



N3B-Los Alamos
 1200 Trinity Drive, Suite 150
 Los Alamos, New Mexico 87544
 (505) 257-7690



Environmental Management
 Los Alamos Field Office
 P.O. Box 1663, MS M984
 Los Alamos, New Mexico 87545
 (505) 257-7950/FAX (505) 606-2132

Date: **MAR 02 2020**
 Refer To: N3B-20-0043

James Sales
 Regional PCB Coordinator (6PD)
 U.S. Environmental Protection Agency, Region 6
 1201 Elm Street, Suite 500
 Dallas, TX 75270-2102

Subject: Disposal of Polychlorinated Biphenyl Remediation Waste Subject to an Extension to the 180-day Storage Requirement and Exemption from Two Inspections Pursuant to 40 Code of Federal Regulations 761.65(a)(4)

Reference: U.S. Environmental Protection Agency letter to F. Lockhart and A.Q. Duran, "Request for extension to the 180-day storage requirement and exemption from two inspection requirements of Polychlorinated Biphenyl (PCB) remediation waste pursuant to 40 CFR § 761.61.a," dated April 10, 2019

Dear Mr. Sales:

The purpose of this letter is to update you on the status of the polychlorinated biphenyl (PCB) remediation waste that was the subject of an extension to the 180-day storage requirement and an exemption from two inspection requirements issued to the U.S. Department of Energy (DOE) and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) by the U.S. Environmental Protection Agency (EPA), Region 6, on April 10, 2019. The waste in question was generated in September 2018 from an EPA-approved 40 Code of Federal Regulations 761.61(a) cleanup project at Technical Area 02 in Middle Los Alamos Canyon (Solid Waste Management Unit 02-014) at Los Alamos National Laboratory (LANL) in Los Alamos, New Mexico. The referenced extension and inspection exemptions were necessary because of site access restrictions attributable to an unusually heavy snowfall in the winter of 2019, followed by the Mexican spotted owl breeding season. The PCB wastes, which were subject to the extension and inspection exemptions, consisted of 56 U.S. Department of Transportation-approved industrial package containers, each 5.5 yd³ in volume.

All of the PCB remediation waste subject to EPA's April 10, 2019, disposal extension and inspection exemptions has been removed from LANL and disposed of by landfill at Energy Solutions, LLC, in Clive, Utah. A summary of disposal documentation for this waste is provided in Table 1. Hazardous waste manifests and certificates of disposal for 56 containers are provided in Enclosure 1.

Table 1
Disposal Summary for 56 Containers of PCB Remediation Waste

Hazardous Waste Manifest No.	Shipment Number	Transport Date	Energy Solutions Arrival Date	WCATS* No.	Number of Bags	Weight (kg)	Volume (yd ³)	Disposal Date
010505590FLE	9705-02-0015	7/22/2019	7/23/2019	W848195	1	4622	297	7/29/2019
				W848196	1	4116		
010505589FLE	9705-02-0014	7/22/2019	7/23/2019	W848194	1	4296	594	7/29/2019
				W848197	1	3964		
				W848198	1	4432		
				W848381	1	3323		
010505588FLE	9705-02-0013	7/22/2019	7/23/2019	W848199	1	4423	594	7/29/2019
				W848200	1	4300		
				W848201	1	4450		
				W848202	1	4434		
010505587FLE	9705-02-0012	7/22/2019	7/23/2019	W848203	1	3890	594	7/29/2019
				W848204	1	4323		
				W848205	1	4239		
				W848206	1	4239		
010505586FLE	9705-02-0011	7/22/2019	7/23/2019	W848207	1	4316	594	7/29/2019
				W848208	1	4749		
				W848209	1	4586		
				W848210	1	4720		
010505579FLE	9705-02-0010	7/16/2019	7/18/2019	W848211	1	4658	594	7/23/2019
				W848212	1	4531		
				W848213	1	4540		
				W848214	1	4969		
010505578FLE	9705-02-0009	7/16/2019	7/18/2019	W848215	1	5044	445.5	7/23/2019
				W848216	1	4928		
				W848217	1	4969		
010505577FLE	9705-02-0008	7/16/2019	7/18/2019	W848218	1	4906	445.5	7/23/2019
				W848219	1	4906		
				W848220	1	4953		
010505576FLE	9705-02-0007	7/16/2019	7/18/2019	W848221	1	5096	445.5	7/23/2019
				W848222	1	5087		
				W848223	1	4992		
010505574FLE	9705-02-0006	6/26/2019	6/27/2019	W848227	1	4500	594	6/28/2019
				W848226	1	4350		
				W848225	1	4445		
				W848224	1	4849		

Hazardous Waste Manifest No.	Shipment Number	Transport Date	Energy Solutions Arrival Date	WCATS* No.	Number of Bags	Weight (kg)	Volume (yd³)	Disposal Date
010505572FLE	9705-02-0005	6/26/2019	6/27/2019	W848228	1	4212	594	6/28/2019
				W848229	1	4307		
				W848230	1	3797		
				W848231	1	3785		
010505557FLE	9705-02-0004	6/27/2019	6/28/2019	W848233	1	3479	594	7/23/2019
				W848234	1	4423		
				W848235	1	4472		
				W848232	1	3402		
010505573FLE	9705-02-0003	6/26/2019	6/27/2019	W848236	1	4187	594	6/28/2019
				W848237	1	4234		
				W848238	1	4218		
				W848239	1	3905		
010505551FLE	9705-02-0002	6/12/2019	6/14/2019	W848240	1	3636	742.5	6/28/2019
				W848241	1	3270		
				W848242	1	4094		
				W848243	1	3685		
				W848244	1	4071		
010505550FLE	9705-02-0001	6/12/2019	6/14/2019	W848245	1	3978	594	6/28/2019
				W848246	1	4377		
				W848247	1	4722		
				W848248	1	4677		
TOTAL					56	244,076		

*WCATS = Waste Compliance and Tracking System.

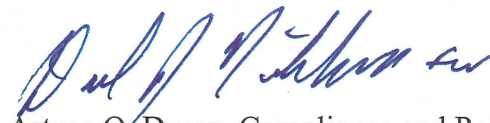
If you have any questions, please contact Jennifer von Rohr at (505) 695-4365 (jennifer.vonrohr@em-la.doe.gov) or Arturo Duran at (505) 257-7907 (arturo.duran@em.doe.gov).

Sincerely,



Elizabeth Lowes
Program Manager
Environment, Safety and Health
N3B-Los Alamos

Sincerely,



Arturo Q. Duran, Compliance and Permitting Manager
Office of Quality and Regulatory Compliance
Environmental Management
Los Alamos Field Office

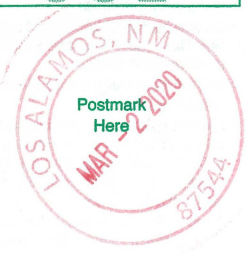
Enclosure(s): One hard copy:

1. Certificates of Disposal and Shipment Manifests for 56 Containers of PCB Remediation Waste

cc (letter and enclosure[s] emailed):

Arturo Duran, EM-LA
 David Nickless, EM-LA
 Cheryl Rodriguez, EM-LA
 William Alexander, N3B
 Brenda Bowlby, N3B
 Emily Day, N3B
 Ron DeSotel, N3B
 Mary Erwin, N3B
 Ellen Gammon, N3B
 Debby Holgerson, N3B
 Kim Lebak, N3B
 Joseph Legare, N3B
 Dana Lindsay, N3B
 Frazer Lockhart, N3B
 Elizabeth Lowes, N3B
 Pamela Maestas, N3B
 Jason Moore, N3B
 Glenn Morgan, N3B
 Joseph Noll, N3B
 Gerald O'Leary, N3B
 Gary Pool, N3B
 Ben Roberts, N3B
 Bradley Smith, N3B
 Tashia Vigil, N3B
 Jennifer von Rohr, N3B
 emla.docs@em.doe.gov
 n3brecords@em-la.doe.gov
 Public Reading Room (EPRR)
 PRS Website

7019 0700 0001 6963 8359

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
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Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy) \$	
☐ Return Receipt (electronic) \$	
☐ Certified Mail Restricted Delivery \$	
☐ Adult Signature Required \$	
☐ Adult Signature Restricted Delivery \$	
Postage \$	
Total Postage and Fees \$	
Sent To James Sales Regional PCB Coordinator US EPA	
Street and Apt. No., or PO Box No. 1201 Elm Street Suite 500	
City, State, ZIP+4® Dallas, TX 75270-2102	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

Enclosure 1

*Certificates of Disposal and Shipment Manifests for
56 Containers of PCB Remediation Waste*

CERTIFICATE OF DISPOSAL

3 miles South, Exit 49, I-80
Clive, Utah 84029
EPA ID: UTD982598898

N3B Los Alamos,

This certificate acknowledges that the following manifested shipments have been disposed of as listed below:

<u>Shipment</u>	<u>Manifest</u>	<u>Disposal Date</u>	<u>Volume (Cu/Ft)</u>	<u>Process</u>	<u>Disposal Location</u>
9705-02-0001	5550	06/28/2019	594.0	Landfill	Mixed Waste
9705-02-0002	5551	06/28/2019	742.5	Landfill	Mixed Waste
9705-02-0003	05573	06/28/2019	594.0	Landfill	Mixed Waste
9705-02-0005	05572	06/28/2019	594.0	Landfill	Mixed Waste
9705-02-0006	05574	06/28/2019	594.0	Landfill	Mixed Waste

The total volume above represents the cubic feet of waste disposed of at EnergySolutions' Disposal Facility Landfill. Disposal is subject to EnergySolutions' Radioactive Material License, all other applicable licenses, permits and regulations, and the Disposal Agreement.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identification section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.



