Department of Energy

Portsmouth/Paducah Project Office
1017 Majestic Drive, Suite 200
Lexington, Kentucky 40513
(859) 219-4000

June 28, 2024

Ms. Myrna Redfield, Program Manager
Four Rivers Nuclear Partnership, LLC
5511 Hobbs Road
Kevil, Kentucky 42053

PPPO-02-10027989-24

Dear Ms. Redfield:

DE-EM0004895: CONCURRENCE ON DEVLIVERABLE NO. 68, FINAL ANNUAL REPORT OF POLYCHLORINATED BIPHENYLS, FOR JANUARY 1, 2023 – DECEMBER 31, 2023, FRNP-RPT-0347

Reference: Letter from M. Redfield to J. Stokes, "Four Rivers Nuclear Partnership, LLC—Deliverable No. 68—FINAL *Annual Report of Polychlorinated Biphenyls at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, for January 1, 2023–December 31, 2023,* FRNP-RPT-0347," (FRNP-24-8443), dated June 13, 2024

The U.S. Department of Energy reviewed the Four Rivers Nuclear Partnership, LLC, Deliverable No. 68, final *Annual Document of Polychlorinated Biphenyls for January 1, 2023 – December 31, 2023*, FRNP-RPT-0347, and concurs with the document as submitted.

If you have any questions or require additional information, please contact Ryan Callihan at (740) 897-2835.

Sincerely,

APRIL LADD Digitally signed by APRIL LADD Date: 2024.06.28 09:34:05 -05'00'

April Ladd
Contracting Officer's Representative
Portsmouth/Paducah Project Office

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I am not authorized to negotiate, or make any agreements or commitments, which involve a change in the scope, price, period of performance, terms or conditions of the contract. If you believe that a change has been directed as a result of this correspondence, then in accordance with contract clause DEAR 952.242-70 "Technical Direction," you are directed to contact the Contracting Officer, in writing, within five (5) working days after receipt of this letter (or email) and prior to taking any action as a result of this letter.

FRNP-RPT-0347

Annual Document of Polychlorinated Biphenyls at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, for January 1, 2023–December 31, 2023

FOUR RIVERS NUCLEAR PARTNERSHIP, LLC

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FRNP-RPT-0347

Annual Document of Polychlorinated Biphenyls at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, for January 1, 2023–December 31, 2023

Date Issued—June 2024

U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
FOUR RIVERS NUCLEAR PARTNERSHIP, LLC,
Managing the
Deactivation and Remediation Project at the
Paducah Gaseous Diffusion Plant
under Contract No. DE-EM0004895

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CONTENTS

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TABLES

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ACRONYMS

CD	certificate of disposal
CFR	*Code of Federal Regulations*
CY	calendar year
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
RCRA	Resource Conservation and Recovery Act
TSDF	treatment, storage, and disposal facility
UHWM	Uniform Hazardous Waste Manifest

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EXECUTIVE SUMMARY

This *Annual Document of Polychlorinated Biphenyls at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, for January 1, 2023–December 31, 2023*, (Annual Document) was prepared to meet applicable requirements of the Toxic Substances Control Act, as codified in the *Code of Federal Regulations* at 40 *CFR* Part 761, Subpart J, *General Records and Reports*. The mailing address for the U.S. Department of Energy (DOE) Paducah Site is 5501 Hobbs Road, Kevil, Kentucky 42053. The physical address is 5600 Hobbs Road, Kevil, Kentucky 42053. The U.S. Environmental Protection Agency (EPA) Identification Number is KY8-890-008-982. The Annual Document provides records and information required by 40 *CFR* § 761.180(a), *Records and Monitoring, PCBs and PCB Items in service or projected for disposal*.

The Annual Records required by 40 *CFR* § 761.180(a)(1) are located in Sections 1–4 and address the signed manifests, certificates of disposal (CDs), waste storage area inspections, and spill cleanup activities, respectively. The information for the annual document log, which is required by 40 *CFR* § 761.180(a)(2), is located in Section 1 and Sections 5–7. The annual document log includes the name, address, and EPA identification number of the facility, unique manifest number of every polychlorinated biphenyl (PCB) waste manifest generated by the facility during the calendar year (CY) (Section 1), PCB electrical equipment remaining in service at the end of the CY (Section 5), information on PCB waste shipped off-site and stored at the facility (Section 6), and a PCB waste shipment receipt log (Section 7). The appendices contain the PCB waste manifests, PCB waste CDs, PCB waste storage area inspection records, and PCB waste inventory tables.

The PCB items in service and PCB activities at the Paducah Site for CY 2023 are summarized below:

PCB transformers in service as of 12/31/2023: 0
Total PCBs in kg in PCB transformers as of 12/31/2023: 0
PCB large capacitors in service as of 12/31/2023:.....0
PCB waste in kg[1] generated in CY 2023: 29,174
PCB waste in kg[2] shipped off-site for treatment/disposal in CY 2023: 6,906
PCB waste in kg[3] remaining in storage for disposal as of 12/31/2023: 19,117

Throughout CY 2023, the Paducah Site generated 17 manifested shipments of PCB wastes to off-site treatment/disposal facilities. Fifteen CDs were received in CY 2023 for disposal of PCB wastes.

Due to the nature and history of operations at the Paducah Site, all PCB waste is suspected of being radiologically contaminated, and all PCB waste is considered potentially radiologically contaminated until it is certified otherwise. DOE has ongoing programs to characterize the radiological contamination of waste so it can be disposed of appropriately. In accordance with 40 *CFR* § 761.65, PCB wastes shall not be stored for more than one year. Radiologically contaminated PCB wastes may be stored beyond the one-year limit, as outlined in 40 *CFR* § 761.65(a)(1). Efforts to secure disposal of radioactive PCB waste items exceeding the one-year storage limitation are discussed in the *Uranium Enrichment Toxic Substances Control Act Compliance Agreement 2023 Annual Compliance Agreement Report January 1 through December 31, 2023, for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* FRNP-RPT-0352, dated May 2024, in accordance with the *Modification to the February 20, 1992, Compliance Agreement Between the*

[1] The weights in kg are taken from the Waste Tracking System, Requests for Disposal, or generator-supplied information, and may be estimated.
[2] The weights in kg were taken from the Uniform Hazardous Waste Manifests, as shown in Table 1.1, which differ from Waste Tracking System weights shown in Table D.4.
[3] See note 1.

United States Department of Energy and the United States Environmental Protection Agency, Washington, D.C., Toxic Substances Control Act, approved May 30, 2017.

1. PCB WASTE MANIFESTS

Uniform Hazardous Waste Manifests (UHWMs) of polychlorinated biphenyl (PCB) wastes shipped by the facility during the calendar year (CY) are annual records required by 40 *CFR* § 761.180(a)(1)(i), *PCBs and PCB Items in service or projected for disposal*. This section of the *Annual Document of Polychlorinated Biphenyls at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, for January 1, 2023–December 31, 2023*, (Annual Document) contains the information from the signed manifests of PCB wastes shipped off-site for disposal during CY 2023, which are included in Appendix A.

Seventeen manifests with 30 containers of solid and liquid PCB wastes were shipped for disposal. Copies of the UHWMs are located in Appendix A. PCB wastes were shipped to the following disposal sites:

- Energy*Solutions* disposal facility in Clive, Utah.

Table 1.1 summarizes the 2023 manifested PCB waste shipments. The table includes the manifest number, the shipment destination, the number of PCB containers/items on the manifest, and the net weight in kilograms of PCB containers/items shipped. The weights listed in this table were obtained from the UHWMs. The weights of wastes listed on the manifests were calculated based on the weight of the PCB-contaminated waste contents of the shipping container(s) or the estimated volume of the shipment. The weight on the manifest may differ from the weight recorded in the waste tracking system and the "PCB and Additional Information" attachment to the UHWM. When completing manifest documentation, the Deactivation and Remediation Contractor works with various treatment, storage, and disposal facilities (TSDFs) to facilitate acceptance. On occasion, the manifested weights are adjusted due to factors such as differences in the receiving facility's scale or because the TSDF requires the gross weight to be manifested instead of the net weight; however, the waste database is kept intact to reflect the operating weights while the waste was managed on-site.

Table 1.1 PCB Waste Manifests Summary

UHWM Number	Date Shipped	Shipment Destination	Number of PCB Containers	Weight from UHWM (kg)[a,b]
023682199JJK	1/12/2023	Energy*Solutions*, Clive, UT	2	114
023682201JJK	1/12/2023	Energy*Solutions*, Clive, UT	1	183
023682222JJK	2/7/2023	Energy*Solutions*, Clive, UT	1	1
023682223JJK	2/7/2023	Energy*Solutions*, Clive, UT	1	211
023682259JJK	2/23/2023	Energy*Solutions*, Clive, UT	1	69
023682277JJK	3/23/2023	Energy*Solutions*, Clive, UT	1	71
023682312JJK	4/27/2023	Energy*Solutions*, Clive, UT	3	483
023682332JJK	6/20/2023	Energy*Solutions*, Clive, UT	1	3
023682338JJK	6/20/2023	Energy*Solutions*, Clive, UT	1	25
023682405JJK	8/17/2023	Energy*Solutions*, Clive, UT	1	47
023682407JJK	8/17/2023	Energy*Solutions*, Clive, UT	1	57
023682410JJK	8/17/2023	Energy*Solutions*, Clive, UT	1	69
023682418JJK	8/17/2023	Energy*Solutions*, Clive, UT	1	101
023682433JJK	9/18/2023	Energy*Solutions*, Clive, UT	9	5024
023682462JJK	11/2/2023	Energy*Solutions*, Clive, UT	2	83
023682464JJK	11/2/2023	Energy*Solutions*, Clive, UT	1	180
023682469JJK	11/2/2023	Energy*Solutions*, Clive, UT	2	185
Total UHWM: 17			**30**	**6,906**

[a] The weights in kg were taken from the UHWMs which may differ from WTS weights shown in Table D.4.

[b] Due to rounding, the weight totals may vary.

2. PCB WASTE CERTIFICATES OF DISPOSAL

Certificates of disposal (CDs) that have been received by the facility during the CY for PCB wastes disposed of are annual records required by 40 *CFR* § 761.180(a)(1)(ii). Fifteen CDs were received in 2023 from the following facilities:

- Energy*Solutions* disposal facility in Clive, Utah; and
- Perma-Fix of Florida, Inc., treatment facility in Gainesville, Florida.

Table 2.1 lists the UHWM number, disposal facility, date disposed of, number of PCB containers/items disposed of, and the weight in kilograms of PCB items shipped. The weights listed in the table were obtained from the UHWMs.

The CDs are presented in Appendix B. If the CD received in 2023 was for waste shipped in 2023, the manifests are shown in Table 1.1 and Appendix A.

Table 2.1. PCB Waste Certificates of Disposal Summary

UHWM	Earliest Date Removed from Service	Date Shipped	Disposer	Containers Disposed of	Weight from UHWM (kg)[a]	Date of Disposal	Date CD Received
023531984JJK	8/2/2022	8/16/2022	Perma-Fix of Florida Gainesville, FL	1	1	8/16/2023	9/11/2023
023682199JJK	8/2/2022	1/12/2023	Energy*Solutions*, Clive, UT	1	56	3/31/2023	4/26/2023
023682199JJK	9/27/2022	1/12/2023	Energy*Solutions*, Clive, UT	1	58	3/31/2023	4/26/2023
023682201JJK	2/21/2022	1/12/2023	Energy*Solutions*, Clive, UT	1	183	11/13/2023	12/14/2023
023682222JJK	9/7/2022	2/7/2023	Energy*Solutions*, Clive, UT	1	1	3/16/2023	4/4/2023
023682223JJK	3/7/2022	2/7/2023	Energy*Solutions*, Clive, UT	1	211	3/27/2023	4/4/2023
023682259JJK	3/10/2022	2/23/2023	Energy*Solutions*, Clive, UT	1	69	3/16/2023	4/4/2023
023682277JJK	10/7/2022	3/23/2023	Energy*Solutions*, Clive, UT	1	71	5/22/2023	6/26/2023
023682312JJK	5/18/2022	4/27/2023	Energy*Solutions*, Clive, UT	1	96	5/22/2023	6/26/2023
023682312JJK	6/24/2022	4/27/2023	Energy*Solutions*, Clive, UT	1	372	5/22/2023	6/26/2023
023682312JJK	2/20/2023	4/27/2023	Energy*Solutions*, Clive, UT	1	15	5/22/2023	6/26/2023
023682332JJK	2/16/2023	6/20/2023	Energy*Solutions*, Clive, UT	1	3	7/31/2023	8/2/2023
023682338JJK	2/20/2023	6/20/2023	Energy*Solutions*, Clive, UT	1	25	6/29/2023	7/24/2023
023682405JJK	11/17/2022	8/17/2023	Energy*Solutions*, Clive, UT	1	47	9/7/2023	9/20/2023
023682407JJK	2/8/2023	8/17/2023	Energy*Solutions*, Clive, UT	1	57	9/25/2023	10/3/2023
023682418JJK	10/27/2022	8/17/2023	Energy*Solutions*, Clive, UT	1	101	9/25/2023	10/3/2023
023682433JJK	7/14/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	233	9/28/2023	10/3/2023
023682433JJK	7/21/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	233	9/28/2023	10/3/2023
023682433JJK	7/21/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	64	9/28/2023	10/3/2023
023682433JJK	7/22/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	176	9/28/2023	10/3/2023

Table 2.1. PCB Waste Certificates of Disposal Summary (Continued)

UHWM	Earliest Date Removed from Service	Date Shipped	Disposer	Containers Disposed of	Weight from UHWM (kg)[a]	Date of Disposal	Date CD Received
023682433JJK	7/22/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	666	9/28/2023	10/3/2023
023682433JJK	7/22/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	245	9/28/2023	10/3/2023
023682433JJK	8/4/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	529	9/28/2023	10/3/2023
023682433JJK	8/8/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	2,458	9/28/2023	10/3/2023
023682433JJK	8/11/2023	9/18/2023	Energy*Solutions*, Clive, UT	1	420	9/28/2023	10/3/2023
023682462JJK	7/21/2023	11/2/2023	Energy*Solutions*, Clive, UT	1	49	12/14/2023	12/28/2023
023682462JJK	7/21/2023	11/2/2023	Energy*Solutions*, Clive, UT	1	34	12/14/2023	12/28/2023
			Totals[b]	**27**	**6,473**		

[a] The weights in kg were taken from the UHWMs, as shown in Table 1.1, which differs from WTS weights shown in Table 6.1.

[b] Due to rounding, the weight totals may vary.

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3. PCB WASTE STORAGE AREA INSPECTION RECORDS

Records of inspections performed in accordance with 40 *CFR* § 761.65(c)(5), *Storage and Disposal*, are annual records required by 40 *CFR* § 761.180(a)(1)(iii).

Table 3.1 lists the PCB waste storage areas (i.e., a building or an area within a building) established and/or operated for PCB wastes at the Paducah Site during CY 2023. Appendix C contains information from the PCB Waste Inspection database and lists the dates of inspection and a "Yes/No" check to indicate if leaks/spills were found.

As noted in Appendix C, supplemental inspection information is used to demonstrate continued compliance with 40 *CFR* § 761.65(c)(5) during instances when routine PCB storage inspection frequencies exceed 30 days. This supplemental information is comprised of other inspections/walkdowns [e.g., Resource Conservation and Recovery Act (RCRA) storage facility inspections, waste facility inventory inspections, facility operations daily rounds] performed in the facilities where the affected PCB waste containers are stored. Any containers, including PCB containers, found to have deficiencies during these supplemental inspections are documented and reported. When necessary, this supplemental information is compiled and maintained with the site PCB storage area inspection records.

Table 3.1. PCB Waste Storage Areas at the Paducah Site

Building	Waste Area Designator
C-300	30DAA-PCB-300-01[a]
C-300	30DAA-PCB-300-02[b]
C-333	G-331-18[c]
C-333	S-333-27[d,e]
C-333	S-333-28[d,f]
C-333	S-333-29[d,g]
C-337	G-337-PCB-02[c]
C-337	S-337-12[d]
C-337	S-337-13[d,h]
C-337	S-337-14[d,i]
C-733	C-733
C-746-Q	C-746-Q
C-752-A	C-752-A
C-753-A	C-753-A
C-757	G-757-03[c]

[a] 30DAA-PCB-300-01 was established on September 14, 2023, and closed on October 21, 2023.
[b] 30DAA-PCB-300-02 was established on September 27, 2023, and closed on October 17, 2023.
[c] Waste Area Designators that begin with a "G" indicate a generator staging area, which is a temporary storage area for non-RCRA, PCB, and/or low-level (radioactive) waste.
[d] Waste Area Designators that begin with a "S" indicate a satellite accumulation area, which is a temporary storage area for RCRA, but may be mixed with PCB, and/or low-level (radioactive) waste.
[e] S-333-27 was established on July 31, 2023.
[f] S-333-28 was established on August 28, 2023.
[g] S-333-29 was established on August 28, 2023.
[h] S-337-13 was closed on August 29, 2023.
[i] S-337-14 was closed on August 29, 2023.

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4. PCB SPILL CLEANUP RECORDS

Records of cleanup and disposal of any spilled or leaked materials from PCB items in storage, in accordance with 40 *CFR* § 761.65(c)(5), are annual records required by 40 *CFR* § 761.180(a)(1)(iii). Because no spills occurred in PCB storage areas during CY 2023, there are no records.

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5. PCB ELECTRICAL EQUIPMENT IN SERVICE

No PCB [≥ 500 parts per million (ppm)] transformers or PCB (≥ 500 ppm) large capacitors were in service at the Paducah Site as of December 31, 2023, which is summarized in Table 5.1. In addition, no PCB transformers or PCB large capacitors were removed from service in CY 2023. Sixty-seven PCB transformers were removed from service, drained, and flushed during 2015. They were stored in place in C-337 during CY 2023. Residual flushate was removed over time as it drained through and collected in the units.

There are no CY 2023 PCB transformer maintenance records because there was no maintenance performed on these transformers, and the transformers currently are not in service.

Table 5.1. PCB Electrical Equipment in Service as of December 31, 2023

Type	Number in Service	Volume (gal)	PCB (kg)
PCB transformers*	0	0	0
PCB large high-voltage capacitors	0	0	0

*There were 67 PCB transformers that were removed from service, drained, flushed, and stored in place in 2015. Due to their size and the structural interferences in the process buildings, options for disposal of these items continue to be evaluated.

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6. PCB WASTE ACTIVITY

PCB waste activities performed by the facility during CY 2023 are annual records required by 40 *CFR* § 761.180 (a)(2)(iii). The PCB Waste Activity Summary for CY 2023 is shown in Table 6.1. Detail tables supporting the summary table are located in Appendix D. Throughout the tables, the PCB Date, often referred to as PCB DTS (date to storage), reflects the date that the PCB waste was first added to a container and is also the origin date of the container.

The PCB Waste Inventory for December 31, 2022, has been adjusted from the "PCB Waste Inventory as of December 31, 2022," reported as Table D.5 of the *Annual Document of Polychlorinated Biphenyls at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, for January 1, 2022—December 31, 2022*, FRNP-RPT-0296. The net changes to the January 1, 2023, beginning inventory include adjustments because of in-process collection containers at the time of the 2022 inventory, information received after the 2022 report submittal, and/or weight corrections. The detailed listing of the December 31, 2022, corrections and adjustments is provided in Appendix D, Table D.1.

The detailed listing of PCB waste generated during CY 2023 is provided in Appendix D, Table D.2.

The detailed listing of the adjustments to the CY 2023 PCB inventory is provided in Appendix D, Table D.3.

The detailed listing of the PCB waste shipped in CY 2023 is provided in Appendix D, Table D.4.

The detailed listing of the PCB waste inventory as of December 31, 2023, is provided in Appendix D, Table D.5.

There was no PCB waste received from off-site facilities in CY 2023.

Table 6.1. PCB Waste Activity Summary for CY 2023

PCB Waste Items In Inventory	12/31/2022 Inventory		Corrections and Adjustments to Beginning Inventory[a]		1/1/2023 Inventory		Generated		Corrections to 2023 Inventory[b]		Shipped for Disposal		12/31/2023 Inventory	
	pc	*kg*	*pc*	*kg*	*pc*	*kg*	*pc*	*kg*	*pc*	*kg*	*pc*	*kg*	*pc*	*kg*
ARTICLES	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PCB Transformer Components (drained)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PCB Transformers (drained)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARTICLE CONTAINERS[c]	**4**	**687**	**1**	**162**	**5**	**849**	**34**	**96**	**-30**	**18,094**	**-5**	**-778**	**4**	**18,261**
Large Capacitors	1	5	0	0	1	5	0	0	0	0	-1	-5	0	0
Light Ballasts	2	111	1	162	3	273	2	96	-1	-76	-3	-202	1	91
Misc. Equip. (motors, pumps, etc.)	1	571	0	0	1	571	32	[g]	-29	18,170	-1	-571	3	18,170
CONTAINERS	**10**	**1,624**	**1**	**614**	**11**	**2,238**	**31**	**8,739**	**-9**	**2,244**	**-25**	**-12,365**	**8**	**856**
Liquids [d]	4	290	1	429	5	719	2	190	0	0	-5	-719	2	190
Solids	6	1,334	0	185	6	1,519	29	8,549	-9	2,244	-20	-11,646	6	666
BULK PCB REMEDIATION WASTE SOLIDS < 49 MG/Kg[e]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL[f]	**14**	**2,311**	**2**	**776**	**16**	**3,087**	**65**	**8,835**	**-39**	**20,338**	**-30**	**-13,143**	**12**	**19,117**

pc = piece count; kg = kilogram (rounded to the nearest whole number for the summaries)

[a] The Corrections and Adjustments to Beginning Inventory column includes adjustments because of in-process collection containers at time of 2022 inventory, information received after the 2022 report submittal, characterization waste category adjustments, and/or weight corrections. Weights reported in this summary include the weight of the container (drum/box), except for tanks/tankers.

[b] The Adjustments to 2023 Inventory column includes adjustments due to repackaging of wastes or because of in-process collection containers during time of 2023 inventory. Weights reported in this summary include the weight of the container (drum/box), except for tanks/tankers.

[c] Article Containers are drums or boxes of PCB transformers, PCB large capacitors, electrical equipment, PCB light ballasts, or PCB small capacitors.

[d] Portable (mobile) tanks and totes are counted as Containers.

[e] PCB Remediation Waste Solids disposed at the onsite C-746-U Landfill.

[f] Due to rounding, the weight totals may vary.

[g] The containers were created as collection containers and repackaged before being individually weighed. The total weight of the items was captured in the final conatainer listed on Table D.

7. PCB WASTE SHIPMENT RECEIPT LOG

A PCB waste shipment receipt log is required by 40 *CFR* § 761.180(a)(2)(viii). The log is included as Table 7.1. The table is an excerpt from a data file, which includes a record of phone calls or other agreed method to confirm receipt of PCB waste shipments. Information in the log that is not required for this report has been omitted from Table 7.1.

