FRNP-RPT-0039

Annual Compliance Agreement Report for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, January 1 through December 31, 2017

FOUR RIVERS NUCLEAR PARTNERSHIP, LLC

This document is approved for public release per review by:

David Hayden — FRNP Classification Support

6-21-18 — Date

FRNP-RPT-0039

Annual Compliance Agreement Report for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, January 1 through December 31, 2017

Date Issued—June 2018

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

THIS PAGE INTENTIONALLY LEFT BLANK

PREFACE

The U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) entered into the Toxic Substances Control Act (TSCA) Compliance Agreement (CA) to address TSCA compliance at the Paducah, Portsmouth, and Oak Ridge uranium enrichment (UE) facilities. This agreement, signed on February 20, 1992, was intended to bring DOE's UE facilities into full compliance with the TSCA regulations for the management of polychlorinated biphenyls (PCBs). This agreement was modified on September 25, 1997, and modified again on May 30, 2017. At Paducah, the TSCA CA addresses the following:

- Troughing of ventilation duct gaskets;
- Investigation of historic PCB disposal sites;
- Use and removal of leaking potential PCB devices;
- Sampling of air;
- Process lubrication oil;
- Process lubrication oil removal;
- Spill cleanup;
- Storage of PCB waste;
- Building demolition wastes;
- PCB-contaminated slabs;
- Processing of PCB-contaminated demolition material;
- Non-radioactive PCBs and PCB Item storage and disposal;
- Co-contaminated, radioactive PCBs and PCB Items storage and disposal;
- Ensurance of worker safety measures; and
- Hydraulic systems at Paducah Gaseous Diffusion Plant.

This Annual CA Report implements changes per the May 30, 2017, TSCA CA modification agreement and summarizes TSCA CA activities that occurred at Paducah from January 1 through December 31, 2017.

THIS PAGE INTENTIONALLY LEFT BLANK

CONTENTS

THIS PAGE INTENTIONALLY LEFT BLANK

TABLES

FIGURES

THIS PAGE INTENTIONALLY LEFT BLANK

ACRONYMS

CA	Compliance Agreement
CFR	*Code of Federal Regulations*
CY	calendar year
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
PGDP	Paducah Gaseous Diffusion Plant
PPE	personal protective equipment
TSCA	Toxic Substances Control Act
TSDF	treatment, storage, and disposal facility
UE	Uranium Enrichment

THIS PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

This Annual Compliance Agreement (CA) Report summarizes the Toxic Substances Control Act (TSCA) CA activities that occurred at Paducah from January 1 through December 31, 2017.

During calendar year 2017, Paducah continued to address the ongoing elements identified in the TSCA CA as required by the modified agreement.

The TSCA CA requires the Paducah facility to conduct the interim measure of performing annual air sampling as required by Attachment 1, Section 1 (D), Air Sampling.

The TSCA CA modification signed on May 30, 2017, requires annual PCB air sampling. This modification removed the quarterly sampling requirement. As a result, no PCB air sampling event took place during the fourth quarter of 2017. Air sampling was conducted during each of the first two quarters of 2017 and the annual air sampling event took place during July in accordance with the TSCA CA Attachment I, Section 1, Interim Measures, (D) Air Sampling. Results for the first two quarters of 2017 and the annual event did not exceed the TSCA CA reporting level of 0.5 $\mu g/m^3$.

The TSCA CA also includes the following open compliance measures:

- Section 2 (C)—Spill Cleanup
- Section 2 (D)—Storage for Disposal
- Section 2 (E-1)—Building Demolition Wastes
- Section 2 (E-2)—PCB-contaminated Slabs
- Section 2 (E-3)—Processing for the On-Site Waste Disposal Facility
- Secton 2 (F)—Other Wastes
  - — Non-radioactive PCBs and PCB Items
  - — Co-contaminated; and radioactive PCBs and PCB Items.

Seven PCB gasket spills and one non-gasket spill were cleaned and closed in accordance with the standards set forth in the TSCA CA Attachment I, Section 2, Compliance Measures, (C) Spill Cleanup.

Paducah shipped for disposal a net weight of approximately 40,984 kg of TSCA-regulated PCB/radioactive waste on 12 Uniform Hazardous Waste Manifests. Four of the manifests were generated from non-U. S. Department of Transportation-regulated wastes that were shipped on October 12, 2017. Upon testing, the treatment, storage, and disposal facility determined the waste was PCB on November 22, 2017. Nine Certificates of Disposal were received in 2017.

INTEGRATED SCHEDULE SUMMARY

In accordance with paragraph 36 of the TSCA CA an annual update on the status of each item on the Integrated Schedule is provided. The Integrated Schedule for fiscal year (FY) 2017 included four ongoing activities, and six activities are scheduled to begin work in the future.

Section 1 (D), Air Sampling, is an ongoing effort and work scheduled for calendar year (CY) 2017 was completed.

Section 2 (C), Spill Cleanups, is the second ongoing effort and work scheduled for CY 2017 was completed.

Section 2 (E-1), Building Demolition Waste, is an ongoing effort, but during CY 2017 there were no scheduled activities related to this item.

Section 2 (E-2), PCB-contaminated slab management/demolition, is the fourth ongoing effort on the Paducah Site. Currently, there are two PCB-contaminated slabs managed on-site; scheduled activities regarding these slabs were completed for CY 2017.

The following six activities also are included in the Integrated Schedule.

(1) No decision has been made for Paducah regarding the On-Site Waste Disposal Facility; therefore, there were no scheduled activities related to the design phase of the potential On-Site Waste Disposal Facility. Currently, work associated with this schedule item is scheduled beyond fiscal year (FY) 2020.

(2) No decision has been made for Paducah regarding the On-Site Waste Disposal Facility; therefore, there were no scheduled activities related to the construction phase for the first cell of the potential On-Site Waste Disposal Facility during CY 2017. Currently, work associated with this item is scheduled beyond FY 2020.

(3) The waste staging and processing/resizing operations have not been determined to be necessary for Paducah; therefore, there were no scheduled activities related to the design phase during the CY 2017. Currently, work associated with this item is scheduled beyond FY 2020.

(4) The waste staging and processing/resizing operations have not been determined to be necessary for Paducah; therefore, there were no scheduled activities related to the construction phase during the CY 2017. Currently, work associated with this item is scheduled beyond FY 2020.

(5) None of the buildings listed in paragraph 11 of the TSCA CA had any demolition activities associated with them during CY 2017. The C-400 Complex demolition is slated to start in November 2018. Currently, work associated with other buildings related to this schedule item is scheduled beyond FY 2020.

(6) During CY 2017, no PCB-contaminated slab demolition was scheduled. Currently, work associated with this item is scheduled beyond FY 2020.

1. INTERIM MEASURES

1.1 AIR SAMPLING

Both the original Uranium Enrichment (UE) Toxic Substances Control Act (TSCA) Compliance Agreement (CA) and the TSCA CA modification signed on May 30, 2017, require polychlorinated biphenyl (PCB) air sampling to be conducted in process buildings with motor exhaust duct ventilation systems. These buildings include the C-331, C-333, C-335, and C-337 process buildings at the Paducah facility.

The original UE TSCA CA mandated that at least five samples were to be taken per building per year. At least one of the five samples would be taken at a best engineering judgment (BEJ)-selected site, with the remainder of the sites to be selected randomly. For each of the buildings, the samples were to be taken quarterly every calendar year (CY), at least 30 days apart. The results of the samples taken during the first two quarters of CY 2017 are shown in Table 1.