Brian Beynon
Jul 2 2019 11:28 AM

Brian Beynon
Operations Manager

cosign
Date

CERTIFICATE OF DISPOSAL

3 miles South, Exit 49, I-80
Clive, Utah 84029
EPA ID: UTD982598898

N3B Los Alamos,

This certificate acknowledges that the following manifested shipments have been disposed of as listed below:

<u>Shipment</u>	<u>Manifest</u>	<u>Disposal Date</u>	<u>Volume (Cu/Ft)</u>	<u>Process</u>	<u>Disposal Location</u>
9705-02-0004	5557	07/23/2019	594.0	Landfill	Mixed Waste
9705-02-0007	05576	07/23/2019	445.5	Landfill	Mixed Waste
9705-02-0008	05577	07/23/2019	445.5	Landfill	Mixed Waste
9705-02-0009	05578	07/23/2019	445.5	Landfill	Mixed Waste
9705-02-0010	05579	07/23/2019	594.0	Landfill	Mixed Waste

The total volume above represents the cubic feet of waste disposed of at EnergySolutions' Disposal Facility Landfill. Disposal is subject to EnergySolutions' Radioactive Material License, all other applicable licenses, permits and regulations, and the Disposal Agreement.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identification section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.



Brian Beynon
Jul 25 2019 10:03 AM

cosign

Brian Beynon
Operations Manager

Date

CERTIFICATE OF DISPOSAL

3 miles South, Exit 49, I-80
Clive, Utah 84029
EPA ID: UTD982598898

N3B Los Alamos,

This certificate acknowledges that the following manifested shipments have been disposed of as listed below:

<u>Shipment</u>	<u>Manifest</u>	<u>Disposal Date</u>	<u>Volume (Cu/Ft)</u>	<u>Process</u>	<u>Disposal Location</u>
9705-02-0011	05586	07/29/2019	594.0	Landfill	Mixed Waste
9705-02-0012	05587	07/29/2019	594.0	Landfill	Mixed Waste
9705-02-0013	05588	07/29/2019	594.0	Landfill	Mixed Waste
9705-02-0014	05589	07/29/2019	594.0	Landfill	Mixed Waste
9705-02-0015	05590	07/29/2019	297.0	Landfill	Mixed Waste

The total volume above represents the cubic feet of waste disposed of at EnergySolutions' Disposal Facility Landfill. Disposal is subject to EnergySolutions' Radioactive Material License, all other applicable licenses, permits and regulations, and the Disposal Agreement.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identification section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.

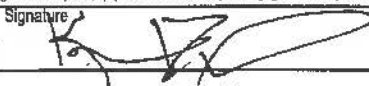
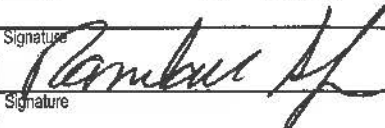
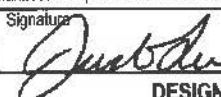


Brian Beynon
Aug 8 2019 2:33 PM

Brian Beynon
Operations Manager

Date

cosign

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NM0890010515	2. Page 1 of + 2	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505550 FLE
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 Generator's Phone: 5056656347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544		
6. Transporter 1 Company Name Hittman Transportation Services, Inc. (TN2)				U.S. EPA ID Number TNR 000034686 TND987783063	
7. Transporter 2 Company Name				U.S. EPA ID Number	
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155				U.S. EPA ID Number UTD982598898	
9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type	11. Total Quantity
x 1		RD, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA	3978
x 2		RD, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA	4377
x 3		RD, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA	4722
x 4		RD, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA	4677
14. Special Handling Instructions and Additional Information L 1 47049, W848245, 171 L 2 47049, W848246, 171 L 3 47049, W848247, 171 L 4 47049, W848248, 171				See PCB Attachment Page for additional information (page 2)	
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name KAREN DEWEES-LEE				Signature 	Month Day Year 6/12/19
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:					
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: Randall Salyer Signature:  Month Day Year: 6/12/19 Transporter 2 Printed/Typed Name: Signature: Month Day Year:					
18. Discrepancy 18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Manifest Reference Number:					
18b. Alternate Facility (or Generator)				U.S. EPA ID Number	
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)				Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. H132		2. H132		3. H132	
4. H132					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name: Justin Lee Signature:  Month Day Year: 6/14/19					

FORM 540		EnergySolutions, LLC		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 107674		7. FORM 540 AND 540A FORM 541 AND 541A FORM 542 AND 542A ADDITIONAL INFORMATION		PAGE 1 OF 1 PAGE(S) 2 PAGE(S) None PAGE(S) None PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0001							
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				Utah Generator Site Access Permit No. 1805010603		SHIPMENT NUMBER 1882892/107674		9. CONSIGNEE - Name and Facility Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029		CONTACT Security Department Shipping and Receiving TELEPHONE (801)-649-2175									
1. EMERGENCY TELEPHONE NUMBER 505-667-6211				CONTACT KAREN DEWEES-LEE		TELEPHONE NUMBER (Include Area Code) 5052317838		SIGNATURE Authorized consignee acknowledging waste receipt PRO 9043		DATE 6/14/19									
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO				3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST 4		6. CARRIER - Name and Address Hittman Transportation Services, Inc. (TN1) 1560 Bear Creek Road Oak Ridge, TN 37830		EPA I.D. NUMBER 1805010603		10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.									
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number =====>				EPA MANIFEST NUMBER 010505550FLE		CONTACT Marsha Berardo		TELEPHONE (801) 649-2087		AUTHORIZED SIGNATURE Shipper		DATE 5/12/19							
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)				12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES		16. TOTAL PACKAGE ACTIVITY MBq mCi		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		5.7638E+00 1.5578E-01		NA		3978.0053 KGS; 4.2051 M3		W848245-	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.3843E+00 1.7255E-01		NA		4377.1667 KGS; 4.2051 M3		W848246-	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.9203E+00 1.8704E-01		NA		4721.8969 KGS; 4.2051 M3		W848247-	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.8497E+00 1.8513E-01		NA		4876.5376 KGS; 4.2051 M3		W848248-	
FOR CONSIGNEE USE ONLY				Record Waste Description Inadequate Contamination or Leakage Detected Unexpected Exposure Rates Detected Labels, Markings, etc. Inadequate Container Integrity Inadequate Other ☒ No Violations Detected on this Shipment				20. TERMS AND CONDITIONS A. HAZARDOUS MATERIALS Generator represents & warrants that Waste Material is (or) is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1 B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC C. WASTE MATERIAL Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions LLC's facility license D. INDEMNIFICATION Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters											

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NH0890010515	2. Page 1 of 3	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505551 FLE
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 Generator's Phone: 505-665-6347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544		
6. Transporter 1 Company Name Hittman Transportation Services, Inc. (TN2)			U.S. EPA ID Number: TNR 000034636 TND987783065 <i>6/14/19</i>		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 Facility's Phone: 4358840155			U.S. EPA ID Number UTD982598898		
GENERATOR	9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers
					No. Type
	x	1	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA
	x	2	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA
	x	3	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA
	x	4	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA
11. Total Quantity					12. Unit Wt./Vol.
3636					K
3270					K
4094					K
3685					K
13. Waste Codes					
14. Special Handling Instructions and Additional Information 1.1 47049, W848240, 171 1.2 47049, W848241, 171 1.3 47049, W848242, 171 1.4 47049, W848243, 171 See PCB Attachment Page for additional information (page 3)					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name KAREN DEWEES-LEE			Signature <i>Karen Dewees-Lee</i>		Month Day Year 16 11 2019
TRANSPORTER	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:				
	Transporter signature (for exports only):				
	17. Transporter Acknowledgment of Receipt of Materials				
	Transporter 1 Printed/Typed Name PAULY LEWIS		Signature <i>Paul Lewis</i>		Month Day Year 16 12 18
	Transporter 2 Printed/Typed Name		Signature		Month Day Year
DESIGNATED FACILITY	18. Discrepancy				
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection				
	Manifest Reference Number:				
	18b. Alternate Facility (or Generator) U.S. EPA ID Number				
	Facility's Phone:				
	18c. Signature of Alternate Facility (or Generator)				Month Day Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. H132		2. H132		3. H132	
				4. H132	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name Justin Lee			Signature <i>Justin Lee</i>		Month Day Year 16 14 19

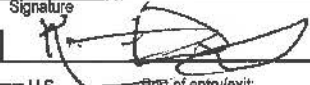
DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