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Table 7.1 CY 2023 PCB Waste Shipment Receipt Log

Shipment ID	Actual Ship Date	Shipment Destination	UHWM #	Comments / Notes	Date Manifest Received	Comments for Manifest Inquiries and Requests	Waste Cat	Confirmation email received from TSDF
7340-08-0027	1/12/2023	Energy*Solutions*, Clive, UT	023682199JJK	(2) DRUMS OF TSCA/LLW	1/16/2023		TSCA Mixed (TM)	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 1/16/2023
9750-04-0014	1/12/2023	Energy*Solutions*, Clive, UT	023682201JJK	(1) DRUM OF TSCA/LLW WASTE	1/16/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 1/16/2023
9750-01-0098	2/7/2023	Energy*Solutions*, Clive, UT	023682223JJK	(1) ST-90 OF TSCA/MLLW	2/13/2023		RCRA/TSCA Mixed (RTM)	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 2/13/2023
9750-90-0003	2/7/2023	Energy*Solutions*, Clive, UT	023682222JJK	(1) DRUM OF TSCA WASTE	2/13/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 2/13/2023
9750-90-0004	2/23/2023	Energy*Solutions*, Clive, UT	023682259JJK	(1) DRUM OF TSCA/LLW	2/28/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 2/28/2023
7340-08-0028	3/23/2023	Energy*Solutions*, Clive, UT	023682277JJK	(1) DRUM OF TSCA/LLW	3/27/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 3/27/2023
7340-08-0029	4/27/2023	Energy*Solutions*, Clive, UT	023682312JJK	(2) ST-90S AND (1) DRUM OF TSCA/LLW	5/1/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 5/1/2023
9750-01-0101	6/20/2023	Energy*Solutions*, Clive, UT	023682338JJK	(2) DRUMS OF TSCA/ MLLW, (3) DRUMS OF RCRA WASTE, (1) DRUM OF LLW/TSCA/ACM	6/23/2023		RTM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 6/23/2023
9750-90-0005	6/20/2023	Energy*Solutions*, Clive, UT	023682332JJK	(1) DRUM OF TSCA WASTE	7/3/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 7/3/2023
7340-08-0031	8/17/2023	Energy*Solutions*, Clive, UT	023682405JJK	(1) DRUM OF TSCA/LLW	8/22/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 8/22/2023
9750-01-0102	8/17/2023	Energy*Solutions*, Clive, UT	023682407JJK	(1) DRUM OF TSCA/LLW AND (3) DRUMS OF MLLW/PCB BULK PRODUCT	8/22/2023		RTM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 8/22/2023
9750-09-0036	8/17/2023	Energy*Solutions*, Clive, UT	023682410JJK	(1) DRUM OF RCRA WASTE (UNPUNCTURED AEROSAL CANS) AND (1) DRUM OF TSCA/MLLW	8/22/2023		RTM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 8/22/2023
9750-90-0006	8/17/2023	Energy*Solutions*, Clive, UT	023682418JJK	(1) DRUM TSCA/LLW	8/22/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 8/22/2023
7340-08-0032	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK	(7) ST-90s, (1) SEALAND, AND (1) B-12 BOX OF TSCA/LLW	9/21/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 9/21/2023
9750-01-0103	11/2/2023	Energy*Solutions*, Clive, UT	023682462JJK	(3) DRUMS OF MLLW AND (1) DRUM OF RCRA WASTE	11/7/2023		RT	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 11/7/2023
9750-04-0015	11/2/2023	Energy*Solutions*, Clive, UT	023682469JJK	(2) DRUMS OF TSCA/LLW	11/7/2023		TM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 11/7/2023
9750-09-0037	11/2/2023	Energy*Solutions*, Clive, UT	023682464JJK	(1) DRUM OF RCRA/TSCA WASTE AND (2) DRUMS OF RCRA WASTE	11/7/2023		RTM	RECEIVED EMAIL CONFIRMATION FROM SCOTT GLEASON ON 11/7/2023

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APPENDIX A

PCB WASTE MANIFESTS

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Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	1-270-441-6333	023682199 JK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of FRNP
5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-441-6211

Generator's Site Address (if different than mailing address)
FRNP on behalf of the FRNP
Paducah Gaseous Diffusion Plant
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: Interstate Ventures, Inc. — U.S. EPA ID Number: TNR000034678

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site- Bulk Waste Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155 — 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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN 2912, Radioactive material, low specific activity (LSA-I), 7, (PCB), Pu-238, Pu-239, Tc-99, Th-230, U-234, Solid/Oxide, 26 MBq, Fissile Exempted	2	DM	114	K	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Truck: H58 Trailer: 536227V TID:0349259 Accumulation Start Date: NA PCB Start Date: 08/02/22
ERG #162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Exclusive Use Shipment, See Attachment for Additional Info Shipment ID: 7340-08-0027

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: Blake Cleary on Behalf of FRNP — Signature: Blake Cleary — Month: 01 Day: 12 Year: 23

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.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kenneth Dillman — Signature: Kenneth Dillman — Month: 1 Day: 12 Year: 23

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:

RECEIVED
JAN 16 2023
BY:

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.	2.	3.	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 Gums — Signature: Albert Gums — Month: 1 Day: 16 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Additional Information Attachment, Page 2 of 2

Manifest Number: 023682199JJK

Shipment ID Number: 7340-08-0027

Shipment Date: 1/12/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Date to Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	Net Wt (Kg)	Maximum Activity MBq
9b.1	122623	122623-08	PAD22C51250	POTENTIALLY PCB CONTAMINATED PPE & PLASTIC	8/2/2022	7	179	81	123	56	13
9b.1	122623	122623-09	PAD22C51277	POTENTIALLY PCB CONTAMINATED PPE & PLASTIC	9/27/2022	7	187	85	127	58	13
		Totals	2			**14**	**366**	**166**	**250**	**114**	**26**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	1-270-441-6333	023682201 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of FRNP
5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-441-8211

Generator's Site Address (if different than mailing address)
FRNP on behalf of the FRNP
Paducah Gaseous Diffusion Plant
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: Interstate Ventures, Inc. — U.S. EPA ID Number: TNR000034678

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155
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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN 2912, Radioactive material, low specific activity (LSA-I), 7, (PCB), Am-241, Np-237, Pu-238, Pu-239, Tc-99, Th-230, Liquid/Oxide, 0.417 MBq, Fissile Excepted	1	DM	183	K	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Truck: H58 Trailer: 536227V TID:0349259 Accumulation Start Date: NA PCB Start Date: 02-21-22
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Exclusive Use Shipment, See Attachment for Additional Info Shipment ID: 9750-04-0014

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: Blake Cleary on Behalf OF FRNP — Signature: Blake Cleary — Month 01 Day 12 Year 23

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.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kenneth Dillman — Signature: [signature] — Month 1 Day 12 Year 23

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:

RECEIVED JAN 16 2023 BY: [signature]

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.	2.	3.	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 Enns — Signature: Albert Enns — Month 1 Day 16 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Additional Information Attachment, Page 2 of 2

Manifest Number: 023682201JJK

Shipment ID Number: 9750-04-0014

Shipment Date: 1/12/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Date to Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	Net Wt (Kg)	Maximum Activity MBq
9b.1	122622	122622-02	PAD22C50128	VENTILATION DUCT OIL AND WATER	02/21/22	5.95	460	209	404	183	0.417
		Totals	**1**			**6**	**460**	**209**	**404**	**183**	**0.417**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	1-270-441-6333	023682222 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of FRNP
5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-441-5544

Generator's Site Address (if different than mailing address)
FRNP on behalf of the FRNP
Paducah Gaseous Diffusion Plant
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: RSB LOGISTIC Inc. — U.S. EPA ID Number: WAR000012005

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155 — 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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN3077, Environmentally Hazardous substance, solid, n.o.s. (PCB), 9, PG III	1	DM	1	K	
	2.					
	3.					

Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including, but not limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895.

14. Special Handling Instructions and Additional Information
Truck: 58306 Trailer 253285 TID: 349879 Accumulation Start Date: N/A PCB Start Date: 09/07/22
ERG # 171 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
See Attachment for Additional Info PM02605 Shipment ID: 9750-90-0003

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/Offeror's Printed/Typed Name: Regina Rea — Signature: Regina Rea — Month 02 Day 07 Year 23

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.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Shane Culp — Signature: Shane Culp — Month 2 Day 7 Year 23

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

RECEIVED
FEB 13 2023
BY:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	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 2 Day 10 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. **DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM**

Additional Information Attachment, Page 2 of 2

Manifest Number: 023682222JJK

Shipment ID Number: 9750-90-0003

Shipment Date: 2/7/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Date To Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	Net Wt (Kg)
9b.1	130083	130083-01	PAD22C50693	CAPACITORS FROM CHARGERS IN BATTERY ROOMS AND ASSOCIATED BCS	09/07/22	0.2	11	5	2	1
		Totals	1			0.20	11	5	2	1

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008882	2	1-270-441-6333	023682223 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of FRNP
5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-441-5544

Generator's Site Address (if different than mailing address)
FRNP on behalf of the FRNP
Paducah Gaseous Diffusion Plant
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: RSB LOGISTIC Inc. — U.S. EPA ID Number: WAR000012005

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155 — 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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
RQ	1. UN 2913, Waste, Radioactive Material, surface contaminated objects (SCO-I), 7, (D008, PCB), NP-237, Tc-99, U-234, U-236, Solid/Oxide, 1 MBq, Fissile Excepted	1	CM	211	K	D008		
	2.							
	3.							

Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including, but not limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895.

14. Special Handling Instructions and Additional Information
Truck: 58306 Trailer 253285 TID: 349879 Accumulation Start Date: 03/07/22 PCB Start Date: 03/07/22
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
See Attachment for Additional Info PM02604 Shipment ID: 9750-01-0098

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: Regina Lea — Signature: Regina Lea — Month 02 Day 07 Year 23

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.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Shane Culp — Signature: Shane Culp — Month 2 Day 7 Year 23

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

RECEIVED
FEB 13 2023
BY:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	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 2 Day 10 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. **DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM**

PCB and Additional Information Attachment, Page 2 of 2

Manifest Number: 023682223JJK

Shipment ID Number: 9750-01-0098

Shipment Date: 2/7/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Accumulation Start Date	Date To Storage	Maximum Activity MBq	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	Net Wt (Kg)
9b.1	122667-01	122667-01	PAD22C50415	Site Process Equip.	03/07/22	03/07/22	1	30	1258	571	465	211
		Totals	1				1	**30.00**	**1258**	**571**	**465**	**211**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

122667-01

9750-01-0098

LAND DISPOSAL NOTIFICATION AND CERTIFICATION

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682223JJK

Profile No.: 9750-01 State Manifest No.: N/A

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: Non-wastewater ☒ Wastewater ☐
2. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent standards are listed on the following page. If F039, multi-source leachate applies those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	D008	TCLP Lead	☐	A
2			☐	
3		11/30/2022	☐	
4			☐	

To identify F039 or D001-D043 underlying hazardous constituent (s), use the "F039/Underlying Hazardous Constituent Form" provided (Form B1) and check here ☐
If no UHCs are present in the waste upon its initial generation check here: ☒
To list additional USEPA waste code(s) and subcategorie(s), use the supplemental sheet provided (Form A2) and check here: ☐

HOW MUST THE WASTE BE MANAGED? In column 5 above, enter the letter (A, B1, B3, B4, C, D, or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B3, B4, or D, you are making the appropriate certification as provided below. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.

A. RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268.40.
☒ For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards in 40 CFR Part 268.40 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion in units as specified in 268.42 Table 1. I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 5 above.
☐ For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS
This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature JOSHUA NORMAN (Affiliate) Digitally signed by JOSHUA NORMAN (Affiliate) Date: 2022.11.30 15:20:46 -05'00' Title Waste Engineer Date 11/30/2022

Form A1
Page 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

If the waste identified on the first page of this form is described by any of the following USEPA hazardous waste codes: F001, F002, F003, F004, F005, and all solvent constituents will not be monitored by the treater, then each constituent MUST be identified below by checking the appropriate box, and this page must accompany the shipment, along with the previous page of this form. If the waste code F039 describes this waste, then the corresponding list of constituents must be attached. If D001-D043 require treatment to 268.48 standards, then the underlying hazardous constituent(s) must also be attached.

SOLVENT WASTE TREATMENT STANDARDS[2]					
F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]		F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]	
	Wastewaters	Nonwastewaters		Wastewaters	Nonwastewaters
Acetone (F003)	0.28	160	Methanol (F003)	5.6	0.75 (TCLP)[3]
Benzene (F005)	0.14	10	Methylene chloride (F001, F002)	0.089	30
n-Butanol (n-butyl alcohol) (F003)	5.6	2.6	Methyl ethyl ketone (F005)	0.28	36
Carbon disulfide (F005)	3.8	4.8 (TCLP)[3]	Methyl isobutyl ketone (F003)	0.14	33
Carbon tetrachloride (F001)	0.057	6.0	Nitrobenzene (F004)	0.068	14
Chlorobenzene (F002)	0.057	6.0	2-Nitropropane (F005)	INCIN or {(WETOX or C HOXD) followed by CARBN}	INCIN
o-Cresol (F004)	0.11	5.6	Pyridine (F005)	0.014	16
Cresol (m- and p- isomers) (F004)	0.77	5.6	Tetrachloroethylene (F001, F002)	0.056	6.0
Cyclohexanone (F003)	0.36	0.75 (TCLP)[3]	Toluene (F005)	0.080	10
o-Dichlorobenzene (F002)	0.088	6.0	1,1,1-Trichloroethane (F001, F002)	0.054	6.0
2-Ethoxyethanol (F005) also called ethylene glycol, monoethyl ether	INCIN or BIODG	INCIN	1,1,2-Trichloroethane (F002)	0.054	6.0
Ethyl acetate (F003)	0.34	33	Trichloroethylene (F001, F002)	0.054	6.0
Ethyl benzene (F003)	0.057	10	Trichloromonofluoromethane (F002)	0.020	30
Ethyl ether (F003)	0.12	160	1,1,2-Trichloro-1,2,2-trifluoroethane (F002)	0.057	30
Isobutanol (Isobutyl Alcohol) (F005)	5.6	170	Xylenes (sum of o-, m-, and p-isomers) (F003)	0.32	30

[1] All spent solvent treatment standards are measured through a total waste analysis (TCA), unless otherwise noted. Wastewater units are mg/l, nonwastewater are mg/kg.

[2] For contaminated soils using the alternative soil treatment standards, the treatment standards for F001-F005 spent solvents must be a 90% reduction of the constituents or less than 10x the standard listed.

[3] These solvents require a TCLP standard with units of mg/l.

SUBCATEGORY REFERENCE

D001:

A. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.

B. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in CWA/CWA-equivalent or Class I SDWA systems.

C. High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a) (1) – Greater than or equal to 10% total organic carbon.

D002:

D. Corrosive characteristic wastes that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.

E. Corrosive characteristic wastes that are managed in CWA, CWA-equivalent, or Class I SWDA systems.

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682223JJK

Profile No.: 9750-01 State Manifest No.: N/A

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
5			☐	
6			☐	
7			☐	
8			☐	
9			☐	
10			☐	
11			☐	
12			☐	
13			☐	
14			☐	
15			☐	
16			☐	
17			☐	
18			☐	
19			☐	
20			☐	
21			☐	
22			☐	
23			☐	
24			☐	
25			☐	
26			☐	
27			☐	
28			☐	
29			☐	
30			☐	
31			☐	
32			☐	
33			☐	
34			☐	
35			☐	

JW 11/30/2022

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature JOSHUA NORMAN (Affiliate) Digitally signed by JOSHUA NORMAN (Affiliate) Date: 2022.11.30 15:21:45 -05'00'

Title Waste Engineer Date 11/30/2022

Form A2
Page 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682223JJK

Profile No.: 9750-01 State Manifest No.: N/A

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
36			☐	
37			☐	
38			☐	
39			☐	
40			☐	
41			☐	
42			☐	
43			☐	
44			☐	
45			☐	
46			☐	
47			☐	
48			☐	
49			☐	
50			☐	
51			☐	
52			☐	
53			☐	
54		JW 11/30/2022	☐	
55			☐	
56			☐	
57			☐	
58			☐	
59			☐	
60			☐	
61			☐	
62			☐	
63			☐	
64			☐	
65			☐	

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature JOSHUA NORMAN (Affiliate) Digitally signed by JOSHUA NORMAN (Affiliate) Date: 2022.11.30 15:22:30 -05'00'

Title Waste Engineer Date 11/30/2022

Form A2
Page 2 of 2

F039/UNDERLYING HAZARDOUS CONSTITUENT (UTS) (Phase IV)

023682222JJK 5/14/23

Generator Name: Four Rivers Nuclear Partnership

Manifest Doc. No. : ~~023682222JJK~~

Profile No.: ~~5/14/23 9750-90~~ 9750-01

State Manifest No.: N/A

If D001-D043 requires treatment to the 40 CRF 268.48 standards, then each underlying hazardous constituent (UHC) present in the waste at the point of generation and at a level above the Universal Treatment Standard (UTS) constituent specific standard must be listed. Write the letter (A1, B1, B2, B3, or C that corresponds to the letter on the land disposal form A1) beside each constituent present to properly describe how the constituent(s) must be managed under 40 CFR 268.7. If contaminated soil requires treatment to 40 CFR 268.49 standards, then each UHC in the waste at the point of generation and at a level above 10 times the UTS must be listed. Write the appropriate letter which corresponds to the letter on the LDR form.

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Acenaphthylene		0.059	3.4	2-Chloro-1,3-butadiene		0.057	0.28[1]
Acenapthene		0.059	3.4	Chlorodibromomethane		0.057	15
Acetone		0.28	160	Chloroethane		0.27	6.0
Acetonitrile		5.6	38[1]	bis(2-Chloroethoxy)methane		0.036	7.2
Acetophenone		0.010	9.7	bis(2-Chloroethyl)ether		0.033	6.0
2-Acetylaminofluorene		0.059	140	Chloroform		0.046	6.0
Acrolein		0.29	NA	bis(2-Chloroisopropyl)ether		0.055	7.2
Acylamide		19[1]	23[1]	p-Chloro-m-cresol		0.018	14
Acrylonitrile		0.24	84	2-Chloroethyl vinyl ether		0.062[1]	NA[1]
Aldicarb sulfone		0.056[1]	0.28[1]	Chloromethane/Methyl chloride		0.19	30
Aldrin		0.021	0.066	2-Chloronaphthalene		0.055	5.6
4-Aminobiphenyl		0.13	NA	2-Chlorophenol		0.044	5.7
Aniline		0.81	14	3-Chloropropylene		0.036	30
Anthracene		0.059	3.4	Chrysene		0.059	3.4
Aramite		0.36	NA	o-Cresol		0.11	5.6
alpha-(BHC)		0.00014	0.066	m-Cresol		0.77	5.6
beta-(BHC)		0.00014	0.066	p-Cresol		0.77	5.6
delta-(BHC)		0.023	0.066	m-Cumenyl methylcarbamate		0.056[1]	1.4[1]
gamma-(BHC)		0.0017	0.066	Cyclohexanone		0.36	0.75 mg/l[1]
Barban		0.056[1]	1.4[1]	o,p'-DDD		0.023	0.087
Bendiocarb		0.056[1]	1.4[1]	p,p'-DDD		0.023	0.087
Benomyl		0.056[1]	1.4[1]	o,p'-DDE		0.031	0.087
Benzene		0.14	10	p,p'-DDE		0.031	0.087
Benz(a)anthracene		0.059	3.4	o,p'-DDT		0.0039	0.087
Benzal chloride		0.055[1]	6.0[1]	p,p'-DDT		0.0039	0.087
Benzo(b)fluoranthene[3]		0.11	6.8	Dibenz(a,h)anthracene		0.055	8.2
Benzo(k)fluoranthene[3]		0.11	6.8	Dibenz(a,e)pyrene		0.061	NA
Benzo (g,h,i)perylene		0.0055	1.8	1,2-Dibromo-3-chloropropane		0.11	15
Benzo(a)pyrene		0.061	3.4	1,2-Dibromomethane/ Ethylene dibromide		0.028	15
Bromodichloromethane		0.35	15	Dibromomethane		0.11	15
Bromomethane/Methyl Bromide		0.11	15	m-Dichlorobenzene		0.036	6.0
4-Bromophenyl phenyl ether		0.055	15	o-Dichlorobenzene		0.088	6.0
n-Butyl alcohol		5.6	2.6	p-Dichlorobenzene		0.090	6.0
Butylate		0.042[1]	1.4[1]	Dichlorodifluoromethane		0.23	7.2
Butyl benzyl phthalate		0.017	28	1,1-Dichloroethane		0.059	6.0
2-sec-Butyl-4,6-dinitrophenol/Dinoseb		0.066	2.5	1,2-Dichloroethane		0.21	6.0
Carbaryl		0.006[1]	0.14[1]	1,1-Dichloroethylene		0.025	6.0
Carbenzadim		0.056[1]	1.4[1]	trans-1,2-Dichloroethylene		0.054	30
Carbofuran		0.006[1]	0.14[1]	2,4-Dichlorophenol		0.044	14
Carbofuran phenol		0.056[1]	1.4[1]	2.6-Dichlorophenol		0.044	14
Carbon disulfide		3.8	4.8 mg/l TCLP[1]	2,4-Dichlorophenoxyacetic acid/2,4-D		0.72	10
Carbon tetrachloride		0.057	6.0	1,2-Dichloropropane		0.85	18
Carbosulfan		0.028[1]	1.4[1]	cis-1,3-Dichloropropylene		0.036	18
Chlordane (alpha and gamma isomers)	JW 11/30/2022	0.0033	0.26	trans-1,3-Dichloropropylene	JW 11/30/2022	0.036	18
p-Chloroaniline		0.46	16	Dieldrin		0.017	0.13
Chlorobenzene		0.057	6.0	Diethyl phthalate		0.20	28

Form B1
Page 1 of 3

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Chlorobenzilate		0.10	NA	p-Dimethylaminoazobenzene		0.13[1]	NA
2,4-Dimethyl phenol		0.036	14	Methylene chloride		0.089	30
Dimethyl phthalate		0.047	28	Methyl ethyl ketone		0.28	36
Di-n-butyl phthalate		0.057	28	Methyl isobutyl ketone		0.14	33
1,4-Dinitrobenzene		0.32	2.3	Methyl methacrylate		0.14	160
4,6-Dinitro-o-cresol		0.28	160	Methyl methansulfonate		0.018	NA
2,4-Dinitrophenol		0.12	160	Methyl parathion		0.014	4.6
2,4-Dinitrotoluene		0.32	140	Metolcarb		0.056[1]	1.4[1]
2,6-Dinitrotoluene		0.55	28	Mexacarbate		0.056[1]	1.4[1]
Di-n-octyl phthalate		0.017	28	Molinate		0.042[1]	1.4[1]
Di-n-propylnitrosamine		0.40	14	Naphthalene		0.059	5.6
1,4-Dioxane		12.0	170	2-Naphthylamine		0.52	NA
Diphenylamine[3]		0.92	13[1]	o-Nitroaniline		0.27[1]	14[1]
Diphenylnitrosamine[3]		0.92	13[1]	p-Nitroaniline		0.028	28
1,2-Diphenylhydrazine		0.087	NA	Nitrobenzene		0.068	14
Disulfoton		0.017	6.2	5-Nitro-o-toluidine		0.32	28
Dithiocarbamates (total)		0.028	28[1]	o-Nitrophenol		0.028[1]	13[1]
Endosulfan I		0.023	0.066	p-Nitrophenol		0.12	29
Endosulfan II		0.029	0.13	N-Nitrosodiethylamine		0.40	28
Endosulfan sulfate		0.029	0.13	N-Nitrosodimethylamine		0.40	2.3[1]
Endrin		0.0028	0.13	N-Nitroso-di-n-butylamine		0.40	17
Endrin aldehyde		0.025	0.13	N-Nitrosomethylethylamine		0.40	2.3
EPTC		0.042[1]	1.4[1]	N-Nitrosomorpholine		0.40	2.3
Ethyl acetate		0.34	33	N-Nitrosopiperidine		0.013	35
Ethyl benzene		0.057	10	N-Nitrosopyrrolidine		0.013	35
Ethyl cyanide/Propanenitrile		0.24	360	Oxamyl		0.056[1]	0.28[1]
Ethyl ether		0.12	160	Parathion		0.014	4.6
Bis(2-Ethylhexyl)phthalate		0.28	28	Total PCBs (sum of all PCB isomers or all Aroclors)		0.10	10
Ethyl methacrylate		0.14	160	Pebulate		0.042[1]	1.4[1]
Ethylene oxide		0.12	NA	Pentachlorobenzene		0.055[1]	10[1]
Famphur		0.017	15	PeCDDs (All Pentachlorodibenzo-p-dioxins)		0.000035	0.001
Fluoranthene		0.068	3.4	PeCDFs(All Pentachlorodibenzofurans)		0.000035	0.001
Fluorene		0.059	3.4	Pentachloroethane		0.055	6.0
Formetanate hydrochloride		0.056[1]	1.4[1]	Pentachloronitrobenzene		0.055	4.8
Heptachlor		0.0012	0.066	Pentachlorophenol		0.089	7.4
Heptachlor epoxide		0.016	0.066	Phenacetin		0.081	16
Hexachlorobenzene		0.055	10	Phenanthrene		0.059	5.6
Hexachlorobutadiene		0.055	5.6	Phenol		0.039	6.2
Hexachlorocyclopentadiene		0.057	2.4	Phorate		0.021	4.6
HxCDDs (All Hexachrorodibenzo-p-dioxins)		0.000063	0.001	Phthalic acid		0.055[1]	28[1]
HxCDFs (All Hexachlorodibenzofurans)		0.000063	0.001	Phthalic anhydride		0.055	28[1]
Hexachloroethane		0.055	30	Physostigmine		0.056[1]	1.4[1]
Hexachloropropylene		0.035	30	Physostigmine salicylate		0.056[1]	1.4[1]
Indeno(1,2,3-c,d)pyrene		0.0055	3.4	Promecarb		0.056[1]	1.4[1]
Iodomethane		0.19	65	Pronamide		0.093	1.5
Isobutyl alcohol		5.6	170	Propham		0.056[1]	1.4[1]
Isodrin		0.021	0.066	Propoxur		0.056[1]	1.4[1]
Isosafrole		0.081	2.6	Prosulfocarb		0.042[1]	1.4[1]
Kepone		0.0011	0.13	Pyrene		0.067	8.2
Methacrylonitrile		0.24	84	Pyridine		0.014	16
Methanol		5.6	0.75 mg/l[1]	Safrole		0.081	22
Methapyrilene		0.081	1.5	Silvex/2,4,5-TP		0.72	7.9
Methiocarb		0.056[1]	1.4[1]	1,2,4,5-Tetrachlorobenzene		0.055	14
Methomyl		0.028[1]	0.14[1]	TCDDs (All Tetrachlorodibenzo-p-dioxins)		0.000063	0.001
Methoxychlor	JW 11/30/2022	0.25	0.18	TCDFs (All Tetrachlorodibenzo-furans)	JW 11/30/2022	0.000063	0.001
3-Methylcholanthrene		0.0055	15	1,1,1,2-Tetrachloroethane		0.057	6.0
4,4'-Methylene bis(2-chloroaniline)		0.50	30	1,1,2,2-Tetrachloroethane		0.057	6.0

Form B1
Page 2 of 3

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Tetrachloroethylene		0.056	6.0	**INORGANIC CONSTITUENTS**			
2,3,4,6-Tetrachlorophenol		0.030	7.4	Antimony		1.9	2.1 mg/l TCLP
Thiodicarb		0.0191	1.4[1]	Antimony		1.9	1.15 mg/l TCLP[4]
Thiophanate-methyl		0.0561	1.4[1]	Arsenic		1.4	5.0 mg/l TCLP
Toluene		0.080	10	Barium		1.2	7.6 mg/l TCLP
Toxaphene		0.0095	2.6	Barium		1.2	21 mg/l TCLP[4]
Triallate		0.042[1]	1.4[1]	Beryllium		0.82	0.014 mg/l TCLP
Tribromomethane/Bromoform		0.63	15	Beryllium		0.82	1.22 mg/l TCLP[4]
2,4,6-Tribromophenol		0.035	7.4	Cadmium		0.69	0.19 mg/l TCLP
1,2,4-Trichlorobenzene		0.055	19	Cadmium		0.69	0.11 mg/l TCLP[4]
1,1,1-Trichloroethane		0.054	6.0	Chromium (Total)		2.77	0.86mg/l TCLP
1,1,2-Trichloroethane		0.054	6.0	Chromium (Total)		2.77	0.60 mg/l TCLP[4]
Trichloroethylene		0.054	6.0	Cyanides (Total)		1.2	590
Trichloromonofluoromethane		0.020	30	Cyanides (Amenable)		0.86	30[1]
2,4,5-Trichlorophenol		0.18	7.4	Fluoride		35	NA[4]
2,4,6-Trichlorophenol		0.035	7.4	Lead		0.69	0.37 mg/l
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T		0.72	7.9	Lead		0.69	0.75 mg/l[4] TCLP
1,2,3-Trichloropropane		0.85	30	Mercury (Nonwastewater from Retort)		NA	0.20 mg/l TCLP
1,1,2-Trichloro-1,2,2-trifluoroethane		0.057	30	Mercury (All others)		0.15	0.025 mg/l TCLP
Triethylamine		0.081[1]	1.5[1]	Nickel		3.98	5.0 mg/l TCLP
Tris-(2,3-Dibromopropyl)phosphate		0.11	0.10[1]	Nickel		3.98	11 mg/l TCLP[4]
Vernolate		0.042[1]	6.0[1]	Selenium		0.82	0.16 mg/l TCLP
Vinyl chloride		0.27	6.0	Selenium		0.82	5.7 mg/l TCLP[5]
Xylenes – mixed isomers (sum of o-,m-, and p-xylene	11/30/2022	0.32	30	Silver		0.43	0.30 mg/l TCLP
				Silver		0.43	0.14 mg/l TCLP[4]
				Sulfide		14	NA[2]
				Thallium		1.4	0.078 mg/l TCLP[1]
				Thallium		1.4	0.20 mg/l TCLP[4]
	11/30/2022			Vanadium	11/30/2022	4.3[2]	1.6 mg/l TCLP[2]
				Zinc		2.61	4.3 mg/l TCLP[2]

[1] These constituents are only applicable as underlying hazardous constituents. These constituents are not constituents that require treatment in F039 wastes.