The TSCA CA modification signed on May 30, 2017, requires two samples per process building to be taken once annually anytime during the months of June, July, and August. For each annual air monitoring activity in a building, there will be a BEJ-selected site and a randomly selected site. The results for the 2017 PCB air sampling event are shown in Table 2.

The U.S. Department of Energy (DOE) is required to report to the U.S. Environmental Protection Agency (EPA) any PCB concentrations greater than 0.5 $\mu g/m^3$ measured from any air monitoring sampler at any location.

The sampling was conducted as described in National Institute for Occupational Safety and Health 5503. The volumes and flow rates, as noted, were necessary to achieve the detection limit required by the UE TSCA CA and the modified TSCA CA. All samples results were below laboratory reporting limits of 0.1 $\mu g/m^3$.

2. COMPLIANCE MEASURES

2.1 SPILL CLEANUP

The TSCA CA requires that PCB spills and PCB-contaminated oil that may leak onto building floors be cleaned in accordance with the EPA PCB Spill Cleanup Policy in 40 *CFR* § 761, Subpart G. Reports documenting PCB spills and PCB spill cleanup measures are required to be prepared each quarter and summarized in this Annual Compliance Agreement Report. Record copies of cleanup documentation are kept on-site and are available for inspection.

The TSCA CA allows historic spills, those that occurred before March 19, 1992, to be left in place until demolition of the facility. PCB high-concentration gasket spills (i.e., from a source of 500 parts per million or greater in PCB concentration) that occurred to building floors after March 19, 1992, shall be verified closed in accordance with the requirements of the TSCA CA.

Table 1. PCB Air Results 1st and 2nd Quarter CY 2017

	Sample Numbers	Sample Date	Building	Floor	Sample Location	Method of Selection	Results* (µg/m3)	Pump Flow Rate (liters/minute)	Air Volume Sampled (liters)
Quarter 1	PCB17-AIR-02-01	1/25/2017	C-331	GROUND	N of P-13	RANDOM	0.020	1.05	524
	PCB17-AIR-02-02	1/25/2017	C-331	GROUND	At BB-25	BEJ	0.020	1.08	514
	PCB17-AIR-02-03	1/25/2017	C-333	GROUND	N of S-19	RANDOM	0.020	1.04	502
	PCB17-AIR-02-04	1/25/2017	C-335	GROUND	E of L-26	RANDOM	0.020	1.03	541
	PCB17-AIR-02-05	1/25/2017	C-337	GROUND	E of Ua-03	RANDOM	0.020	1.04	516
Quarter 2	PCB17-AIR-03-01	4/12/2017	C-331	CELL	W of N-13	RANDOM	0.020	1.05	535
	PCB17-AIR-03-02	4/12/2017	C-333	CELL	NE of P-38	RANDOM	0.020	1.05	536
	PCB17-AIR-03-03	4/12/2017	C-333	GROUND	At P-12	BEJ	0.020	1.03	525
	PCB17-AIR-03-04	4/12/2017	C-335	CELL	E of K-17	RANDOM	0.020	1.05	572
	PCB17-AIR-03-05	4/12/2017	C-337	CELL	SE of Z-40	RANDOM	0.020	1.01	505

*Reported results are calculated. PCBs not detected above laboratory reporting limits.

Table 2. PCB Air Results Annual CY 2017

	Sample Numbers	Sample Date	Building	Floor	Sample Location	Method of Selection	Results* (µg/m3)	Pump Flow Rate (liters/minute)	Air Volume Sampled (liters)
CY 2017 Mod	PCB17-AIR-04-01	7/19/2017	C-331	GROUND	E of J-30	RANDOM	0.020	1.06	526
	PCB17-AIR-04-02	7/19/2017	C-331	GROUND	E of F-29	BEJ	0.020	1.06	536
	PCB17-AIR-04-03	7/19/2017	C-333	CELL	NE of H-46	RANDOM	0.020	1.04	519
	PCB17-AIR-04-04	7/19/2017	C-333	CELL	NW of H-18	BEJ	0.020	1.07	534
	PCB17-AIR-04-05	7/19/2017	C-335	GROUND	N of CC-28	RANDOM	0.020	1.02	512
	PCB17-AIR-04-06	7/19/2017	C-335	CELL	NW of FF-12	BEJ	0.020	1.06	530
	PCB17-AIR-04-07	7/19/2017	C-337	GROUND	S of Wa-32	RANDOM	0.020	1.04	522
	PCB17-AIR-04-08	7/19/2017	C-337	GROUND	At Gb-6	BEJ	0.020	1.03	513

*Reported results are calculated. PCBs not detected above laboratory reporting limits.

The following is a summary of PCB gasket spill activities for CY 2017:

- Remaining PCB gasket spill sites awaiting verification of successful cleaning as of December 31, 2016—11
- Number of new PCB gasket spill sites identified during reporting period—8
- Number of PCB gasket spill sites closed during reporting period—7
- Remaining PCB gasket spill sites awaiting verification of successful cleaning as of December 31, 2017—12
- Number of PCB gasket spill sites closed as a historic spill—0

A quarterly breakdown of PCB gasket spill information can be found in Figure 1.

The following is a summary of PCB non-gasket spill activities for CY 2017:

- Remaining PCB non-gasket spill sites awaiting verification of successful cleaning as of December 31, 2016—24
- Number of new PCB non-gasket spill sites identified during reporting period—0
- Number of PCB non-gasket spill sites closed during reporting period—1
- Remaining PCB non-gasket spill sites awaiting verification of successful cleaning as of December 31, 2017—23
- Number of PCB non-gasket spill sites closed as a historic spill—0

A quarterly breakdown of PCB non-gasket spill information can be found in Figure 2.

All PCB gasket and non-gasket spills identified were high concentration PCB spills (i.e., from a source of 500 ppm or greater in PCB concentration). Cleanup of each identified spill site was initiated within 24 hours, in accordance with the TSCA CA. Clearly visible signs have been posted at each spill site advising personnel to avoid the area in order to minimize the spread of contamination and the potential for human exposure. The cleanup documentation and the records are available for inspection.

2.2 BUILDING DEMOLITION

2.2.1 Building Demolition Wastes

The TSCA CA requires building demolition wastes comprised of PCBs or PCB Items (as defined in 40 *CFR* § 761.3) to be managed and disposed of as directed in 40 *CFR* § 761.50. In particular, building demolition wastes comprised of PCB-contaminated ventilation ducts, gaskets or flanges, PCB-contaminated piping, or other PCB-contaminated materials containing PCBs as a result of a spill, release, or other unauthorized disposal shall be managed and disposed of as PCB remediation waste in accordance with 40 *CFR* § 761.61. During the CY 2017, no building demolition wastes containing PCB wastes, PCB items, or PCB remediation wastes were generated.

