



## Department of Energy

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**JUN 25 2019**

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Dear Ms. Leff and Mr. Feely:

**TRANSMITTAL OF THE TOXIC SUBSTANCES CONTROL ACT COMPLIANCE  
AGREEMENT 2018 ANNUAL COMPLIANCE AGREEMENT REPORT FOR THE  
PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, JANUARY 1  
THROUGH DECEMBER 31, 2018, FRNP-RPT-0091**

Please find enclosed the subject report for the U.S. Department of Energy Paducah Site. This annual report is required under the Toxic Substances Control Act (TSCA) Compliance Agreement (CA), as modified on May 30, 2017. This report documents progress on TSCA CA activities at Paducah, Kentucky, for the period from January 1, 2018, through December 31, 2018.

If you have any questions or require additional information, please contact Tracey Duncan at (270) 441-6682.

Sincerely,

*Jennifer Woodard*  
Jennifer Woodard  
Paducah Site Lead

Portsmouth/Paducah Project Office

Enclosure:

Annual Compliance Agreement Report, FRNP-RPT-0091

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**Annual Compliance Agreement Report for the  
Paducah Gaseous Diffusion Plant,  
Paducah, Kentucky,  
January 1 through December 31, 2019**



This document is approved for public release per review by:

  
FRNP Classification Support

6-17-2020  
Date



**Annual Compliance Agreement Report for the  
Paducah Gaseous Diffusion Plant,  
Paducah, Kentucky,  
January 1 through December 31, 2019**

Date Issued—June 2020

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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## PREFACE

The U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency 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 the Paducah facility, 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;
- Nonradioactive 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 summarizes TSCA CA activities that occurred at the Paducah facility from January 1 through December 31, 2019.

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## ACRONYMS

BEJ	best engineering judgment
CA	Compliance Agreement
<i>CFR</i>	<i>Code of Federal Regulations</i>
CY	calendar year
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FY	fiscal year
OSWDF	on-site waste disposal facility
PPE	personal protective equipment
TSCA	Toxic Substances Control Act

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## EXECUTIVE SUMMARY

This Annual Compliance Agreement (CA) Report summarizes the Toxic Substances Control Act (TSCA) CA activities that occurred at the Paducah facility from January 1 through December 31, 2019.

During calendar year 2019, the Paducah facility 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. 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 annual event did not exceed the TSCA CA reporting level of 0.5  $\mu\text{g}/\text{m}^3$ .

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
- Section 2 (F)—Other Wastes
  - Nonradioactive PCBs and PCB items
  - Co-contaminated and Radioactive PCBs and PCB items

Two PCB gasket spills were cleaned and closed in accordance with the standards set forth in the TSCA CA Attachment I, Section 2, Compliance Measures, (C) Spill Cleanup. One gasket and six non-gasket spills were closed as historic spills in accordance with measures proposed and accepted at previous TSCA Federal Facility Compliance Act Annual Meetings.

The Paducah facility shipped for disposal a net weight of approximately 1,410 kg of TSCA-regulated PCB/nonradioactive waste on one Uniform Hazardous Waste Manifest. The Paducah facility shipped for disposal a net weight of approximately 3,408 kg of TSCA-regulated PCB/radioactive waste on eight Uniform Hazardous Waste Manifests. Eight Certificates of Disposal were received in 2019.

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## INTEGRATED SCHEDULE SUMMARY

In accordance with paragraph 36 of the Toxic Substances Control Act (TSCA) Compliance Agreement (CA), an annual update on the status of each item on the Integrated Schedule is provided. The Integrated Schedule for fiscal year (FY) 2019, submitted in July 2018, 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) 2019 was completed (see Section 1.1).

Section 2 (C), Spill Cleanups, is an ongoing effort and work scheduled for CY 2019 was completed (see Section 2.1).

Section 2 (E-1), Building Demolition Waste, is an ongoing effort, but during CY 2019 there were no scheduled activities related to this item.

Section 2 (E-2), PCB-contaminated slab management/demolition, is an ongoing effort on the Paducah Site. Currently, there are two polychlorinated biphenyl-contaminated slabs managed on-site; scheduled activities regarding these slabs were completed for CY 2019 (see Section 2.2.2).