FORM 540		EnergySolutions, LLC		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 800 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 107675 / 1882893		7. FORM 540 AND 540A FORM 541 AND 541A FORM 542 AND 542A ADDITIONAL INFORMATION		PAGE 1 OF 1 PAGE(S) 3 PAGE(S) None PAGE(S) None PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0002							
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				Utah Generator Site Access Permit No 1805010563		SHIPMENT NUMBER 1882893		9. CONSIGNEE - Name and Facility Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029		CONTACT Security Department		TELEPHONE (Include Area Code) (801) 649-2175							
EMERGENCY TELEPHONE NUMBER 505-567-5211				CONTACT KAREN DEWEES-LEE		TELEPHONE NUMBER (Include Area Code) 5052317838		SIGNATURE Authorized consignee acknowledging waste receipt		DATE 6/14/19		10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.							
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☒ YES ☐ NO		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST 5		6. CARRIER - Name and Address Hittman Transportation Services, Inc. (TN1) 1550 Bear Creek Road Oak Ridge, TN 37830		EPA I.D. NUMBER TN855783555		SHIPPING DATE 06/19/2019		TELEPHONE (Include Area Code) (801) 649-2087		DATE 6/12/19							
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number =====>		EPA MANIFEST NUMBER 010605551FLE		CONTACT Marsha Bernardo		SIGNATURE Authorized carrier acknowledging waste receipt		DATE 6/12/19		AUTHORIZED SIGNATURE		TITLE Shipper							
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)				12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES		16. TOTAL PACKAGE ACTIVITY MBq mCi		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		5.2311E+00 1.4138E-01		NA		3635.543 KGS; 4.205 M3		W848240	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		4.6635E+00 1.2604E-01		NA		3270.401 KGS; 4.205 M3		W848241	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		5.9436E+00 1.6064E-01		NA		4093.671 KGS; 4.205 M3		W848242	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		5.3088E+00 1.4348E-01		NA		3685.438 KGS; 4.205 M3		W848243	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		5.9083E+00 1.5968E-01		NA		4070.992 KGS; 4.205 M3		W848244	
FOR CONSIGNEE USE ONLY				20. TERMS AND CONDITIONS															
Record Waste Description Inadequate Contamination or Leakage Detected Unexpected Exposure Rates Detected Labels, Markings, etc. Inadequate Container Integrity Inadequate Other ☒ No Violations Detected on this Shipment				A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material ☒ is (or) ☐ is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1. B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC. C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions LLC's facility license. D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST), or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.															

* 1 0 7 8 1 9 *

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

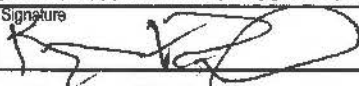
Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NH0890010515	2. Page 1 of 1	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505573 FLE				
5. Generator's Name and Mailing Address ATTR: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 500 Sixth Street, MS E527 Los Alamos, NM 87544 Generator's Phone: 5056656347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544						
6. Transporter 1 Company Name Hittman Transportation Services, Inc. (TN3)				U.S. EPA ID Number TNR000034686					
7. Transporter 2 Company Name				U.S. EPA ID Number					
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155				U.S. EPA ID Number UTD982598898					
Facility's Phone:									
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type	11. Total Quantity	12. Unit Wt/Vol.	13. Waste Codes		
x 1	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III			1 BA	4187	K			
x 2	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III			1 BA	4234	K			
x 3	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III			1 BA	4218	K			
x 4	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III			1 BA	3905	K			
14. Special Handling Instructions and Additional Information 1.1 47049, W848236, 171 1.2 47049, W848237, 171 1.3 47049, W848238, 171 1.4 47049, W848239, 171				See PCB Attachment page for additional information (page 2) 9705-02-0003					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Offor's Printed/Typed Name KAREN DEWEES-LEE				Signature 		Month Day Year 6 26 19			
16. International Shipments ☐ Import to U.S. ☐ Export from U.S.				Port of entry/exit: Date leaving U.S.:					
Transporter signature (for exports only):									
17. Transporter Acknowledgment of Receipt of Materials									
Transporter 1 Printed/Typed Name SH 4/24/19 Theo Eaton Destina Carr				Signature 		Month Day Year 6 26 19			
Transporter 2 Printed/Typed Name				Signature		Month Day Year			
18. Discrepancy									
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection									
Manifest Reference Number:									
18b. Alternate Facility (or Generator)								U.S. EPA ID Number	
Facility's Phone:									
18c. Signature of Alternate Facility (or Generator)								Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1. H132		2. H132		3. H132		4. H132			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a									
Printed/Typed Name Albert Eums				Signature 		Month Day Year 6 27 19			

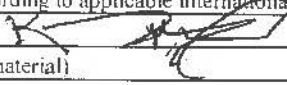
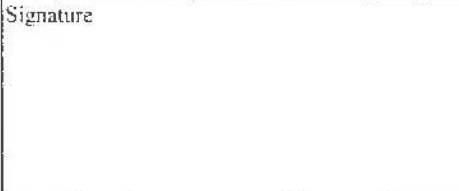
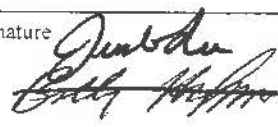
FORM 540		EnergySolutions, LLC		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 107819		7. FORM 540 AND 540A FORM 541 AND 541A FORM 542 AND 542A ADDITIONAL INFORMATION		PAGE 1 OF 1 PAGE(S) 2 PAGE(S) None PAGE(S) None PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0003					
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				1. EMERGENCY TELEPHONE NUMBER 505-667-6211 (Include Area Code)		2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST 4		4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number =====> ☒ YES ☐ NO		5. EPA MANIFEST NUMBER 010505573FLE					
ORGANIZATION EMERGENCY MANAGEMENT & RESPONSE				6. CARRIER - Name and Address Hittman Transportation Services, Inc. 1560 Bear Creek Road Oak Ridge, TN 37830		CONTACT KAREN DEWEES-LEE		SHIPMENT NUMBER 1853999		9. CONSIGNEE - Name and Facility EnergySolutions, LLC Interstate 80, Exit 49 Clive, UT 84029 PR09050		CONTACT Security Department TELEPHONE (Include Area Code) 801-549-2175 DATE 6/27/2019					
10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.				SIGNATURE - Authorized carrier acknowledging waste receipt 6/26/19		DATE 6/26/19		AUTHORIZED SIGNATURE 6/26/19		TITLE Shipper		DATE 6/26/19					
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)		12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES		16. TOTAL PACKAGE ACTIVITY MBq mCi		17. LSASCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.0881E+00 1.6454E-01		NA		4186.658 KGS; 4.205 M3		W848236	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.1620E+00 1.6654E-01		NA		4234.285 KGS; 4.205 M3		W848237	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.1372E+00 1.6587E-01		NA		4218.4093 KGS; 4.2051 M3		W848238	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		5.6508E+00 1.5272E-01		NA		3905.4306 KGS; 4.2051 M3		W848239	
FOR CONSIGNEE USE ONLY				20. TERMS AND CONDITIONS A. HAZARDOUS MATERIALS. Generator represents & warrants that Waste Material is (or) is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1 B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC C. WASTE MATERIAL. Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions LLC's facility license. D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST), or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.				☐ Record Waste Description Inadequate ☐ Contamination or Leakage Detected ☐ Unexpected Exposure Rates Detected ☐ Labels, Markings, etc. Inadequate ☐ Container Integrity Inadequate ☒ Other ☒ No Violations Detected on this Shipment									

FORM 540 (03-06)

F480141

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NM0890010515	2. Page 1 of 1	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505557 FLE		
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544				Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544			
6. Transporter 1 Company Name Hittman Transportation Services, Inc. (TN3)				U.S. EPA ID Number TNR000034686			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155				U.S. EPA ID Number UTD982598898			
9a. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt/Vol.
				No.	Type		
* 1. RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				1	BA	3479	K
* 2. RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				1	BA	4423	K
* 3. RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				1	BA	4472	K
* 4. RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				1	BA	3402	K
14. Special Handling Instructions and Additional Information L-1 47049, W848233, 171 L-2 47049, W848234, 171 L-3 47049, W848235, 171 L-4 47059, W848232, 171				See PCB Attachment page for additional information (page 2) 9705-02-0004			
15. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's Name (Printed/Typed Name) KAREN DEWEES-LEE				Signature 		Month Day Year 6/27/19	
16. International Shipments ☐ Import to U.S. ☐ Export from U.S.				Port of entry/exit: Date leaving U.S.:			
17. Transporter's Acknowledgment of Receipt of Materials Transporter 1 (Printed/Typed Name) Bobby Helms				Signature 		Month Day Year 06/27/19	
Transporter 2 (Printed/Typed Name)				Signature		Month Day Year	
18. Discrepancy 18a. Discrepancy/Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection							
18b. Alternate Facility (or Generator)				Manifest Reference Number: U.S. EPA ID Number			
Facility's Phone:							
19a. Signature of Alternate Facility (or Generator)				Signature		Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. H132		2. H132		3. H132		4. H132	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Justin La							
Signature 				Month Day Year 6/28/19			