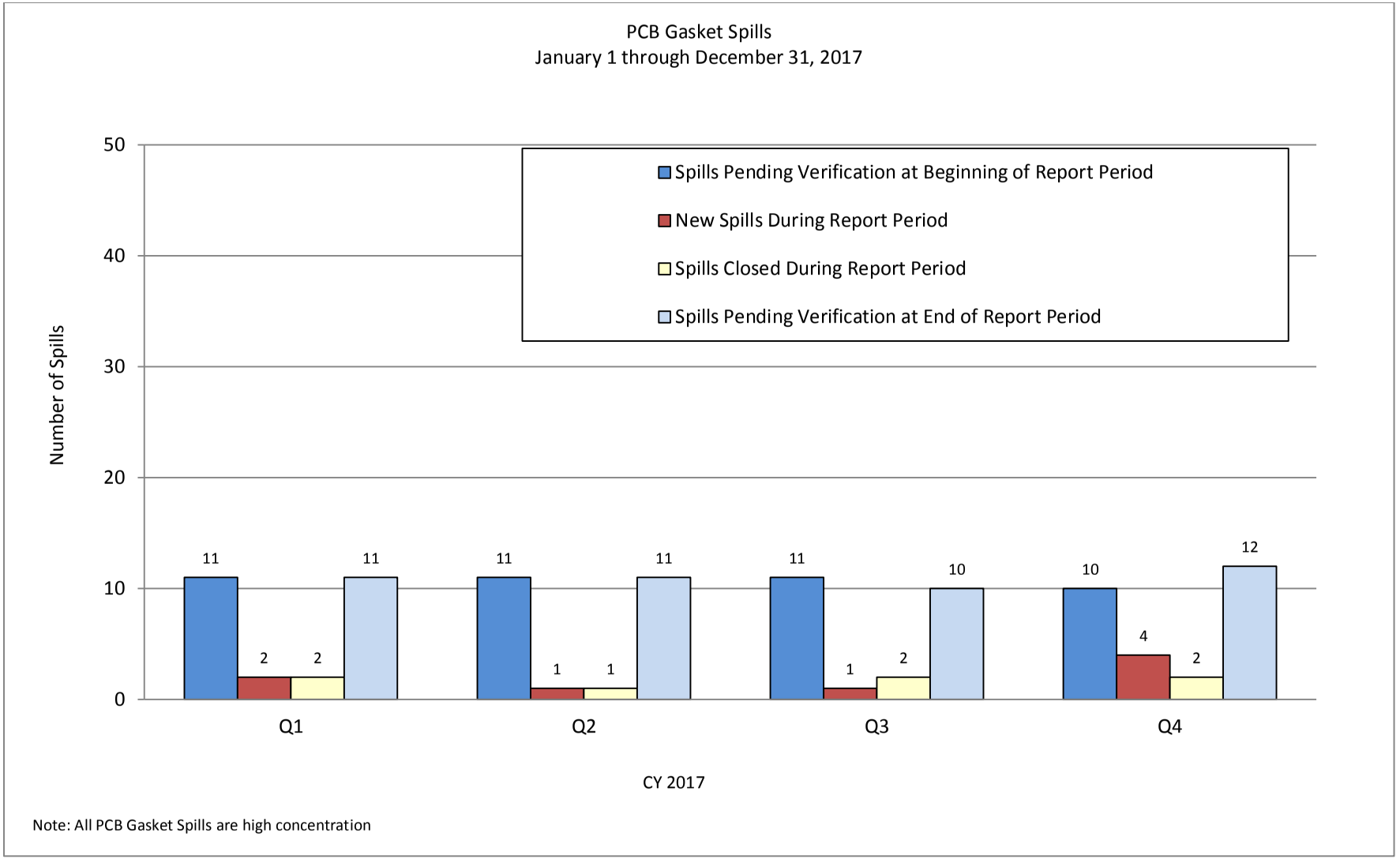

Figure 1. Quarterly Summary of PCB Gasket Spills

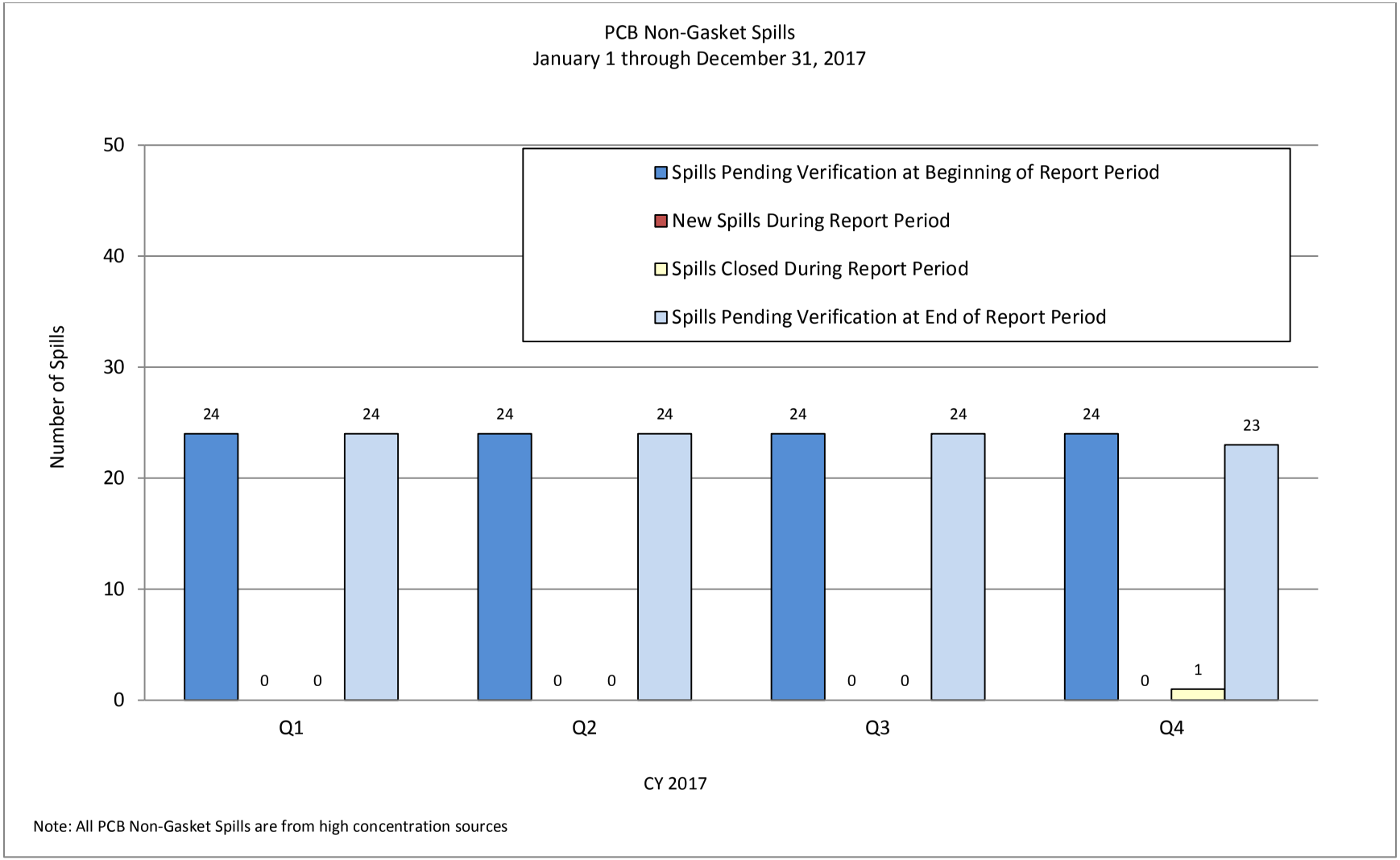

Figure 2. Quarterly Summary of PCB Non-Gasket Spills

2.2.2 PCB-Contaminated Slabs

The TSCA CA requires PCB-contaminated slabs from buildings listed in paragraph 11 of the agreement shall be maintained according to the requirements of 40 CFR § 761.30, except that historical spills as defined in Section 2 (C) shall be maintained in accordance with Section 2 (C). The previous demolition of the buildings associated with C-340-A Powder Building, C-340-B Metals Building, C-340-C Slag Building, C-410 Feed Plant, C-410-A Hydrogen Holder (Slab Only), C-410-C HF Neutralization Building, C-410-F HF Storage Building (North), C-410-G HF Storage Building (Center), C-410-H HF Storage (South), C-410-I Ash Receiver Shelter, C-410-J HF Storage Building (East), C-411 Cell Maintenance Building and C-420 Green Salt Building did result in PCB-contaminated slabs. The slabs were double washed and rinsed; and two contrasting colors of epoxy fixative were applied. The documentation of these actions can be found in the documents DOE/LX/07-1286&D1, *Removal Action Report for the C-340 Metals Reduction Plant at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, for C-340 and DOE/LX/07-2182&D1, *Removal Action Report for the C-410 Complex Infrastructure Decontamination and Decommissioning Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, for the C-410 complex. No discharges or releases of PCB-contaminated material were detected or reported for the associated slabs for CY 2017.