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

- (1) No decision has been made for the Paducah facility regarding the on-site waste disposal facility (OSWDF); therefore, there were no scheduled activities related to the design phase of the potential OSWDF. Currently, work associated with this item is scheduled beyond FY 2024.
- (2) No decision has been made for the Paducah facility regarding the OSWDF; therefore, there were no scheduled activities related to the construction phase for the first cell of the potential OSWDF during CY 2019. Currently, work associated with this item is scheduled beyond FY 2024.
- (3) The waste staging and processing/resizing operations have not been determined to be necessary for the Paducah facility; therefore, there were no scheduled activities related to the design phase during the CY 2019. Currently, work associated with this item is scheduled beyond FY 2024.
- (4) The waste staging and processing/resizing operations have not been determined to be necessary for the Paducah facility; therefore, there were no scheduled activities related to the construction phase during the CY 2019. Currently, work associated with this item is scheduled beyond FY 2024.
- (5) None of the buildings listed in paragraph 11 of the TSCA CA had any demolition activities associated with them during CY 2019. The C-400 Complex demolition that was slated to start in November 2018 was delayed due to regulatory disputes under the Federal Facility Agreement. A Memorandum of Agreement (MOA) was issued in August 2019 concerning the C-400 Complex demolition regulatory disputes. The MOA allowed the C-400 Complex Remedial Investigation/Feasibility Study project to begin; however, the current schedule for initiating demolition activities extends beyond FY 2024. Currently, work associated with other buildings related to this item is scheduled beyond FY 2024.
- (6) During CY 2019, no PCB-contaminated slab demolition was scheduled. Currently, work associated with this item is scheduled beyond FY 2024.

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# **1. INTERIM MEASURES**

## **AIR SAMPLING**

Both the original Uranium Enrichment 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 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 best engineering judgment (BEJ)-selected site and a randomly selected site. The results for the 2019 PCB air sampling event are shown in Table 1.

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 µg/m<sup>3</sup> 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 TSCA CA.

# **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 CA 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.

The following is a summary of PCB gasket spill activities for calendar year (CY) 2019:

- Remaining PCB gasket spill sites awaiting verification of successful cleaning as of December 31, 2018—4
- Number of new PCB gasket spill sites identified during reporting period—4
- Number of PCB gasket spill sites closed during reporting period—3

Table 1. PCB Air Results CY 2019

Calendar Year	Sample Numbers	Sample Date	Building	Floor	Sample Location	Method of Selection	Results (µg/m <sup>3</sup> )	Pump Flow Rate (liters/minute)	Air Volume Sampled (liters)
2019	PCB19-AIR-01-01	8/7/2019	C-331	GROUND	At C-4	RANDOM	0.040	0.985	498
2019	PCB19-AIR-01-02	8/7/2019	C-331	GROUND	S of E-29	BEJ	0.160	1	504
2019	PCB19-AIR-01-03	8/7/2019	C-333	GROUND	At Mb-9	RANDOM	0.060	1.02	513
2019	PCB19-AIR-01-04	8/7/2019	C-333	GROUND	N of C-11	BEJ	0.020	1.02	510
2019	PCB19-AIR-01-05	8/7/2019	C-335	GROUND	At C-14	RANDOM	0.030	0.99	500
2019	PCB19-AIR-01-06	8/7/2019	C-335	CELL	NE of R-32	BEJ	0.080	1	503
2019	PCB19-AIR-01-07	8/7/2019	C-337	CELL	At W-27	RANDOM	0.090	1	506
2019	PCB19-AIR-01-08	8/7/2019	C-337	GROUND	NW of J-29	BEJ	0.050	0.97	488

BEJ = best engineering judgment

- Remaining PCB gasket spill sites awaiting verification of successful cleaning as of December 31, 2019—5
- Number of PCB gasket spill sites closed as a historic spill—1

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 2019:

- Remaining PCB non-gasket spill sites awaiting verification of successful cleaning as of December 31, 2018—18
- Number of new PCB non-gasket spill sites identified during reporting period—0
- Number of PCB non-gasket spill sites closed during reporting period—6
- Remaining PCB non-gasket spill sites awaiting verification of successful cleaning as of December 31, 2019—12
- Number of PCB non-gasket spill sites closed as a historic spill—6