Asbestos Waste Shipment Record
40 CFR 61.149
Shipment Number # 9705-02-0004

Generator	1. Department of Energy, Los Alamos National Lab Technical Area 41 Los Alamos, NM 87544		Shipper: Karen DeWees-Lee	(505) 695-8230
	2. DOE C/O N3B LLC 600 Sixth Street, MS E527 Los Alamos, NM 87544			(505) 665-6347
	3. EnergySolutions, LLC Clive Disposal Site Interstate 80, Exit 49 (Bulk Waste Facility) Clive, Utah 84029			(801) 649-2175
	4. Responsible agency: Air Quality Bureau. New Mexico Environment Department, 1301 Siler Road Building B Santa Fe, NM 87507. Telephone (505) 476-4375			
	5. PCB Contaminated Soils with 2 Thermal System Insulation wrapped pipes (containing Cat II Non-Friable asbestos)	6. 1 Super Sack containing bagged non-friable asbestos.	7. 0.06 yd 3	
	W848232			
8. Special handling instructions: None required.				
9. Operator's Certification: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.				
Printed name & Title: Karen Lee DeWees		Signature: 	Date: 6/26/19 6/27/19	
Transporter	10. Transporter (Acknowledgment of receipt of material)		6/27/19	
	Printed name & Title: Driver Hittman Transport Services 1560 Bear Creek Road Oak Ridge, TN 37830 865-481-0222	Signature: 	Date: 6/28/19	
Disposal Site	11. Discrepancy indication space:			
	12. Waste Disposal Site owner operator: Certification of receipt of asbestos materials covered by this manifest except as noted in item 11.			
	Printed Name & Title: Justin Lee Bobby Helms	Signature:  6-28-19	Date: 6/28/19 06-27-19	

F480194

FORM 540 (03-06)

Please print or type. (Form designed for use on 12-pitch typewriter.)

Form Approved, OMB No. 2650-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NN0890010515	2. Page 1 of 1	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505572 FLE
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE H3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 5056656347			Generator's Site Address (if different than mailing address) H3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544		
6. Transporter 1 Company Name Hittman Transportation Services, Inc. (TN3)			U.S. EPA ID Number TNR000034686		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and State Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155			U.S. EPA ID Number UTD982598898		
9a. HM			9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers
					No. Type
X	1	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4212 K
X	2	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4307 K
X	3	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	3797 K
X	4	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	3783 K
11. Total Quantity			12. Unit Wt./Vol.		
13. Waste Codes					
14. Special Handling Instructions and Additional Information 1.1 47049, W848228, 171 1.2 47049, W848229, 171 1.3 47049, W848230, 171 1.4 47049, W848231, 171			See PCB Attachment page for additional information (page 2) 9705-02-0005		
15. GENERATOR/SUFFERER'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. (I certify that the waste minimization statement identified in 40 CFR 262.27(a) (I am a large quantity generator) or (b) (I am a small quantity generator) is true)					
Generator's Name and Printed Name KAREN DEWEES-LEE			Signature 		Month Day Year 16 26 19
16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Thao Eatan			Signature 		Month Day Year 6 26 19
Transporter 2 Printed/Typed Name			Signature		Month Day Year
18. Discrepancy					
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection					
18b. Alternate Facility (or Generator)			Manifest Reference Number: U.S. EPA ID Number		
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)			Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. H132		2. H132		3. H132	
4. H132					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name Albert Guss			Signature 		Month Day Year 6 27 19

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

FORM 540		EnergySolutions, LLC		5. SHIPPER -- NAME AND FACILITY N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 107873		7. FORM 540 AND 540A FORM 541 AND 541A FORM 542 AND 542A ADDITIONAL INFORMATION		3. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0005							
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER		Utah Generator Site Access Permit No 1805010503		SHIPMENT NUMBER 1884431		☐ COLLECTOR ☐ PROCESSOR ☒ GENERATOR TYPE (Specify) G		9. CONSIGNEE - Name and Facility EnergySolutions, LLC Interstate 80, Exit 49 Clive, UT 84029		CONTACT Security Department TELEPHONE (Include Area Code) 801-649-2175 DATE 6/27/2019							
1. EMERGENCY TELEPHONE NUMBER 505-667-6211 (Include Area Code)		ORGANIZATION Emergency Management & Response		6. CARRIER -- Name and Address Hittman Transportation Services, Inc. 1560 Bear Creek Road Oak Ridge, TN 37830		EPA I.D. NUMBER TNR000034586		SIGNATURE -- Authorized consignee acknowledging waste receipt TE PRO9049 And Enno		10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.							
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST 4		CONTACT KAREN DEWEES-LEE		TELEPHONE NUMBER (Include Area Code) 505-595-8230		DATE 6/26/19		AUTHORIZED SIGNATURE Shimmer							
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number =====>		EPA MANIFEST NUMBER 010505572FLE		CONTACT Jeff Packett		DATE 6/26/19		TITLE Shimmer		DATE 6/26/19							
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)		12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES		16. TOTAL PACKAGE ACTIVITY MBq mCi		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.1268E+00 1.6559E-01		NA		4211.6054 KGS; 4.2051 M3		W848228	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.2751E+00 1.6960E-01		NA		4306.860 KGS; 4.205 M3		W848229	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		5.4816E+00 1.4815E-01		NA		3796.5684 KGS; 4.2051 M3		W848230	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		5.4719E+00 1.4789E-01		NA		3785.2286 KGS; 4.2051 M3		W848231	
FOR CONSIGNEE USE ONLY				20. TERMS AND CONDITIONS													
Record Waste Description Inadequate Contamination or Leakage Detected Unexpected Exposure Rates Detected Labels, Markings, etc. Inadequate Container Integrity Inadequate Other ☒ No Violations Detected on this Shipment				A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material is (or) is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1. B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC. C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions LLC's facility license. D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST,) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.				6/27/19									



Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NH0890010515	2. Page 1 of 1	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505574 FLE		
5. Generator's Name and Mailing Address N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 50566556347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544				
6. Transporter 1 Company Name Hittman Transportation Services, Inc. (TN3)			U.S. EPA ID Number TNR000034686				
7. Transporter 2 Company Name			U.S. EPA ID Number				
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155			U.S. EPA ID Number UTD982598898				
Facility's Phone:							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
			No.	Type			
	X 1	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4849	K	
	X 2	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4445	K	
	X 3	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4350	K	
X 4	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4500	K		
14. Special Handling Instructions and Additional Information 1.1 47049, W848224, 171 1.2 47049, W848225, 171 1.3 47049, W848226, 171 1.4 47049, W848227, 171			See PCB Attachment Page for additional information (page 2) 9705-02-0006				
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's Name Printed/Typed Name KAREN DEWEES LEE			Signature 		Month Day Year 6 26 19		
INT'L	16. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: Date leaving U.S.:				
	Transporter signature (for exports only):						
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials						
	Transporter 1 Printed/Typed Name Darrell Roberts		Signature 		Month Day Year 06 26 19		
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name		Signature		Month Day Year		
	18. Discrepancy						
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection						
	Manifest Reference Number:						
18b. Alternate Facility (or Generator) U.S. EPA ID Number							
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator) Month Day Year							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. H132		2. H132		3. H132		4. H132	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a							
Printed/Typed Name Albus Ems		Signature 		Month Day Year 6 27 19			

FORM 540

EnergySolutions, LLC

UNIFORM LOW-LEVEL RADIOACTIVE
WASTE MANIFEST
SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER
505-667-6211

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
☐ YES
☒ NO

3. TOTAL NUMBER OF
PACKAGES IDENTIFIED
ON THIS MANIFEST
4

4. DOES EPA REGULATED
WASTE REQUIRING A
MANIFEST ACCOMPANY
THIS SHIPMENT?
If "Yes," provide Manifest Number =====>
☒ YES
☐ NO

5. SHIPPER - NAME AND FACILITY
N3B LLC on behalf of USDOE
800 Sixth Street, MS E527
Los Alamos, NM 87544

6. CARRIER - Name and Address
Hittman Transportation Services, Inc.
1560 Bear Creek Road
Oak Ridge, TN 37830

7. FORM 540 AND 540A
FORM 541 AND 541A
FORM 542 AND 542A
ADDITIONAL INFORMATION
PAGE 1 OF 1 PAGE(S)
2 PAGE(S)
None PAGE(S)
None PAGE(S)

8. MANIFEST NUMBER
(Use this number on all continuation
pages)
9705-02-0006

9. CONSIGNEE - Name and Facility
Energy Solutions LLC
Interstate 80, Exit 49
Clive, UT 84029

10. CERTIFICATION
This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION
(including proper shipping name, hazard class, UN ID number,
and any additional information)

12. DOT LABEL
"RADIOACTIVE"

13. TRANSPORT
INDEX

14. PHYSICAL AND
CHEMICAL FORM

15. INDIVIDUAL
RADIOISOTOPES

16. TOTAL PACKAGE ACTIVITY
MBq mCi

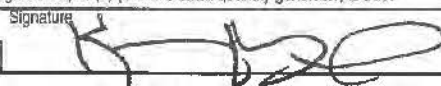
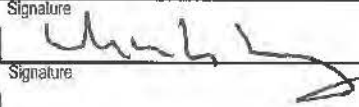
17. ICA/SCO
CLASS

18. TOTAL WEIGHT
OR VOLUME
(Use appropriate units)

19. IDENTIFICATION
NUMBER OF
PACKAGE

20. TERMS AND CONDITIONS
A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material is (or) is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1.
B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC.
C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions LLC's facility license.
D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST,) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.