2.2.3 Processing of PCB-Contaminated Demolition Material for On-Site Waste Disposal

The TSCA CA requires the processing of any PCB-contaminated demolition material before disposal in the On-Site Waste Disposal Facility must be in compliance with 40 *CFR* § 761.20(c). The requirements of this section are not applicable at this time because the On-Site Waste Disposal Facility has not been constructed.

2.3 OTHER WASTES

2.3.1 Non-radioactive PCBs and PCB Items

The TSCA CA requires an annual progress update on the storage and disposal of non-radioactive PCBs and PCB items. At Paducah, PCB waste generated on-site is assumed to contain a radioactive component. During the CY 2017 the Paducah site generated zero non-radioactive PCBs or PCB Items. During the CY 2017 the Paducah site had zero non-radioactive PCBs or PCB Items in storage. During the CY 2017 the Paducah site had zero non-radioactive PCB or PCB Item shipments.

2.3.2 Co-contaminated, Radioactive PCBs and PCB Items

The TSCA CA requires an annual progress update on the storage and disposal of co-contaminated, radioactive PCB and PCB Items. At Paducah, all PCB waste generated on-site is assumed to contain a radioactive component. Pending radiological characterization for disposal, Paducah radiological PCB waste is stored in accordance with the requirements of the TSCA CA, Attachment I, Section 2(D), "Storage," 40 *CFR* § 761.65, "Storage for disposal," and associated concurrences. The inventory, as of December 31, 2017, of radiologically contaminated PCBs and PCB items is reflected in Table 3. Radioactive PCBs and PCB items stored in TSCA-compliant storage areas may be stored for more than one year prior to disposal pursuant to 40 *CFR* § 761.65(a)(1). Sixteen radioactive PCB waste items did exceed the one-year storage limitation. A summation of the records documenting the efforts to secure disposal of these items can be found in the Appendix.

Table 3. PCB Waste Inventory as of December 31, 2017

Waste ID	Description	Earliest Date Removed from Service	Physical	Gross Wt (lb)	Gross Wt (kg)	Net Wt (lb)	Net Wt (kg)	Gross Vol (ft^3)	Current Facility	Source	Waste Cat
106744-01	DAMAGED, DISCONNECTED, DE-ENERGIZED, AND DRAINED PCB TRANSFORMER B983126. FORMERLY STAGE AT C-337 U2C3 "B" LOCATION.	11/7/2005	Solid (S)	34500	15,649	34,500	15,649	2,304.0	C-337	C-337	TSCA Mixed (TM)
107839-01	DAMAGED, DISCONNECTED, DE-ENERGIZED, AND DRAINED PCB TRANSFORMER RHL-0610. FORMERLY STAGED AT C-337 U2C8 "B" LOCATION.	6/27/2004	S	37800	17,146	37,800	17,146	462.0	C-337	C-337	TM
119845-59	PCB ABSORBENTS	4/22/2016	S	78	35	22	10	7.4	C-752-A	C-337	TM
119845-60	PCB ABSORBENTS	10/3/2016	S	95	43	39	18	7.4	C-752-A	C-337	TM
119863-01	PCB CONTAMINATED METAL	6/3/2015	S	341	155	285	129	7.4	C-752-A	C-337	TM
119874-05	PCB ABSORBENTS	10/6/2015	S	249	113	183	83	7.4	C-752-A	C-337	TM
119874-06	PCB ABSORBENTS	9/17/2015	S	249	113	193	88	7.4	C-752-A	C-337	TM
119874-07	PCB ABSORBENTS	12/16/2015	S	129	59	73	33	7.4	C-752-A	C-337	TM
119874-08	PCB ABSORBENTS	12/17/2015	S	180	82	124	56	7.4	C-752-A	C-337	TM
119874-09	PCB ABSORBENTS	1/22/2016	S	177	80	121	55	7.4	C-752-A	C-337	TM
119874-10	PCB ABSORBENTS	1/29/2016	S	128	58	72	33	7.4	C-752-A	C-337	TM
119874-11	PCB ABSORBENTS	4/8/2016	S	90	41	34	15	7.4	C-752-A	C-337	TM
119874-12	PCB ABSORBENTS	10/17/2016	S	68	31	12	5	7.4	C-752-A	C-337	TM
119881-01	PCB ABSORBENTS	9/3/2015	S	86	39	30	14	7.4	C-752-A	C-333	TM
120906-01	SPILL CLEANUP FROM VENT DUCT TROUGHS FROM C-335	10/18/2016	S	74	34	18	8	7.4	C-752-A	C-335	TM
121053-01	PCB BALLASTS, CAPACITORS AND SMALL TRANSFORMERS (COLLECTION)	3/21/2017	S	107	49	51	23	7.4	C-752-A	Various	TM
121072-01	SPILL CLEANUP FROM VENT DUCT TROUGHS	5/11/2017	S	106.4	48	53	24	7.0	C-752-A	C-331	TM

Table 3. PCB Waste Inventory as of December 31, 2017 (Continued)