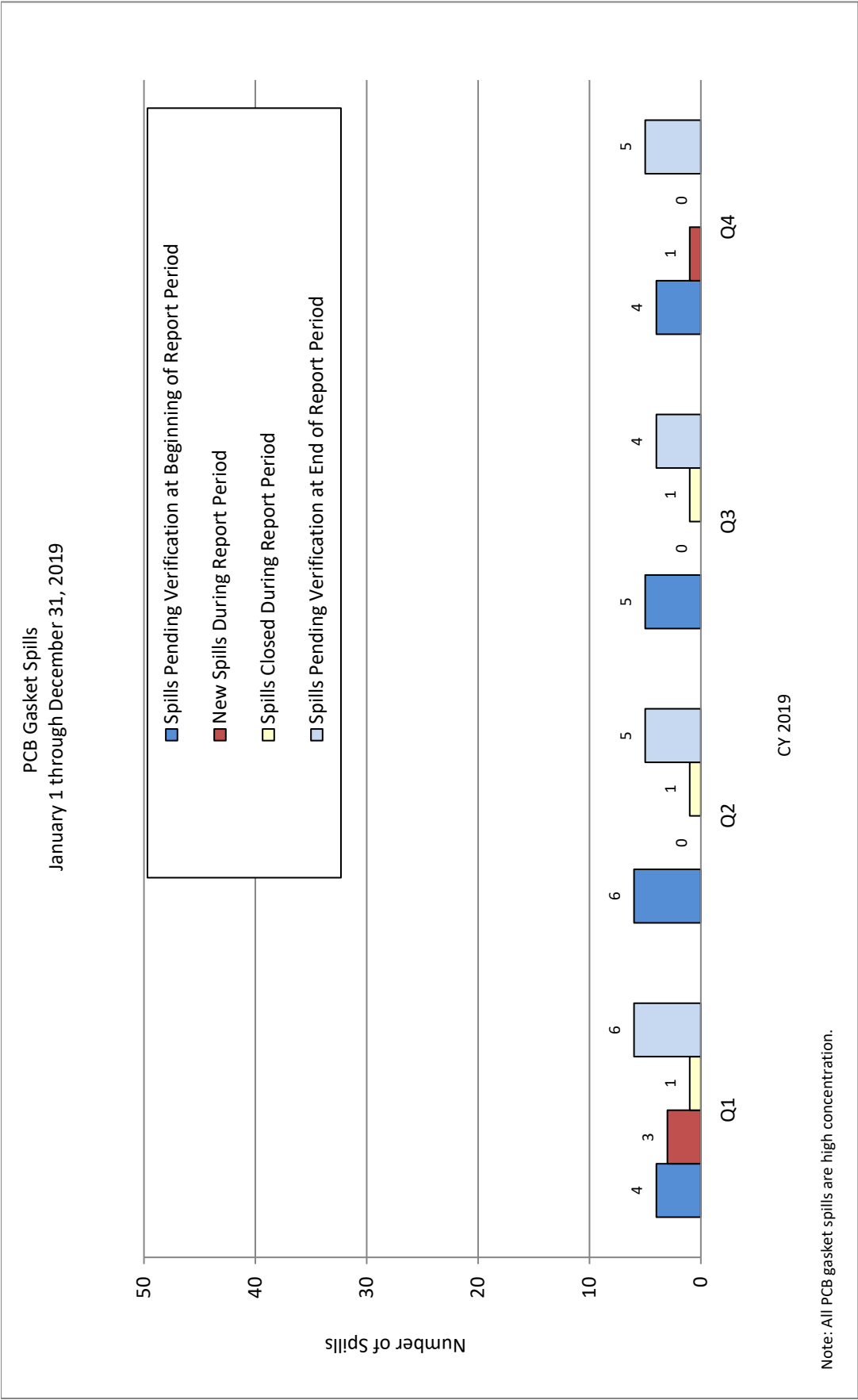
A quarterly breakdown of PCB non-gasket spill information can be found in Figure 2.

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.