[2] Not an underlying hazardous constituent requiring treatment in a D001-D043 waste.

[3] These compounds are regulated by the sum of their concentration instead of as individual constituents.

[4] These constituents are effective in authorized states or states with no LDR program on 8/24/99. These concentrations are effective in all other states upon adoption by the state.

[5] Effective 8/24/98 in unauthorized states or states with no LDR program. Selenium at 5.7 mg/l is not an underlying hazardous constituent in D001-D043 waste. This becomes effective in authorized states upon adoption by the state.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	1-270-441-6333	023682259 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of the U.S. Department of Energy
Generator's Phone: 5511 Hobbs Road, Kevil, KY 42053

Generator's Site Address (if different than mailing address)
FRNP on behalf of the U.S. Department of Energy
Paducah Gaseous Diffusion Plant,
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: RSB LOGISTICS Inc. — U.S. EPA ID Number: WAR000012005

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: EnergySolutions Clive Disposal Site-Waste Bulk Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155
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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN 2913, Radioactive material, surface contaminated objects (SCO-I), 7, Np-237, Tc-99, Th-230, U-234 Solid/Oxide, (PCB) 0.38 MBq, Fissile Excepted	1	DM	69	K	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Truck: 00820 VAN: 253205 TID: 0349197 Accumulation date: N/A PCB Start Date: 03/10/22
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Exclusive Use Shipment, See PCB Attachment for Additional Info Shipment ID: 9750-90-0004

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: Candace Gillette on behalf of FRNP — Signature: Candace Gillette — Month: 2 — Day: 23 — Year: 23

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.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Kurt Forster — Signature: Kurt Forster — Month: 02 — Day: 23 — Year: 23
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

RECEIVED FEB 28 2023 BY:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	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 Fens — Signature: Albert Fens — Month: 2 — Day: 27 — Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Manifest Number: 023682259JJK

Shipment ID Number: 9750-90-0004

Shipment Date: 2/23/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	PCB Date to Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	NET Wt (Kg)
9b.1	122668	122668-01	PAD22C50602	PCB LIGHT BALLASTS, CAPACITORS, TRANSFORMERS ETC	03/10/22	2.8	183	83	153	69
		Totals	1			2.8	183	83	153	69

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: KY 8890008982

2. Page 1 of: 2

3. Emergency Response Phone: 1-270-441-6333

4. Manifest Tracking Number: 023682277 JJK

5. Generator's Name and Mailing Address:
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of the U.S. Department of Energy
5511 Hobbs Road, Kevil, KY 42053

Generator's Phone:

Generator's Site Address (if different than mailing address):
FRNP on behalf of the U.S. Department of Energy
Paducah Gaseous Diffusion Plant,
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: Land Star Inway on behalf of Hittman Transport Services — U.S. EPA ID Number: TNR000034686

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
EnergySolutions Clive Disposal Site-Bulk Waste Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155

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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN2912, Radioactive material, low specific activity (LSA-I), 7, (PCB), Np-237, Pu-238, Pu-239, TC-99, Th-230, U-234, Solid/Oxide, 28.07 MBq, Fissile Excepted	1	DM	71	K	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information:
Truck: ~~8885~~ 41266 / 663323 Trailer: W06719 — PCB Start Date: 10/07/22
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 — If undeliverable, return to generator
Exclusive Use Shipment, See PCB Attachment for Additional Info PR09457 Shipment ID: 7340-08-0028

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: Candace Gillette on behalf of FRNP — Signature: Candace Gillette — Month 03 Day 23 Year 23

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: Kelvin Pruett — Signature: Kelvin Pruett — Month 3 Day 23 Year 23
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:

RECEIVED MAR 27 2023 BY: [signature]

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. 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: Justin Lee — Signature: [signature] — Month 3 Day 27 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

PCB and Additional Information Attachment, Page 2 of 2

Manifest Number: 023682277JJK

Shipment ID Number: 7340-08-0028

Shipment Date: 3/23/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Date to storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	NET Wt (Kg)
9b.1	122623	122623-10	PAD22C51278	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	10/7/2022	7.4	216	98	156	71
		Totals	1			7.4	216	98	156	71

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: KY 8890008982
2. Page 1 of: 2
3. Emergency Response Phone: 1-270-441-6333
4. Manifest Tracking Number: 023682312 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of FRNP
5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-441-5544

Generator's Site Address (if different than mailing address)
FRNP on behalf of the FRNP
Paducah Gaseous Diffusion Plant
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: RSB LOGISTIC Inc.
U.S. EPA ID Number: WAR000012005

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155
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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN 2912, Radioactive Material, low specific activity (LSA-I), 7, (PCB), To-99, Th-230, U-234, Solid/Oxide, 318 MBq, Fissile Excepted	2	CM	468	K	
RQ	2. UN 2912, Radioactive Material, low specific activity (LSA-I), 7, (PCB), Np-237, To-99, Th-230, U-234, Solid/Oxide, 17 MBq, Fissile Excepted	1	DM	15	K	
	3.					
	4. Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including, but not limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895.					

14. Special Handling Instructions and Additional Information
Truck: 56306 Trailer 78357 TID: 2061486 Accumulation Start Date: NA PCB Start Date: 05/18/22
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
EXCLUSIVE USE See PCB Attachment for Additional Info PR09477 Shipment ID: 7340-08-0029

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: Regina Lea on behalf of FRNP
Signature: Regina Lea
Month: 4 Day: 27 Year: 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Shane Culp
Signature: Shane Culp
Month: 4 Day: 27 Year: 23

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:

RECEIVED
MAY 01 2023
BY:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132	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: Scott A. Gleason
Signature:
Month: 05 Day: 01 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. **DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM**

PCB and Additional Information Attachment, Page 2 of 2

Manifest Number: 023682312JJK

Shipment ID Number: 7340-08-0029

Shipment Date: 4/27/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	NET VOLUME (ft3)	PCB Date To Storage	Total Activity (MEq)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	Net Wt (Kg)
9b.1	122235	122235-05	PAD22C50509	EPOXY PAINT CHIPS,	15	5/18/2022	57	1000	454	211	96
9b.1	122193	122193-10	PAD22C50285	EPOXY PAINT CHIPS,	65	6/24/2022	259	1612	731	820	372
9b.2	122623	122623-12	PAD23C60071	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	6	2/20/2023	17	84	38	34	15
		Totals	**3**		**86.00**		**333**	**2696**	**1223**	**1065**	**483**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: KY 8890008982
2. Page 1 of: 2
3. Emergency Response Phone: 1-270-441-6333
4. Manifest Tracking Number: 023682332 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP)
for U.S. Department of Energy (DOE)
5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-441-6333

Generator's Site Address (if different than mailing address)
FRNP for U.S. Department of Energy (DOE)
Paducah Gaseous Diffusion Plant,
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: RSB LOGISTICS Inc.
U.S. EPA ID Number: WAR000012005

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site-Treatment Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155
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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
RQ	1. UN 3077, Environmentally hazardous substance, solid, n.o.s., (PCB), 9, PG-III	1	DM	3	K			
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Truck:58718 Trailer: 253191 TID: 0349776 PCB Start Date: 02/16/23
ERG # 171 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
See Attachment for Additional Info PM02657 Shipment ID: 9750-90-0005

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: Candace Gillette for US DOE
Signature: Candace Gillette
Month: 6 Day: 20 Year: 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Alex Roten
Signature: Alex Roten
Month: 6 Day: 20 Year: 23
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:

RECEIVED
JUL 03 2023

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
BY:
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 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: Scott A. Gleason
Signature: Scott A. Gleason
Month: 06 Day: 23 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

PCB and Additional Information Attachment, Page 2 of 2

Manifest Number: 023682332 JJK

Shipment ID Number: 9750-90-0005

Shipment Date: 6/20/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	PCB Date to storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	Net WT (lb)	Net Wt (Kg)
9b.1	130162	130162-01	PAD23C60339	PCB LIGHT BALLASTS AND/OR CAPACITORS	02/16/23	0.2	12	5	7	3
		Totals	**1**			**0.2**	**12**	**5**	**7**	**3**

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	KY 8890008982	2	1-270-441-6333	023682338 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP)
for U.S. Department of Energy
5511 Hobbs Road, Kevil, KY 42053
Generator's Phone:

Generator's Site Address (if different than mailing address)
FRNP for U.S. Department of Energy
Paducah Gaseous Diffusion Plant,
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: RSB LOGISTIC Inc. — U.S. EPA ID Number: WAR000012005

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155 — 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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
RQ	1. UN 2912, Waste, Radioactive material, low specific activity (LSA-I), 7, (PCB, D008), Np-237, Tc-99, Th-230, U-234, Solid/Oxide, 71 MBq, Fissile Excepted	2	DM	79	K	D008	D007	D008
RQ	2. NA3077, Hazardous waste solid, n.o.s., (Barium, Selenium), 9, PG III, (D010)	3	DM	67	K	D005	D010	
RQ	3. UN2913, Waste, Radioactive material, surface contaminated objects (SCO-I), 7, (PCB, Asbestos), Np-237, Tc-99, Th-230, U-234, Solid/Oxide, 0.77 MBq, Fissile Excepted	1	DM	25	K	D008	D007	D008

Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including, but not limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895.

14. Special Handling Instructions and Additional Information
Truck: 58718 Trailer 253191 TID: 349776 Accumulation Start Date: 03/22/23 PCB Start Date: 02/20/23
ERG # 162, 171 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Exclusive Use Shipment, See PCB Attachment for Additional Info Shipment ID: 9750-01-0101

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: Regina Pea on behalf of FRNP — Signature: Regina Pea — Month: 06 Day: 20 Year: 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alexander Roten — Signature: Alexander Roten — Month: 06 Day: 20 Year: 23

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

RECEIVED
JUN 23 2023
BY:

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.	2.	3.	4.
H132	H132	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 Guns — Signature — Month: 6 Day: 23 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

PCB and Additional Information Attachment, Page 2 of 2

Manifest Number: 023682338JJK

Shipment ID Number: 9750-01-0101

Shipment Date: 6/20/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	PCB Date to Storage	Accumulation Start Date	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	Net Wt (Kg)	Maximum Activity MBq
9b.1	121650	121650-62	PAD23C60005	LEAD WASTE, lead paint chips	N/A	03/22/23	6.1	98	44	48	22	34
9b.1	121650	121650-63	PAD23C60088	LEAD WASTE, lead paint chips	N/A	04/17/23	6.6	176	80	126	57	37
9b.2	122234	122234-17	PAD22C51097	ABSORBENTS FROM LUBE OIL THAT WAS GENERATED IN SUPPORT OF PGDP	N/A	04/20/23	6	100	45	44	20	N/A
9b.2	122234	122234-18	PAD23C60750	ABSORBENTS FROM LUBE OIL THAT WAS GENERATED IN SUPPORT OF PGDP	N/A	05/09/23	6.5	94	43	44	20	N/A
9b.2	122234	122234-19	PAD23C60527	ABSORBENTS FROM LUBE OIL THAT WAS GENERATED IN SUPPORT OF PGDP	N/A	05/18/23	6.5	110	50	60	27	N/A
9b.3	130163	130163-01	PAD23C60072	PCB CONTAMINATED ASBESTOS	02/20/23	06/05/23	6	106	48	56	25	0.77
		Totals	**6**				**37.7**	**684**	310	378	171	71.77

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

130163-01

9750-01-0101

LAND DISPOSAL NOTIFICATION AND CERTIFICATION

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682338JJK

Profile No.: 9750-01 State Manifest No.: N/A

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: Non-wastewater ☒ Wastewater ☐
2. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent standards are listed on the following page. If F039, multi-source leachate applies those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	D006	Cadmium (TCLP)	☐	A
2	D007	Chromium (TCLP)	☐	A
3	D008	Lead (TCLP)	☐	A
4		~~SS 06/06/2023~~	☐	

To identify F039 or D001-D043 underlying hazardous constituent (s), use the "F039/Underlying Hazardous Constituent Form" provided (Form B1) and check here ☐
If no UHCs are present in the waste upon its initial generation check here: ☒
To list additional USEPA waste code(s) and subcategorie(s), use the supplemental sheet provided (Form A2) and check here: ☐

HOW MUST THE WASTE BE MANAGED? In column 5 above, enter the letter (A, B1, B3, B4, C, D, or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B3, B4, or D, you are making the appropriate certification as provided below. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.

A. RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268.40.
☒ For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards in 40 CFR Part 268.40 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion in units as specified in 268.42 Table 1. I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 5 above.
☐ For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS
This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature MARY STAHR (Affiliate) Digitally signed by MARY STAHR (Affiliate) Date: 2023.06.06 09:54:47 -05'00' Title WASTE ENGINEER Date

Form A1
Page 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

If the waste identified on the first page of this form is described by any of the following USEPA hazardous waste codes: F001, F002, F003, F004, F005, and all solvent constituents will not be monitored by the treater, then each constituent MUST be identified below by checking the appropriate box, and this page must accompany the shipment, along with the previous page of this form. If the waste code F039 describes this waste, then the corresponding list of constituents must be attached. If D001-D043 require treatment to 268.48 standards, then the underlying hazardous constituent(s) must also be attached.

SOLVENT WASTE TREATMENT STANDARDS[2]					
F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]		F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]	
	Wastewaters	Nonwastewaters		Wastewaters	Nonwastewaters
Acetone (F003)	0.28	160	Methanol (F003)	5.6	0.75 (TCLP)[3]
Benzene (F005)	0.14	10	Methylene chloride (F001, F002)	0.089	30
n-Butanol (n-butyl alcohol) (F003)	5.6	2.6	Methyl ethyl ketone (F005)	0.28	36
Carbon disulfide (F005)	3.8	4.8 (TCLP)[3]	Methyl isobutyl ketone (F003)	0.14	33
Carbon tetrachloride (F001)	0.057	6.0	Nitrobenzene (F004)	0.068	14
Chlorobenzene (F002)	0.057	6.0	2-Nitropropane (F005)	INCIN or {(WETOX or C HOXD) followed by CARBN}	INCIN
o-Cresol (F004)	0.11	5.6	Pyridine (F005)	0.014	16
Cresol (m- and p- isomers) (F004)	0.77	5.6	Tetrachloroethylene (F001, F002)	0.056	6.0
Cyclohexanone (F003)	0.36	0.75 (TCLP)[3]	Toluene (F005)	0.080	10
o-Dichlorobenzene (F002)	0.088	6.0	1,1,1-Trichloroethane (F001, F002)	0.054	6.0
2-Ethoxyethanol (F005) also called ethylene glycol, monoethyl ether	INCIN or BIODG	INCIN	1,1,2-Trichloroethane (F002)	0.054	6.0
Ethyl acetate (F003)	0.34	33	Trichloroethylene (F001, F002)	0.054	6.0
Ethyl benzene (F003)	0.057	10	Trichloromonofluoromethane (F002)	0.020	30
Ethyl ether (F003)	0.12	160	1,1,2-Trichloro-1,2,2-trifluoroethane (F002)	0.057	30
Isobutanol (Isobutyl Alcohol) (F005)	5.6	170	Xylenes (sum of o-, m-, and p-isomers) (F003)	0.32	30

[1] All spent solvent treatment standards are measured through a total waste analysis (TCA), unless otherwise noted. Wastewater units are mg/l, nonwastewater are mg/kg.

[2] For contaminated soils using the alternative soil treatment standards, the treatment standards for F001-F005 spent solvents must be a 90% reduction of the constituents or less than 10x the standard listed.

[3] These solvents require a TCLP standard with units of mg/l.

SUBCATEGORY REFERENCE

D001:

A. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.

B. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in CWA/CWA-equivalent or Class I SDWA systems.

C. High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a) (1) – Greater than or equal to 10% total organic carbon.

D002:

D. Corrosive characteristic wastes that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.

E. Corrosive characteristic wastes that are managed in CWA, CWA-equivalent, or Class I SWDA systems.

Form A1
Page 2 of 2

130163-01

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682338JJK

Profile No.: 9750-01 State Manifest No.: N/A

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
5			☐	
6			☐	
7			☐	
8			☐	
9			☐	
10			☐	
11			☐	
12			☐	
13			☐	
14			☐	
15			☐	
16			☐	
17			☐	
18			☐	
19			☐	
20			☐	
21			☐	
22		SS 06/06/2023	☐	
23			☐	
24			☐	
25			☐	
26			☐	
27			☐	
28			☐	
29			☐	
30			☐	
31			☐	
32			☐	
33			☐	
34			☐	
35			☐	

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature MARY STAHR (Affiliate) Digitally signed by MARY STAHR (Affiliate) Date: 2023.06.06 09:53:55 -05'00'

Title WASTE ENGINEER Date

Form A2
Page 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682338JJK

Profile No.: 9750-01 State Manifest No.: N/A

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
36			☐	
37			☐	
38			☐	
39			☐	
40			☐	
41			☐	
42			☐	
43			☐	
44			☐	
45			☐	
46			☐	
47			☐	
48			☐	
49			☐	
50			☐	
51			☐	
52		SS 06/06/2023	☐	
53			☐	
54			☐	
55			☐	
56			☐	
57			☐	
58			☐	
59			☐	
60			☐	
61			☐	
62			☐	
63			☐	
64			☐	
65			☐	

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature MARY STAHR (Affiliate) Digitally signed by MARY STAHR (Affiliate) Date: 2023.06.06 09:53:10 -05'00'

Title WASTE ENGINEER Date

Form A2
Page 2 of 2

F039/UNDERLYING HAZARDOUS CONSTITUENT (UTS) (Phase IV)

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682338JJK

Profile No.: 9750-01 State Manifest No.: N/A

If D001-D043 requires treatment to the 40 CRF 268.48 standards, then each underlying hazardous constituent (UHC) present in the waste at the point of generation and at a level above the Universal Treatment Standard (UTS) constituent specific standard must be listed. Write the letter (A1, B1, B2, B3, or C that corresponds to the letter on the land disposal form A1) beside each constituent present to properly describe how the constituent(s) must be managed under 40 CFR 268.7. If contaminated soil requires treatment to 40 CFR 268.49 standards, then each UHC in the waste at the point of generation and at a level above 10 times the UTS must be listed. Write the appropriate letter which corresponds to the letter on the LDR form.

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Acenaphthylene		0.059	3.4	2-Chloro-1,3-butadiene		0.057	0.28[1]
Acenapthene		0.059	3.4	Chlorodibromomethane		0.057	15
Acetone		0.28	160	Chloroethane		0.27	6.0
Acetonitrile		5.6	38[1]	bis(2-Chloroethoxy)methane		0.036	7.2
Acetophenone		0.010	9.7	bis(2-Chloroethyl)ether		0.033	6.0
2-Acetylaminofluorene		0.059	140	Chloroform		0.046	6.0
Acrolein		0.29	NA	bis(2-Chloroisopropyl)ether		0.055	7.2
Acylamide		19[1]	23[1]	p-Chloro-m-cresol		0.018	14
Acrylonitrile		0.24	84	2-Chloroethyl vinyl ether		0.062[1]	NA[1]
Aldicarb sulfone		0.056[1]	0.28[1]	Chloromethane/Methyl chloride		0.19	30
Aldrin		0.021	0.066	2-Chloronaphthalene		0.055	5.6
4-Aminobiphenyl		0.13	NA	2-Chlorophenol		0.044	5.7
Aniline		0.81	14	3-Chloropropylene		0.036	30
Anthracene		0.059	3.4	Chrysene		0.059	3.4
Aramite		0.36	NA	o-Cresol		0.11	5.6
alpha-(BHC)		0.00014	0.066	m-Cresol		0.77	5.6
beta-(BHC)		0.00014	0.066	p-Cresol		0.77	5.6
delta-(BHC)		0.023	0.066	m-Cumenyl methylcarbamate		0.056[1]	1.4[1]
gamma-(BHC)		0.0017	0.066	Cyclohexanone		0.36	0.75 mg/l[1]
Barban		0.056[1]	1.4[1]	o,p'-DDD		0.023	0.087
Bendiocarb		0.056[1]	1.4[1]	p,p'-DDD		0.023	0.087
Benomyl		0.056[1]	1.4[1]	o,p'-DDE		0.031	0.087
Benzene		0.14	10	p,p'-DDE		0.031	0.087
Benz(a)anthracene		0.059	3.4	o,p'-DDT		0.0039	0.087
Benzal chloride	SS 06/06/2023	0.055[1]	6.0[1]	p,p'-DDT	SS 06/06/2023	0.0039	0.087
Benzo(b)fluoranthene[3]		0.11	6.8	Dibenz(a,h)anthracene		0.055	8.2
Benzo(k)fluoranthene[3]		0.11	6.8	Dibenz(a,e)pyrene		0.061	NA
Benzo (g,h,i)perylene		0.0055	1.8	1,2-Dibromo-3-chloropropane		0.11	15
Benzo(a)pyrene		0.061	3.4	1,2-Dibromomethane/ Ethylene dibromide		0.028	15
Bromodichloromethane		0.35	15	Dibromomethane		0.11	15
Bromomethane/Methyl Bromide		0.11	15	m-Dichlorobenzene		0.036	6.0
4-Bromophenyl phenyl ether		0.055	15	o-Dichlorobenzene		0.088	6.0
n-Butyl alcohol		5.6	2.6	p-Dichlorobenzene		0.090	6.0
Butylate		0.042[1]	1.4[1]	Dichlorodifluoromethane		0.23	7.2
Butyl benzyl phthalate		0.017	28	1,1-Dichloroethane		0.059	6.0
2-sec-Butyl-4,6-dinitrophenol/Dinoseb		0.066	2.5	1,2-Dichloroethane		0.21	6.0
Carbaryl		0.006[1]	0.14[1]	1,1-Dichloroethylene		0.025	6.0
Carbenzadim		0.056[1]	1.4[1]	trans-1,2-Dichloroethylene		0.054	30
Carbofuran		0.006[1]	0.14[1]	2,4-Dichlorophenol		0.044	14
Carbofuran phenol		0.056[1]	1.4[1]	2.6-Dichlorophenol		0.044	14
Carbon disulfide		3.8	4.8 mg/l TCLP[1]	2,4-Dichlorophenoxyacetic acid/2,4-D		0.72	10
Carbon tetrachloride		0.057	6.0	1,2-Dichloropropane		0.85	18
Carbosulfan		0.028[1]	1.4[1]	cis-1,3-Dichloropropylene		0.036	18
Chlordane (alpha and gamma isomers)		0.0033	0.26	trans-1,3-Dichloropropylene		0.036	18
p-Chloroaniline		0.46	16	Dieldrin		0.017	0.13
Chlorobenzene		0.057	6.0	Diethyl phthalate		0.20	28

Form B1
Page 1 of 3

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Chlorobenzilate		0.10	NA	p-Dimethylaminoazobenzene		0.13[1]	NA
2,4-Dimethyl phenol		0.036	14	Methylene chloride		0.089	30
Dimethyl phthalate		0.047	28	Methyl ethyl ketone		0.28	36
Di-n-butyl phthalate		0.057	28	Methyl isobutyl ketone		0.14	33
1,4-Dinitrobenzene		0.32	2.3	Methyl methacrylate		0.14	160
4,6-Dinitro-o-cresol		0.28	160	Methyl methansulfonate		0.018	NA
2,4-Dinitrophenol		0.12	160	Methyl parathion		0.014	4.6
2,4-Dinitrotoluene		0.32	140	Metolcarb		0.056[1]	1.4[1]
2,6-Dinitrotoluene		0.55	28	Mexacarbate		0.056[1]	1.4[1]
Di-n-octyl phthalate		0.017	28	Molinate		0.042[1]	1.4[1]
Di-n-propylnitrosamine		0.40	14	Naphthalene		0.059	5.6
1,4-Dioxane		12.0	170	2-Naphthylamine		0.52	NA
Diphenylamine[3]		0.92	13[1]	o-Nitroaniline		0.27[1]	14[1]
Diphenylnitrosamine[3]		0.92	13[1]	p-Nitroaniline		0.028	28
1,2-Diphenylhydrazine		0.087	NA	Nitrobenzene		0.068	14
Disulfoton		0.017	6.2	5-Nitro-o-toluidine		0.32	28
Dithiocarbamates (total)		0.028	28[1]	o-Nitrophenol		0.028[1]	13[1]
Endosulfan I		0.023	0.066	p-Nitrophenol		0.12	29
Endosulfan II		0.029	0.13	N-Nitrosodiethylamine		0.40	28
Endosulfan sulfate		0.029	0.13	N-Nitrosodimethylamine		0.40	2.3[1]
Endrin		0.0028	0.13	N-Nitroso-di-n-butylamine		0.40	17
Endrin aldehyde		0.025	0.13	N-Nitrosomethylethylamine		0.40	2.3
EPTC		0.042[1]	1.4[1]	N-Nitrosomorpholine		0.40	2.3
Ethyl acetate		0.34	33	N-Nitrosopiperidine		0.013	35
Ethyl benzene	SS 06/06/2023	0.057	10	N-Nitrosopyrrolidine		0.013	35
Ethyl cyanide/Propanenitrile		0.24	360	Oxamyl	SS 06/06/2023	0.056[1]	0.28[1]
Ethyl ether		0.12	160	Parathion		0.014	4.6
Bis(2-Ethylhexyl)phthalate		0.28	28	Total PCBs (sum of all PCB isomers or all Aroclors)		0.10	10
Ethyl methacrylate		0.14	160	Pebulate		0.042[1]	1.4[1]
Ethylene oxide		0.12	NA	Pentachlorobenzene		0.055[1]	10[1]
Famphur		0.017	15	PeCDDs (All Pentachlorodibenzo-p-dioxins)		0.000035	0.001
Fluoranthene		0.068	3.4	PeCDFs(All Pentachlorodibenzofurans)		0.000035	0.001
Fluorene		0.059	3.4	Pentachloroethane		0.055	6.0
Formetanate hydrochloride		0.056[1]	1.4[1]	Pentachloronitrobenzene		0.055	4.8
Heptachlor		0.0012	0.066	Pentachlorophenol		0.089	7.4
Heptachlor epoxide		0.016	0.066	Phenacetin		0.081	16
Hexachlorobenzene		0.055	10	Phenanthrene		0.059	5.6
Hexachlorobutadiene		0.055	5.6	Phenol		0.039	6.2
Hexachlorocyclopentadiene		0.057	2.4	Phorate		0.021	4.6
HxCDDs (All Hexachrorodibenzo-p-dioxins)		0.000063	0.001	Phthalic acid		0.055[1]	28[1]
HxCDFs (All Hexachlorodibenzofurans)		0.000063	0.001	Phthalic anhydride		0.055	28[1]
Hexachloroethane		0.055	30	Physostigmine		0.056[1]	1.4[1]
Hexachloropropylene		0.035	30	Physostigmine salicylate		0.056[1]	1.4[1]
Indeno(1,2,3-c,d)pyrene		0.0055	3.4	Promecarb		0.056[1]	1.4[1]
Iodomethane		0.19	65	Pronamide		0.093	1.5
Isobutyl alcohol		5.6	170	Propham		0.056[1]	1.4[1]
Isodrin		0.021	0.066	Propoxur		0.056[1]	1.4[1]
Isosafrole		0.081	2.6	Prosulfocarb		0.042[1]	1.4[1]
Kepone		0.0011	0.13	Pyrene		0.067	8.2
Methacrylonitrile		0.24	84	Pyridine		0.014	16
Methanol		5.6	0.75 mg/l[1]	Safrole		0.081	22
Methapyrilene		0.081	1.5	Silvex/2,4,5-TP		0.72	7.9
Methiocarb		0.056[1]	1.4[1]	1,2,4,5-Tetrachlorobenzene		0.055	14
Methomyl		0.028[1]	0.14[1]	TCDDs (All Tetrachlorodibenzo-p-dioxins)		0.000063	0.001
Methoxychlor		0.25	0.18	TCDFs (All Tetrachlorodibenzo-furans)		0.000063	0.001
3-Methylcholanthrene		0.0055	15	1,1,1,2-Tetrachloroethane		0.057	6.0
4,4'-Methylene bis(2-chloroaniline)		0.50	30	1,1,2,2-Tetrachloroethane		0.057	6.0