FOR CONSIGNEE USE ONLY
Record Waste Description Inadequate
Contamination or Leakage Detected
Unexpected Exposure Rates Detected
Labels, Markings, etc. Inadequate
Container Integrity Inadequate
Other
No Violations Detected on this Shipment

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number RR0890010515	2. Page 1 of 2	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505576 FLE		
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 5056656347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544				
6. Transporter 1 Company Name Hittman Transportation Services, Inc.			U.S. EPA ID Number TNR000034686				
7. Transporter 2 Company Name			U.S. EPA ID Number				
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155			U.S. EPA ID Number UTD982598898				
Facility's Phone:							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	X 1	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	5096	K	
	X 2	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	5087	K	
	X 3	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4992	K	
	4.						
14. Special Handling Instructions and Additional Information 1.1 46110, W848221, 171 1.2 46110, W848222, 171 1.3 46110, W848223, 171			See PCB Attachment Page for additional information (page 2) 9705-02-0007 PRO9053				
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offeror's Printed/Typed Name KAREN DEWEES-LEE			Signature 		Month Day Year 17 16 19		
TRANSPORTER	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Whalen Brady Signature  Month Day Year 17 16 19 Transporter 2 Printed/Typed Name _____ Signature _____ Month Day Year _____						
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Manifest Reference Number: _____						
	18b. Alternate Facility (or Generator) _____ U.S. EPA ID Number _____						
	Facility's Phone: _____						
	18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____						
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H132 2. H132 3. H132 4. _____						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a Printed/Typed Name J. Gardner Signature  Month Day Year 17 18 19							

Trailer #545 13

FORM 540 (8-2010)		Energy Solutions		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 1885337		7. NRC FORM 540 AND 540A PAGE 1 OF 1 PAGE(S) NRC FORM 541 AND 541A 3 PAGE(S) NRC FORM 542 AND 542A None PAGE(S) ADDITIONAL INFORMATION 1 PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0007							
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				USER PERMIT NUMBER 180501065 603		SHIPMENT NUMBER 1885337		9. CONSIGNEE - Name and Facility Address EnergySolutions, LLC Interstate 80, Exit 49 Clive, UT 84029 LB PR09053		CONTACT Security Department TELEPHONE NUMBER (Include Area Code) 801-649-2175 DATE 7/18/19							
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 505-667-6211				CONTACT KAREN DEWEES-LEE		TELEPHONE NUMBER (Include Area Code) 505-695-8230		EPA I.D. NUMBER TNR000034686		SIGNATURE - Authorized consignee acknowledging waste receipt <i>[Signature]</i>							
ORGANIZATION Emergency Management & Response				6. CARRIER - Name and Address Hittman Transportation Services, Inc. 1560 Bear Creek Rd Oak Ridge, TN 37830		SHIPPING DATE 7/16/19		10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the applicable requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.		DATE 7/16/19							
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO				3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST =====> 3		CONTACT Jeff Packett WHL		TELEPHONE NUMBER (Include Area Code) 805-220-5817		DATE 7-16-19							
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number				EPA MANIFEST NUMBER 010505576FLE		SIGNATURE - Authorized carrier acknowledging waste receipt <i>[Signature]</i>		DATE 7-16-19		TITLE Shipper							
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)		12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES		16. TOTAL PACKAGE ACTIVITY IN SI UNITS		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/11/19		Ac-228 K-40 Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239		8.9684E+00 MBq (2.4239E-01 mCi)		NA		5096.111 kg 4.205 M3		W848221	
								Th-234 U-238 Ti-208 U-234 U-235									
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/11/19		Ac-228 K-40 Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239		8.9516E+00 MBq (2.4193E-01 mCi)		NA		5087.039 kg 4.205 M3		W848222	
								Th-234 U-238 Ti-208 U-234 U-235									
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/11/19		Ac-228 K-40 Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239		8.7745E+00 MBq (2.3715E-01 mCi)		NA		4991.784 kg 4.205 M3		W848223	
								Th-234 U-238 Ti-208 U-234 U-235									
FOR CONSIGNEE USE ONLY				20. TERMS AND CONDITIONS													
☐ Record Waste Description Inadequate ☐ Contamination or Leakage Detected ☐ Unexpected Exposure Rates Detected ☐ Labels, Markings, etc. Inadequate ☐ Container Integrity Inadequate ☐ Other ☒ No Violations Detected on this Shipment				A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material is (or) is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1. B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC. C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions LLC's facility license. D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.													



15480084

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-002

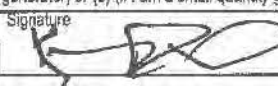
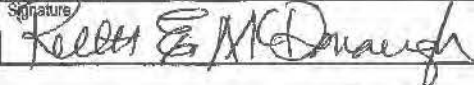
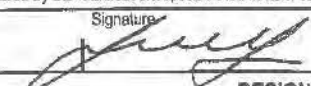
UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number HM0890010515	2. Page 1 of 2	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505577 FLE
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544		
6. Transporter 1 Company Name Hittman Transportation Services, Inc.			U.S. EPA ID Number TNR000034686		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155			U.S. EPA ID Number UTD982598898		
Facility's Phone:					
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity
			No.	Type	12. Unit Wt./Vol.
	x 1	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4906
	x 2	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4906
	x 3	RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4953
					13. Waste Codes
14. Special Handling Instructions and Additional Information 1.1 46110, W848218, 171 1.2 46110, W848219, 171 1.3 46110, W848220, 171					
See PCB Attachment Page for additional information (page 3 of 4) 9705-02-0008 PRO9054					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping names, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name KAREN DEWEES-LEE			Signature 		Month Day Year 7 16 19
TRANSPORTER	16. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: Date leaving U.S.:		
	17. Transporter Acknowledgment of Receipt of Materials				
	Transporter 1 Printed/Typed Name John E. Cisco		Signature 		Month Day Year 07 16 19
Transporter 2 Printed/Typed Name		Signature		Month Day Year	
DESIGNATED FACILITY	18. Discrepancy				
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection				
	Manifest Reference Number:				
	18b. Alternate Facility (or Generator) U.S. EPA ID Number				
	Facility's Phone:				
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. H132		2. H132		3. H132	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name J. Gardner			Signature 		Month Day Year 7 18 19

FORM 540 (8-2010)		Energy Solutions		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544		6. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0008	
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				7. NRC FORM 540 AND 541A NRC FORM 541 AND 541A PAGE(S) 1 OF 1 NRC FORM 542 AND 542A PAGE(S) None ADDITIONAL INFORMATION PAGE(S) 1		8. CONSIGNEE - Name and Facility Address EnergySolutions, LLC Interstate 80, Exit 49 Clive, UT 84029	
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 505-667-6211		USER PERMIT NUMBER 1805010603		SHIPMENT NUMBER 1885340		CONTACT KAREN DEWEES-LEE	
ORGANIZATION Emergency Management & Response		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST =====> 3		6 CARRIER - Name and Address Hittman Transportation Services, Inc. 1560 Bear Creek Rd Oak Ridge, TN 37830		TELEPHONE NUMBER (include Area Code) 505-695-8230	
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO		EPA MANIFEST NUMBER 010505577FLE		EPA ID NUMBER TNR000034686		SIGNATURE - Authorized consignee acknowledging waste receipt Jeff Packett	
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? ☒ YES ☐ NO If "Yes," provide Manifest Number		CONTACT John E. Cisco		TELEPHONE NUMBER (include Area Code) 865-220-5817		DATE 7/16/19	
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)		12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid Oxide 7/10/19	

* 1 0 7 9 6 1 *

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NH0890010515	2. Page 1 of 2	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505578 FLE
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 5056656347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544		
6. Transporter 1 Company Name Hittman Transportation Services, Inc.				U.S. EPA ID Number TNR000034686	
7. Transporter 2 Company Name				U.S. EPA ID Number	
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155				U.S. EPA ID Number UTD982598898	
9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type	11. Total Quantity
X 1		RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA	5044
X 2		RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA	4928
X 3		RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA	4969
4.					
14. Special Handling Instructions and Additional Information L.1 46110, W848215, 171 L.2 46110, W848216, 171 L.3 46110, W848217, 171				See PCB Attachment Page for additional information (page 2) 9705-02-0009 PRO9055	
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Offereor's Printed/Typed Name KAREN DEWEES-LEE				Signature  Month Day Year 17 16 19	
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name RUTH VAN STEENBURG				Signature  Month Day Year 17 16 19	
Transporter 2 Printed/Typed Name MCDONOUGH, RUTH E.				Signature  Month Day Year 10 16 19	
18. Discrepancy					
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection					
Manifest Reference Number: _____					
18b. Alternate Facility (or Generator) U.S. EPA ID Number					
Facility's Phone: _____					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. H132		2. H132		3. H132	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name J. Gardner				Signature  Month Day Year 17 18 19	