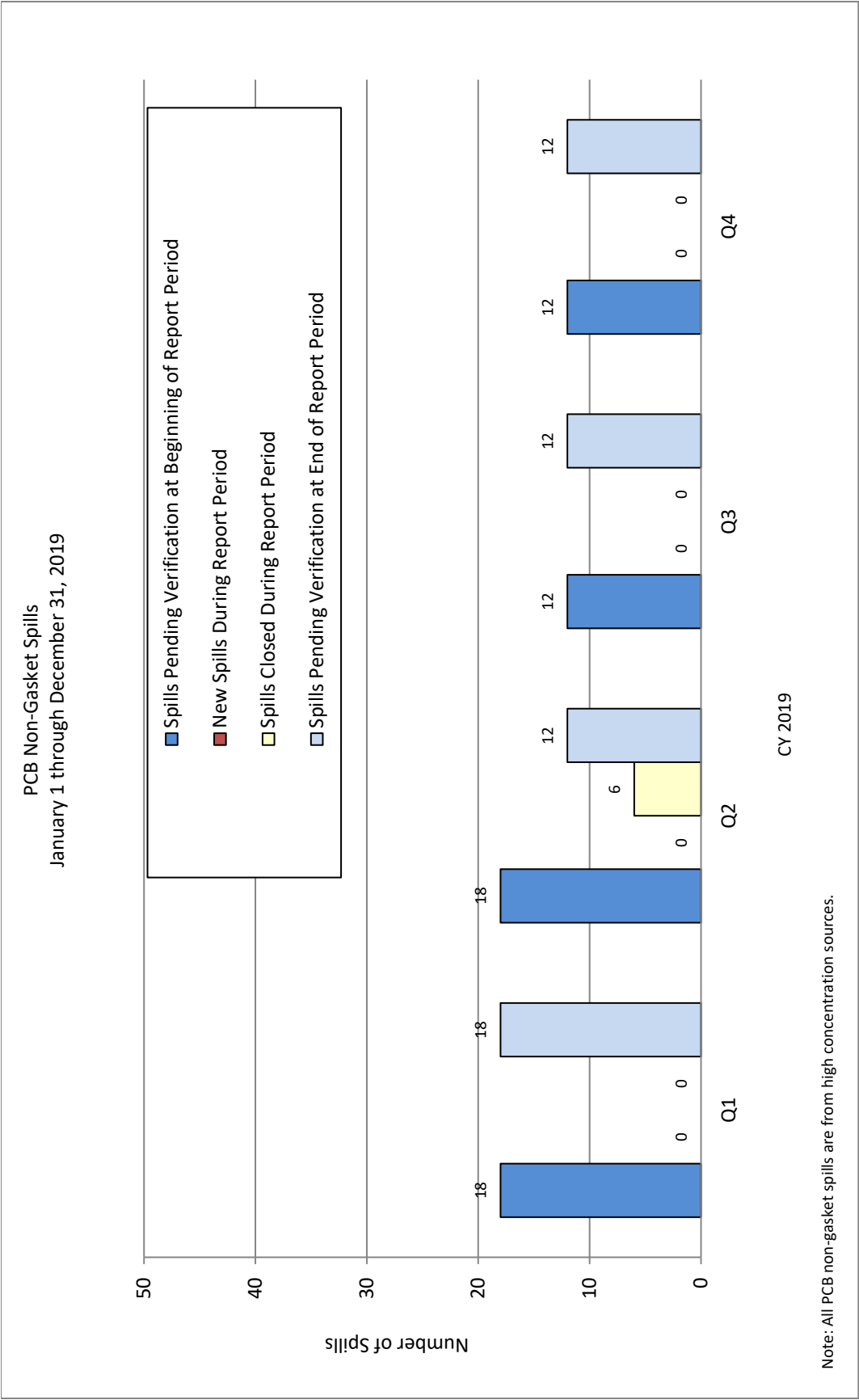
## **2.2 BUILDING DEMOLITION**

### **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 2019, 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 2019.

### **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 (OSWDF) must be in compliance with 40 *CFR* § 761.20(c). The requirements of this section are not applicable at this time because the OSWDF has not been constructed.

## **2.3 OTHER WASTES**

### **2.3.1 Nonradioactive PCBs and PCB Items**

The TSCA CA requires an annual progress update on the storage and disposal of nonradioactive PCBs and PCB items. At the Paducah facility, PCB waste generated on-site is assumed to contain a radioactive component. After radiological characterization for disposal, Paducah nonradiological 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. There were no nonradioactive PCBs or PCB items in the inventory, as of December 31, 2019. Nonradioactively contaminated PCBs and PCB items are shipped for disposal to commercial facilities. During CY 2019, nine non-radioactive PCBs or PCB items with a net weight of approximately 1,410 kg were shipped off-site for disposal on one hazardous waste manifest.