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Tetrachloroethylene		0.056	6.0	INORGANIC CONSTITUENTS			
2,3,4,6-Tetrachlorophenol		0.030	7.4	Antimony		1.9	2.1 mg/l TCLP
Thiodicarb		0.0191	1.4[1]	Antimony		1.9	1.15 mg/l TCLP[4]
Thiophanate-methyl		0.0561	1.4[1]	Arsenic		1.4	5.0 mg/l TCLP
Toluene		0.080	10	Barium		1.2	7.6 mg/l TCLP
Toxaphene		0.0095	2.6	Barium		1.2	21 mg/l TCLP[4]
Triallate		0.042[1]	1.4[1]	Beryllium		0.82	0.014 mg/l TCLP
Tribromomethane/Bromoform		0.63	15	Beryllium		0.82	1.22 mg/l TCLP[4]
2,4,6-Tribromophenol		0.035	7.4	Cadmium		0.69	0.19 mg/l TCLP
1,2,4-Trichlorobenzene		0.055	19	Cadmium		0.69	0.11 mg/l TCLP[4]
1,1,1-Trichloroethane		0.054	6.0	Chromium (Total)		2.77	0.86mg/l TCLP
1,1,2-Trichloroethane		0.054	6.0	Chromium (Total)		2.77	0.60 mg/l TCLP[4]
Trichloroethylene	SS 06/06/2023	0.054	6.0	Cyanides (Total)	SS 06/06/2023	1.2	590
Trichloromonofluoromethane		0.020	30	Cyanides (Amenable)		0.86	30[1]
2,4,5-Trichlorophenol		0.18	7.4	Fluoride		35	NA[4]
2,4,6-Trichlorophenol		0.035	7.4	Lead		0.69	0.37 mg/l
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T		0.72	7.9	Lead		0.69	0.75 mg/l[4] TCLP
1,2,3-Trichloropropane		0.85	30	Mercury (Nonwastewater from Retort)		NA	0.20 mg/l TCLP
1,1,2-Trichloro-1,2,2-trifluoroethane		0.057	30	Mercury (All others)		0.15	0.025 mg/l TCLP
Triethylamine		0.081[1]	1.5[1]	Nickel		3.98	5.0 mg/l TCLP
Tris-(2,3-Dibromopropyl)phosphate		0.11	0.10[1]	Nickel		3.98	11 mg/l TCLP[4]
Vernolate		0.042[1]	6.0[1]	Selenium		0.82	0.16 mg/l TCLP
Vinyl chloride		0.27	6.0	Selenium		0.82	5.7 mg/l TCLP[5]
Xylenes – mixed isomers (sum of o-,m-, and p-xylene		0.32	30	Silver		0.43	0.30 mg/l TCLP
				Silver		0.43	0.14 mg/l TCLP[4]
				Sulfide		14	NA[2]
	SS 06/06/2023			Thallium		1.4	0.078 mg/l TCLP[1]
				Thallium		1.4	0.20 mg/l TCLP[4]
				Vanadium		4.3[2]	1.6 mg/l TCLP[2]
				Zinc		2.61	4.3 mg/l TCLP[2]

[1] These constituents are only applicable as underlying hazardous constituents. These constituents are not constituents that require treatment in F039 wastes.

[2] Not an underlying hazardous constituent requiring treatment in a D001-D043 waste.

[3] These compounds are regulated by the sum of their concentration instead of as individual constituents.

[4] These constituents are effective in authorized states or states with no LDR program on 8/24/99. These concentrations are effective in all other states upon adoption by the state.

[5] Effective 8/24/98 in unauthorized states or states with no LDR program. Selenium at 5.7 mg/l is not an underlying hazardous constituent in D001-D043 waste. This becomes effective in authorized states upon adoption by the state.

Form B1
Page 3 of 3

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	KY 8890008982	2	1-270-441-6333	023682405 JJK

5. Generator's Name and Mailing Address: Four Rivers Nuclear Partnership, LLC, (FRNP) for U.S. Department of Energy (DOE) 5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-816-7632

Generator's Site Address (if different than mailing address): Four Rivers Nuclear Partnership, LLC, (FRNP) for U.S. Department of Energy (DOE) 5511 Hobbs Road, Kevil, KY 42053

6. Transporter 1 Company Name: CAST Transportation — U.S. EPA ID Number: CQR000005389

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: EnergySolutions Clive Disposal Site- Waste Treatment Facility, US I-80 Exit 49, Clive, UT 84029 — U.S. EPA ID Number: UTD982598898
Facility's Phone: 1-435-884-0155

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1 UN 2912, Radioactive material, low specific activity (LSA-I), 7, (PCB), Np-237, Pu-238, Pu-239, Tc-99, Th-230, U-234, Solid/Oxide, 23.73 MBq, Fissile Excepted	1	DM	47	K	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Truck:1442 Van:519 TID:0349756 Accumulation Start Date: N/A PCB DTS: 11/17/2022
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Exclusive Use Shipment, See Attachment for Additional Info Shipment ID: 7340-08-0031

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: Blake Cleary on Behalf of FRNP — Signature: Blake Cleary — Month: 08 Day: 17 Year: 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tyler Spence — Signature: Tyler Spence — Month: 8 Day: 17 Year: 23

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

RECEIVED AUG 22 2023 BY:

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.	2.	3.	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 Gunn — Signature: Albert Gunn — Month: 8 Day: 21 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Additional Information Attachment, Page 2 of 2

Manifest Number: 023682405JJK

Shipment ID Number: 7340-08-0031

Shipment Date: 8/17/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Date to Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	Net Wt (lb)	Net Wt (Kg)
9b.1	122623	122623-11	PAD22C51254	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	11/17/2022	7.4	154	70	104	47
		Totals	**1**			**7.4**	**154**	**71**	**104**	**47**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

RT

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: KY 8890008982
2. Page 1 of: 2
3. Emergency Response Phone: 1-270-441-6333
4. Manifest Tracking Number: 023682407 JJK

5. Generator's Name and Mailing Address: Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of FRNP, 5511 Hobbs Road, Kevil, KY 42053
Generator's Site Address (if different than mailing address): FRNP for U.S. Department of Energy (DOE), Paducah Gaseous Diffusion Plant, 5511 Hobbs Rd, Kevil, KY 42053
Generator's Phone:

6. Transporter 1 Company Name: CAST Transportation — U.S. EPA ID Number: COR000005389

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: EnergySolutions Clive Disposal Site-Treatment Facility, US I-80 Exit 49, Clive, UT 84029 — U.S. EPA ID Number: UTD982598898
Facility's Phone: 1-435-884-0155

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
RQ	1UN 2912, Waste, Radioactive material, low specific activity (LSA-I), 7, (PCB, D008), Am-241, Pu-239, Tc-99, Th-228, Th-230, Solid/Oxide, 0.35 MBq, Fissile Excepted	1	DM	57	K	D008	D007	D008
RQ	2UN 2912, Waste, Radioactive material, low specific activity (LSA-I), 7, (PCB, D008), Am-241, Pu-239, Tc-99, Th-228, Th-230, Solid/Oxide, 0.82 MBq, Fissile Excepted	3	DM	71	K	D008	D007	D008
	3.							
	4.							

Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including, but not limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895.

14. Special Handling Instructions and Additional Information
Truck: 1442 Van: 519 TID: 0349756 Accumulation Start Date: 5/3/2023 PCB Start Date: 2/8/2023
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Exclusive Use Shipment, See PCB Attachment for Additional Info Shipment ID: 9750-01-0102

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: LaChelle Telfair on behalf of FRNP — Signature: LaChelle Telfair — Month: 8 Day: 17 Year: 23

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: Tyler Spence — Signature: Tyler Spence — Month: 8 Day: 17 Year: 23

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:

RECEIVED AUG 22 2023

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year
BY:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132	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 Evans — Signature: Albert Evans — Month: 8 Day: 21 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

PCB and Additional Information Attachment, Page 2 of 2

Manifest Number: 023682407 JJK

Shipment ID Number: 9750-01-0102

Shipment Date: 8/17/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	PCB Date to Storage	Accumulation Storage Date	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	Net Wt (Kg)	Maximum Activity MBq
9b.1	130116	130116-01	PAD22C51252	PCB SOLIDS WITH CADMIUM, CHROMIUM, AND LEAD	2/8/2023	5/10/2023	7.4	176	80	126	57	0.36
9b.2	121650	121650-64	PAD23C60047	LEAD WASTE, BAGGED PAINT CHIPS, BAGGED PPE, BAGGED RAGS WASTE ECT.	N/A	5/3/2023	6.5	128	58	78	35	0.29
9b.2	121650	121650-65	PAD23C60522	LEAD WASTE, BAGGED PAINT CHIPS, BAGGED PPE, BAGGED RAGS WASTE ECT.	N/A	5/15/2023	6.5	84	38	34	15	0.26
9b.2	121650	121650-66	PAD23C60528	LEAD WASTE, BAGGED PAINT CHIPS, BAGGED PPE, BAGGED RAGS WASTE ECT.	N/A	5/17/2023	6.5	94	43	44	20	0.27
		Totals	4				**26.9**	**482**	219	**282**	**128**	**1.18**

121650-64, 121650-65, and 120650-66 are PCB Bulk Product

LAND DISPOSAL NOTIFICATION AND CERTIFICATION

Generator Name: US Department of Energy (Paducah Site) Manifest Doc. No.: 023682407 JJK

Profile No.: 9758-01-0102 State Manifest No.: NA

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: Non-wastewater ☒ Wastewater ☐
2. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent standards are listed on the following page. If F039, multi-source leachate applies those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	D006	Cadmium	☒	A
2	D007	Chromium	☒	A
3	D008	Lead	☒	A
4	←	EO 07/03/2023	☐	

To identify F039 or D001-D043 underlying hazardous constituent (s), use the "F039/Underlying Hazardous Constituent Form" provided (Form B1) and check here ☐
If no UHCs are present in the waste upon its initial generation check here: ☒
To list additional USEPA waste code(s) and subcategorie(s), use the supplemental sheet provided (Form A2) and check here: ☐

HOW MUST THE WASTE BE MANAGED? In column 5 above, enter the letter (A, B1, B3, B4, C, D, or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B3, B4, or D, you are making the appropriate certification as provided below. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.

A. RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268.40.
☒ For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards in 40 CFR Part 268.40 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion in units as specified in 268.42 Table 1. I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 5 above.
☐ For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS
This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature FRANKLIN OVERBY (Affiliate) Digitally signed by FRANKLIN OVERBY (Affiliate) Date: 2023.07.12 06:58:26 -05'00' Title Waste Engineer Date 07/03/2023

Form A1
Page 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

If the waste identified on the first page of this form is described by any of the following USEPA hazardous waste codes: F001, F002, F003, F004, F005, and all solvent constituents will not be monitored by the treater, then each constituent MUST be identified below by checking the appropriate box, and this page must accompany the shipment, along with the previous page of this form. If the waste code F039 describes this waste, then the corresponding list of constituents must be attached. If D001-D043 require treatment to 268.48 standards, then the underlying hazardous constituent(s) must also be attached.

SOLVENT WASTE TREATMENT STANDARDS[2]

F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]		F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]	
	Wastewaters	Nonwastewaters		Wastewaters	Nonwastewaters
Acetone (F003)	0.28	160	Methanol (F003)	5.6	0.75 (TCLP)[3]
Benzene (F005)	0.14	10	Methylene chloride (F001, F002)	0.089	30
n-Butanol (n-butyl alcohol) (F003)	5.6	2.6	Methyl ethyl ketone (F005)	0.28	36
Carbon disulfide (F005)	3.8	4.8 (TCLP)[3]	Methyl isobutyl ketone (F003)	0.14	33
Carbon tetrachloride (F001)	0.057	6.0	Nitrobenzene (F004)	0.068	14
Chlorobenzene (F002)	0.057	6.0	2-Nitropropane (F005)	INCIN or {(WETOX or C HOXD) followed by CARBN}	INCIN
o-Cresol (F004)	0.11	5.6	Pyridine (F005)	0.014	16
Cresol (m- and p- isomers) (F004)	0.77	5.6	Tetrachloroethylene (F001, F002)	0.056	6.0
Cyclohexanone (F003)	0.36	0.75 (TCLP)[3]	Toluene (F005)	0.080	10
o-Dichlorobenzene (F002)	0.088	6.0	1,1,1-Trichloroethane (F001, F002)	0.054	6.0
2-Ethoxyethanol (F005) also called ethylene glycol, monoethyl ether	INCIN or BIODG	INCIN	1,1,2-Trichloroethane (F002)	0.054	6.0
Ethyl acetate (F003)	0.34	33	Trichloroethylene (F001, F002)	0.054	6.0
Ethyl benzene (F003)	0.057	10	Trichloromonofluoromethane (F002)	0.020	30
Ethyl ether (F003)	0.12	160	1,1,2-Trichloro-1,2,2-trifluoroethane (F002)	0.057	30
Isobutanol (Isobutyl Alcohol) (F005)	5.6	170	Xylenes (sum of o-, m-, and p-isomers) (F003)	0.32	30

[1] All spent solvent treatment standards are measured through a total waste analysis (TCA), unless otherwise noted. Wastewater units are mg/l, nonwastewater are mg/kg.

[2] For contaminated soils using the alternative soil treatment standards, the treatment standards for F001-F005 spent solvents must be a 90% reduction of the constituents or less than 10x the standard listed.

[3] These solvents require a TCLP standard with units of mg/l.

SUBCATEGORY REFERENCE

D001:

A. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.

B. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in CWA/CWA-equivalent or Class I SDWA systems.

C. High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a) (1) – Greater than or equal to 10% total organic carbon.

D002:

D. Corrosive characteristic wastes that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.

E. Corrosive characteristic wastes that are managed in CWA, CWA-equivalent, or Class I SWDA systems.

Form A1
Page 2 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: US Department of Energy (Paducah Site) Manifest Doc. No. : 023682407 JJK

Profile No.: 9755-01-0102 State Manifest No.: NA

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
5			☐	
6			☐	
7			☐	
8			☐	
9			☐	
10			☐	
11			☐	
12			☐	
13			☐	
14			☐	
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19		FO	☐	
20			☐	
21		07/03/2023	☐	
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32			☐	
33			☐	
34			☐	
35			☐	

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature FRANKLIN OVERBY (Affiliate) Digitally signed by FRANKLIN OVERBY (Affiliate) Date: 2023.07.12 07:00:26 -05'00'

Title Waste Engineer Date 07/03/2023

Form A2
Page 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: US Department of Energy (Paducah Site) Manifest Doc. No.: 923682467JJK

Profile No.: 9750-01-0162 State Manifest No.: NA

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
36			☐	
37			☐	
38			☐	
39			☐	
40			☐	
41			☐	
42			☐	
43			☐	
44			☐	
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49		FO	☐	
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51		07/03/2023	☐	
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63			☐	
64			☐	
65			☐	

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature FRANKLIN OVERBY (Affiliate) Digitally signed by FRANKLIN OVERBY (Affiliate) Date: 2023.07.12 07:01:09 -05'00'

Title Waste Engineer Date 07/03/2023

Form A2
Page 2 of 2

F039/UNDERLYING HAZARDOUS CONSTITUENT (UTS) (Phase IV)

Generator Name: US Department of Energy (Paducah Site) Manifest Doc. No.: 023682407 JJK

Profile No.: 9750-01-0102 State Manifest No.: NA

If D001-D043 requires treatment to the 40 CRF 268.48 standards, then each underlying hazardous constituent (UHC) present in the waste at the point of generation and at a level above the Universal Treatment Standard (UTS) constituent specific standard must be listed. Write the letter (A1, B1, B2, B3, or C that corresponds to the letter on the land disposal form A1) beside each constituent present to properly describe how the constituent(s) must be managed under 40 CFR 268.7. If contaminated soil requires treatment to 40 CFR 268.49 standards, then each UHC in the waste at the point of generation and at a level above 10 times the UTS must be listed. Write the appropriate letter which corresponds to the letter on the LDR form.

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Acenaphthylene		0.059	3.4	2-Chloro-1,3-butadiene		0.057	0.28[1]
Acenapthene		0.059	3.4	Chlorodibromomethane		0.057	15
Acetone		0.28	160	Chloroethane		0.27	6.0
Acetonitrile		5.6	38[1]	bis(2-Chloroethoxy)methane		0.036	7.2
Acetophenone		0.010	9.7	bis(2-Chloroethyl)ether		0.033	6.0
2-Acetylaminofluorene		0.059	140	Chloroform		0.046	6.0
Acrolein		0.29	NA	bis(2-Chloroisopropyl)ether		0.055	7.2
Acylamide		19[1]	23[1]	p-Chloro-m-cresol	FO	0.018	14
Acrylonitrile		0.24	84	2-Chloroethyl vinyl ether		0.062[1]	NA[1]
Aldicarb sulfone		0.056[1]	0.28[1]	Chloromethane/Methyl chloride	07/03/2023	0.19	30
Aldrin		0.021	0.066	2-Chloronaphthalene		0.055	5.6
4-Aminobiphenyl		0.13	NA	2-Chlorophenol		0.044	5.7
Aniline		0.81	14	3-Chloropropylene		0.036	30
Anthracene		0.059	3.4	Chrysene		0.059	3.4
Aramite		0.36	NA	o-Cresol		0.11	5.6
alpha-(BHC)		0.00014	0.066	m-Cresol		0.77	5.6
beta-(BHC)		0.00014	0.066	p-Cresol		0.77	5.6
delta-(BHC)		0.023	0.066	m-Cumenyl methylcarbamate		0.056[1]	1.4[1]
gamma-(BHC)		0.0017	0.066	Cyclohexanone		0.36	0.75 mg/l[1]
Barban		0.056[1]	1.4[1]	o,p'-DDD		0.023	0.087
Bendiocarb		0.056[1]	1.4[1]	p,p'-DDD		0.023	0.087
Benomyl	FO	0.056[1]	1.4[1]	o,p'-DDE		0.031	0.087
Benzene		0.14	10	p,p'-DDE		0.031	0.087
Benz(a)anthracene		0.059	3.4	o,p'-DDT		0.0039	0.087
Benzal chloride		0.055[1]	6.0[1]	p,p'-DDT		0.0039	0.087
Benzo(b)fluoranthene[3]		0.11	6.8	Dibenz(a,h)anthracene		0.055	8.2
Benzo(k)fluoranthene[3]		0.11	6.8	Dibenz(a,e)pyrene		0.061	NA
Benzo (g,h,i)perylene	07/03/2023	0.0055	1.8	1,2-Dibromo-3-chloropropane		0.11	15
Benzo(a)pyrene		0.061	3.4	1,2-Dibromomethane/ Ethylene dibromide		0.028	15
Bromodichloromethane		0.35	15	Dibromomethane		0.11	15
Bromomethane/Methyl Bromide		0.11	15	m-Dichlorobenzene		0.036	6.0
4-Bromophenyl phenyl ether		0.055	15	o-Dichlorobenzene	FO	0.088	6.0
n-Butyl alcohol		5.6	2.6	p-Dichlorobenzene		0.090	6.0
Butylate		0.042[1]	1.4[1]	Dichlorodifluoromethane		0.23	7.2
Butyl benzyl phthalate		0.017	28	1,1-Dichloroethane		0.059	6.0
2-sec-Butyl-4,6-dinitrophenol/Dinoseb		0.066	2.5	1,2-Dichloroethane	07/03/2023	0.21	6.0
Carbaryl		0.006[1]	0.14[1]	1,1-Dichloroethylene		0.025	6.0
Carbenzadim		0.056[1]	1.4[1]	trans-1,2-Dichloroethylene		0.054	30
Carbofuran		0.006[1]	0.14[1]	2,4-Dichlorophenol		0.044	14
Carbofuran phenol		0.056[1]	1.4[1]	2.6-Dichlorophenol		0.044	14
Carbon disulfide		3.8	4.8 mg/l TCLP[1]	2,4-Dichlorophenoxyacetic acid/2,4-D		0.72	10
Carbon tetrachloride		0.057	6.0	1,2-Dichloropropane		0.85	18
Carbosulfan		0.028[1]	1.4[1]	cis-1,3-Dichloropropylene		0.036	18
Chlordane (alpha and gamma isomers)		0.0033	0.26	trans-1,3-Dichloropropylene		0.036	18
p-Chloroaniline		0.46	16	Dieldrin		0.017	0.13
Chlorobenzene		0.057	6.0	Diethyl phthalate		0.20	28

Form B1
Page 1 of 3

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Chlorobenzilate		0.10	NA	p-Dimethylaminoazobenzene		0.13[1]	NA
2,4-Dimethyl phenol		0.036	14	Methylene chloride		0.089	30
Dimethyl phthalate		0.047	28	Methyl ethyl ketone		0.28	36
Di-n-butyl phthalate		0.057	28	Methyl isobutyl ketone		0.14	33
1,4-Dinitrobenzene		0.32	2.3	Methyl methacrylate		0.14	160
4,6-Dinitro-o-cresol		0.28	160	Methyl methansulfonate		0.018	NA
2,4-Dinitrophenol		0.12	160	Methyl parathion		0.014	4.6
2,4-Dinitrotoluene		0.32	140	Metolcarb		0.056[1]	1.4[1]
2,6-Dinitrotoluene		0.55	28	Mexacarbate		0.056[1]	1.4[1]
Di-n-octyl phthalate		0.017	28	Molinate		0.042[1]	1.4[1]
Di-n-propylnitrosamine		0.40	14	Naphthalene		0.059	5.6
1,4-Dioxane		12.0	170	2-Naphthylamine		0.52	NA
Diphenylamine[3]		0.92	13[1]	o-Nitroaniline		0.27[1]	14[1]
Diphenylnitrosamine[3]		0.92	13[1]	p-Nitroaniline		0.028	28
1,2-Diphenylhydrazine		0.087	NA	Nitrobenzene	FO	0.068	14
Disulfoton		0.017	6.2	5-Nitro-o-toluidine		0.32	28
Dithiocarbamates (total)		0.028	28[1]	o-Nitrophenol		0.028[1]	13[1]
Endosulfan I		0.023	0.066	p-Nitrophenol		0.12	29
Endosulfan II		0.029	0.13	N-Nitrosodiethylamine	07/03/2023	0.40	28
Endosulfan sulfate		0.029	0.13	N-Nitrosodimethylamine		0.40	2.3[1]
Endrin		0.0028	0.13	N-Nitroso-di-n-butylamine		0.40	17
Endrin aldehyde		0.025	0.13	N-Nitrosomethylethylamine		0.40	2.3
EPTC		0.042[1]	1.4[1]	N-Nitrosomorpholine		0.40	2.3
Ethyl acetate		0.34	33	N-Nitrosopiperidine		0.013	35
Ethyl benzene		0.057	10	N-Nitrosopyrrolidine		0.013	35
Ethyl cyanide/Propanenitrile		0.24	360	Oxamyl		0.056[1]	0.28[1]
Ethyl ether		0.12	160	Parathion		0.014	4.6
Bis(2-Ethylhexyl)phthalate		0.28	28	Total PCBs (sum of all PCB isomers or all Aroclors)		0.10	10
Ethyl methacrylate		0.14	160	Pebulate		0.042[1]	1.4[1]
Ethylene oxide		0.12	NA	Pentachlorobenzene		0.055[1]	10[1]
Famphur	FO	0.017	15	PeCDDs (All Pentachlorodibenzo-p-dioxins)		0.000035	0.001
Fluoranthene	07/03/2023	0.068	3.4	PeCDFs(All Pentachlorodibenzofurans)		0.000035	0.001
Fluorene		0.059	3.4	Pentachloroethane		0.055	6.0
Formetanate hydrochloride		0.056[1]	1.4[1]	Pentachloronitrobenzene		0.055	4.8
Heptachlor		0.0012	0.066	Pentachlorophenol		0.089	7.4
Heptachlor epoxide		0.016	0.066	Phenacetin		0.081	16
Hexachlorobenzene		0.055	10	Phenanthrene		0.059	5.6
Hexachlorobutadiene		0.055	5.6	Phenol		0.039	6.2
Hexachlorocyclopentadiene		0.057	2.4	Phorate		0.021	4.6
HxCDDs (All Hexachrorodibenzo-p-dioxins)		0.000063	0.001	Phthalic acid		0.055[1]	28[1]
HxCDFs (All Hexachlorodibenzofurans)		0.000063	0.001	Phthalic anhydride	FO	0.055	28[1]
Hexachloroethane		0.055	30	Physostigmine		0.056[1]	1.4[1]
Hexachloropropylene		0.035	30	Physostigmine salicylate		0.056[1]	1.4[1]
Indeno(1,2,3-c,d)pyrene		0.0055	3.4	Promecarb	07/03/2023	0.056[1]	1.4[1]
Iodomethane		0.19	65	Pronamide		0.093	1.5
Isobutyl alcohol		5.6	170	Propham		0.056[1]	1.4[1]
Isodrin		0.021	0.066	Propoxur		0.056[1]	1.4[1]
Isosafrole		0.081	2.6	Prosulfocarb		0.042[1]	1.4[1]
Kepone		0.0011	0.13	Pyrene		0.067	8.2
Methacrylonitrile		0.24	84	Pyridine		0.014	16
Methanol		5.6	0.75 mg/l[1]	Safrole		0.081	22
Methapyrilene		0.081	1.5	Silvex/2,4,5-TP		0.72	7.9
Methiocarb		0.056[1]	1.4[1]	1,2,4,5-Tetrachlorobenzene		0.055	14
Methomyl		0.028[1]	0.14[1]	TCDDs (All Tetrachlorodibenzo-p-dioxins)		0.000063	0.001
Methoxychlor		0.25	0.18	TCDFs (All Tetrachlorodibenzo-furans)		0.000063	0.001
3-Methylcholanthrene		0.0055	15	1,1,1,2-Tetrachloroethane		0.057	6.0
4,4'-Methylene bis(2-chloroaniline)		0.50	30	1,1,2,2-Tetrachloroethane		0.057	6.0