Waste ID	Description	Earliest Date Removed from Service	Physical	Gross Wt (lb)	Gross Wt (kg)	Net Wt (lb)	Net Wt (kg)	Gross Vol (ft^3)	Current Facility	Source	Waste Cat
121073-01	VENTILATION DUCT OIL AND WATER C-331	4/25/2017	Liquid (L)	238.5	108	197	89	5.6	C-752-A	C-331	TM
121074-01	SPILL CLEANUP FROM VENT DUCT TROUGHS	5/15/2017	S	104	47	59	27	5.9	C-752-A	C-333	TM
121075-01	PCB VENTILATION DUCT OIL AND WATER	4/25/2017	L	432	196	376	171	7.4	C-752-A	C-333	TM
121076-01	SPILL CLEANUP FROM VENT DUCT TROUGHS	4/26/2017	S	290	132	234	106	7.4	C-752-A	C-335	TM
121076-02	SPILL CLEANUP FROM VENT DUCT TROUGHS	10/19/2017	S	81.6	37	34	15	6.3	C-752-A	C-335	TM
121077-01	VENTILATION DUCT OIL AND WATER	4/26/2017	L	453	205	397	180	7.4	C-746-Q	C-335	TM
121077-02	VENTILATION DUCT OIL AND WATER	5/1/2017	L	476	216	420	191	7.4	C-746-Q	C-335	TM
121077-03	VENTILATION DUCT OIL AND WATER	5/1/2017	L	463	210	407	185	7.4	C-746-Q	C-335	TM
121077-04	VENTILATION DUCT OIL AND WATER	5/1/2017	L	456	207	400	181	7.4	C-746-Q	C-335	TM
121077-05	VENTILATION DUCT OIL AND WATER	5/4/2017	L	482	219	426	193	7.4	C-746-Q	C-335	TM
121077-06	VENTILATION DUCT OIL AND WATER	5/9/2017	L	436.05	198	198	90	7.0	C-752-ARPK	C-335	TM
121078-01	VENT DUCT SOLIDS	4/25/2017	S	114	52	58	26	7.4	C-752-A	C-337	TM
121078-02	PCB SPILL CLEANUP DEBRIS	10/9/2017	S	90	41	34	15	7.4	C-752-A	C-337	TM
121078-03	SPILL CLEANUP DEBRIS	10/12/2017	S	92	42	36	16	7.4	C-752-A	C-337	TM
121078-04	SPILL CLEANUP DEBRIS	11/29/2017	S	52	24	24	11	3.7	C-752-A	C-337	TM
121079-01	PCB VENTILATION DUCT OIL AND WATER	4/25/2017	L	466	211	410	186	7.4	C-746-Q	C-337	TM
121079-02	PCB VENTILATION DUCT OIL AND WATER	4/27/2017	L	480	218	424	192	7.4	C-746-Q	C-337	TM
121079-03	PCB VENTILATION DUCT OIL AND WATER	7/12/2017	L	372	169	316	143	7.4	C-752-A	C-337	TM
121079-04	PCB VENTILATION DUCT OIL AND WATER	5/9/2017	L	71.4	32	63	29	1.1	C-752-A	C-337	TM
121084-01	PCB BALLASTS/TRANSFORMERS/CAPACITORS	4/25/2017	S	522	237	466	211	7.4	C-752-A	Various	TM
121161-01	VENT DUCT SOLIDS	3/11/2016	S	106	48	50	23	7.4	C-752-A	Proc Bldgs	TM
121208-01	PCB LIGHT BALLASTS/TRANSFORMERS/CAPACITORS	7/10/2017	S	362	164	306	139	7.4	C-752-A	C-757	TM
121255-01	Lube Oil/PCB Rinseate collected in Sight Glasses from Transformer Draining, Post-TSCA Rinse.	8/23/2017	L	493	224	437	198	7.4	C-746-Q	C-337	TM
121272-01	Pothead and PLC Cable	9/12/2017	S	1804	818	1,008	457	93.0	C-752-A	Various	RCRA TSCA Mixed (RTM)
121277-01	PCB LIGHT BALLASTS/TRANSFORMERS/CAPACITORS	10/4/2017	S	201.5	91	174	79	3.7	C-752-A	Various	TM

Table 3. PCB Waste Inventory as of December 31, 2017 (Continued)

Waste ID	Description	Earliest Date Removed from Service	Physical	Gross Wt (lb)	Gross Wt (kg)	Net Wt (lb)	Net Wt (kg)	Gross Vol (ft^3)	Current Facility	Source	Waste Cat
125104-01	Light ballasts	5/1/2017	S	3802	1,725	3,087	1,400	90.0	C-752-A	C-400	TM
125105-01	PCB ballasts (leaking)	5/3/2017	S	442	200	386	175	7.4	C-752-A	C-400	TM
125105-02	PCB ballasts (leaking)	5/3/2017	S	534	242	478	217	7.4	C-752-A	C-400	TM
125105-03	PCB ballasts (leaking)	5/15/2017	S	260	118	204	93	7.4	C-752-A	C-400	TM
125118-01	Sample returns from C-400	6/6/2017	S	15	7	6	3	0.7	C-752-A	C-400	RTM
125127-01	Capacitors/ballasts	6/26/2017	S	262	119	206	93	7.4	C-752-A	C-400	TM
125150-01	PCB OIL FROM C-400 ZONE, 16 J-BOX	9/19/2017	L	318	144	262	119	7.4	C-752-A	C-400	TM
125150-02	PCB OIL FROM C-400 ZONE 16, J-BOX	9/20/2017	L	314	142	258	117	7.4	C-752-A	C-400	TM
125151-01	PCB CONTAMINATED PPE, ETC C-400, ZONE 16, J-BOX OIL DRAINING	9/20/2017	S	64	29	8	4	7.4	C-752-A	C-400	TM
51	**Total Containers**	**Totals**		89,606	40,645	85,458	38,763	3,271.3			

Radioactively contaminated PCBs and PCB items are shipped for disposal to DOE-owned facilities, Nuclear Regulatory Commission-licensed facilities, or facilities that have received authorized limits approval from DOE and the facility's host state. During CY 2017, 134 co-contaminated, radioactive PCBs or PCB items with a net weight of approximately 40,984 kg were shipped off-site for disposal on 12 hazardous waste manifests.

As discussed in the Executive Summary, 4 hazardous waste manifests were generated for 17 containers after testing by the treatment, storage, and disposal facility (TSDF) found regulated levels of PCBs. The shipment originally occurred on October 12, 2017. At that time, 42 330-gal containers of oil drained from equipment were shipped on NRC 540 and 541 forms for disposal at a licensed facility. The oil was characterized as non-TSCA regulated using historical data, process knowledge, and some confirmatory sampling/analysis.

Upon initial composite testing by the TSDF, the presence of PCBs was detected. The Paducah Site was notified November 22, 2017, of the initial test results. Project personnel requested that the TSDF run confirmatory sampling on each individual container. Upon receipt of individual confirmatory sample data, it was determined that 17 of the 42 containers were, in fact, TSCA regulated. At that time, the TSDF requested that the site complete Universal Hazardous Waste Manifests for the 17 containers. The containers then were reprofiled and treated appropriately. Paducah was informed that the TSDF's compliance manager made the necessary notifications to the EPA and no further compliance issues were involved with this shipment.

Also during CY 2017, 9 Certificates of Disposal were received for PCB/radioactive wastes that had been disposed of, representing a total net weight of 24,421 kg of radiologically contaminated PCBs and PCB items. The PCB waste off-site shipping and disposal information for this reporting period is shown in Table 4. Waste generated as a result of site cleanup and operations is included in this report, including Comprehensive, Environmental Response, Compensation, and Liability Act waste, which is provided for information only and is intended to show progress toward removal of PCBs at Paducah.