### **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 the Paducah facility, 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, 2019, of radiologically contaminated PCBs and PCB items is reflected in Table 2. 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). Three 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 2. PCB Waste Inventory as of December 31, 2019

Waste ID	Description	Earliest Date Removed from Service	Physical	Gross Wt (lb)	Gross Wt (kg)	Net Wt (lb)	Net Wt (kg)	Gross Vol (ft <sup>3</sup> )	Current Facility	Source	Waste Category
106744-01	DAMAGED, DISCONNECTED, DE-ENERGIZED, AND DRAINED PCB TRANSFORMER B983126. FORMERLY STAGED AT C-337 U2C3 "B" LOCATION.	11/7/2005	Solid (S)	34,500	15,649	34,500	15,649	2,304	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	37,800	17,146	37,800	17,146	462	C-337	C-337	TM
121255-03 <sup>a</sup>	LUBE OIL/PCB RINSEATE COLLECTED IN SIGHT GLASSES FROM TRANSFORMER DRAINING. POST-TSCA RINSE.	4/3/2019	Liquid (L)	290	132	234	106	7	C-337	C-337	TM
121423-07	VENTILATION DUCT OIL AND WATER	5/9/2019	L	496	225	440	200	7	C-752-A	Process Buildings	TM
121423-08	VENTILATION DUCT OIL AND WATER	6/24/2019	L	500	227	444	201	7	C-752-A	Process Buildings	TM
121423-09	VENTILATION DUCT OIL AND WATER	8/20/2019	L	492	223	436	198	7	C-752-A	Process Buildings	TM
121423-10	VENTILATION DUCT OIL AND WATER	10/30/2019	L	476	216	420	191	7	C-752-A	C-337	TM
121423-11 <sup>a</sup>	VENTILATION DUCT OIL AND WATER	10/30/2019	L	492	223	436	198	7	C-337	Process Buildings	TM
121424-11	RAG, PANS, PLASTIC, PADS, PPE	6/4/2019	S	204	93	148	67	7	C-752-A	C-337	TM
121424-12	SPILL CLEANUP DEBRIS FROM VENT DUCT TROUGHS	7/24/2019	S	206	93	150	68	7	C-752-A	Process Buildings	TM
121424-13	SPILL CLEANUP DEBRIS FROM VENT DUCT TROUGHS	7/25/2019	S	242	110	186	84	7	C-752-A	Process Buildings	TM
121424-14	SPILL CLEANUP/ENCAPUSLATION DEBRIS	8/1/2019	S	300	136	244	111	7	C-752-A	Process Buildings	TM
121424-15	SPILL CLEANUP/ENCAPUSLATION DEBRIS	9/3/2019	S	276	125	220	100	7	C-752-A	C-337	TM
121424-16 <sup>a</sup>	SPILL CLEANUP/ENCAPUSLATION DEBRIS	12/2/2019	S	152	69	96	44	7	C-337	C-337	TM
121546-04	PCB/LEAD CABLE AND POTHEAD	4/3/2019	S	2,144	973	1,338	607	93	C-752-A	C-333	RCRA/TSCA Mixed (RTM)
121918-01 <sup>b</sup>	PCB LIGHT BALLASTS/TRANSFORMERS/CAPACITORS	9/17/2019	S	101	46	45	20	7	C-757	Various	TM
121993-01 <sup>b</sup>	CONDUIT/METAL WITH PCB CONTAMINATION	12/23/2019	S	133	60	77	35	7	C-333	C-333	TM
121950-01 <sup>a</sup>	PCB CONTAINMENT DIKE	11/4/2019	S	1,010	458	310	141	90	C-752-A	C-337	TM
18	Total Containers	Totals <sup>c</sup>		79,814	36,203	77,524	35,164	3,053			

<sup>a</sup>Indicates a collection container as of December 31, 2019.

<sup>b</sup>Indicates a collection container still in use. Weight is estimated.

<sup>c</sup>Due to rounding, the weight totals may vary by 1 kg.

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 2019, 21 co-contaminated, radioactive PCBs or PCB items with a net weight of approximately 3,408 kg were shipped off-site for disposal on nine hazardous waste manifests.

During CY 2019, no Certificates of Disposal were received for nonradioactive PCBs or PCB waste items. Also during CY 2019, eight Certificates of Disposal were received for PCB/radioactive wastes that had been disposed of, representing a total net weight of 2,546 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 3. 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 the Paducah facility.