Form B1
Page 2 of 3

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Tetrachloroethylene		0.056	6.0	**INORGANIC CONSTITUENTS**			
2,3,4,6-Tetrachlorophenol		0.030	7.4	Antimony		1.9	2.1 mg/l TCLP
Thiodicarb		0.0191	1.4[1]	Antimony		1.9	1.15 mg/l TCLP[4]
Thiophanate-methyl		0.0561	1.4[1]	Arsenic		1.4	5.0 mg/l TCLP
Toluene		0.080	10	Barium		1.2	7.6 mg/l TCLP
Toxaphene		0.0095	2.6	Barium		1.2	21 mg/l TCLP[4]
Triallate		0.042[1]	1.4[1]	Beryllium		0.82	0.014 mg/l TCLP
Tribromomethane/Bromoform		0.63	15	Beryllium		0.82	1.22 mg/l TCLP[4]
2,4,6-Tribromophenol		0.035	7.4	Cadmium		0.69	0.19 mg/l TCLP
1,2,4-Trichlorobenzene		0.055	19	Cadmium		0.69	0.11 mg/l TCLP[4]
1,1,1-Trichloroethane	FO	0.054	6.0	Chromium (Total)		2.77	0.86mg/l TCLP
1,1,2-Trichloroethane		0.054	6.0	Chromium (Total)	FO	2.77	0.60 mg/l TCLP[4]
Trichloroethylene	07/03/2023	0.054	6.0	Cyanides (Total)		1.2	590
Trichloromonofluoromethane		0.020	30	Cyanides (Amenable)	07/03/2023	0.86	30[1]
2,4,5-Trichlorophenol		0.18	7.4	Fluoride		35	NA[4]
2,4,6-Trichlorophenol		0.035	7.4	Lead		0.69	0.37 mg/l
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T		0.72	7.9	Lead		0.69	0.75 mg/l[4] TCLP
1,2,3-Trichloropropane		0.85	30	Mercury (Nonwastewater from Retort)		NA	0.20 mg/l TCLP
1,1,2-Trichloro-1,2,2-trifluoroethane		0.057	30	Mercury (All others)		0.15	0.025 mg/l TCLP
Triethylamine		0.081[1]	1.5[1]	Nickel		3.98	5.0 mg/l TCLP
Tris-(2,3-Dibromopropyl)phosphate		0.11	0.10[1]	Nickel		3.98	11 mg/l TCLP[4]
Vernolate		0.042[1]	6.0[1]	Selenium		0.82	0.16 mg/l TCLP
Vinyl chloride		0.27	6.0	Selenium		0.82	5.7 mg/l TCLP[5]
Xylenes – mixed isomers (sum of o-,m-, and p-xylene		0.32	30	Silver		0.43	0.30 mg/l TCLP
				Silver		0.43	0.14 mg/l TCLP[4]
				Sulfide	FO	14	NA[2]
	FO			Thallium	07/03/2023	1.4	0.078 mg/l TCLP[1]
	07/03/2023			Thallium		1.4	0.20 mg/l TCLP[4]
				Vanadium		4.3[2]	1.6 mg/l TCLP[2]
				Zinc		2.61	4.3 mg/l TCLP[2]

[1] These constituents are only applicable as underlying hazardous constituents. These constituents are not constituents that require treatment in F039 wastes.

[2] Not an underlying hazardous constituent requiring treatment in a D001-D043 waste.

[3] These compounds are regulated by the sum of their concentration instead of as individual constituents.

[4] These constituents are effective in authorized states or states with no LDR program on 8/24/99. These concentrations are effective in all other states upon adoption by the state.

[5] Effective 8/24/98 in unauthorized states or states with no LDR program. Selenium at 5.7 mg/l is not an underlying hazardous constituent in D001-D043 waste. This becomes effective in authorized states upon adoption by the state.

Form B1
Page 3 of 3

RT

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	1-270-441-6333	023682410 JJK

5. Generator's Name and Mailing Address: Four Rivers Nuclear Partnership, LLC, (FRNP) for U.S. DOE, 5511 Hobbs Road, Kevil, KY 42053 — 8/17/23
Generator's Phone:

Generator's Site Address (if different than mailing address): FRNP for U.S. Department of Energy (DOE), Paducah Gaseous Diffusion Plant, 5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: CAST Transportation — U.S. EPA ID Number: COR000005389

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: EnergySolutions Clive Disposal Site-Treatment Facility, US I-80 Exit 49, Clive, UT 84029 — U.S. EPA ID Number: UTD982598898
Facility's Phone: 1-435-884-0155

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	UN 1954, Waste, Compressed gas, flammable, n.o.s. (contains non-punctured aerosol cans), 2.1, "Limited quantity radioactive material"	1	DM	38	K	D001	D003	
RQ	2. NA 3082, Hazardous waste liquid, n.o.s. (contains PCB and Benzene), 9, PCB, D016), III	1	DM	69	K	D018	D021	D027
	3.					D032		
	4.							

GENERATOR

4. Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including; but not limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895.

14. Special Handling Instructions and Additional Information
Truck: 1442 Van: 519 TID: 0349756 Accumulation Start Date: 06/28/23 PCB Start Date: 8/23/2022
ERG # 115, 171, In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Dedicated Service Shipment, See Attachment for Additional Info Shipment ID: 9750-09-0036

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: LaChelle Telfaire for FRNP — Signature: [signature] — Month 8 Day 17 Year 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Tyler Spence — Signature: [signature] — Month 8 Day 17 Year 23

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:

RECEIVED AUG 22 2023

18c. Signature of Alternate Facility (or Generator) BY: [signature] — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132	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 Evans — Signature: [signature] — Month 8 Day 21 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

PCB and Additional Information Attachment, Page 2 of 2

Manifest Number: 023682410 JJK

Shipment ID Number: 9750-09-0036

Shipment Date: 8/17/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	PCB Date to Storage	Accumulation Storage Date	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	NET WT (lb)	Net Wt (Kg)
9b.1	122610	122610-02	PAD22C50485	UNPUNCTURED AEROSOL CANS	N/A	4/19/2023	7	144	65	84	38
9b.2	122621	122621-01	PAD22C50116	LUBE OIL/PCB RINSATE COLLECTED FROM SITE GLASSES FROM TRANSFORMER DRAINING	8/23/2022	06/28/23	1.34	208	94	152	69
		Totals	**2**				**8.34**	**352**	**159**	**236**	**107**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

122621-01

LAND DISPOSAL NOTIFICATION AND CERTIFICATION

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682410 JJK

Profile No.: 9750-89-0036 State Manifest No.: NA

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: Non-wastewater ☒ Wastewater ☐
2. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent standards are listed on the following page. If F039, multi-source leachate applies those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	D018	TCLP Benzene	☐	A
2	D021	TCLP Chlorobenzene	☐	A
3	D027	TCLP 1,4-Dichlorobenzene	☐	A
4	D032	TCLP Hexachlorobenzene	☐	A

To identify F039 or D001-D043 underlying hazardous constituent (s), use the "F039/Underlying Hazardous Constituent Form" provided (Form B1) and check here ☐
If no UHCs are present in the waste upon its initial generation check here: ☒
To list additional USEPA waste code(s) and subcategorie(s), use the supplemental sheet provided (Form A2) and check here: ☐

HOW MUST THE WASTE BE MANAGED? In column 5 above, enter the letter (A, B1, B3, B4, C, D, or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B3, B4, or D, you are making the appropriate certification as provided below. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.

A. RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268.40.
☐ For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards in 40 CFR Part 268.40 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion in units as specified in 268.42 Table 1. I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 5 above.
☐ For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS
This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature JOSHUA NORMAN (Affiliate) Digitally signed by JOSHUA NORMAN (Affiliate) Date: 2023.07.06 09:59:52 -04'00' Title Waste Engineer Date 07/06/2023

Form A1
Page 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

If the waste identified on the first page of this form is described by any of the following USEPA hazardous waste codes: F001, F002, F003, F004, F005, and all solvent constituents will not be monitored by the treater, then each constituent MUST be identified below by checking the appropriate box, and this page must accompany the shipment, along with the previous page of this form. If the waste code F039 describes this waste, then the corresponding list of constituents must be attached. If D001-D043 require treatment to 268.48 standards, then the underlying hazardous constituent(s) must also be attached.

SOLVENT WASTE TREATMENT STANDARDS[2]					
F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]		F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]	
	Wastewaters	Nonwastewaters		Wastewaters	Nonwastewaters
Acetone (F003)	0.28	160	Methanol (F003)	5.6	0.75 (TCLP)[3]
Benzene (F005)	0.14	10	Methylene chloride (F001, F002)	0.089	30
n-Butanol (n-butyl alcohol) (F003)	5.6	2.6	Methyl ethyl ketone (F005)	0.28	36
Carbon disulfide (F005)	3.8	4.8 (TCLP)[3]	Methyl isobutyl ketone (F003)	0.14	33
Carbon tetrachloride (F001)	0.057	6.0	Nitrobenzene (F004)	0.068	14
Chlorobenzene (F002)	0.057	6.0	2-Nitropropane (F005)	INCIN or {(WETOX or C HOXD) followed by CARBN}	INCIN
o-Cresol (F004)	0.11	5.6	Pyridine (F005)	0.014	16
Cresol (m- and p- isomers) (F004)	0.77	5.6	Tetrachloroethylene (F001, F002)	0.056	6.0
Cyclohexanone (F003)	0.36	0.75 (TCLP)[3]	Toluene (F005)	0.080	10
o-Dichlorobenzene (F002)	0.088	6.0	1,1,1-Trichloroethane (F001, F002)	0.054	6.0
2-Ethoxyethanol (F005) also called ethylene glycol, monoethyl ether	INCIN or BIODG	INCIN	1,1,2-Trichloroethane (F002)	0.054	6.0
Ethyl acetate (F003)	0.34	33	Trichloroethylene (F001, F002)	0.054	6.0
Ethyl benzene (F003)	0.057	10	Trichloromonofluoromethane (F002)	0.020	30
Ethyl ether (F003)	0.12	160	1,1,2-Trichloro-1,2,2-trifluoroethane (F002)	0.057	30
Isobutanol (Isobutyl Alcohol) (F005)	5.6	170	Xylenes (sum of o-, m-, and p-isomers) (F003)	0.32	30

[1] All spent solvent treatment standards are measured through a total waste analysis (TCA), unless otherwise noted. Wastewater units are mg/l, nonwastewater are mg/kg.

[2] For contaminated soils using the alternative soil treatment standards, the treatment standards for F001-F005 spent solvents must be a 90% reduction of the constituents or less than 10x the standard listed.

[3] These solvents require a TCLP standard with units of mg/l.

SUBCATEGORY REFERENCE

D001:

A. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.

B. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in CWA/CWA-equivalent or Class I SDWA systems.

C. High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a) (1) – Greater than or equal to 10% total organic carbon.

D002:

D. Corrosive characteristic wastes that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.

E. Corrosive characteristic wastes that are managed in CWA, CWA-equivalent, or Class I SWDA systems.

122621-01

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682410 JJK

Profile No.: 9758-09-0036 State Manifest No.: NA

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
5			☐	
6			☐	
7			☐	
8			☐	
9			☐	
10			☐	
11			☐	
12			☐	
13			☐	
14			☐	
15			☐	
16			☐	
17			☐	
18			☐	
19			☐	
20			☐	
21			☐	
22			☐	
23			☐	
24			☐	
25			☐	
26			☐	
27			☐	
28			☐	
29			☐	
30			☐	
31			☐	
32			☐	
33			☐	
34			☐	
35			☐	

JW 07/06/2023

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature JOSHUA NORMAN (Affiliate) Digitally signed by JOSHUA NORMAN (Affiliate) Date: 2023.07.06 09:58:45 -04'00'

Title Waste Engineer Date 07/06/2023

Form A2
Page 1 of 2

122621-01

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682410 JJK

Profile No.: 9750-09-0036 State Manifest No.: NA

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
36			☐	
37			☐	
38			☐	
39			☐	
40			☐	
41			☐	
42			☐	
43			☐	
44			☐	
45			☐	
46			☐	
47			☐	
48			☐	
49			☐	
50			☐	
51			☐	
52			☐	
53			☐	
54			☐	
55			☐	
56			☐	
57			☐	
58			☐	
59			☐	
60			☐	
61			☐	
62			☐	
63			☐	
64			☐	
65			☐	

JW 07/06/2023

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature JOSHUA NORMAN (Affiliate) Digitally signed by JOSHUA NORMAN (Affiliate) Date: 2023.07.06 09:57:13 -04'00'

Title Waste Engineer Date 07/06/2023

Form A2
Page 2 of 2

F039/UNDERLYING HAZARDOUS CONSTITUENT (UTS) (Phase IV)

Generator Name: Four Rivers Nuclear Partnership Manifest Doc. No. : 023682410 JJK

Profile No.: 9758-09-0036 State Manifest No.: NA

If D001-D043 requires treatment to the 40 CRF 268.48 standards, then each underlying hazardous constituent (UHC) present in the waste at the point of generation and at a level above the Universal Treatment Standard (UTS) constituent specific standard must be listed. Write the letter (A1, B1, B2, B3, or C that corresponds to the letter on the land disposal form A1) beside each constituent present to properly describe how the constituent(s) must be managed under 40 CFR 268.7. If contaminated soil requires treatment to 40 CFR 268.49 standards, then each UHC in the waste at the point of generation and at a level above 10 times the UTS must be listed. Write the appropriate letter which corresponds to the letter on the LDR form.

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Acenaphthylene	→	0.059	3.4	2-Chloro-1,3-butadiene	→	0.057	0.28[1]
Acenapthene		0.059	3.4	Chlorodibromomethane		0.057	15
Acetone		0.28	160	Chloroethane		0.27	6.0
Acetonitrile		5.6	38[1]	bis(2-Chloroethoxy)methane		0.036	7.2
Acetophenone		0.010	9.7	bis(2-Chloroethyl)ether		0.033	6.0
2-Acetylaminofluorene		0.059	140	Chloroform		0.046	6.0
Acrolein		0.29	NA	bis(2-Chloroisopropyl)ether		0.055	7.2
Acylamide		19[1]	23[1]	p-Chloro-m-cresol		0.018	14
Acrylonitrile		0.24	84	2-Chloroethyl vinyl ether		0.062[1]	NA[1]
Aldicarb sulfone		0.056[1]	0.28[1]	Chloromethane/Methyl chloride		0.19	30
Aldrin		0.021	0.066	2-Chloronaphthalene		0.055	5.6
4-Aminobiphenyl		0.13	NA	2-Chlorophenol		0.044	5.7
Aniline		0.81	14	3-Chloropropylene		0.036	30
Anthracene		0.059	3.4	Chrysene		0.059	3.4
Aramite		0.36	NA	o-Cresol		0.11	5.6
alpha-(BHC)		0.00014	0.066	m-Cresol		0.77	5.6
beta-(BHC)		0.00014	0.066	p-Cresol		0.77	5.6
delta-(BHC)		0.023	0.066	m-Cumenyl methylcarbamate		0.056[1]	1.4[1]
gamma-(BHC)		0.0017	0.066	Cyclohexanone		0.36	0.75 mg/l[1]
Barban		0.056[1]	1.4[1]	o,p'-DDD		0.023	0.087
Bendiocarb		0.056[1]	1.4[1]	p,p'-DDD		0.023	0.087
Benomyl		0.056[1]	1.4[1]	o,p'-DDE		0.031	0.087
Benzene		0.14	10	p,p'-DDE		0.031	0.087
Benz(a)anthracene		0.059	3.4	o,p'-DDT		0.0039	0.087
Benzal chloride		0.055[1]	6.0[1]	p,p'-DDT		0.0039	0.087
Benzo(b)fluoranthene[3]		0.11	6.8	Dibenz(a,h)anthracene		0.055	8.2
Benzo(k)fluoranthene[3]		0.11	6.8	Dibenz(a,e)pyrene		0.061	NA
Benzo (g,h,i)perylene		0.0055	1.8	1,2-Dibromo-3-chloropropane		0.11	15
Benzo(a)pyrene		0.061	3.4	1,2-Dibromomethane/ Ethylene dibromide		0.028	15
Bromodichloromethane		0.35	15	Dibromomethane		0.11	15
Bromomethane/Methyl Bromide		0.11	15	m-Dichlorobenzene		0.036	6.0
4-Bromophenyl phenyl ether		0.055	15	o-Dichlorobenzene		0.088	6.0
n-Butyl alcohol		5.6	2.6	p-Dichlorobenzene		0.090	6.0
Butylate		0.042[1]	1.4[1]	Dichlorodifluoromethane		0.23	7.2
Butyl benzyl phthalate		0.017	28	1,1-Dichloroethane		0.059	6.0
2-sec-Butyl-4,6-dinitrophenol/Dinoseb		0.066	2.5	1,2-Dichloroethane		0.21	6.0
Carbaryl		0.006[1]	0.14[1]	1,1-Dichloroethylene		0.025	6.0
Carbenzadim		0.056[1]	1.4[1]	trans-1,2-Dichloroethylene		0.054	30
Carbofuran		0.006[1]	0.14[1]	2,4-Dichlorophenol		0.044	14
Carbofuran phenol		0.056[1]	1.4[1]	2.6-Dichlorophenol		0.044	14
Carbon disulfide		3.8	4.8 mg/l TCLP[1]	2,4-Dichlorophenoxyacetic acid/2,4-D		0.72	10
Carbon tetrachloride		0.057	6.0	1,2-Dichloropropane		0.85	18
Carbosulfan		0.028[1]	1.4[1]	cis-1,3-Dichloropropylene		0.036	18
Chlordane (alpha and gamma isomers)	JW 07/06/2023	0.0033	0.26	trans-1,3-Dichloropropylene	JW 07/06/2023	0.036	18
p-Chloroaniline		0.46	16	Dieldrin		0.017	0.13
Chlorobenzene	→	0.057	6.0	Diethyl phthalate	→	0.20	28

Form B1
Page 1 of 3

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Chlorobenzilate	→	0.10	NA	p-Dimethylaminoazobenzene	→	0.13[1]	NA
2,4-Dimethyl phenol		0.036	14	Methylene chloride		0.089	30
Dimethyl phthalate		0.047	28	Methyl ethyl ketone		0.28	36
Di-n-butyl phthalate		0.057	28	Methyl isobutyl ketone		0.14	33
1,4-Dinitrobenzene		0.32	2.3	Methyl methacrylate		0.14	160
4,6-Dinitro-o-cresol		0.28	160	Methyl methansulfonate		0.018	NA
2,4-Dinitrophenol		0.12	160	Methyl parathion		0.014	4.6
2,4-Dinitrotoluene		0.32	140	Metolcarb		0.056[1]	1.4[1]
2,6-Dinitrotoluene		0.55	28	Mexacarbate		0.056[1]	1.4[1]
Di-n-octyl phthalate		0.017	28	Molinate		0.042[1]	1.4[1]
Di-n-propylnitrosamine		0.40	14	Naphthalene		0.059	5.6
1,4-Dioxane		12.0	170	2-Naphthylamine		0.52	NA
Diphenylamine[3]		0.92	13[1]	o-Nitroaniline		0.27[1]	14[1]
Diphenylnitrosamine[3]		0.92	13[1]	p-Nitroaniline		0.028	28
1,2-Diphenylhydrazine		0.087	NA	Nitrobenzene		0.068	14
Disulfoton		0.017	6.2	5-Nitro-o-toluidine		0.32	28
Dithiocarbamates (total)		0.028	28[1]	o-Nitrophenol		0.028[1]	13[1]
Endosulfan I		0.023	0.066	p-Nitrophenol		0.12	29
Endosulfan II		0.029	0.13	N-Nitrosodiethylamine		0.40	28
Endosulfan sulfate		0.029	0.13	N-Nitrosodimethylamine		0.40	2.3[1]
Endrin		0.0028	0.13	N-Nitroso-di-n-butylamine		0.40	17
Endrin aldehyde		0.025	0.13	N-Nitrosomethylethylamine		0.40	2.3
EPTC		0.042[1]	1.4[1]	N-Nitrosomorpholine		0.40	2.3
Ethyl acetate		0.34	33	N-Nitrosopiperidine		0.013	35
Ethyl benzene		0.057	10	N-Nitrosopyrrolidine		0.013	35
Ethyl cyanide/Propanenitrile		0.24	360	Oxamyl		0.056[1]	0.28[1]
Ethyl ether		0.12	160	Parathion		0.014	4.6
Bis(2-Ethylhexyl)phthalate		0.28	28	Total PCBs (sum of all PCB isomers or all Aroclors)		0.10	10
Ethyl methacrylate		0.14	160	Pebulate		0.042[1]	1.4[1]
Ethylene oxide		0.12	NA	Pentachlorobenzene		0.055[1]	10[1]
Famphur		0.017	15	PeCDDs (All Pentachlorodibenzo-p-dioxins)		0.000035	0.001
Fluoranthene		0.068	3.4	PeCDFs(All Pentachlorodibenzofurans)		0.000035	0.001
Fluorene		0.059	3.4	Pentachloroethane		0.055	6.0
Formetanate hydrochloride		0.056[1]	1.4[1]	Pentachloronitrobenzene		0.055	4.8
Heptachlor		0.0012	0.066	Pentachlorophenol		0.089	7.4
Heptachlor epoxide		0.016	0.066	Phenacetin		0.081	16
Hexachlorobenzene		0.055	10	Phenanthrene		0.059	5.6
Hexachlorobutadiene		0.055	5.6	Phenol		0.039	6.2
Hexachlorocyclopentadiene		0.057	2.4	Phorate		0.021	4.6
HxCDDs (All Hexachrorodibenzo-p-dioxins)		0.000063	0.001	Phthalic acid		0.055[1]	28[1]
HxCDFs (All Hexachlorodibenzofurans)		0.000063	0.001	Phthalic anhydride		0.055	28[1]
Hexachloroethane		0.055	30	Physostigmine		0.056[1]	1.4[1]
Hexachloropropylene		0.035	30	Physostigmine salicylate		0.056[1]	1.4[1]
Indeno(1,2,3-c,d)pyrene		0.0055	3.4	Promecarb		0.056[1]	1.4[1]
Iodomethane		0.19	65	Pronamide		0.093	1.5
Isobutyl alcohol		5.6	170	Propham		0.056[1]	1.4[1]
Isodrin		0.021	0.066	Propoxur		0.056[1]	1.4[1]
Isosafrole		0.081	2.6	Prosulfocarb		0.042[1]	1.4[1]
Kepone		0.0011	0.13	Pyrene		0.067	8.2
Methacrylonitrile		0.24	84	Pyridine		0.014	16
Methanol		5.6	0.75 mg/l[1]	Safrole		0.081	22
Methapyrilene		0.081	1.5	Silvex/2,4,5-TP		0.72	7.9
Methiocarb		0.056[1]	1.4[1]	1,2,4,5-Tetrachlorobenzene		0.055	14
Methomyl		0.028[1]	0.14[1]	TCDDs (All Tetrachlorodibenzo-p-dioxins)		0.000063	0.001
Methoxychlor	JW 07/06/2023	0.25	0.18	TCDFs (All Tetrachlorodibenzo-furans)	JW 07/06/2023	0.000063	0.001
3-Methylcholanthrene		0.0055	15	1,1,1,2-Tetrachloroethane		0.057	6.0
4,4'-Methylene bis(2-chloroaniline)	→	0.50	30	1,1,2,2-Tetrachloroethane	→	0.057	6.0

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Tetrachloroethylene		0.056	6.0	**INORGANIC CONSTITUENTS**			
2,3,4,6-Tetrachlorophenol		0.030	7.4	Antimony		1.9	2.1 mg/l TCLP
Thiodicarb		0.0191	1.4[1]	Antimony		1.9	1.15 mg/l TCLP[4]
Thiophanate-methyl		0.0561	1.4[1]	Arsenic		1.4	5.0 mg/l TCLP
Toluene		0.080	10	Barium		1.2	7.6 mg/l TCLP
Toxaphene		0.0095	2.6	Barium		1.2	21 mg/l TCLP[4]
Triallate		0.042[1]	1.4[1]	Beryllium		0.82	0.014 mg/l TCLP
Tribromomethane/Bromoform		0.63	15	Beryllium		0.82	1.22 mg/l TCLP[4]
2,4,6-Tribromophenol		0.035	7.4	Cadmium		0.69	0.19 mg/l TCLP
1,2,4-Trichlorobenzene		0.055	19	Cadmium		0.69	0.11 mg/l TCLP[4]
1,1,1-Trichloroethane		0.054	6.0	Chromium (Total)		2.77	0.86mg/l TCLP
1,1,2-Trichloroethane		0.054	6.0	Chromium (Total)		2.77	0.60 mg/l TCLP[4]
Trichloroethylene		0.054	6.0	Cyanides (Total)		1.2	590
Trichloromonofluoromethane		0.020	30	Cyanides (Amenable)		0.86	30[1]
2,4,5-Trichlorophenol		0.18	7.4	Fluoride		35	NA[4]
2,4,6-Trichlorophenol		0.035	7.4	Lead		0.69	0.37 mg/l
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T		0.72	7.9	Lead		0.69	0.75 mg/l[4] TCLP
1,2,3-Trichloropropane		0.85	30	Mercury (Nonwastewater from Retort)		NA	0.20 mg/l TCLP
1,1,2-Trichloro-1,2,2-trifluoroethane		0.057	30	Mercury (All others)		0.15	0.025 mg/l TCLP
Triethylamine		0.081[1]	1.5[1]	Nickel		3.98	5.0 mg/l TCLP
Tris-(2,3-Dibromopropyl)phosphate		0.11	0.10[1]	Nickel		3.98	11 mg/l TCLP[4]
Vernolate		0.042[1]	6.0[1]	Selenium		0.82	0.16 mg/l TCLP
Vinyl chloride		0.27	6.0	Selenium		0.82	5.7 mg/l TCLP[5]
Xylenes – mixed isomers (sum of o-,m-, and p-xylene	07/06/2023	0.32	30	Silver		0.43	0.30 mg/l TCLP
				Silver		0.43	0.14 mg/l TCLP[4]
				Sulfide		14	NA[2]
				Thallium		1.4	0.078 mg/l TCLP[1]
				Thallium		1.4	0.20 mg/l TCLP[4]
	07/06/2023			Vanadium	07/06/2023	4.3[2]	1.6 mg/l TCLP[2]
				Zinc		2.61	4.3 mg/l TCLP[2]

[1] These constituents are only applicable as underlying hazardous constituents. These constituents are not constituents that require treatment in F039 wastes.
[2] Not an underlying hazardous constituent requiring treatment in a D001-D043 waste.
[3] These compounds are regulated by the sum of their concentration instead of as individual constituents.
[4] These constituents are effective in authorized states or states with no LDR program on 8/24/99. These concentrations are effective in all other states upon adoption by the state.
[5] Effective 8/24/98 in unauthorized states or states with no LDR program. Selenium at 5.7 mg/l is not an underlying hazardous constituent in D001-D043 waste. This becomes effective in authorized states upon adoption by the state.