Table 4. PCB Waste Disposal Activities for CY 2017

Waste ID	Description	Gross Weight (lbs)	Gross Weight (kg)	Net Weight (lbs)	Net Weight (kg)	Earliest Date Removed from Service	Date Shipped	Manifest	Shipment No	Disposal Location	Disposal Method	Disposal Date	CoD Rec'd
120614-01	PCB Articles, Wood, Pumps, Drum VACs	11,440	5,189	3,940	1,787	3/27/2015	5/18/2017	006841867JJK	9701-26-0001	Energy*Solutions* , Clive, UT			
120624-01	Holdup, residue, rags from nickel stripper evaporation unit	30	14	0.1	0.1	5/8/2017	7/11/2017	006841893JJK	ETTP-17-103	M&EC, Oak Ridge, TN			
120338-03	THIS WASTE CONSISTS OF RECYCLABLE NON-TSCA TRANSFORMER OIL DRAINED FROM THE 3PH3 AUXILLARY TRANSFORMER AT C-633 PUMP HOUSE. ACCORDING TO THE TSCA ANNUAL REPORT, THE PCB CONCENTRATIONS IN THE VARIOUS COMPARTMENTS OF THIS TRANSFORMER VARY BETWEEN 8.1 AND 34	2,596	1,178	2,130	966	11/22/2017*	10/12/2017	006843002JJK	ETTP-17-168	M&EC, Oak Ridge, TN			
120338-04	THIS WASTE CONSISTS OF RECYCLABLE NON-TSCA TRANSFORMER OIL DRAINED FROM THE 3PH3 AUXILLARY TRANSFORMER AT C-633 PUMP HOUSE. ACCORDING TO THE TSCA ANNUAL REPORT, THE PCB CONCENTRATIONS IN THE VARIOUS COMPARTMENTS OF THIS TRANSFORMER VARY BETWEEN 8.1 AND 34	2,644	1,199	2,189	993	11/22/2017*	10/12/2017	006843005JJK	ETTP-17-169	M&EC, Oak Ridge, TN			
120543-01	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,596	1,178	2,277	1,033	11/22/2017*	10/12/2017	006843002JJK	ETTP-17-168	M&EC, Oak Ridge, TN			
120543-03	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,626	1,191	2,161	980	11/22/2017*	10/12/2017	006843002JJK	ETTP-17-168	M&EC, Oak Ridge, TN			
120543-07	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,720	1,234	2,253	1,022	11/22/2017*	10/12/2017	006843005JJK	ETTP-17-169	M&EC, Oak Ridge, TN			
120543-08	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,750	1,247	2,284	1,036	11/22/2017*	10/12/2017	006843006JJK	ETTP-17-170	M&EC, Oak Ridge, TN			
120543-10	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	1,872	849	1,407	638	11/22/2017*	10/12/2017	006843006JJK	ETTP-17-170	M&EC, Oak Ridge, TN			
120543-15	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,636	1,196	2,169	984	11/22/2017*	10/12/2017	006843006JJK	ETTP-17-170	M&EC, Oak Ridge, TN			
120543-26	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,792	1,266	2,326	1,055	11/22/2017*	10/12/2017	006843007JJK	ETTP-17-171	M&EC, Oak Ridge, TN			
120543-29	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,814	1,276	2,348	1,065	11/22/2017*	10/12/2017	006843002JJK	ETTP-17-168	M&EC, Oak Ridge, TN			
120543-30	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,794	1,267	2,337	1,060	11/22/2017*	10/12/2017	006843005JJK	ETTP-17-169	M&EC, Oak Ridge, TN			
120543-31	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,678	1,215	2,211	1,003	11/22/2017*	10/12/2017	006843002JJK	ETTP-17-168	M&EC, Oak Ridge, TN			
120543-32	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,742	1,244	2,275	1,032	11/22/2017*	10/12/2017	006843002JJK	ETTP-17-168	M&EC, Oak Ridge, TN			
120543-33	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,796	1,268	2,330	1,057	11/22/2017*	10/12/2017	006843002JJK	ETTP-17-168	M&EC, Oak Ridge, TN			
120543-34	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	846	384	379	172	11/22/2017*	10/12/2017	006843007JJK	ETTP-17-171	M&EC, Oak Ridge, TN			
120543-35	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,806	1,273	2,339	1,061	11/22/2017*	10/12/2017	006843002JJK	ETTP-17-168	M&EC, Oak Ridge, TN			
120543-36	DIELECTRIC FLUID FROM THE AUXILLARY TRANSFORMERS AT THE C-633, C-635, AND C-637 PUMPHOUSES. THE FLUID WILL BE DRAINED AND BULKED INTO CONTAINER OR DIRECTLY INTO TANKERS AS PART OF THE DEACTIVATION SCOPE OF WORK IN THE PUMPHOUSES. THE SOURCE LOCATION AND	2,798	1,269	2,344	1,063	11/22/2017*	10/12/2017	006843007JJK	ETTP-17-171	M&EC, Oak Ridge, TN			

Table 4. PCB Waste Disposal Activities for CY 2017 (Continued)

Waste ID	Description	Gross Weight (lbs)	Gross Weight (kg)	Net Weight (lbs)	Net Weight (kg)	Earliest Date Removed from Service	Date Shipped	Manifest	Shipment No	Disposal Location	Disposal Method	Disposal Date	CoD Rec'd
120356-02	AQUEOUS PRIMARY AND SECONDARY WASTE. AQUEOUS WASTE HAVING SOLID PARTICULATES EMANATING FROM THE SLUDGE THAT CANNOT BE FILTERED FROM ENTERING THE WASTE CONTAINER IS TO PACKAGED AND TREATED WITH THE SLUDGE/SLURRY (I.E. rfd 120357).	2,828	1,283	2,690	1,220	9/14/2016	10/28/2016	006841826JJK	9701-24-0003	Energy*Solutions* , Clive, UT	Landfill	3/30/2017	4/3/2017
120356-03	AQUEOUS PRIMARY AND SECONDARY WASTE. AQUEOUS WASTE HAVING SOLID PARTICULATES EMANATING FROM THE SLUDGE THAT CANNOT BE FILTERED FROM ENTERING THE WASTE CONTAINER IS TO PACKAGED AND TREATED WITH THE SLUDGE/SLURRY (I.E. rfd 120357).	594	269	456	207	9/14/2016	10/28/2016	006841826JJK	9701-24-0003	Energy*Solutions* , Clive, UT	Landfill	3/30/2017	4/3/2017
119802-04	VENTILATION DUCT OIL AND WATER	492	223	436	198	7/7/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
119802-05	VENTILATION DUCT OIL AND WATER	468	212	412	187	7/7/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
119802-06	VENTILATION DUCT OIL AND WATER	473	215	417	189	7/9/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
119802-07	VENTILATION DUCT OIL AND WATER	458	208	402	182	7/13/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-05	VENTILATION DUCT OIL AND WATER	484	220	428	194	1/12/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-06	VENTILATION DUCT OIL AND WATER	472	214	406	184	1/21/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-07	VENTILATION DUCT OIL AND WATER	472	214	406	184	1/27/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-08	VENTILATION DUCT OIL AND WATER	472	214	416	189	1/27/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-09	VENTILATION DUCT OIL AND WATER	494	224	438	199	3/2/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-10	VENTILATION DUCT OIL AND WATER	490	222	434	197	3/10/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-11	VENTILATION DUCT OIL AND WATER	478	217	422	191	3/10/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-12	VENTILATION DUCT OIL AND WATER	484	220	428	194	3/11/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-13	VENTILATION DUCT OIL AND WATER	497	225	427	194	3/11/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-14	VENTILATION DUCT OIL AND WATER	474	215	418	190	3/15/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-15	VENTILATION DUCT OIL AND WATER	482	219	426	193	3/17/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-16	VENTILATION DUCT OIL AND WATER	460	209	404	183	3/23/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-17	VENTILATION DUCT OIL AND WATER	458	208	402	182	3/31/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-18	VENTILATION DUCT OIL AND WATER	478	217	422	191	3/31/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-27	VENTILATION DUCT OIL AND WATER	524	238	468	212	5/17/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-28	VENTILATION DUCT OIL AND WATER	484	220	428	194	6/1/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-29	VENTILATION DUCT OIL AND WATER	502	228	446	202	7/5/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-30	VENTILATION DUCT OIL AND WATER	469	213	413	187	7/5/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-31	VENTILATION DUCT OIL AND WATER	475	215	419	190	7/5/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-32	VENTILATION DUCT OIL AND WATER	460	209	404	183	7/5/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-33	VENTILATION DUCT OIL AND WATER	482	219	426	193	7/5/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-34	VENTILATION DUCT OIL AND WATER	503	228	447	203	7/6/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120306-35	VENTILATION DUCT OIL AND WATER	485	220	429	195	7/7/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120587-01	VENTILATION DUCT OIL AND WATER	464	210	408	185	7/7/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120587-02	VENTILATION DUCT OIL AND WATER	470	213	414	188	7/7/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120587-03	VENTILATION DUCT OIL AND WATER	517	235	461	209	7/7/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120587-04	VENTILATION DUCT OIL AND WATER	450	204	394	179	7/11/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120587-07	VENTILATION DUCT OIL AND WATER	492	223	436	198	7/19/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120587-24	VENTILATION DUCT OIL AND WATER	305	138	249	113	9/8/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120903-01	VENTILATION DUCT OIL AND WATER FROM C-337	454	206	398	181	11/17/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120903-02	VENTILATION DUCT OIL AND WATER FROM C-337	483	219	427	194	11/30/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120903-03	VENTILATION DUCT OIL AND WATER FROM C-337	456	207	400	181	12/6/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120903-04	VENTILATION DUCT OIL AND WATER FROM C-337	448	203	392	178	12/6/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120905-01	VENTILATION DUCT OIL AND WATER FROM C-335	442	200	386	175	11/30/2016	1/25/2017	006841839JJK	DSSI-17-009	DSSI, Inc. Kingston, TN	Treatment	3/27/2017	4/13/2017
120085-02	OILS AND LIQUIDS DRAINED FROM OBSOLETE AND NON-FUNCTIONAL EQUIPMENT PREVIOUSLY STORED IN THE C-727 FACILITY	46	21	29	13	3/23/2016	6/29/2016	006841810JJK	NUC-258-OH	Perma-Fix, Gainesville, FL	Alternate Thermal Treatment	8/26/2016	6/12/2017
120194-01	RCRA/TSCA/LLW LABPACKED SAMPLE RESUDUALS/EXTRACTS FROM C-710 LAB	22	10	11	5	8/5/2015	6/29/2016	006841810JJK	NUC-258-OH	Perma-Fix, Gainesville, FL	Alternate Thermal Treatment	8/26/2016	6/12/2017
115919-01	VENTILATION DUCT OIL AND WATER	483	219	427	194	10/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-02	VENTILATION DUCT OIL AND WATER	441	200	385	175	11/18/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-03	VENTILATION DUCT OIL AND WATER	489	222	433	196	11/18/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-04	VENTILATION DUCT OIL AND WATER	489	222	433	196	11/18/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-05	VENTILATION DUCT OIL AND WATER	463	210	407	185	11/18/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-06	VENTILATION DUCT OIL AND WATER	499	226	443	201	11/18/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-07	VENTILATION DUCT OIL AND WATER	482	219	426	193	11/18/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-08	VENTILATION DUCT OIL AND WATER	506	230	450	204	11/19/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-09	VENTILATION DUCT OIL AND WATER	472	214	416	189	11/30/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-10	VENTILATION DUCT OIL AND WATER	468	212	412	187	11/30/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-11	VENTILATION DUCT OIL AND WATER	461	209	405	184	11/30/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-12	VENTILATION DUCT OIL AND WATER	483	219	427	194	12/1/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-13	VENTILATION DUCT OIL AND WATER	473	215	417	189	12/15/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-14	VENTILATION DUCT OIL AND WATER	499	226	443	201	12/28/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-15	VENTILATION DUCT OIL AND WATER	518	235	462	210	12/28/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-16	VENTILATION DUCT OIL AND WATER	501	227	445	202	12/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-17	VENTILATION DUCT OIL AND WATER	515	234	459	208	12/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-18	VENTILATION DUCT OIL AND WATER	497	225	441	200	12/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-19	VENTILATION DUCT OIL AND WATER	497	225	441	200	12/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-20	VENTILATION DUCT OIL AND WATER	467	212	411	186	12/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-21	VENTILATION DUCT OIL AND WATER	488	221	432	196	12/30/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017