FORM 540 (8-2010)		Energy Solutions		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 1885341		7. NRC FORM 540 AND 540A PAGE 1 OF 1 PAGE(S) NRC FORM 541 AND 541A 3 PAGE(S) NRC FORM 542 AND 542A None PAGE(S) ADDITIONAL INFORMATION 1 PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0009	
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				USER PERMIT NUMBER 1805010603		SHIPMENT NUMBER 1885341		9. CONSIGNEE - Name and Facility Address EnergySolutions, LLC Interstate 80, Exit 49 Clive, UT 84029 Rus PR09055		CONTACT Security Department TELEPHONE NUMBER (Include Area Code) 801-649-2175	
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 505-667-6211				CONTACT KAREN DEWEES-LEE		TELEPHONE NUMBER (Include Area Code) 505-655-8230		SIGNATURE - Authorized consignee acknowledging waste receipt [Signature]		DATE 7/12/19	
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO				3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST =====> 3		6. CARRIER - Name and Address Hittman Transportation Services, Inc. 1560 Bear Creek Rd Oak Ridge, TN 37830		EPA I.D. NUMBER TNR000034686		10. CERTIFICATION This is to certify that the herein named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the applicable requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.	
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number ☒ YES ☐ NO				EPA MANIFEST NUMBER 010505578FLE		CONTACT Jeff Packett		TELEPHONE NUMBER (Include Area Code) 865-220-5817		SIGNATURE - Authorized carrier acknowledging waste receipt [Signature]	
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)				12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		NA Solid Oxide 7/10/19		Ac-228 K-40 Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239	
										Th-234 U-238 Ti-208 U-234 U-235	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		NA Solid Oxide 7/10/19		Ac-228 K-40 Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239	
										Th-234 U-238 Ti-208 U-234 U-235	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		NA Solid Oxide 7/10/19		Ac-228 K-40 Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239	
										Th-234 U-238 Ti-208 U-234 U-235	
FOR CONSIGNEE USE ONLY				20. TERMS AND CONDITIONS							
☐ Record Waste Description Inadequate ☐ Contamination or Leakage Detected ☐ Unexpected Exposure Rates Detected ☐ Labels, Markings, etc. Inadequate ☐ Container Integrity Inadequate ☒ Other ☒ No Violations Detected on this Shipment				A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material is (or) is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1. B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC. C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions LLC's facility license. D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST), or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.							

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number MM0890010515	2. Page 1 of 1	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505579 FLE		
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 Generator's Phone: 5056655347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544				
6. Transporter 1 Company Name Hittman Transportation Services, Inc.				U.S. EPA ID Number TRR000034686			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155				U.S. EPA ID Number UTD96259A890			
Facility's Phone:							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes
	X 1.	KG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4658	K	
	X 2.	KG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4531	K	
	X 3.	KG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4540	K	
	X 4.	KG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4969	K	
14. Special Handling Instructions and Additional Information 1. 46110, W848211, 171 2. 46110, W848212, 171 3. 46110, W848213, 171 4. 46110, W848214, 171			See PCB Attachment Page for additional information (page 3) 9705-02-0010 <i>PRO9056</i>				
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name KAREN DEWEES-LEE			Signature 		Month Day Year 7/16/19		
INT'L	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____						
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name _____ Signature _____ Month Day Year 7/16/19 Transporter 2 Printed/Typed Name _____ Signature _____ Month Day Year _____						
TRANSPORTER	18. Discrepancy						
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection						
	Manifest Reference Number: _____						
	18b. Alternate Facility (or Generator) _____ U.S. EPA ID Number _____						
DESIGNATED FACILITY	Facility's Phone: _____						
	18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____						
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
	1. H132	2. H132	3. H132	4. H132			
20. Designated Facility Owner or Operator Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name J. Gardner Signature Month Day Year 7/18/19							

F480097

FORM 540 (8-2010)		Energy Solutions		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 1885343		7. NRC FORM 540 AND 540A PAGE 1 OF 1 PAGE(S) NRC FORM 541 AND 541A 3 PAGE(S) NRC FORM 542 AND 542A None PAGE(S) ADDITIONAL INFORMATION <i>None</i> PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0010											
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				USER PERMIT NUMBER 1805010603		SHIPMENT NUMBER 1885343		☐ COLLECTOR ☐ PROCESSOR ☒ GENERATOR TYPE (Specify) G		9. CONSIGNEE - Name and Facility Address EnergySolutions, LLC Interstate 80, Exit 49 Clive, UT 84029											
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 505-667-6211				CONTACT KAREN DEWEES-LEE		TELEPHONE NUMBER (Include Area Code) 505-695-8230		SIGNATURE - Authorized consignee acknowledging waste receipt <i>[Signature]</i>		CONTACT Security Department TELEPHONE NUMBER (Include Area Code) 801-649-2175											
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO				3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST =====> 4		6. CARRIER - Name and Address Hittman Transportation Services, Inc. 1560 Bear Creek Rd Oak Ridge, TN 37830		EPA I.D. NUMBER TNR000034686		DATE 7/10/19											
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number				☒ YES ☐ NO		EPA MANIFEST NUMBER 010505579FLE		CONTACT <i>Jeff Packett</i> SIGNATURE - Authorized carrier acknowledging waste receipt <i>[Signature]</i>		10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the applicable requirements of 10 CFR Parts 20 and 51, or equivalent state regulations.											
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)				12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES		16. TOTAL PACKAGE ACTIVITY IN SI UNITS		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE			
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		NA Solid Oxide 7/10/19		Ac-228 K-40 Th-234 U-238		Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239		8.1549E+00 MBq (2.2040E-01 mCi)		NA		4658.394 kg 4.205 M3		W848211	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		NA Solid Oxide 7/10/19		Ac-228 K-40 Th-234 U-238		Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239		7.9188E+00 MBq (2.1402E-01 mCi)		NA		4531.386 kg 4.205 M3		W848212	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		NA Solid Oxide 7/10/19		Ac-228 K-40 Th-234 U-238		Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239		7.9357E+00 MBq (2.1448E-01 mCi)		NA		4540.460 kg 4.205 M3		W848213	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		NA Solid Oxide 7/10/19		Ac-228 K-40 Th-234 U-238		Bi-212 Pb-212 Bi-214 Pb-214 Cs-137 Pu-239		8.7324E+00 MBq (2.3601E-01 mCi)		NA		4969.105 kg 4.205 M3		W848214	
FOR CONSIGNEE USE ONLY				Record Waste Description Inadequate Contamination or Leakage Detected Unexpected Exposure Rates Detected Labels, Markings, etc. Inadequate Container Integrity Inadequate Other ☒ No Violations Detected on this Shipment		20. TERMS AND CONDITIONS A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material is (or) is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1. B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC. C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions, LLC's facility license. D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.															



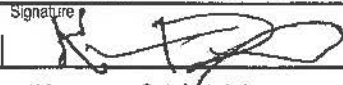
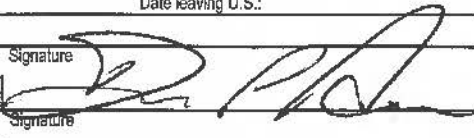
UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NH0890010515	2. Page 1 of 2	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505586 FLE		
5. Generator's Name and Mailing Address N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 5056656347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544				
6. Transporter 1 Company Name Hittman Transportation Services, Inc.				U.S. EPA ID Number TNR000034686			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155				U.S. EPA ID Number UTD982598898			
9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X 1	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1	BA	4316	K	
X 2	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1	BA	4749	K	
X 3	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1	BA	4586	K	
X 4	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1	BA	4720	K	
14. Special Handling Instructions and Additional Information 1.1 47049, W848207, 171 1.2 47049, W848208, 171 1.3 47049, W848209, 171 1.4 47049, W848210, 171				See PCB Attachment Page for additional information (page 2) 9705-02-0011			
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offendor's Printed/Typed Name KAREN DEWEES LEE				Signature 		Month Day Year 7 22 19	
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____							
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name P. Beck Signature Month Day Year 7 22 19 Transporter 2 Printed/Typed Name _____ Signature _____ Month Day Year _____							
18. Discrepancy 18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Manifest Reference Number: _____							
18b. Alternate Facility (or Generator) U.S. EPA ID Number _____ Facility's Phone: _____							
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H132 2. H132 3. H132 4. H132							
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 16a Printed/Typed Name Albert Gms Signature Month Day Year 7 23 19							

[illegible]



UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NM0890010515		2. Page 1 of 2		3. Emergency Response Phone 505-667-6211		4. Manifest Tracking Number 010505587 FLE		
		5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 Generator's Phone: 5056656347		Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544						
GENERATOR		6. Transporter 1 Company Name Hittman Transportation Services, Inc.						U.S. EPA ID Number TNR000034686		
		7. Transporter 2 Company Name						U.S. EPA ID Number		
DESIGNATED FACILITY		8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155						U.S. EPA ID Number UTD982598898		
		Facility's Phone:								
TRANSPORTER		9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
						No. Type				
		x 1		RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA		3890	K	
		x 2		RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA		4323	K	
		x 3		RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA		4239	K	
		x 4		RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1 BA		4239	K	
INT'L		14. Special Handling Instructions and Additional Information 1.1 47049, W848203, 171 1.2 47049, W848204, 171 1.3 47049, W848205, 171 1.4 47049, W848206, 171						See PCB Attachment Page for additional information (page 2) 9705-02-0012 PC09060		
		15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
		Generator's/Officer's Printed/Typed Name KAREN DEWEES-LEE						Signature Month Day Year 7 22 19		
DESIGNATED FACILITY		16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ Transporter signature (for exports only): _____								
		17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name MARK D. SMITH Signature Month Day Year 7 22 19 Transporter 2 Printed/Typed Name _____ Signature _____ Month Day Year _____								
		18. Discrepancy 18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Manifest Reference Number: _____ 18b. Alternate Facility (or Generator) _____ U.S. EPA ID Number _____ Facility's Phone: _____ 18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____								
DESIGNATED FACILITY		19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H132 2. H132 3. H132 4. H132								
		20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name J. Gardner Signature Month Day Year 7 23 19								