Form B1
Page 3 of 3

T

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	1-270-441-6333	023682418 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) for U.S. Department of Energy (DOE) 5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-816-7632

Generator's Site Address (if different than mailing address)
Four Rivers Nuclear Partnership, LLC, (FRNP) for U.S. Department of Energy (DOE) 5511 Hobbs Road, Kevil, KY 42053

6. Transporter 1 Company Name — U.S. EPA ID Number
~~EAST Transportation~~

7. Transporter 2 Company Name — U.S. EPA ID Number ~~COR000005389~~

8. Designated Facility Name and Site Address — U.S. EPA ID Number
EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029 UTD982598898
Facility's Phone: ~~1-435-224-9165~~

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN 2913, Radioactive material, surface contaminated objects (SCO-I), 7, (PCB), Np-237, Tc-99, Th-230, U-234, Solid/Oxide, 0.49 MBq, Fissile ~~Excepted~~	1	DM	101	K	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Truck:1442 Van:519 TID:0349756 Accumulation Start Date: N/A PCB Start Date: 10/27/2022
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Exclusive Use Shipment, See PCB Attachment for Additional Info Shipment ID: ~~9750-90-0008~~

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: Blake Cleary on Behalf of FRNP — Signature: Blake Cleary — Month 08 Day 17 Year 23

INTL

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: Tyler Spence — Signature: [signature] — Month 8 Day 17 Year 23

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:

RECEIVED AUG 22 2023 BY:

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.	2.	3.	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 Enns — Signature: [signature] — Month 8 Day 21 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Manifest Number: 023682418JJK

Shipment ID Number: 9750-90-0006

Shipment Date: 8/17/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Date to Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	Net Wt (lb)	Net Wt (Kg)
9b.1	130123	130123-01	PAD23C60156	PCB LIGHT BALLASTS, CAPACITORS, TRANSFORMERS, ETC.	10/27/2022	3.8	252	114	222	101
		Totals	**1**			**3.8**	**252**	**115**	**222**	**101**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: KY 8890008982 | 2. Page 1 of 1 | 3. Emergency Response Phone: 270-441-6333 | 4. Manifest Tracking Number: 023682433 JJK

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP)
For U.S. Department of Energy (DOE)
Generator's Phone: Four Rivers, Kevil, KY 42053

Generator's Site Address (if different than mailing address)
Four Rivers Nuclear Partnership (FRNP) for
U.S. Department of Energy (DOE),
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: CAST Transportation | U.S. EPA ID Number: COR000005389

7. Transporter 2 Company Name | U.S. EPA ID Number:

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site Bulk Waste Facility
US 1-80 Exit 49, Clive, UT 84029
Facility's Phone: 1-435-884-0155
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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN 2912, Radioactive material, low specific activity (LSA-I), 7, (PCB), Np-237, Tc-99, Th-230, U-234, Solid/Oxide, 2000 MBq, Fissile Excepted	7	CM	2148	K	
RQ	2. UN 2912, Radioactive material, low specific activity (LSA-I), 7, (PCB), Tc-99, Th-230, Solid/Oxide, 38 MBq, Fissile Excepted	1	CM	420	K	
RQ	3. UN 2912, Radioactive material, low specific activity (LSA-I), 7, (PCB), Tc-99, Solid/Oxide, 2577 MBq, Fissile Excepted	1	CM	2458	K	
	4.					

14. Special Handling Instructions and Additional Information
Accumulation Start Date: N/A
PCB Start Date: 7/14/2023
ERG # 162 In the event of an RQ Release, call 1-800-424-8802
If undeliverable, return to generator
Exclusive Use Shipment. See Additional Attachment for Additional Info
Shipment ID: 7340-08-0032

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: Blake Cleary on Behalf of FRNP | Signature: Blake Cleary | Month 09 | Day 18 | Year 23

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.:

TRANSPORTER
17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: LOUIS PALOMBA | Signature | Month 9 | Day 18 | Year 23
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

RECEIVED
SEP 2 1 2023
BY:

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: Albert Evans | Signature | Month 9 | Day 21 | Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

PCB and Additional Information Attachment, Page 2 of 3

Manifest Number: 023682433JJK

Shipment ID Number: 7340-08-0032

Shipment Date: 9/18/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	PCB Date To Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	Net Wt (lb)	Net Wt (Kg)	Maximum Activity MBq
9b.1	130188	130188-01	PAD23C60561	PCB CONTAMINATED MISCELLANEOUS	7/14/2023	70	1282	582	514	233	13
9b.1	130188	130188-02	PAD23C60562	PCB CONTAMINATED MISCELLANEOUS	7/21/2023	54	1282	582	514	233	1188
9b.1	130188	130188-03	PAD23C60563	PCB CONTAMINATED MISCELLANEOUS	7/21/2023	52	910	413	142	64	119
9b.1	130188	130188-04	PAD23C60564	PCB CONTAMINATED MISCELLANEOUS	7/22/2023	88	1154	523	388	176	194
9b.1	130188	130188-05	PAD23C60565	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND	7/22/2023	66	2256	1023	1468	666	145
9b.1	130188	130188-06	PAD23C60566	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND	7/22/2023	85	1306	592	540	245	187
9b.1	130188	130188-07	PAD23C60570	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND	8/4/2023	70	2160	980	1166	529	154
9b.2	130188	130188-17	PAD23C61519	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/11/2023	17	926	420	926	420	38
9b.3	130188	130188-19	PAD23C61660	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	1171	10400	4717	5420	2458	2577
		Totals				1673	21676	9832			4615

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	1-270-441-6333	023682462 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) for U.S. Department of Energy (DOE) 5511 Hobbs Road, Kevil, KY 42053
Generator's Phone:

Generator's Site Address (if different than mailing address)
FRNP for the U.S. Department of Energy Paducah Gaseous Diffusion Plant, 5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name
Hittman Transport Services
U.S. EPA ID Number
TNR000034888

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029
1-435-884-0155
Facility's Phone:
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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. UN 2913, Waste, Radioactive material, surface contaminated object RQ (SCO-II), 7, (PCB,D008), Np-237, Tc-99, Th-230, U-234, Solid/Oxide, 10.71 MBq, Fissile Excepted	1	DM	19	K	D006 D007 D008
	RQ UN 2912, Waste, Radioactive material, low specific activity (LSA-I), 7, (PCB, D009), Am-241, Np-237, Pu-239, Tc-99, Th-228, Th-230, Solid/Oxide, 0.68 MBq, Fissile Excepted	2	DM	83	K	D006 D008 D009
	RQ NA 3077, Hazardous waste, solid, n.o.s., (Barium, Selenium), 9, PG III, (D010)	1	DM	17	K	D011 D005 D010

Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including, but not limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895.

14. Special Handling Instructions and Additional Information
Truck: 3051 Van: W 10235 TID: 0349776
BC 04/16/24
ERG # 162, 171 In the event of an RQ Release, call 1-800-424-8802
Accumulation Start Date: 7/21/2023
PCB Start Date: NA 7/21/23
Exclusive Use Shipment, See Attachment for Additional Info
If undeliverable, return to generator
Shipment ID: 9700-01-0103

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: Blake Cleary on Behalf of FRNP
Signature: Blake Cleary
Month 11 Day 02 Year 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brian Gleason
Signature:
Month 11 Day 02 Year 23

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

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.	2.	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
Signature
Month Day Year

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Manifest Number: 023682462JJK

Shipment ID Number: 9750-01-0103

Shipment Date: 11/2/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Accumulation Storage Date	PCB Start Date	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	Net Wt (lb)	Net Wt (Kg)
9b.1	121650	121650-68	PAD23C60926	LEAD WASTE, BAGGED PAINT CHIPS, BAGGED PPE, BAGGED RAGS WASTE ECT.	8/11/2023	N/A	6	92	42	42	19
9b.2	130233	130233-01	PAD23C60567	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT CONTAINER CIRCUIT BOARDS, CAPACITORS, ETC.	7/21/2023	7/21/2023	6	158	72	108	49
9b.2	130233	130233-02	PAD23C60569	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT CONTAINER CIRCUIT BOARDS, CAPACITORS, ETC	7/21/2023	7/21/2023	4.74	126	57	76	34
9b.3	122234	122234-20	PAD23C60765	ABSORBENTS FROM LUBE OIL THAT WAS GENERATED IN SUPPORT OF PGDP	05/15/23	N/A	0.6	88	40	38	17
		Totals	**4**				**17.34**	**464**	**211**	**264**	**120**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	1-270-441-6333	023682464 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of
FRNP 5511 Hobbs Road, Kevil, KY 42053
270-441-6310
Generator's Phone:

Generator's Site Address (if different than mailing address)
FRNP for the U.S. Department of Energy
Paducah Gaseous Diffusion Plant,
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: Hittman Transport Services — U.S. EPA ID Number: TNR000034686

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029
1-435-884-0155
Facility's Phone:
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.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NA 3082, Hazardous waste, liquid, n.o.s., (PCB,Cadmium), 9, PG III (PCB,D006)	1	DM	180	K	D006 D007 D008
RQ	2. NA 3082, Hazardous waste, liquid, n.o.s., (Cadmium, Lead), 9, PG III, (D006,D008)	2	DM	327	K	D006 D008 D018

Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including, but not limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895.

14. Special Handling Instructions and Additional Information
Truck:3051 Van:W10295 TID:0349232 Accumulation Start Date: 12/28/22 PCB Start Date: 12/28/2022
ERG #171 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Dedicated Service Shipment, See Attachment for Additional Info Shipment ID: 9750-09-0037

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: Blake Cleary On Behalf Of FRNP — Signature: Blake Cleary — Month 11 Day 2 Year 23

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brian Gleason — Signature: Brian Gleason — Month 11 Day 02 Year 23

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:

RECEIVED
NOV 07 2023
BY:

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.	2.	3.	4.
H132	H132		

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a — AE 11/6/23

Printed/Typed Name: Albert Evans — Signature — Month 11 Day 07 Year 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Additional Information Attachment, Page 2 of 2

Manifest Number: 023682464JJK

Shipment ID Number: 9750-09-0037

Shipment Date: 11/2/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Accumulation Storage Date	Date to Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	Net Wt (lb)	Net Wt (Kg)
9b.1	130099	130099-01	PAD22C51251	PCB LIQUIDS WITH CADMIUM, CHROMIUM, AND LEAD	10/03/23	12/28/2022	6.15	436	198	396	180
9b.2	122731	122731-01	PAD22C50667	USED OIL FROM NON-PROCESS EQUIPMENT	8/31/2023	N/A	6.68	432	196	373	169
9b.2	121896	121896-08	PAD23C60114	USED OIL	08/31/23	N/A	7	402	182	349	158
		Totals	3				19.83	1270	576	1118	507

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

1300FFU1

LAND DISPOSAL NOTIFICATION AND CERTIFICATION

Generator Name: US Department of Energy (Paducah Site) Manifest Doc. No. : 023682464JJK

Profile No.: 9750-09-0037 State Manifest No.: NA

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: Non-wastewater ☒ Wastewater ☐
2. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent standards are listed on the following page. If F039, multi-source leachate applies those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	D006	TCLP Cadmium	☐	A
2	D007	TCLP Chromium	☐	A
3	D008	TCLP Lead	☐	A
4		FO 10/10/2023	☐	

To identify F039 or D001-D043 underlying hazardous constituent (s), use the "F039/Underlying Hazardous Constituent Form" provided (Form B1) and check here ☒
If no UHCs are present in the waste upon its initial generation check here: ☐
To list additional USEPA waste code(s) and subcategorie(s), use the supplemental sheet provided (Form A2) and check here: ☐

HOW MUST THE WASTE BE MANAGED? In column 5 above, enter the letter (A, B1, B3, B4, C, D, or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B3, B4, or D, you are making the appropriate certification as provided below. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.

A. RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268.40.
☐ For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards in 40 CFR Part 268.40 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion in units as specified in 268.42 Table 1. I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 5 above.
☐ For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS
This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature FRANKLIN OVERBY (Affiliate) Digitally signed by FRANKLIN OVERBY (Affiliate) Date: 2023.10.11 09:40:02 -05'00' Title Waste Engineer Date 10/10/2023

Form A1
Page 1 of 2

LAND SPOSAL NOTIFICATION AND CERTI ATION (PHASE IV)

If the waste identified on the first page of this form is described by any of the following USEPA hazardous waste codes: F001, F002, F003, F004, F005, and all solvent constituents will not be monitored by the treater, then each constituent MUST be identified below by checking the appropriate box, and this page must accompany the shipment, along with the previous page of this form. If the waste code F039 describes this waste, then the corresponding list of constituents must be attached. If D001-D043 require treatment to 268.48 standards, then the underlying hazardous constituent(s) must also be attached.

SOLVENT WASTE TREATMENT STANDARDS[2]					
F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]		F001 through F005 spent solvent constituents and their associated USEPA hazardous waste code(s).	Treatment Standard[1]	
	Wastewaters	Nonwastewaters		Wastewaters	Nonwastewaters
Acetone (F003)	0.28	160	Methanol (F003)	5.6	0.75 (TCLP)[3]
Benzene (F005)	0.14	10	Methylene chloride (F001, F002)	0.089	30
n-Butanol (n-butyl alcohol) (F003)	5.6	2.6	Methyl ethyl ketone (F005)	0.28	36
Carbon disulfide (F005)	3.8	4.8 (TCLP)[3]	Methyl isobutyl ketone (F003)	0.14	33
Carbon tetrachloride (F001)	0.057	6.0	Nitrobenzene (F004)	0.068	14
Chlorobenzene (F002)	0.057	6.0	2-Nitropropane (F005)	INCIN or {(WETOX or C HOXD) followed by CARBN}	INCIN
o-Cresol (F004)	0.11	5.6	Pyridine (F005)	0.014	16
Cresol (m- and p- isomers) (F004)	0.77	5.6	Tetrachloroethylene (F001, F002)	0.056	6.0
Cyclohexanone (F003)	0.36	0.75 (TCLP)[3]	Toluene (F005)	0.080	10
o-Dichlorobenzene (F002)	0.088	6.0	1,1,1-Trichloroethane (F001, F002)	0.054	6.0
2-Ethoxyethanol (F005) also called ethylene glycol, monoethyl ether	INCIN or BIODG	INCIN	1,1,2-Trichloroethane (F002)	0.054	6.0
Ethyl acetate (F003)	0.34	33	Trichloroethylene (F001, F002)	0.054	6.0
Ethyl benzene (F003)	0.057	10	Trichloromonofluoromethane (F002)	0.020	30
Ethyl ether (F003)	0.12	160	1,1,2-Trichloro-1,2,2-trifluoroethane (F002)	0.057	30
Isobutanol (Isobutyl Alcohol) (F005)	5.6	170	Xylenes (sum of o-, m-, and p-isomers) (F003)	0.32	30

[1] All spent solvent treatment standards are measured through a total waste analysis (TCA), unless otherwise noted. Wastewater units are mg/l, nonwastewater are mg/kg.

[2] For contaminated soils using the alternative soil treatment standards, the treatment standards for F001-F005 spent solvents must be a 90% reduction of the constituents or less than 10x the standard listed.

[3] These solvents require a TCLP standard with units of mg/l.

SUBCATEGORY REFERENCE

D001:

A. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.

B. Ignitable characteristic wastes, except for the 40 CFR 261.21(a) (1) High TOC subcategory, that are managed in CWA/CWA-equivalent or Class I SDWA systems.

C. High TOC Ignitable characteristic liquids subcategory based on 40 CFR 261.21(a) (1) – Greater than or equal to 10% total organic carbon.

D002:

D. Corrosive characteristic wastes that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.

E. Corrosive characteristic wastes that are managed in CWA, CWA-equivalent, or Class I SWDA systems.

Form A1
Page 2 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV)

Generator Name: US Department of Energy (Paducah Site) Manifest Doc. No. : 023682464JJK

Profile No.: 9750-09-0037 State Manifest No.: NA

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
5			☐	
6			☐	
7			☐	
8			☐	
9			☐	
10			☐	
11			☐	
12			☐	
13			☐	
14			☐	
15			☐	
16			☐	
17			☐	
18			☐	
19			☐	
20			☐	
21			☐	
22		FO 10/10/20223	☐	
23			☐	
24			☐	
25			☐	
26			☐	
27			☐	
28			☐	
29			☐	
30			☐	
31			☐	
32			☐	
33			☐	
34			☐	
35			☐	

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature FRANKLIN OVERBY (Affiliate) Digitally signed by FRANKLIN OVERBY (Affiliate) Date: 2023.10.11 09:40:46 -05'00'

Title Waste Engineer Date 10/10/2023

Form A2
Page 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION (PHASE IV) 023682464WK (PW)

Generator Name: US Department of Energy (Paducah Site) Manifest Doc. No. : ~~023682464~~ 10-30-23

Profile No.: 9750-09-0037 State Manifest No.: NA

This form is a continuation from form A1 for a waste identified by more than five USEPA waste code/subcategory groups. This page by itself IS NOT an acceptable Land Disposal Notification and Certification Form.

Continue (from form A1, Page 1) to identify ALL USEPA hazardous wastes that apply to this waste shipment (as defined by 40 CFR 261). For each waste number, identify the corresponding subcategory (write in the description from 40 CFR 268.40, or check NONE if the waste does not have a subcategory.). Also identify in column 5 how the waste must be managed. Spent solvents are listed on Form A1, Page 2. F039 constituent(s) and underlying hazardous constituent(s) if applicable, must be listed and attached.

REF #	3. US EPA HAZARDOUS WASTE CODE(S)	4. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE.		5. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM FORM A1, PAGE 1
		DESCRIPTION	NONE	
36			☐	
37			☐	
38			☐	
39			☐	
40			☐	
41			☐	
42			☐	
43			☐	
44			☐	
45			☐	
46			☐	
47			☐	
48			☐	
49			☐	
50			☐	
51			☐	
52		FO 10/10/2023	☐	
53			☐	
54			☐	
55			☐	
56			☐	
57			☐	
58			☐	
59			☐	
60			☐	
61			☐	
62			☐	
63			☐	
64			☐	
65			☐	

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature FRANKLIN OVERBY (Affiliate) Digitally signed by FRANKLIN OVERBY (Affiliate) Date: 2023.10.11 09:42:04 -05'00'

Title Waste Engineer Date 10/10/2023

Form A2
Page 2 of 2

F039/ UNDERLYING HAZARDOUS CONSTITU[illegible]T (UTS) (Phase IV)

Generator Name: US Department of Energy (Paducah Site) Manifest Doc. No. : 023682464JJK

Profile No.: 9750-69-6037 State Manifest No.: NA

If D001-D043 requires treatment to the 40 CRF 268.48 standards, then each underlying hazardous constituent (UHC) present in the waste at the point of generation and at a level above the Universal Treatment Standard (UTS) constituent specific standard must be listed. Write the letter (A1, B1, B2, B3, or C that corresponds to the letter on the land disposal form A1) beside each constituent present to properly describe how the constituent(s) must be managed under 40 CFR 268.7. If contaminated soil requires treatment to 40 CFR 268.49 standards, then each UHC in the waste at the point of generation and at a level above 10 times the UTS must be listed. Write the appropriate letter which corresponds to the letter on the LDR form.

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Acenaphthylene		0.059	3.4	2-Chloro-1,3-butadiene		0.057	0.28'
Acenapthene		0.059	3.4	Chlorodibromomethane		0.057	15
Acetone		0.28	160	Chloroethane		0.27	6.0
Acetonitrile		5.6	38'	bis(2-Chloroethoxy)methane		0.036	7.2
Acetophenone		0.010	9.7	bis(2-Chloroethyl)ether		0.033	6.0
2-Acetylaminofluorene		0.059	140	Chloroform		0.046	6.0
Acrolein		0.29	NA	bis(2-Chloroisopropyl)ether		0.055	7.2
Acylamide		19'	23'	p-Chloro-m-cresol		0.018	14
Acrylonitrile		0.24	84	2-Chloroethyl vinyl ether		0.062'	NA '
Aldicarb sulfone		0.056[1]	0.28[1]	Chloromethane/Methyl chloride		0.19	30
Aldrin		0.021	0.066	2-Chloronaphthalene		0.055	5.6
4-Aminobiphenyl		0.13	NA	2-Chlorophenol		0.044	5.7
Aniline		0.81	14	3-Chloropropylene		0.036	30
Anthracene		0.059	3.4	Chrysene		0.059	3.4
Aramite		0.36	NA	o-Cresol		0.11	5.6
alpha-(BHC)		0.00014	0.066	m-Cresol		0.77	5.6
beta-(BHC)		0.00014	0.066	p-Cresol		0.77	5.6
delta-(BHC)		0.023	0.066	m-Cumenyl methylcarbamate		0.056'	1.4'
gamma-(BHC)		0.0017	0.066	Cyclohexanone		0.36	0.75 mg/l'
Barban		0.056'	1.4'	o,p'-DDD		0.023	0.087
Bendiocarb		0.056'	1.4'	p,p'-DDD		0.023	0.087
Benomyl		0.056'	1.4'	o,p'-DDE		0.031	0.087
Benzene		0.14	10	p,p'-DDE		0.031	0.087
Benz(a)anthracene		0.059	3.4	o,p'-DDT		0.0039	0.087
Benzal chloride		0.055'	6.0'	p,p'-DDT		0.0039	0.087
Benzo(b)fluoranthene[3]	FO 10/10/2023	0.11	6.8	Dibenz(a,h)anthracene	FO 10/10/2023	0.055	8.2
Benzo(k)fluoranthene[3]		0.11	6.8	Dibenz(a,e)pyrene		0.061	NA
Benzo (g,h,i)perylene		0.0055	1.8	1,2-Dibromo-3-chloropropane		0.11	15
Benzo(a)pyrene		0.061	3.4	1,2-Dibromomethane/ Ethylene dibromide		0.028	15
Bromodichloromethane		0.35	15	Dibromomethane		0.11	15
Bromomethane/Methyl Bromide		0.11	15	m-Dichlorobenzene		0.036	6.0
4-Bromophenyl phenyl ether		0.055	15	o-Dichlorobenzene		0.088	6.0
n-Butyl alcohol		5.6	2.6	p-Dichlorobenzene		0.090	6.0
Butylate		0.042'	1.4'	Dichlorodifluoromethane		0.23	7.2
Butyl benzyl phthalate		0.017	28	1,1-Dichloroethane		0.059	6.0
2-sec-Butyl-4,6-dinitrophenol/Dinoseb		0.066	2.5	1,2-Dichloroethane		0.21	6.0
Carbaryl		0.006'	0.14'	1,1-Dichloroethylene		0.025	6.0
Carbenzadim		0.056'	1.4'	trans-1,2-Dichloroethylene		0.054	30
Carbofuran		0.006'	0.14'	2,4-Dichlorophenol		0.044	14
Carbofuran phenol		0.056'	1.4'	2.6-Dichlorophenol		0.044	14
Carbon disulfide		3.8	4.8 mg/l TCLP[1]	2,4-Dichlorophenoxyacetic acid/2,4-D		0.72	10
Carbon tetrachloride		0.057	6.0	1,2-Dichloropropane		0.85	18
Carbosulfan		0.028'	1.4'	cis-1,3-Dichloropropylene		0.036	18
Chlordane (alpha and gamma isomers)		0.0033	0.26	trans-1,3-Dichloropropylene		0.036	18
p-Chloroaniline		0.46	16	Dieldrin		0.017	0.13
Chlorobenzene		0.057	6.0	Diethyl phthalate		0.20	28