Table 4. PCB Waste Disposal Activities for CY 2017 (Continued)

Waste ID	Description	Gross Weight (lbs)	Gross Weight (kg)	Net Weight (lbs)	Net Weight (kg)	Earliest Date Removed from Service	Date Shipped	Manifest	Shipment No	Disposal Location	Disposal Method	Disposal Date	CoD Rec'd
115919-22	VENTILATION DUCT OIL AND WATER	470	213	414	188	12/30/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
115919-23	VENTILATION DUCT OIL AND WATER	506	230	450	204	12/30/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
119802-08	VENTILATION DUCT OIL AND WATER	473	215	417	189	7/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
119802-09	VENTILATION DUCT OIL AND WATER	480	218	424	192	7/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
119802-10	VENTILATION DUCT OIL AND WATER	462	210	406	184	7/30/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
119802-11	VENTILATION DUCT OIL AND WATER	482	219	426	193	9/10/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
119802-12	VENTILATION DUCT OIL AND WATER	487	221	431	195	10/29/2015	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-01	VENTILATION DUCT OIL AND WATER	463	210	407	185	1/6/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-02	VENTILATION DUCT OIL AND WATER	483	219	427	194	1/6/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-03	VENTILATION DUCT OIL AND WATER	501	227	445	202	1/12/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-04	VENTILATION DUCT OIL AND WATER	480	218	424	192	1/12/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-19	VENTILATION DUCT OIL AND WATER	422	191	366	166	3/31/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-20	VENTILATION DUCT OIL AND WATER	471	214	413	187	4/13/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-21	VENTILATION DUCT OIL AND WATER	461	209	403	183	5/4/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-22	VENTILATION DUCT OIL AND WATER	476	216	420	191	5/4/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-23	VENTILATION DUCT OIL AND WATER	457	207	401	182	5/11/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-24	VENTILATION DUCT OIL AND WATER	497	225	441	200	5/12/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-25	VENTILATION DUCT OIL AND WATER	460	209	404	183	5/17/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120306-26	VENTILATION DUCT OIL AND WATER	508	230	452	205	5/17/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-05	VENTILATION DUCT OIL AND WATER	501	227	445	202	7/11/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-06	VENTILATION DUCT OIL AND WATER	504	229	448	203	7/13/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-08	VENTILATION DUCT OIL AND WATER	503	228	447	203	7/28/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-09	VENTILATION DUCT OIL AND WATER	510	231	454	206	8/2/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-10	VENTILATION DUCT OIL AND WATER	499	226	443	201	8/9/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-11	VENTILATION DUCT OIL AND WATER	473	215	417	189	8/9/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-12	VENTILATION DUCT OIL AND WATER	492	223	436	198	8/9/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-13	VENTILATION DUCT OIL AND WATER	470	213	414	188	8/9/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-14	VENTILATION DUCT OIL AND WATER	471	214	415	188	8/9/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-15	VENTILATION DUCT OIL AND WATER	517	235	461	209	8/16/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-16	VENTILATION DUCT OIL AND WATER	504	229	448	203	8/17/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-17	VENTILATION DUCT OIL AND WATER	505	229	449	204	8/17/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-18	VENTILATION DUCT OIL AND WATER	492	223	436	198	8/17/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-19	VENTILATION DUCT OIL AND WATER	496	225	440	200	8/17/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-20	VENTILATION DUCT OIL AND WATER	516	234	460	209	8/17/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-21	VENTILATION DUCT OIL AND WATER	483	219	427	194	8/17/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-22	VENTILATION DUCT OIL AND WATER	454	206	398	181	8/18/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120587-23	VENTILATION DUCT OIL AND WATER	482	219	426	193	8/24/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120903-05	VENTILATION DUCT OIL AND WATER FROM C-337	438	199	382	173	12/19/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120903-06	VENTILATION DUCT OIL AND WATER FROM C-337	436	198	380	172	12/19/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120903-07	VENTILATION DUCT OIL AND WATER FROM C-337	486	220	430	195	12/19/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120903-08	VENTILATION DUCT OIL AND WATER FROM C-337	474	215	418	190	12/28/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120905-02	VENTILATION DUCT OIL AND WATER FROM C-335	322	146	266	121	12/20/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120907-01	VENTILATION DUCT OIL AND WATER FROM C-333	286	130	230	104	11/30/2016	1/25/2017	006841845JJK	DSSI-17-008	DSSI, Inc. Kingston, TN	Treatment	5/18/2017	7/19/2017
120647-01	MILLERS FLUORINATED LUBRICANT SYSTEM SCRAP METAL, PPE	2,802	1,271	2,093	949	12/2/2016	6/1/2017	006841869JJK	9701-02-0017	Energy*Solutions* , Clive, UT	Landfill	7/24/2017	8/25/2017
120647-02	MILLERS FLUORINATED LUBRICANT SYSTEM SCRAP METAL, PPE	2,368	1,074	1,659	753	12/6/2016	6/1/2017	006841869JJK	9701-02-0017	Energy*Solutions* , Clive, UT	Landfill	7/24/2017	8/25/2017
120647-03	F-Listed Floor Pans	2,868	1,301	2,072	940	2/13/2017	6/1/2017	006841869JJK	9701-02-0017	Energy*Solutions* , Clive, UT	Landfill	7/24/2017	8/25/2017
120672-01	PCB Oil Filled Capacitor	12	5	2	1	2/16/2017	6/29/2017	006841884JJK	9701-26-0002	Energy*Solutions* , Clive, UT	Landfill	8/17/2017	9/28/2017
120648-01	Water from Lines in Zone 2 (MFL) Area	34	15	22	10	12/7/2016	7/11/2017	006841890JJK	DSSI-17-082	DSSI, Inc. Kingston, TN	Incineration	10/25/2017	11/27/2017
120903-09	VENTILATION DUCT OIL AND WATER FROM C-337	458	208	402	182	1/4/2017	6/22/2017	006841878JJK	DSSI-17-076	DSSI, Inc. Kingston, TN	Incineration	11/9/2017	11/27/2017
120903-10	VENTILATION DUCT OIL AND WATER FROM C-337	476	216	420	191	1/25/2017	6/22/2017	006841878JJK	DSSI-17-076	DSSI, Inc. Kingston, TN	Incineration	11/9/2017	11/27/2017
120903-11	VENTILATION DUCT OIL AND WATER FROM C-337	429	195	373	169	3/8/2017	6/22/2017	006841878JJK	DSSI-17-076	DSSI, Inc. Kingston, TN	Incineration	11/9/2017	11/27/2017
120903-12	VENTILATION DUCT OIL AND WATER FROM C-337	354	161	298	135	4/17/2017	6/22/2017	006841878JJK	DSSI-17-076	DSSI, Inc. Kingston, TN	Incineration	11/9/2017	11/27/2017
120905-03	VENTILATION DUCT OIL AND WATER FROM C-335	344	156	288	131	1/18/2017	6/22/2017	006841878JJK	DSSI-17-076	DSSI, Inc. Kingston, TN	Incineration	11/9/2017	11/27/2017
120907-02	VENTILATION DUCT OIL AND WATER FROM C-333	260	118	204	93	1/18/2017	6/22/2017	006841878JJK	DSSI-17-076	DSSI, Inc. Kingston, TN	Incineration	11/9/2017	11/27/2017
120909-01	VENTILATION DUCT OIL AND WATER FROM C-331	128	58	72	33	11/30/2016	6/22/2017	006841878JJK	DSSI-17-076	DSSI, Inc. Kingston, TN	Incineration	11/9/2017	11/27/2017
120920-01	VENTILATION DUCT OIL	16	7	4	2	11/16/2016	6/22/2017	006841878JJK	DSSI-17-076	DSSI, Inc. Kingston, TN	Incineration	11/9/2017	11/27/2017