FORM 540 (8-2010)		Energy Solutions		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 1885625		7. NRC FORM 540 AND 540A PAGE 1 OF 1 PAGE(S) NRC FORM 541 AND 541-A 2 PAGE(S) NRC FORM 542 AND 542-A None PAGE(S) ADDITIONAL INFORMATION 2 PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0012	
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				USER PERMIT NUMBER 1805010603		SHIPMENT NUMBER 1885625		9. CONSIGNEE - Name and Facility Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029		CONTACT Security Department TELEPHONE NUMBER (Include Area Code) 801-649-2175	
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 505-667-6211				CONTACT KAREN DEWEES-LEE		TELEPHONE NUMBER (Include Area Code) 505-667-8237		SIGNATURE - Authorized Consignee acknowledging waste receipt <i>[Signature]</i>		DATE 7/23/19	
ORGANIZATION Emergency Management & Response				6. CARRIER - Name and Address Hittman Transportation Services, Inc. 1560 Bear Creek Rd Oak Ridge, TN 37830		EPA I.D. NUMBER TNR000034686		10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the applicable requirements of 49 CFR Parts 20 and 61 or equivalent state regulations.			
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO				3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST =====> 4		CONTACT Jeff Packard <i>[Signature]</i>		TELEPHONE NUMBER (Include Area Code) 800-440-8628		DATE 7-22-19	
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? ☒ YES ☐ NO If "Yes," provide Manifest Number				EPA MANIFEST NUMBER 010505587FLE		SIGNATURE - Authorized Carrier acknowledging waste receipt <i>[Signature]</i>		DATE 7-22-19		AUTHORIZED SIGNATURE <i>[Signature]</i>	
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)				12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid/Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid/Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid/Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				NA		NA		Solid/Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238	
										16. TOTAL PACKAGE ACTIVITY IN SI UNITS 5.6261E+00 MBq (1.5206E-01 mCi)	
										17. LSA/SCO CLASS NA	
										18. TOTAL WEIGHT OR VOLUME (Use appropriate units) 3889.555 kg 4.205 M3	
										19. IDENTIFICATION NUMBER OF PACKAGE W848203	
FOR CONSIGNEE USE ONLY				20. TERMS AND CONDITIONS							
☐ Record Waste Description Inadequate ☐ Contamination or Leakage Detected ☐ Unexpected Exposure Rates Detected ☐ Labels, Markings, etc. Inadequate ☐ Container Integrity Inadequate ☐ Other ☒ No Violations Detected on this Shipment				A. HAZARDOUS MATERIALS: Generator represents and warrants that Waste Material is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1. B. TITLE: Upon acceptance at the disposal site by Energy Solutions LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in Energy Solutions LLC. C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and Energy Solutions LLC's facility license. D. INDEMNIFICATION: Generator agrees to indemnify Energy Solutions LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability result from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.							

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NH0890010515	2. Page 1 of 2	3. Emergency Response Phone 505-667-6211	4. Manifest Tracking Number 010505588 FLE	
5. Generator's Name and Mailing Address N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544 5056656347			Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544			
6. Transporter 1 Company Name Hittman Transportation Services, Inc.			U.S. EPA ID Number TNR000034686			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155			U.S. EPA ID Number UTD982598898			
Facility's Phone:						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
			No.	Type		
	X 1	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4423	K
	X 2	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4300	K
	X 3	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4450	K
	X 4	RG, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	1	BA	4434	K
14. Special Handling Instructions and Additional Information 1.1 47049, W848199, 171 1.2 47049, W848200, 171 1.3 47049, W848201, 171 1.4 47049, W848202, 171			See PCB Attachment Page for additional information (page 2) 9705-02-0013			
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offeree's Printed/Typed Name KAREN DEWEES-LEE			Signature 		Month Day Year 7 22 19	
TRANSPORTER	16. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: Date leaving U.S.:			
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Douglas P. Austin		Signature 		Month Day Year 7 24 19	
	Transporter 2 Printed/Typed Name		Signature		Month Day Year	
DESIGNATED FACILITY	18. Discrepancy					
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection					
	Manifest Reference Number:					
	18b. Alternate Facility (or Generator) U.S. EPA ID Number					
	Facility's Phone:					
	18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
	1. H132	2. H132	3. H132	4. H132		
20. Designated Facility Owner or Operator. Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name Albert Eune			Signature 		Month Day Year 7 23 19	

F480085

FORM 540 (8-2010)		Energy Solutions		5. SHIPPER - NAME AND FACILITY N3B LLC on behalf of USDOE 800 Sixth Street, MS E527 Los Alamos, NM 87544		SHIPPER I.D. NUMBER 1885626		7. NRC FORM 540 AND 540A PAGE 1 OF 1 PAGE(S) NRC FORM 541 AND 541A 2 PAGE(S) NRC FORM 542 AND 542A None 2 PAGE(S) ADDITIONAL INFORMATION		8. MANIFEST NUMBER (Use this number on all continuation pages) 9705-02-0013							
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER				USER PERMIT NUMBER 1805010603		SHIPMENT NUMBER 1885626		9. CONSIGNEE - Name and Facility Address EnergySolutions, LLC Interstate 80, Exit 49 Clive, UT 84029 PR09057		CONTACT Security Department TELEPHONE NUMBER (include Area Code) 801-649-2175							
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 505-667-6211				CONTACT KAREN DEWEES-LEE		TELEPHONE NUMBER (Include Area Code) 505-655-8233		SIGNATURE - Authorized consignee acknowledging waste receipt Ant Ems		DATE 7/23/19							
ORGANIZATION Emergency Management & Response				6. CARRIER - Name and Address Hittman Transportation Services, Inc. 1560 Bear Creek Rd Oak Ridge, TN 37830		EPA I.D. NUMBER TNR000034686		10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the applicable requirements of 10 CFR Parts 20 and 81 or equivalent state regulations.									
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☒ NO		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST =====> 4		CONTACT Jeff Packett		TELEPHONE NUMBER (Include Area Code) 800-448-8628		DATE 7-22-19		AUTHORIZED SIGNATURE [Signature]							
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number		EPA MANIFEST NUMBER 010505588FLE		SIGNATURE - Authorized carrier acknowledging waste receipt [Signature]		DATE 7-22-19		TITLE Shipper		DATE 7/22/19							
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number and any additional information)		12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES		16. TOTAL PACKAGE ACTIVITY IN SI UNITS		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid/Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.4547E+00 MBq (1.7445E-01 mCi)		NA		4422.526 kg 4.205 M3		W848199	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid/Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.2643E+00 MBq (1.6931E-01 mCi)		NA		4300.056 kg 4.205 M3		W848200	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid/Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.4870E+00 MBq (1.7559E-01 mCi)		NA		4449.741 kg 4.205 M3		W848201	
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		NA		NA		Solid/Oxide		Ac-228 Bi-212 Cs-137 K-40 Pu-239 U-234 U-235 U-238		6.4723E+00 MBq (1.7493E-01 mCi)		NA		4433.866 kg 4.205 M3		W848202	
FOR CONSIGNEE USE ONLY				20. TERMS AND CONDITIONS													
☐ Record Waste Description Inadequate				A. HAZARDOUS MATERIALS: Generator represents and warrants that Waste Material is (or is not) a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1.													
☐ Contamination or Leakage Detected				B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC.													
☐ Unexpected Exposure Rates Detected				C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions, LLC's facility license.													
☐ Labels, Markings, etc. Inadequate				D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.													
☐ Container Integrity Inadequate																	
☐ Other																	
☒ No Violations Detected on this Shipment																	



UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NH0890010515		2. Page 1 of +2		3. Emergency Response Phone 505-667-6211		4. Manifest Tracking Number 010505589 FLE					
5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 600 Sixth Street, MS E527 Los Alamos, NM 87544						Generator's Site Address (If different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544							
6. Transporter 1 Company Name Hittman Transportation Services, Inc.						U.S. EPA ID Number TNR000034686							
7. Transporter 2 Company Name						U.S. EPA ID Number							
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029						U.S. EPA ID Number UTD982598898							
Facility's Phone: 4358840155													
9a. HM		9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity		12. Unit Wt./Vol.		13. Waste Codes	
						No. Type							
x 1		RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				1 BA		4296		K			
x 2		RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				1 BA		3964		K			
x 3		RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				1 BA		4432		K			
x 4		RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III				1 BA		3323		K			
14. Special Handling Instructions and Additional Information 1.1 47049, W848194, 171 1.2 47049, W848197, 171 1.3 47049, W848198, 171 1.4 47049, W848381, 171						See PCB Attachment Page for additional information (page 2) 9705-02-0014 <i>PRO9061</i>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.													
Generator's/Offeror's Printed/Typed Name KAREN DEWEES-LEE						Signature 			Month Day Year 7 12 19				
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Transporter signature (for exports only): Date leaving U.S.:													
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name A. Ives Davis Signature Month Day Year 7 22 19 Transporter 2 Printed/Typed Name Signature Month Day Year													
18. Discrepancy 18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection Manifest Reference Number: U.S. EPA ID Number: Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day Year													
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H132 2. H132 3. H132 4. H132													
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a Printed/Typed Name J. Gardner Signature Month Day Year 7 23 19													