Form B1
Page 1 of 3

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Chlorobenzilate		0.10	NA	p-Dimethylaminoazobenzene		0.13'	NA
2,4-Dimethyl phenol		0.036	14	Methylene chloride		0.089	30
Dimethyl phthalate		0.047	28	Methyl ethyl ketone		0.28	36
Di-n-butyl phthalate		0.057	28	Methyl isobutyl ketone		0.14	33
1,4-Dinitrobenzene		0.32	2.3	Methyl methacrylate		0.14	160
4,6-Dinitro-o-cresol		0.28	160	Methyl methansulfonate		0.018	NA
2,4-Dinitrophenol		0.12	160	Methyl parathion		0.014	4.6
2,4-Dinitrotoluene		0.32	140	Metolcarb		0.056'	1.4'
2,6-Dinitrotoluene		0.55	28	Mexacarbate		0.056'	1.4'
Di-n-octyl phthalate		0.017	28	Molinate		0.042'	1.4'
Di-n-propylnitrosamine		0.40	14	Naphthalene	FO 10/10/2023	0.059	5.6
1,4-Dioxane		12.0	170	2-Naphthylamine		0.52	NA
Diphenylamine[3]		0.92	13'	o-Nitroaniline		0.27'	14'
Diphenylnitrosamine[3]		0.92	13'	p-Nitroaniline		0.028	28
1,2-Diphenylhydrazine		0.087	NA	Nitrobenzene		0.068	14
Disulfoton		0.017	6.2	5-Nitro-o-toluidine		0.32	28
Dithiocarbamates (total)		0.028	28'	o-Nitrophenol		0.028'	13'
Endosulfan I		0.023	0.066	p-Nitrophenol		0.12	29
Endosulfan II		0.029	0.13	N-Nitrosodiethylamine		0.40	28
Endosulfan sulfate		0.029	0.13	N-Nitrosodimethylamine		0.40	2.3'
Endrin		0.0028	0.13	N-Nitroso-di-n-butylamine		0.40	17
Endrin aldehyde		0.025	0.13	N-Nitrosomethylethylamine		0.40	2.3
EPTC		0.042'	1.4'	N-Nitrosomorpholine		0.40	2.3
Ethyl acetate		0.34	33	N-Nitrosopiperidine		0.013	35
Ethyl benzene		0.057	10	N-Nitrosopyrrolidine		0.013	35
Ethyl cyanide/Propanenitrile		0.24	360	Oxamyl		0.056'	0.28'
Ethyl ether	FO 10/10/2023	0.12	160	Parathion		0.014	4.6
Bis(2-Ethylhexyl)phthalate		0.28	28	Total PCBs (sum of all PCB isomers or all Aroclors)	A	0.10	10
Ethyl methacrylate		0.14	160	Pebulate		0.042'	1.4'
Ethylene oxide		0.12	NA	Pentachlorobenzene		0.055'	10'
Famphur		0.017	15	PeCDDs (All Pentachlorodibenzo-p-dioxins)		0.000035	0.001
Fluoranthene		0.068	3.4	PeCDFs(All Pentachlorodibenzofurans)		0.000035	0.001
Fluorene		0.059	3.4	Pentachloroethane		0.055	6.0
Formetanate hydrochloride		0.056'	1.4'	Pentachloronitrobenzene		0.055	4.8
Heptachlor		0.0012	0.066	Pentachlorophenol		0.089	7.4
Heptachlor epoxide		0.016	0.066	Phenacetin		0.081	16
Hexachlorobenzene		0.055	10	Phenanthrene		0.059	5.6
Hexachlorobutadiene		0.055	5.6	Phenol		0.039	6.2
Hexachlorocyclopentadiene		0.057	2.4	Phorate		0.021	4.6
HxCDDs (All Hexachrorodibenzo-p-dioxins)		0.000063	0.001	Phthalic acid		0.055[1]	28[1]
HxCDFs (All Hexachlorodibenzofurans)		0.000063	0.001	Phthalic anhydride	FO 10/10/2023	0.055	28[1]
Hexachloroethane		0.055	30	Physostigmine		0.056'	1.4'
Hexachloropropylene		0.035	30	Physostigmine salicylate		0.056'	1.4'
Indeno(1,2,3-c,d)pyrene		0.0055	3.4	Promecarb		0.056'	1.4'
Iodomethane		0.19	65	Pronamide		0.093	1.5
Isobutyl alcohol		5.6	170	Propham		0.056'	1.4'
Isodrin		0.021	0.066	Propoxur		0.056'	1.4'
Isosafrole		0.081	2.6	Prosulfocarb		0.042'	1.4'
Kepone		0.0011	0.13	Pyrene		0.067	8.2
Methacrylonitrile		0.24	84	Pyridine		0.014	16
Methanol		5.6	0.75 mg/l'	Safrole		0.081	22
Methapyrilene		0.081	1.5	Silvex/2,4,5-TP		0.72	7.9
Methiocarb		0.056'	1.4'	1,2,4,5-Tetrachlorobenzene		0.055	14
Methomyl		0.028[1]	0.14[1]	TCDDs (All Tetrachlorodibenzo-p-dioxins)		0.000063	0.001
Methoxychlor		0.25	0.18	TCDFs (All Tetrachlorodibenzo-furans)		0.000063	0.001
3-Methylcholanthrene		0.0055	15	1,1,1,2-Tetrachloroethane		0.057	6.0
4,4'-Methylene bis(2-chloroaniline)		0.50	30	1,1,2,2-Tetrachloroethane		0.057	6.0

CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted	CONSTITUENT	HOW MUST THIS CONSTITUENT BE MANAGED?	WW (mg/l)	NWW (mg/kg) unless noted
Tetrachloroethylene		0.056	6.0	INORGANIC CONSTITUENTS			
2,3,4,6-Tetrachlorophenol		0.030	7.4	Antimony		1.9	2.1 mg/l TCLP
Thiodicarb		0.0191	1.4[1]	Antimony		1.9	1.15 mg/l TCLP[4]
Thiophanate-methyl		0.0561	1.4[1]	Arsenic		1.4	5.0 mg/l TCLP
Toluene		0.080	10	Barium		1.2	7.6 mg/l TCLP
Toxaphene		0.0095	2.6	Barium		1.2	21 mg/l TCLP[4]
Triallate		0.042[1]	1.4[1]	Beryllium		0.82	0.014 mg/l TCLP
Tribromomethane/Bromoform		0.63	15	Beryllium		0.82	1.22 mg/l TCLP[4]
2,4,6-Tribromophenol		0.035	7.4	Cadmium		0.69	0.19 mg/l TCLP
1,2,4-Trichlorobenzene		0.055	19	Cadmium		0.69	0.11 mg/l TCLP[4]
1,1,1-Trichloroethane	FO 10/10/2023	0.054	6.0	Chromium (Total)		2.77	0.86mg/l TCLP
1,1,2-Trichloroethane		0.054	6.0	Chromium (Total)		2.77	0.60 mg/l TCLP[4]
Trichloroethylene		0.054	6.0	Cyanides (Total)		1.2	590
Trichloromonofluoromethane		0.020	30	Cyanides (Amenable)		0.86	30[1]
2,4,5-Trichlorophenol		0.18	7.4	Fluoride	FO 10/10/2023	35	NA[4]
2,4,6-Trichlorophenol		0.035	7.4	Lead		0.69	0.37 mg/l
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T		0.72	7.9	Lead		0.69	0.75 mg/l[4] TCLP
1,2,3-Trichloropropane		0.85	30	Mercury (Nonwastewater from Retort)		NA	0.20 mg/l TCLP
1,1,2-Trichloro-1,2,2-trifluoroethane		0.057	30	Mercury (All others)		0.15	0.025 mg/l TCLP
Triethylamine		0.081[1]	1.5[1]	Nickel		3.98	5.0 mg/l TCLP
Tris-(2,3-Dibromopropyl)phosphate		0.11	0.10[1]	Nickel		3.98	11 mg/l TCLP[4]
Vernolate		0.042[1]	6.0[1]	Selenium		0.82	0.16 mg/l TCLP
Vinyl chloride		0.27	6.0	Selenium		0.82	5.7 mg/l TCLP[5]
Xylenes – mixed isomers (sum of o-,m-, and p-xylene		0.32	30	Silver		0.43	0.30 mg/l TCLP
				Silver		0.43	0.14 mg/l TCLP[4]
				Sulfide		14	NA[2]
	FO			Thallium		1.4	0.078 mg/l TCLP[1]
	10/10/2023			Thallium		1.4	0.20 mg/l TCLP[4]
				Vanadium		4.3[2]	1.6 mg/l TCLP[2]
				Zinc		2.61	4.3 mg/l TCLP[2]

[1] These constituents are only applicable as underlying hazardous constituents. These constituents are not constituents that require treatment in F039 wastes.

[2] Not an underlying hazardous constituent requiring treatment in a D001-D043 waste.

[3] These compounds are regulated by the sum of their concentration instead of as individual constituents.

[4] These constituents are effective in authorized states or states with no LDR program on 8/24/99. These concentrations are effective in all other states upon adoption by the state.

[5] Effective 8/24/98 in unauthorized states or states with no LDR program. Selenium at 5.7 mg/l is not an underlying hazardous constituent in D001-D043 waste. This becomes effective in authorized states upon adoption by the state.

Form B1
Page 3 of 3

Please print or type. Form Approved. OMB No. 205

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
KY 8890008982	2	270-441-6333	023682469 JJK

GENERATOR

5. Generator's Name and Mailing Address
Four Rivers Nuclear Partnership, LLC, (FRNP) on behalf of
FRNP 5511 Hobbs Road, Kevil, KY 42053
Generator's Phone: 270-441-5310

Generator's Site Address (if different than mailing address)
FRNP for the U.S. Department of Energy
Paducah Gaseous Diffusion Plant,
5511 Hobbs Rd, Kevil, KY 42053

6. Transporter 1 Company Name: Hittman Transport Services — U.S. EPA ID Number: TNR000034886

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
EnergySolutions Clive Disposal Site- Waste Treatment Facility
US I-80 Exit 49, Clive, UT 84029 — U.S. EPA ID Number: UTD982598898
Facility's Phone: 1-435-884-0155

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. UN 2912, Radioactive material, low specific activity (LSA-I), 7, (PCB), Am-241, Pu-238, Pu-239, Tc-99, Th-230, Liquid/Oxide, 0.42 MBq, Fissile Excepted	2	DM	185	K	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Truck:3051 Van:W10295 TID:0349232 Accumulation Start Date: N/A PCB Start Date: 11/17/2022
ERG # 162 In the event of an RQ Release, call 1-800-424-8802 If undeliverable, return to generator
Exclusive Use Shipment, See Attachment for Additional Info Shipment ID: 9750-04-0015

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: Blake Cleary on Behalf of FRNP — Signature: Blake Cleary — Month: 11 Day: 2 Year: 23

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.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brian Gleason — Signature: Brian Gleason — Month: 11 Day: 02 Year: 23

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:

RECEIVED
NOV 07 2023

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.	2.	3.	4.
H132	BY:		

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 Evans — Signature: Albert Evans — Month: 11 Day: 6 Year: 23

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYST

Additional Information Attachment, Page 2 of 2

Manifest Number: 023682469JJK

Shipment ID Number: 9750-04-0015

Shipment Date: 11/2/2023

UHWM Section	RFD	Container / WASTE ID	Barcode	Description	Accumulation Storage Date	Date to Storage	NET VOLUME (ft3)	GROSS WT (lb)	Gross Wt (Kg)	Net Wt (lb)	Net Wt (Kg)
9b.1	122622	122622-03	PAD22C51008	Vent Duct Oil and Water	NA	11/17/2022	5.7	412	187	372	169
9b.1	130135	130135-01	PAD22C51552	SPENT OIL. PENDING SAMPLE RESULTS	N/A	08/02/23	0.87	68	31	35	16
		Totals	**2**				**6.57**	**480**	**218**	**407**	**185**

Equal Employment Opportunity, all provisions of the Executive Order 11246, as amended by Executive Order 11375, and of the rules, regulations, and relevant orders of the Secretary of Labor are incorporated herein.

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APPENDIX B

PCB WASTE CERTIFICATES OF DISPOSAL

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RT

EPA ID # FLD980711071

1940 N.W. 67th Pl., Gainesville, FL

Certificate No. PFFR-22-255-20230816

Certificate of Management

Perma-Fix of Florida of Gainesville, Florida has managed waste(s)

Received from Four River Nuclear Partnership, LLC on behalf of USDOE

EPA ID Number KY8890008982 as identified in Hazardous Waste

Manifest Number 023531984 JJK & the attached container list and hereby certifies management as of

8/16/2023 in accordance with applicable Federal and State regulations.

Shipment Number: PFFR-22-255

Generator: Four River Nuclear Partnership, LLC on behalf of USDOE

Address: 5511 Hobbs Road

Kevil, KY 42053-

Contact:

RECEIVED
SEP 11 2023
BY:

By: Tom McCartt

Title: Waste Tracking Representative

Signature: Tom McCartt Digitally signed by Tom McCartt Date: 2023.08.16 13:59:27 -04'00'

Certificate of Management

PFFR-22-255-20230816

PFF Receipt Number	Haz Manifest Number	PFF Profile Number	PFF Package Number	Item Number	Date Processed	Generator Code	Waste Code	Date Received
PFFR-22-255	023531984 JJK	RS22-07-048	102959	130052-01	8/16/2023	KYFRN01	LARW Solids	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-048	102960	130052-02	8/16/2023	KYFRN01	LARW Solids	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-048	102961	130052-03	8/16/2023	KYFRN01	LARW Solids	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-048	102962	130052-04	8/16/2023	KYFRN01	LARW Solids	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-048	102963	130052-05	8/16/2023	KYFRN01	LARW Solids	8/18/2022
PFFR-22-255	023531984 JJK	RS22-08-008	102964	130052-06	8/16/2023	KYFRN01	LARW Solids	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-048	102965	130052-07	8/16/2023	KYFRN01	LARW Solids	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-049	102966	130053-01	8/16/2023	KYFRN01	CAT III L/P	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-049	102967	130053-02	8/16/2023	KYFRN01	CAT III L/P	8/18/2022
PFFR-22-255	023531984 JJK	RS22-08-008	102968	130053-03	8/16/2023	KYFRN01	Reactive	8/18/2022
PFFR-22-255	023531984 JJK	RS22-08-004	102969	130055-01	8/16/2023	KYFRN01	Mercury	8/18/2022
PFFR-22-255	023531984 JJK	RS22-08-005	102970	130055-02	8/16/2023	KYFRN01	PF I	8/18/2022
PFFR-22-255	023531984 JJK	RS22-08-004	102971	130058-01	8/16/2023	KYFRN01	Mercury	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-049	102972	130058-02	8/16/2023	KYFRN01	CAT III L/P	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-048	102973	130059-01	8/16/2023	KYFRN01	LARW Solids	8/18/2022
PFFR-22-255	023531984 JJK	RS22-07-049	102974	130060-01	8/16/2023	KYFRN01	CAT III L/P	8/18/2022

16

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
7340-08-0027	82199	03/31/2023	15.0	Landfill	Mixed Waste

RECEIVED
APR 26 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.04.07 11:32:34 -06'00'
Adobe Acrobat Reader version: 2023.001.20093

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-04-0014	82201	11/13/2023	7.5	Landfill	Mixed Waste

RECEIVED
DEC 14 2023
BY:

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.

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Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.12.01 12:36:45 -07'00'
Adobe Acrobat Reader version: 2023.006.20380

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

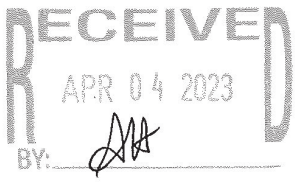
CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-90-0003	2222	03/16/2023	0.8	Landfill	Mixed Waste
9750-90-0004	82259	03/16/2023	4.1	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.

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Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.03.28 08:43:24 -06'00'
Adobe Acrobat Reader version: 2023.001.20064

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-01-0097	82200	03/27/2023	30.2	Landfill	Mixed Waste
9750-01-0098	2223	03/27/2023	96.0	Landfill	Mixed Waste

RECEIVED
APR 04 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.03.31 15:16:12 -06'00'
Adobe Acrobat Reader version: 2023.001.20093

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

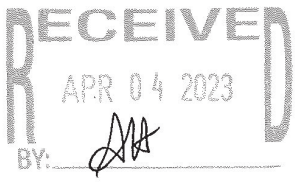
CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-90-0003	2222	03/16/2023	0.8	Landfill	Mixed Waste
9750-90-0004	82259	03/16/2023	4.1	Landfill	Mixed Waste



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Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.03.28 08:43:24 -06'00'
Adobe Acrobat Reader version: 2023.001.20064

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
7340-08-0028	2277	05/22/2023	7.5	Landfill	Mixed Waste
7340-08-0029	82312	05/22/2023	251.5	Landfill	Mixed Waste

RECEIVED
JUN 26 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.05.30 15:04:40 -06'00'
Adobe Acrobat Reader version: 2023.001.20174

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
7340-08-0028	2277	05/22/2023	7.5	Landfill	Mixed Waste
7340-08-0029	82312	05/22/2023	251.5	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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.05.30 15:04:40 -06'00'
Adobe Acrobat Reader version: 2023.001.20174

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-90-0005	82332	07/31/2023	0.8	Landfill	Mixed Waste

RECEIVED 8/2/2023

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.08.01 16:45:16 -06'00'
Adobe Acrobat Reader version: 2023.003.20244

Date

Brennon Dick
Operations Manager

299 S Main Street, Suite 1700, Salt Lake City, Utah 84111. Telephone (801) 649-2000

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-01-0101	82338	06/29/2023	45.0	Landfill	Mixed Waste

RECEIVED
JUL 24 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.07.06 08:32:27 -06'00'
Adobe Acrobat Reader version: 2023.003.20201

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
7340-08-0031	82405	09/07/2023	7.5	Landfill	Mixed Waste

RECEIVED
SEP 20 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.09.11 14:04:54 -06'00'
Adobe Acrobat Reader version: 2023.003.20284

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-01-0102	82407	09/25/2023	30.0	Landfill	Mixed Waste

RECEIVED
OCT 0 3 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.09.29 11:20:23 -06'00'
Adobe Acrobat Reader version: 2023.006.20320

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-90-0006	82418	09/25/2023	4.1	Landfill	Mixed Waste

RECEIVED
OCT 0 3 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.09.29 11:21:05 -06'00'
Adobe Acrobat Reader version: 2023.006.20320

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
7340-08-0032	82433	09/28/2023	2,080.0	Landfill	Mixed Waste

RECEIVED
OCT 0 3 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.09.29 08:42:46 -06'00'
Adobe Acrobat Reader version: 2023.006.20320

Brennon Dick
Operations Manager

Date

ENERGYSOLUTIONS

CERTIFICATE OF DISPOSAL

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

DOE, Paducah, Paducah

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

Shipment	UHWM #	Disposal Date	Volume (Cu/Ft)	Process	Disposal Location
9750-01-0103	82462	12/14/2023	30.0	Landfill	Mixed Waste

RECEIVED
DEC 2 8 2023
BY:

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.

Brennon Dick
Digitally signed by Brennon Dick
Date: 2023.12.23 16:07:38 -07'00'
Adobe Acrobat Reader version: 2023.008.20421

Brennon Dick
Operations Manager

Date

APPENDIX C

PCB WASTE STORAGE AREA INSPECTION RECORDS

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PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
C-300					
	30DAA-PCB-300-01	9/19/2023	☐	☑	PCB storage area established 9/14/2023.
	30DAA-PCB-300-01	9/26/2023	☐	☑	
	30DAA-PCB-300-01	10/3/2023	☐	☑	
	30DAA-PCB-300-01	10/10/2023	☐	☑	
	30DAA-PCB-300-01	10/17/2023	☐	☑	PCB storage area was closed 10/21/2023.
	30DAA-PCB-300-02	10/3/2023	☐	☑	PCB storage area established 9/27/2023.
	30DAA-PCB-300-02	10/10/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
	30DAA-PCB-300-02	10/17/2023	☐	☑	PCB storage area was closed 10/17/2023.
C-333					
	G-333-18	1/17/2023	☐	☑	
	G-333-18	2/14/2023	☐	☑	
	G-333-18	3/14/2023	☐	☑	
	G-333-18	4/11/2023	☐	☑	
	G-333-18	5/9/2023	☐	☑	
	G-333-18	6/6/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
G-333-18		7/5/2023	☐	☑	
G-333-18		8/2/2023	☐	☑	
G-333-18		8/29/2023	☐	☑	
G-333-18		9/19/2023	☐	☑	
G-333-18		10/17/2023	☐	☑	
G-333-18		11/14/2023	☐	☑	
G-333-18		12/12/2023	☐	☑	
S-333-27		8/2/2023	☐	☑	PCB storage area established 7/31/2023.

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
S-333-27		8/29/2023	☐	☑	
S-333-27		9/19/2023	☐	☑	
S-333-27		10/17/2023	☐	☑	
S-333-27		11/14/2023	☐	☑	
S-333-27		12/12/2023	☐	☑	
S-333-28		9/19/2023	☐	☑	PCB storage area established 8/28/2023.
S-333-28		10/17/2023	☐	☑	
S-333-28		11/14/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
	S-333-28	12/12/2023	☐	☑	
	S-333-29	9/19/2023	☐	☑	PCB storage area established 8/28/2023.
	S-333-29	10/17/2023	☐	☑	
	S-333-29	11/14/2023	☐	☑	
	S-333-29	12/12/2023	☐	☑	
	S-333-30	12/12/2023	☐	☑	PCB storage area established 11/21/2023.
C-337					
	G-337-PCB-02	1/17/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
G-337-PCB-02		2/14/2023	☐	☑	
G-337-PCB-02		3/14/2023	☐	☑	
G-337-PCB-02		4/11/2023	☐	☑	
G-337-PCB-02		5/9/2023	☐	☑	
G-337-PCB-02		6/6/2023	☐	☑	
G-337-PCB-02		7/5/2023	☐	☑	
G-337-PCB-02		8/2/2023	☐	☑	
G-337-PCB-02		8/29/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
	G-337-PCB-02	9/19/2023	☐	☑	
	G-337-PCB-02	10/17/2023	☐	☑	
	G-337-PCB-02	11/14/2023	☐	☑	
	G-337-PCB-02	12/12/2023	☐	☑	
	S-337-12	1/17/2023	☐	☑	
	S-337-12	2/14/2023	☐	☑	
	S-337-12	3/14/2023	☐	☑	
	S-337-12	4/11/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
S-337-12		5/9/2023	☐	☑	
S-337-12		6/6/2023	☐	☑	
S-337-12		7/5/2023	☐	☑	
S-337-12		8/2/2023	☐	☑	
S-337-12		8/29/2023	☐	☑	
S-337-12		9/19/2023	☐	☑	
S-337-12		10/17/2023	☐	☑	
S-337-12		11/14/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
S-337-12		12/12/2023	☐	☑	
S-337-13		1/17/2023	☐	☑	
S-337-13		2/14/2023	☐	☑	
S-337-13		3/14/2023	☐	☑	
S-337-13		4/11/2023	☐	☑	
S-337-13		5/9/2023	☐	☑	
S-337-13		6/6/2023	☐	☑	
S-337-13		7/5/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
S-337-13		8/2/2023	☐	☑	
S-337-13		8/29/2023	☐	☑	PCB storage area was closed 8/29/2023.
S-337-14		1/17/2023	☐	☑	
S-337-14		2/14/2023	☐	☑	
S-337-14		3/14/2023	☐	☑	
S-337-14		4/11/2023	☐	☑	
S-337-14		5/9/2023	☐	☑	
S-337-14		6/6/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
	S-337-14	7/5/2023	☐	☑	
	S-337-14	8/2/2023	☐	☑	
	S-337-14	8/29/2023	☐	☑	PCB storage area was closed 8/29/2023.
C-720					
	G-720-36	1/17/2023	☐	☑	
	G-720-36	2/14/2023	☐	☑	
	G-720-36	3/14/2023	☐	☑	
	G-720-36	4/11/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
	G-720-36	5/9/2023	☐	☑	
	G-720-36	6/6/2023	☐	☑	PCB storage area was closed 6/27/23
C-733					
	C-733	1/17/2023	☐	☑	
	C-733	2/14/2023	☐	☑	
	C-733	3/14/2023	☐	☑	
	C-733	4/11/2023	☐	☑	
	C-733	5/9/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
C-733		6/6/2023	☐	☑	
C-733		6/20/2023	☐	☑	
C-733		7/5/2023	☐	☑	
C-733		8/2/2023	☐	☑	
C-733		8/29/2023	☐	☑	
C-733		9/19/2023	☐	☑	
C-733		10/17/2023	☐	☑	
C-733		11/14/2023	☐	☑	

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
C-733		12/12/2023	☐	☑	
C-746-Q					
C-746-Q		1/17/2023	☐	☑	
C-746-Q		2/14/2023	☐	☑	
C-746-Q		3/14/2023	☐	☑	
C-746-Q		4/11/2023	☐	☑	
C-746-Q		5/9/2023	☐	☑	
C-746-Q		6/6/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
C-746-Q		7/5/2023	☐	☑	
C-746-Q		8/2/2023	☐	☑	
C-746-Q		8/29/2023	☐	☑	
C-746-Q		9/19/2023	☐	☑	
C-746-Q		10/17/2023	☐	☑	
C-746-Q		11/14/2023	☐	☑	
C-746-Q		12/12/2023	☐	☑	

C-752-A

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
C-752-A		1/17/2023	☐	☑	
C-752-A		2/14/2023	☐	☑	
C-752-A		3/14/2023	☐	☑	
C-752-A		4/11/2023	☐	☑	
C-752-A		5/9/2023	☐	☑	
C-752-A		6/6/2023	☐	☑	
C-752-A		6/20/2023	☐	☑	
C-752-A		7/5/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
	C-752-A	8/2/2023	☐	☑	
	C-752-A	8/29/2023	☐	☑	
	C-752-A	9/19/2023	☐	☑	
	C-752-A	10/17/2023	☐	☑	
	C-752-A	11/14/2023	☐	☑	
	C-752-A	12/12/2023	☐	☑	
C-753-A					
	C-753-A	1/17/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
C-753-A		2/14/2023	☐	☑	
C-753-A		3/14/2023	☐	☑	
C-753-A		4/11/2023	☐	☑	
C-753-A		5/9/2023	☐	☑	
C-753-A		6/6/2023	☐	☑	
C-753-A		6/20/2023	☐	☑	
C-753-A		7/5/2023	☐	☑	
C-753-A		8/2/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
	C-753-A	8/29/2023	☐	☑	
	C-753-A	9/19/2023	☐	☑	
	C-753-A	10/17/2023	☐	☑	
	C-753-A	11/14/2023	☐	☑	
	C-753-A	12/12/2023	☐	☑	
C-757					
	G-757-03	1/17/2023	☐	☑	
	G-757-03	2/7/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
G-757-03		2/14/2023	☐	☑	
G-757-03		3/14/2023	☐	☑	
G-757-03		4/11/2023	☐	☑	
G-757-03		5/9/2023	☐	☑	
G-757-03		6/6/2023	☐	☑	
G-757-03		7/5/2023	☐	☑	
G-757-03		8/2/2023	☐	☑	
G-757-03		8/29/2023	☐	☑	

PCB Waste Inspection Summary Report

Building	Area	Date Inspected	Leaks Yes	Leaks No	Comments
G-757-03		9/19/2023	☐	☑	
G-757-03		10/17/2023	☐	☑	
G-757-03		11/14/2023	☐	☑	
G-757-03		12/12/2023	☐	☑	

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APPENDIX D

PCB WASTE INVENTORY TABLES

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TABLES

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Table D.1. Corrections and Adjustments to the December 31, 2022 Inventory

Adj	RFD	Waste ID	PCB Item	Description	PCB Date	Physical	Gross Wt (kg)	Source	Waste Cat	Comments
0	122193	122193-10	PCB Container	EPOXY PAINT CHIPS, VEGETATION AND PPE	6/24/2022	Solid (S)	142	C-333	TSCA Mixed (TM)	
0	122621	122621-01	PCB Container	LUBE OIL/PCB RINSATE COLLECTED FROM SITE GLASSES FROM TRANSFORMER DRAINING	8/23/2022	Liquid (L)	67	C-337	RCRA/TSCA Mixed (RTM)	
0	122622	122622-03	PCB Container	VENTILATION DUCT OIL AND WATER	11/17/2022	L	160	C-337	TM	
0	122623	122623-11	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	11/17/2022	S	43	C-337	TM	
0	130099	130099-01	PCB Container	PCB LIQUIDS WITH CADMIUM, CHROMIUM, AND LEAD	12/28/2022	L	171	C-337	RTM	
1	130135	130135-01	PCB Container	LLW PCB OIL FROM C-337	12/12/2022	L	31	C-337	TM	
1	130123	130123-01	PCB Article Container	PCB LIGHT BALLASTS, CAPACITORS, TRANSFORMERS, ETC.	10/27/2022	S	114	PlantWide	TM	
0	130106	130106-01	PCB Article Container	PCB LIGHT BALLASTS	10/27/2022	S	48	C-720	TM	
TOTAL CORRECTIONS AND ADJUSTMENTS TO THE DECEMBER 31, 2022, INVENTORY*:							**776**			

*Due to rounding, the weight totals may vary.