Table 3. PCB Waste Disposal Activities Shipped Off-site and/or Disposed of for CY 2019

Waste ID	Description	Gross Wt (lb)	Gross Wt (kg)	Net Wt (lb)	Net Wt (kg)	Earliest Date Removed from Service	Date Shipped	Manifest	Shipment No	Disposal Location	Disposal Method	Disposal Date	Cod Rec'd
121424-05	SPILL CLEANUP DEBRIS FROM VENT DUCT TROUGHS	106	48	50	23	9/5/2018	2/25/2019	019694554JUK	9750-09-0004	EnergySolutions, Clive, UT	Landfill	6/27/2019	7/3/2019
121516-01	PCB LIGHT BALLASTS/TRANSFORMERS/CAPACITORS/ETC.	428	194	372	169	4/25/2018	2/25/2019	019694554JUK	9750-09-0004	EnergySolutions, Clive, UT	Landfill	6/27/2019	7/3/2019
121255-02	LUBE OIL/PCB RINSEATE COLLECTED IN SIGHT GLASSES FROM TRANSFORMER DRAINING. POST-TSCA Rinse.	476	216	420	191	10/10/2017	2/27/2019	019694567JUK	DSSI-19-020	DSSI, Inc., Kingston, TN			
121423-02	VENTILATION DUCT OIL AND WATER	446	202	390	177	6/13/2018	2/27/2019	019694567JUK	DSSI-19-020	DSSI, Inc., Kingston, TN			
121423-03	VENTILATION DUCT OIL AND WATER	498	226	442	200	9/25/2018	2/27/2019	019694567JUK	DSSI-19-020	DSSI, Inc., Kingston, TN			
121423-04	VENTILATION DUCT OIL AND WATER	506	230	450	204	11/1/2018	2/27/2019	019694567JUK	DSSI-19-020	DSSI, Inc., Kingston, TN			
121734-01	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	426	193	370	168	3/12/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121734-02	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	446	202	390	177	3/20/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121734-03	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	446	202	390	177	3/28/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121734-04	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	436	198	381	173	4/3/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121734-05	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	410	186	354	161	4/15/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121734-06	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	428	194	372	169	4/23/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121734-07	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	434	197	378	171	4/23/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121734-08	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	430	195	374	170	5/5/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121734-09	PCB CONTAMINATED TRANSFORMER OIL FROM C-533 SWITCHYARD	156	71	100	45	5/6/2019	5/28/2019	013496416FLE	013496416FLE	Clean Harbors Deer Park, LaPorte, TX			
121546-01	PCB/LEAD CABLE AND POTHEAD	1,842	836	1,039	471	6/27/2018	6/18/2019	019694615JUK	9750-01-0006	EnergySolutions, Clive, UT	Landfill	6/27/2019	7/3/2019
121546-02	POTHEADS	1,948	884	1,145	519	8/10/2018	6/18/2019	019694615JUK	9750-01-0006	EnergySolutions, Clive, UT	Landfill	6/27/2019	7/3/2019
121546-03	TRANSFORMER POTHEADS	1,594	723	793	360	7/25/2018	6/18/2019	019694615JUK	9750-01-0006	EnergySolutions, Clive, UT	Landfill	6/27/2019	7/3/2019
121423-05	VENTILATION DUCT OIL AND WATER	466	211	410	186	2/13/2019	8/21/2019	019694647JUK	DSSI-19-087	DSSI, Inc., Kingston, TN			
121423-06	VENTILATION DUCT OIL AND WATER	484	220	428	194	4/17/2019	8/21/2019	019694647JUK	DSSI-19-087	DSSI, Inc., Kingston, TN			
121618-01	OIL FILLED DOOR CLOSERS	734	333	674	306	8/22/2018	8/21/2019	019694647JUK	DSSI-19-087	DSSI, Inc., Kingston, TN	Incineration	12/10/2019	12/19/2019
121618-02	OIL FILLED DOOR CLOSERS	368	167	338	153	9/5/2018	8/21/2019	019694647JUK	DSSI-19-087	DSSI, Inc., Kingston, TN	Incineration	12/10/2019	12/19/2019
121625-01	PCB LIGHT BALLASTS/TRANSFORMERS/CAPACITORS/ETC.	296	134	240	109	9/10/2018	9/10/2019	019694669JUK	DSSI-19-096	DSSI, Inc., Kingston, TN			
121645-01	UNUSED LAB CHEMICALS	10	5	6	3	9/27/2018	9/25/2019	019694703JUK	DSSI-19-105	DSSI, Inc., Kingston, TN			
121424-06	RAG, PANS, PLASTIC, PADS, PPE	82	37	26	12	11/7/2018	10/31/2019	019694693JUK	7340-08-0005	EnergySolutions, Clive, UT			
121424-07	RAG, PANS, PLASTIC, PADS, PPE	98	44	42	19	1/24/2019	10/31/2019	019694693JUK	7340-08-0005	EnergySolutions, Clive, UT			
121424-08	RAG, PANS, PLASTIC, PADS, PPE	126	57	70	32	3/6/2019	10/31/2019	019694693JUK	7340-08-0005	EnergySolutions, Clive, UT			
121424-09	SPILL CLEANUP DEBRIS/ENCAPSULATION WASTE	118	54	62	28	3/14/2019	10/31/2019	019694693JUK	7340-08-0005	EnergySolutions, Clive, UT			
121424-10	RAG, PANS, PLASTIC, PADS, PPE	116	53	60	27	5/9/2019	10/31/2019	019694693JUK	7340-08-0005	EnergySolutions, Clive, UT			
121872-01	VACUUMS AND VACUUM DEBRIS FROM CLEANUP OF PCB GASKET SPILL 2019 (ACCOUNTABLE MATERIAL)	112	51	56	25	7/25/2019	12/16/2019	019694743JUK	9750-01-0008	EnergySolutions, Clive, UT			
30	Total Weight Shipped for CY 2019*	14,466	6,562	10,622	4,818								