134	Total Shipped	114,020	51,719	90,353	40,984
119	Total Disposed	62,534	28,365	53,840	24,421

Total CDs Received 9
Total No. of Items Disposed 119

* Earliest Date Removed from service denotes the date the TSDF notified project of confirmed PCB results

APPENDIX

WRITTEN RECORD DEMONSTRATING COMPLIANCE WITH 40 *CFR* § 761.65 (a)(1) REGARDING PCB-MIXED WASTE CONTAINERS STORED IN EXCESS OF ONE YEAR PRIOR TO SHIPPING DURING FIRST QUARTER 2018

THIS PAGE INTENTIONALLY LEFT BLANK

Written Record Demonstrating Compliance with 40 *CFR* § 761.65 (a)(1) Regarding PCB-Mixed Waste Containers Stored in Excess of One Year Prior to Shipping during First Quarter 2018

The following radioactively contaminated waste items remain in storage past one year: 119845-59, 119845-60, 119863-01, 119874-05, 119874-06, 119874-07, 119874-08, 119874-09, 119874-10, 119874-11, 119874-12, and 119881-01.

- The characterization of these containers was completed on July 18, 2017, by a Fluor Federal Services, Inc., Paducah Deactivation Project (FPDP) waste engineer with a peer review performed. As a result of this review, the Energy*Solutions* profile 9701-17, PCB Non-Aqueous Liquid Waste Treatment, was selected. The shipment information for these containers was uploaded to Energy*Solutions*' Customer Portal on September 12, 2017, and assigned the shipment number 9701-17-0002. Approval to ship was received on September 12, 2017, at 4:55 p.m.

- A technical representative from Energy*Solutions* contacted FPDP Waste Management (WM) on September 13, 2017, stating that the profile for shipment 9701-17-0002 was in question. FPDP WM stated the profile had been chosen to be conservative because there had been discussion about the possibility of material being squeezed out of the absorbents and becoming free liquids. They informed WM that profile 9701-17 was for vacuum thermal desorption only and did not allow for free liquid verification upon receipt. The representative then said that 9701-21, Wet PCB Remediation Debris, would be a better fit because this material was absorbents and other material from spill cleanup. Reviewing 9701-21 along with the technical representative, WM determined it is written for aqueous-based liquids. Energy*Solutions* personnel then said FPDP would need to revise it, adding that because the revision would involve going from water-based liquid only to including an oil-based liquid the state of Utah would have to review the revision and it would not be a speedy process. He then informed FPDP that the permission to ship these containers was rescinded, and they needed to be removed from the shipment planned for the next day. This occurred just before 4 o'clock.

- The containers were removed from the truck on the morning of September 14, 2017.

- The FPDP Transportation Specialist then revised the shipment information in the Customer Portal to remove these 12 drums.

- Since September 2017, Energy*Solutions* has worked with FPDP and now Four Rivers Nuclear Partnership, LLC, (FRNP) to review and revise numerous profiles.

Additionally two more containers of radioactively contaminated PCB material, 120906-01 and 121161-01, have exceeded one year storage.

- The characterization for these two containers was completed on September 21, 2017, by FPDP WM.
- Energy*Solutions* initiated profile revision on November 22, 2017.
- Profile approved January 2, 2018.
- Containers shipped February 20, 2018.

Eleven of these 14 containers have PCB date to storage dates that would have exceeded 1 year in storage at the time of the signing of the latest modification to the UE TSCA CA on May 30, 2017.

Two radioactively contaminated PCB transformers have been in storage for more than one year, as well. DOE is evaluating whether it is possible to remove these transformers from the process building without significant modification to move them from their current location. The transformers have been declared waste with waste IDs as 106744-01 and 107839-01.

Backup documentation is kept on file in Waste Materials and Environmental Services Project Document Control Center.