because this is an outside, well ventilated area with little or no exposure potential.

Chris