Table 3. PCB Waste Disposal Activities Shipped Off-site and/or Disposed of for CY 2019

Waste ID	Description	Gross Wt (lb)	Gross Wt (kg)	Net Wt (lb)	Net Wt (kg)	Earliest Date Removed from Service	Date Shipped	Manifest	Shipment No	Disposal Location	Disposal Method	Disposal Date	Cod Rec'd
120702-01	SOLUTION FROM SAMPLE ANALYSIS USING PCB TEST KITS	37	17	25	11	7/7/2016	8/19/2016	006841816JIK	02623	Perma-Fix FL, Gainesville, FL	Other	4/29/2019	8/29/2019
120703-01	PPE PAPER PLASTIC GLASS DEBRIS PCB KITS SAMPLE ANALYSIS	120	54	64	29	4/28/2016	8/19/2016	006841816JIK	02623	Perma-Fix FL, Gainesville, FL	Other	4/29/2019	8/29/2019
120624-01 <sup>b</sup>	HOLDUP, RESIDUE, RAGS FROM NICKEL STRIPPER EVAPORATION UNIT	30	14	0	0	5/8/2017	7/11/2017	006841893JIK	ETTP-17-103	Materials & Energy Corp., Oak Ridge, TN	Other	9/7/2017	1/18/2019
125150-01	PCB OIL FROM C-400 ZONE, 16, J-BOX	318	144	262	119	9/19/2017	8/23/2018	006841953JIK	DSSI-18-104	Materials & Energy Corp., Oak Ridge, TN	Incineration	2/9/2019	2/14/2019
125150-02	PCB OIL FROM C-400 ZONE, 16, J-BOX	314	142	258	117	9/20/2017	8/23/2018	006841953JIK	DSSI-18-104	Materials & Energy Corp., Oak Ridge, TN	Incineration	2/9/2019	2/14/2019
121423-01	VENTILATION DUCT OIL AND WATER	476	216	420	191	4/23/2018	9/26/2018	019694525JIK	9750-04-0003	EnergySolutions, Clive, UT	Landfill	8/16/2019	8/23/2019
121424-02	SPILL CLEANUP DEBRIS FROM VENT DUCT TROUGHS	110	50	54	24	4/18/2018	9/26/2018	019694524 JIK	9750-05-0002	EnergySolutions, Clive, UT	Landfill	6/13/2019	6/14/2019
121424-03	SPILL CLEANUP DEBRIS FROM VENT DUCT TROUGHS	116	53	60	27	6/7/2018	9/26/2018	019694524 JIK	9750-05-0002	EnergySolutions, Clive, UT	Landfill	6/13/2019	6/14/2019
121424-04	SPILL CLEANUP DEBRIS FROM VENT DUCT TROUGHS	114	52	58	26	8/9/2018	9/26/2018	019694524 JIK	9750-05-0002	EnergySolutions, Clive, UT	Landfill	6/13/2019	6/14/2019
16	Total Weight for Certificate of Disposal Received for CY 2019 <sup>a</sup>	8,655	3,925	5,612	2,546								

<sup>a</sup>Weight listed as zero due to rounding 0.045 kg.<sup>b</sup>Total weight may vary due to rounding.