Table D.2. PCB Waste Generated in 2023

RFD	Waste ID	PCB Item	Description	PCB Date	Gross Wt (kg)	Physical	Current Facility	Source	Waste Cat
122193	122193-11	PCB Container	EPOXY PAINT CHIPS, VEGETATION AND PPE	3/29/2023	398	Solid (S)	Energy*Solutions*, Clive, UT	C-410	TSCA Mixed (TM)
122621	122621-02[a]	PCB Container	LUBE OIL / PCB RINSATE COLLECTED FROM SITE GLASSES FROM TRANSFORMER DRAINING	8/22/2023	101	Liquid (L)	C-337	C-337	RCRA/TSCA Mixed (RTM)
122622	122622-04[a]	PCB Container	VENTILATION DUCT OIL AND WATER	7/21/2023	89	L	C-337	Proc Bldgs	TM
122623	122623-12	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	2/20/2023	38	S	Energy*Solutions*, Clive, UT	Proc Bldgs	TM
122623	122623-13	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	5/11/2023	59	S	Energy*Solutions*, Clive, UT	Proc Bldgs	TM
122623	122623-14	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	10/12/2023	64	S	Energy*Solutions*, Clive, UT	Proc Bldgs	TM
122623	122623-15	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	11/16/2023	39	S	Energy*Solutions*, Clive, UT	Proc Bldgs	TM
130116	130116-01	PCB Container	PCB SOLIDS WITH CADMIUM, CHROMIUM, AND LEAD	2/8/2023	80	S	Energy*Solutions*, Clive, UT	C-333	RTM
130116	130116-02	PCB Container	PCB SOLIDS WITH CADMIUM, CHROMIUM, AND LEAD	5/10/2023	68	S	Energy*Solutions*, Clive, UT	C-333	RTM
130116	130116-03[a]	PCB Container	PCB SOLIDS WITH CADMIUM, CHROMIUM, AND LEAD	7/31/2023	38	S	C-333	C-333	RTM
130162	130162-01	PCB Article Container	PCB LIGHT BALLASTS AND/OR CAPACITORS	2/16/2023	5	S	Energy*Solutions*, Clive, UT	C-752-A	TM
130163	130163-01	PCB Container	PCB CONTAMINATED ASBESTOS	2/20/2023	48	S	Energy*Solutions*, Clive, UT	C-333	RTM
130188	130188-01	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/14/2023	582	S	Energy*Solutions*, Clive, UT	PlantWide	TM
130188	130188-02	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/21/2023	582	S	Energy*Solutions*, Clive, UT	PlantWide	TM
130188	130188-03	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/21/2023	413	S	Energy*Solutions*, Clive, UT	PlantWide	TM
130188	130188-04	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/22/2023	523	S	Energy*Solutions*, Clive, UT	PlantWide	TM
130188	130188-05	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/22/2023	1,023	S	Energy*Solutions*, Clive, UT	PlantWide	TM
130188	130188-06	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/22/2023	592	S	Energy*Solutions*, Clive, UT	PlantWide	TM
130188	130188-07	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/4/2023	980	S	Energy*Solutions*, Clive, UT	PlantWide	TM
130188	130188-08	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	312	S	REPACK	PlantWide	TM
130188	130188-09	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	366	S	REPACK	PlantWide	TM
130188	130188-10	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	219	S	REPACK	PlantWide	TM

Table D.2. PCB Waste Generated in 2023 (Continued)

RFD	Waste ID	PCB Item	Description	PCB Date	Gross Wt (kg)	Physical	Current Facility	Source	Waste Cat
130188	130188-11	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	400	S	REPACK	PlantWide	TM
130188	130188-12	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	222	S	REPACK	PlantWide	TM
130188	130188-13	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	220	S	REPACK	PlantWide	TM
130188	130188-14	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	216	S	REPACK	PlantWide	TM
130188	130188-15	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	218	S	REPACK	PlantWide	TM
130188	130188-16	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	223	S	REPACK	PlantWide	TM
130188	130188-17	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/11/2023	420	S	Energy*Solutions*, Clive, UT	PlantWide	TM
130188	130188-18	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/30/2023	77	S	REPACK	PlantWide	TM
130225	130225-01	PCB Article Container	PCB LIGHT BALLAST/CAPACITORS/TRANSFORMERS/ETC	7/25/2023	91	S	C-752-A	PlantWide	TM
130228	130228-01[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/14/2023	[d]	S	REPACK	C-300	RTM
130228	130228-02[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/15/2023	[c]	S	REPACK	C-300	RTM
130228	130228-05[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/25/2023	[c]	S	REPACK	C-300	RTM
130228	130228-06[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/25/2023	[c]	S	REPACK	C-300	RTM
130228	130228-07[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/25/2023	[c]	S	REPACK	C-300	RTM
130228	130228-08[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	[c]	S	REPACK	C-300	RTM

Table D.2. PCB Waste Generated in 2023 (Continued)

RFD	Waste ID	PCB Item	Description	PCB Date	Gross Wt (kg)	Physical	Current Facility	Source	Waste Cat
130228	130228-09[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	[c]	S	REPACK	C-300	RTM
130228	130228-10[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	[c]	S	REPACK	C-300	RTM
130228	130228-11[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	[c]	S	REPACK	C-300	RTM
130228	130228-12[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	[c]	S	REPACK	C-300	RTM
130228	130228-13[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/28/2023	[c]	S	REPACK	C-300	RTM
130228	130228-14[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/28/2023	[c]	S	REPACK	C-300	RTM
130228	130228-15[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/28/2023	[d]	S	REPACK	C-300	RTM
130228	130228-16[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/28/2023	[c]	S	REPACK	C-300	RTM
130228	130228-17[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	[d]	S	REPACK	C-300	RTM
130228	130228-18[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	[d]	S	REPACK	C-300	RTM
130228	130228-19[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	[d]	S	REPACK	C-300	RTM

Table D.2. PCB Waste Generated in 2023 (Continued)

RFD	Waste ID	PCB Item	Description	PCB Date	Gross Wt (kg)	Physical	Current Facility	Source	Waste Cat
130228	130228-20[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	[e]	S	REPACK	C-300	RTM
130228	130228-21[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	[e]	S	REPACK	C-300	RTM
130228	130228-22[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/3/2023	[c]	S	REPACK	C-300	RTM
130228	130228-23[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/3/2023	[e]	S	REPACK	C-300	RTM
130228	130228-24[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/3/2023	[d]	S	REPACK	C-300	RTM
130228	130228-26[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/5/2023	[e]	S	REPACK	C-300	RTM
130228	130228-27[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/3/2023	[d]	S	REPACK	C-300	RTM
130228	130228-28[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/9/2023	[e]	S	REPACK	C-300	RTM
130228	130228-29[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	[e]	S	REPACK	C-300	RTM
130228	130228-30[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	[e]	S	REPACK	C-300	RTM
130228	130228-31[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	[e]	S	REPACK	C-300	RTM

Table D.2. PCB Waste Generated in 2023 (Continued)

RFD	Waste ID	PCB Item	Description	PCB Date	Gross Wt (kg)	Physical	Current Facility	Source	Waste Cat
130228	130228-32[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	[e]	S	REPACK	C-300	RTM
130228	130228-33[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	[e]	S	REPACK	C-300	RTM
130228	130228-34[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	[e]	S	REPACK	C-300	RTM
130228	130228-35[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/11/2023	[e]	S	REPACK	C-300	RTM
130233	130233-01	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT CONTAINER CIRCUIT BOARDS, CAPACITORS, ETC.	7/21/2023	72	S	Energy*Solutions,* Clive, UT	Various	RTM
130233	130233-02	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT CONTAINER CIRCUIT BOARDS, CAPACITORS, ETC	7/21/2023	57	S	Energy*Solutions,* Clive, UT	Various	RTM
			TOTAL PCB WASTE GENERATED IN CY 2023[b]:		**8,835**				

[a] Indicates a collection container as of December 31, 2023. Weight is estimated.

[b] Due to rounding, the weight totals may vary.

[c] Indicates a collection container. The container was not weighed before being repacked. The container was repacked into 130228-03. The weight for 130228-03 can be seen on Table D.3.

[d] Indicates a collection container. The container was not weighed before being repacked. The container was repacked into 130228-04. The weight for 130228-04 can be seen on Table D.3.

[e] Indicates a collection container. The container was not weighed before being repacked. The container was repacked into 130228-25. The weight for 130228-25 can be seen on Table D.3.

Table D.3. Adjustments to the 2023 Inventory

Adj	RFD	Waste ID	PCB Item	Description	PCB Date	Physical	Gross Wt (kg)	Source	Waste Cat	Comments
-1	130106	130106-01	PCB Article Container	PCB LIGHT BALLASTS	10/27/2022	Solid (S)	-76	C-720	TSCA Mixed (TM)	
1	130228	130228-03[b]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/15/2023	S	4,835	C-300	RCRA/TSCA Mixed (RTM)	
1	130228	130228-04[b]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/14/2023	S	7,121	C-300	RTM	
1	130228	130228-25[b]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	S	6,214	C-300	RTM	
-1	130228	130228-01[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/14/2023	S	[d]	C-300	RTM	
-1	130228	130228-02[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/15/2023	S	[c]	C-300	RTM	
-1	130228	130228-05[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/25/2023	S	[c]	C-300	RTM	
-1	130228	130228-06[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/25/2023	S	[c]	C-300	RTM	
-1	130228	130228-07[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/25/2023	S	[c]	C-300	RTM	
-1	130228	130228-08[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	S	[c]	C-300	RTM	

Table D.3. Adjustments to the 2023 Inventory (Continued)

Adj	RFD	Waste ID	PCB Item	Description	PCB Date	Physical	Gross Wt (kg)	Source	Waste Cat	Comments
-1	130228	130228-09[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	S	[c]	C-300	RTM	
-1	130228	130228-10[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	S	[c]	C-300	RTM	
-1	130228	130228-11[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	S	[c]	C-300	RTM	
-1	130228	130228-12[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/26/2023	S	[c]	C-300	RTM	
-1	130228	130228-13[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/28/2023	S	[c]	C-300	RTM	
-1	130228	130228-14[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/28/2023	S	[c]	C-300	RTM	
-1	130228	130228-15[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/28/2023	S	[d]	C-300	RTM	
-1	130228	130228-16[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/28/2023	S	[c]	C-300	RTM	
-1	130228	130228-17[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	S	[d]	C-300	RTM	

Table D.3. Adjustments to the 2023 Inventory (Continued)

Adj	RFD	Waste ID	PCB Item	Description	PCB Date	Physical	Gross Wt (kg)	Source	Waste Cat	Comments
-1	130228	130228-18[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	S	[d]	C-300	RTM	
-1	130228	130228-19[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	S	[d]	C-300	RTM	
-1	130228	130228-20[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	S	[e]	C-300	RTM	
-1	130228	130228-21[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/2/2023	S	[e]	C-300	RTM	
-1	130228	130228-22[c]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/3/2023	S	[c]	C-300	RTM	
-1	130228	130228-23[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/3/2023	S	[e]	C-300	RTM	
-1	130228	130228-24[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/3/2023	S	[d]	C-300	RTM	
-1	130228	130228-26[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/5/2023	S	[e]	C-300	RTM	
-1	130228	130228-27[d]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/3/2023	S	[d]	C-300	RTM	

Table D.3. Adjustments to the 2023 Inventory (Continued)

Adj	RFD	Waste ID	PCB Item	Description	PCB Date	Physical	Gross Wt (kg)	Source	Waste Cat	Comments
-1	130228	130228-28[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/9/2023	S	[e]	C-300	RTM	
-1	130228	130228-29[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	S	[e]	C-300	RTM	
-1	130228	130228-30[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	S	[e]	C-300	RTM	
-1	130228	130228-31[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	S	[e]	C-300	RTM	
-1	130228	130228-32[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	S	[e]	C-300	RTM	
-1	130228	130228-33[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	S	[e]	C-300	RTM	
-1	130228	130228-34[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/10/2023	S	[e]	C-300	RTM	
-1	130228	130228-35[e]	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/11/2023	S	[e]	C-300	RTM	
-1	130188	130188-08[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-312	C-753-A	TM	
-1	130188	130188-09[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-366	C-753-A	TM	
-1	130188	130188-10	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-219	C-753-A	TM	
-1	130188	130188-11[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-400	C-753-A	TM	

Table D.3. Adjustments to the 2023 Inventory (Continued)

Adj	RFD	Waste ID	PCB Item	Description	PCB Date	Physical	Gross Wt (kg)	Source	Waste Cat	Comments
-1	130188	130188-12[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-222	C-753-A	TM	
-1	130188	130188-13[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-220	C-753-A	TM	
-1	130188	130188-14[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-216	C-753-A	TM	
-1	130188	130188-15[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-218	C-753-A	TM	
-1	130188	130188-16[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	-223	C-753-A	TM	
-1	130188	130188-18[f]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/30/2023	S	-77	C-753-A	TM	
1	130188	130188-19[b]	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	S	4,717	C-753-A	TM	
TOTAL ADJUSTMENTS TO CY 2023 INVENTORY[a]:							**20,339**			

[a]Due to rounding, the weight totals may vary.

[b]Indicates a container material was repacked into.

[c] Indicates a collection container. The container was not weighed before being repacked. The container was repacked into 130228-03.

[d] Indicates a collection container. The container was not weighed before being repacked. The container was repacked into 130228-04.

[e] Indicates a collection container. The container was not weighed before being repacked. The container was repacked into 130228-25.

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Table D.4. PCB Waste Shipped for Disposal in 2023

RFD	Waste ID	PCB Item	Description	PCB Date	Current Facility	Gross Wt (kg)	Physical	Source	Waste Cat	Ship Date	Ship Location	Manifest
122622	122622-02	PCB Container	VENTILATION DUCT OIL AND WATER	2/21/2022	Energy*Solutions*, Clive, UT	209	Liquid (L)	Proc Bldgs	TSCA Mixed (TM)	1/12/2023	Energy*Solutions*, Clive, UT	023682201JJK
122623	122623-08	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	8/2/2022	Energy*Solutions*, Clive, UT	81	Solid (S)	Proc Bldgs	TM	1/12/2023	Energy*Solutions*, Clive, UT	023682199JJK
122623	122623-09	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	9/27/2022	Energy*Solutions*, Clive, UT	85	S	Proc Bldgs	TM	1/12/2023	Energy*Solutions*, Clive, UT	023682199JJK
122667	122667-01	PCB Article Container	POTHEAD WITH ELECTRICAL CABLE. POTHEAD CONTAINS PETROLATUM. CABLE IS PAPER AND LEAD INSULATED. PAPER IS IMPREGNATED WITH OIL	3/7/2022	Energy*Solutions*, Clive, UT	571	S	C-531	RCRA/TSCA Mixed (RTM)	2/7/2023	Energy*Solutions*, Clive, UT	023682223JJK
130083	130083-01	PCB Article Container	CAPACITORS FROM CHARGERS IN BATTERY ROOMS AND ASSOCIATED BCS	9/7/2022	Energy*Solutions*, Clive, UT	5	S	Proc Bldgs	TM	2/7/2023	Energy*Solutions*, Clive, UT	023682222JJK
122668	122668-01	PCB Article Container	PCB LIGHT BALLASTS/CAPACITORS/TRANSFORMERS/ETC.	3/10/2022	Energy*Solutions*, Clive, UT	83	S	Various	TM	2/23/2023	Energy*Solutions*, Clive, UT	023682259JJK
122623	122623-10	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	10/7/2022	Energy*Solutions*, Clive, UT	98	S	Proc Bldgs	TM	3/23/2023	Energy*Solutions*, Clive, UT	023682277JJK
122193	122193-10	PCB Container	EPOXY PAINT CHIPS, VEGETATION AND PPE	6/24/2022	Energy*Solutions*, Clive, UT	731	S	C-410	TM	4/27/2023	Energy*Solutions*, Clive, UT	023682312JJK
122235	122235-05	PCB Container	EPOXY PAINT CHIPS, VEGETATION, PPE, BERYLLIUM	5/18/2022	Energy*Solutions*, Clive, UT	454	S	C-746-B	TM	4/27/2023	Energy*Solutions*, Clive, UT	023682312JJK
122623	122623-12	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	2/20/2023	Energy*Solutions*, Clive, UT	38	S	Proc Bldgs	TM	4/27/2023	Energy*Solutions*, Clive, UT	023682312JJK
130162	130162-01	PCB Article Container	PCB LIGHT BALLASTS AND/OR CAPACITORS	2/16/2023	Energy*Solutions*, Clive, UT	5	S	C-752-A	TM	6/20/2023	Energy*Solutions*, Clive, UT	023682332JJK
130163	130163-01	PCB Container	PCB CONTAMINATED ASBESTOS	2/20/2023	Energy*Solutions*, Clive, UT	48	S	C-333	RTM	6/20/2023	Energy*Solutions*, Clive, UT	023682338JJK
122621	122621-01	PCB Container	LUBE OIL / PCB RINSATE COLLECTED FROM SITE GLASSES FROM TRANSFORMER DRAINING	8/23/2022	Energy*Solutions*, Clive, UT	94	L	C-337	RTM	8/17/2023	Energy*Solutions*, Clive, UT	023682410JJK
122623	122623-11	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	11/17/2022	Energy*Solutions*, Clive, UT	70	S	Proc Bldgs	TM	8/17/2023	Energy*Solutions*, Clive, UT	023682405JJK
130116	130116-01	PCB Container	PCB SOLIDS WITH CADMIUM, CHROMIUM, AND LEAD	2/8/2023	Energy*Solutions*, Clive, UT	80	S	C-333	RTM	8/17/2023	Energy*Solutions*, Clive, UT	023682407JJK
130123	130123-01	PCB Article Container	PCB LIGHT BALLASTS, CAPACITORS, TRANSFORMERS, ETC.	10/27/2022	Energy*Solutions*, Clive, UT	114	S	PlantWide	TM	8/17/2023	Energy*Solutions*, Clive, UT	023682418JJK
130188	130188-01	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/14/2023	Energy*Solutions*, Clive, UT	582	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
130188	130188-02	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/21/2023	Energy*Solutions*, Clive, UT	582	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
130188	130188-03	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/21/2023	Energy*Solutions*, Clive, UT	413	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
130188	130188-04	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/22/2023	Energy*Solutions*, Clive, UT	523	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
130188	130188-05	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/22/2023	Energy*Solutions*, Clive, UT	1,023	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
130188	130188-06	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	7/22/2023	Energy*Solutions*, Clive, UT	592	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
130188	130188-07	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/4/2023	Energy*Solutions*, Clive, UT	980	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
130188	130188-17	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/11/2023	Energy*Solutions*, Clive, UT	420	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
130188	130188-19	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT AND CONTAINERS	8/8/2023	Energy*Solutions*, Clive, UT	4,717	S	PlantWide	TM	9/18/2023	Energy*Solutions*, Clive, UT	023682433JJK
122622	122622-03	PCB Container	VENTILATION DUCT OIL AND WATER	11/17/2022	Energy*Solutions*, Clive, UT	187	L	Proc Bldgs	TM	11/2/2023	Energy*Solutions*, Clive, UT	023682469JJK

Table D.4. PCB Waste Shipped for Disposal in 2023 (Continued)

RFD	Waste ID	PCB Item	Description	PCB Date	Current Facility	Gross Wt (kg)	Physical	Source	Waste Cat	Ship Date	Ship Location	Manifest
130099	130099-01	PCB Container	PCB LIQUIDS WITH CADMIUM, CHROMIUM, AND LEAD	12/28/2022	Energy*Solutions*, Clive, UT	198	L	C-333	RTM	11/2/2023	Energy*Solutions*, Clive, UT	023682464JJK
130135	130135-01	PCB Container	LLW PCB OIL FROM C-337	12/12/2022	Energy*Solutions*, Clive, UT	31	L	C-337	TM	11/2/2023	Energy*Solutions*, Clive, UT	023682469JJK
130233	130233-01	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT CONTAINER CIRCUIT BOARDS, CAPACITORS, ETC.	7/21/2023	Energy*Solutions*, Clive, UT	72	S	Various	RTM	11/2/2023	Energy*Solutions*, Clive, UT	023682462JJK
130233	130233-02	PCB Container	PCB CONTAMINATED MISCELLANEOUS EQUIPMENT CONTAINER CIRCUIT BOARDS, CAPACITORS, ETC	7/21/2023	Energy*Solutions*, Clive, UT	57	S	Various	RTM	11/2/2023	Energy*Solutions*, Clive, UT	023682462JJK
TOTAL PCB WASTE SHIPPED FOR DISPOSAL IN CY 2023*:						**13,142**						

*Due to rounding, the weight totals may vary.

Table D.5. PCB Waste Inventory as of December 31, 2023

RFD	Waste ID	PCB Item	Description	PCB Date	Physical	Gross Wt (kgs)	Current Facility	Source	Waste Category
122193	122193-11	PCB Container	EPOXY PAINT CHIPS, VEGETATION AND PPE	3/29/2023	Solid (S)	398	Energy*Solutions*, Clive, UT	C-410	TSCA Mixed (TM)
130116	130116-02	PCB Container	PCB SOLIDS WITH CADMIUM, CHROMIUM, AND LEAD	5/10/2023	S	68	Energy*Solutions*, Clive, UT	C-333	RCRA/TSCA Mixed (RTM)
122623	122623-13	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	5/11/2023	S	59	Energy*Solutions*, Clive, UT	Proc Bldgs	TM
122622	122622-04	PCB Container	VENTILATION DUCT OIL AND WATER	7/21/2023	Liquid (L)	89	C-337	Proc Bldgs	TM
130225	130225-01	PCB Article Container	PCB LIGHT BALLAST/CAPACITORS/TRANSFORMERS/ETC	7/25/2023	S	91	C-752-A	PlantWide	TM
130116	130116-03	PCB Container	PCB SOLIDS WITH CADMIUM, CHROMIUM, AND LEAD	8/10/2023	S	38	C-333	C-333	RTM
122621	122621-02[a]	PCB Container	LUBE OIL / PCB RINSATE COLLECTED FROM SITE GLASSES FROM TRANSFORMER DRAINING	8/22/2023	L	101	C-337	C-337	RTM
130228	130228-04	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/14/2023	S	7,121	Energy*Solutions*, Clive, UT	C-300	RTM
130228	130228-03	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	9/15/2023	S	4,835	Energy*Solutions*, Clive, UT	C-300	RTM
130228	130228-25	PCB Article Container	MATERIALS GENERATED FROM REMOVAL OF HVAC SYSTEM. METAL, INSULATION, PLASTIC, CONCRETE, ASBESTOS. PCB GASKET, LEAD AND PCB CONTAMINATED.	10/4/2023	S	6,214	Energy*Solutions*, Clive, UT	C-300	RTM
122623	122623-14	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	10/12/2023	S	64	Energy*Solutions*, Clive, UT	Proc Bldgs	TM
122623	122623-15[a]	PCB Container	PCB SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	11/16/2023	S	39	C-752-A	Proc Bldgs	TM
					TOTAL PCB WASTE INVENTORY AS OF DECEMBER 31, 2023[b]:	**19,117**			

[a] Indicates a collection container as of December 31, 2023. Weight is estimated.

[b] Due to rounding, the weight totals may vary.

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