FORM 540
(8-2010)

Energy Solutions

UNIFORM LOW-LEVEL RADIOACTIVE
WASTE MANIFEST
SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
505-667-6211

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
☐ YES
☒ NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST
=====> 4

4. DOES EPA REGULATE WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT?
If "Yes," provide Manifest Number

5. SHIPPER - NAME AND FACILITY
N3B LLC on behalf of USDOE
600 Sixth Street, MS E527
Los Alamos, NM 87544

6. CARRIER - Name and Address
Hittman Transportation Services, Inc.
1560 Bear Creek Rd
Oak Ridge, TN 37830

7. NRC FORM 540 AND 540A
NRC FORM 541 AND 541A
NRC FORM 542 AND 542A
ADDITIONAL INFORMATION

8. MANIFEST NUMBER
(Use this number on all continuation pages)

9. CONSIGNEE - Name and Facility Address

10. CERTIFICATION

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION
(Including proper shipping name, hazard class, UN ID number and any additional information)

12. DOT LABEL "RADIOACTIVE"

13. TRANSPORT INDEX

14. PHYSICAL AND CHEMICAL FORM

15. INDIVIDUAL RADIONUCLIDES

16. TOTAL PACKAGE ACTIVITY IN SI UNITS

17. LSA/SCO CLASS

18. TOTAL WEIGHT OR VOLUME
(Use appropriate units)

19. IDENTIFICATION NUMBER OF PACKAGE

20. TERMS AND CONDITIONS

SHIPPER I.D. NUMBER
1885627

USER PERMIT NUMBER
1805010603

SHIPMENT NUMBER
1885627

CONTACT
KAREN DEWEES-LEE

TELEPHONE NUMBER
(Include Area Code)
505-655-8230

EPA I.D. NUMBER
TNR000034686

SHIPPING DATE
7/22/19

TELEPHONE NUMBER
(Include Area Code)
800-448-81028

DATE
7-22-19

CONTACT
Jeff Packett

SIGNATURE - Authorized carrier acknowledging waste receipt
A. J. Smith

DATE
7-22-19

CONTACT
Security Department

TELEPHONE NUMBER (Include Area Code)
801-649-2175

DATE
7/23/19

TITLE
Shipper

DATE
7/22/19

Record Waste Description Inadequate

Contamination or Leakage Detected

Unexpected Exposure Rates Detected

Labels, Markings, etc. Inadequate

Container Integrity Inadequate

Other

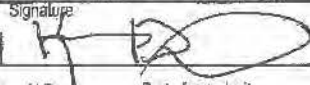
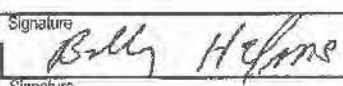
No Violations Detected on this Shipment

A. HAZARDOUS MATERIALS. Generator represents & warrants that Waste Material is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land disposal restriction notice and/or certification as required by 40 CFR 268.1.

B. TITLE. Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC.

C. WASTE MATERIAL. Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions, LLC's facility license.

D. INDEMNIFICATION. Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.

* 1 0 7 9 9 1 *		12. Page 1 of 4-2		3. Emergency Response Phone 505-667-6211		4. Manifest Tracking Number 010505590 FLE		
UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NH0890010515		5. Generator's Name and Mailing Address ATTN: KAREN DEWEES-LEE N3B LLC on behalf of USDOE 500 Sixth Street, MS E527 Los Alamos, NM 87544 5056656347		Generator's Site Address (if different than mailing address) N3B LLC on behalf of USDOE Technical Area 02 Los Alamos, NM 87544		
6. Transporter 1 Company Name Hittman Transportation Services, Inc.		U.S. EPA ID Number TNR000034686		7. Transporter 2 Company Name		U.S. EPA ID Number		
8. Designated Facility Name and Site Address Energy Solutions LLC Interstate 80, Exit 49 Clive, UT 84029 4358840155		U.S. EPA ID Number UTD982598898		Facility's Phone:		U.S. EPA ID Number		
GENERATOR	9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	
	No.		Type		12. Unit WL/Vol.		13. Waste Codes	
	X 1		RD, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1		BA 4522 K	
	X 2		RD, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III		1		BA 4115 K	
	3.							
4.								
14. Special Handling Instructions and Additional Information 1.1 47049, W848195, 171 1.2 47049, W848196, 171		See PCB Attachment Page for additional information (page 2) 9705-02-0015						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name KAREN DEWEES-LEE		Signature 				Month Day Year 17 12 19		
TRANSPORTER	16. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: Date leaving U.S.:					
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Bobby Helms		Signature 		Month Day Year 07 22 19			
Transporter 2 Printed/Typed Name		Signature		Month Day Year				
DESIGNATED FACILITY	18. Discrepancy							
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection							
	Manifest Reference Number:							
	18b. Alternate Facility (or Generator) U.S. EPA ID Number							
	Facility's Phone:							
18c. Signature of Alternate Facility (or Generator) Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. A132		2. #132		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name Albert Euns		Signature 				Month Day Year 7 23 19		

Q54531

FORM 540
(8-2010)

UNIFORM LOW-LEVEL RADIOACTIVE
WASTE MANIFEST
SHIPPING PAPER

Energy Solutions

5. SHIPPER - NAME AND FACILITY
N3B LLC on behalf of USDOE
600 Sixth Street, MS E527
Los Alamos, NM 87544

SHIPPER I.D. NUMBER
1885628

☐ COLLECTOR
☐ PROCESSOR
☒ GENERATOR TYPE
(Specify) G

7. NRC FORM 540 AND 540A
NRC FORM 541 AND 541A
NRC FORM 542 AND 542A
ADDITIONAL INFORMATION

PAGE 1 OF 1 PAGE(S)
2 PAGE(S)
None PAGE(S)
2 PAGE(S)

8. MANIFEST NUMBER
(Use this number on all continuation pages)

9705-02-0015

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
505-667-6211

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
☐ YES
☒ NO

3. TOTAL NUMBER OF
PACKAGES IDENTIFIED
ON THIS MANIFEST
=====> 2

4. DOES EPA REGULATED
WASTE REQUIRING A
MANIFEST ACCOMPANY
THIS SHIPMENT?
If "Yes" provide Manifest Number

☒ YES
☐ NO

EPA MANIFEST NUMBER
010505590FLE

6. CARRIER - Name and Address
Hittman Transportation Services, Inc.
1560 Bear Creek Rd
Oak Ridge, TN 37830

SHIPMENT NUMBER
1885628

CONTACT
KAREN DEWEES-LEE

TELEPHONE NUMBER
(Include Area Code)
505-665-8233

EPA I.D. NUMBER
TNR000034686

SHIPPING DATE
7/32/19

TELEPHONE NUMBER
(Include Area Code)
800-448-81028

DATE
07-22-19

9. CONSIGNEE - Name and Facility Address
EnergySolutions, LLC
Interstate 80, Exit 43
Clive, UT 84029

SIGNATURE - Authorized consignee acknowledging waste receipt
[Signature]

DATE
7/23/2019

10. CERTIFICATION
This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the applicable requirements of 10 CFR Parts 20 and 61 or equivalent state regulations.

AUTHORIZED SIGNATURE
[Signature]

TITLE
Shipper

DATE
7/22/19

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES				16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	NA	NA	Solid/Oxide	Ac-228 Pu-239	Bi-212 U-234	Cs-137 U-235	K-40 U-238	6.7650E+00 MBq (1.8284E-01 mCi)	NA	4622.107 kg 4.205 M3	W848195
RQ, UN3432, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, III	NA	NA	Solid/Oxide	Ac-228 Pu-239	Bi-212 U-234	Cs-137 U-235	K-40 U-238	5.9787E+00 MBq (1.6159E-01 mCi)	NA	4116.351 kg 4.205 M3	W848196

FOR CONSIGNEE USE ONLY

Record Waste Description Inadequate

Contamination or Leakage Detected

Unexpected Exposure Rates Detected

Labels, Markings, etc. Inadequate

Container Integrity Inadequate

Other

☒ No Violations Detected on this Shipment

20. TERMS AND CONDITIONS

A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1

B. TITLE: Upon acceptance at the disposal site by EnergySolutions, LLC, and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, LLC.

C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and EnergySolutions, LLC's facility license.

D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, LLC, its officers, employees and agents against all losses and liability whatsoever if such losses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.

FORM 540 (8-2010) [PRODUCED BY WCATS] -r5