## **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 CALENDAR YEAR 2019 AND  
ACTIONS TAKEN FOR NONCOMPLIANT PCB-MIXED WASTE  
CONTAINER DURING FIRST QUARTER 2019**

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**Written Record Demonstrating Compliance with  
40 *CFR* § 761.65 (a)(1) Regarding PCB-Mixed Waste  
Containers in Storage Exceeding One Year Disposal  
Requirement during Calendar Year 2019**

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**Written Record Demonstrating Compliance with  
40 *CFR* § 761.65 (a)(1) Regarding PCB-Mixed Waste  
Containers in Storage Exceeding One Year Disposal  
Requirement during First Quarter 2019**

The following radioactively contaminated polychlorinated biphenyl (PCB) waste items remain in storage past one year.

Waste items 106744-01 and 107839-01 are faulted transformers that have removed from service dates of November 7, 2005 and June 27, 2004, respectively. Due to their size and the structural interferences in the process buildings, options for disposal of these items continue to be evaluated. In addition, a third container, 121255-02, was discovered to have exceeded the one year storage limit during the first quarter of 2019. A detailed description of events and actions taken regarding this container is provided on page A-11.

Backup documentation is kept on file in the Technical Services Project Document Control Center.

**Written Record Demonstrating Compliance with  
40 *CFR* § 761.65 (a)(1) Regarding PCB-Mixed Waste  
Containers in Storage Exceeding One Year Disposal  
Requirement during Second Quarter 2019**

The following radioactively contaminated polychlorinated biphenyl (PCB) waste items remained in storage past the one year regulatory time from specified in 40 *CFR* § 761.65(a)(1).

Waste items 106744-01 and 107839-01 are faulted transformers that have been removed from service on November 7, 2005, and June 27, 2004, respectively. Due to their size and structural/equipment interferences in the process buildings, options for disposal of these items continue to be evaluated.

Backup documentation is kept on file in the Technical Services Project Document Control Center.

**Written Record Demonstrating Compliance with  
40 *CFR* § 761.65 (a)(1) Regarding PCB-Mixed Waste  
Containers in Storage Exceeding One Year Disposal  
Requirement during Third Quarter 2019**

The following radioactively contaminated polychlorinated biphenyl (PCB) waste items remain in storage past one year.

Waste items 106744-01 and 107839-01 are faulted transformers that have removed from service dates of November 7, 2005 and June 27, 2004, respectively. Due to their size and the structural interferences in the process buildings, options for disposal of these items continue to be evaluated.

Backup documentation is kept on file in the Technical Services Project Document Control Center.

**Written Record Demonstrating Compliance with  
40 *CFR* § 761.65 (a)(1) Regarding PCB-Mixed Waste  
Containers in Storage Exceeding One Year Disposal  
Requirement during Fourth Quarter 2019**

The following radioactively contaminated polychlorinated biphenyl (PCB) waste items remained in storage past the one year regulatory time frame specified in 40 *CFR* § 761.65(a)(1).

Waste items 106744-01 and 107839-01 are faulted transformers that have removed from service dates of November 7, 2005, and June 27, 2004, respectively. Due to their size and the structural/equipment interferences in the process buildings, options for disposal of these items continue to be evaluated.

Backup documentation is kept on file in the Technical Services Project Document Control Center.

**Written Record Regarding Actions Taken for  
Noncompliant PCB-Mixed Waste Container Discovered  
during First Quarter 2019**

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## **Written Record Regarding Actions Taken for Noncompliant PCB-Mixed Waste Container Discovered during First Quarter 2019**

The container discovered to be non-compliant during the first quarter time frame was part of characterization package PAD-WD-0834-V5. Waste item 121255-02 was a container of PCB Rinseate Oil from C-337 PCB Transformers. The container had a Date to Storage (DTS) of October 10, 2017.

- October 4, 2017—Container 121255-01 was filled.
- October 10, 2017—Container 121255-02 was initiated. Two gallons of material was added between October 10, 2017 and October 12, 2017.
- July 23, 2018—Another 4 gallons of material added to container.
- No more material added to the drum again until January 2019.
- January 3, 2019—Procedure CP3-OP-0313 was revised to allow the draining of the sight glasses of PCB transformers.
- January 2019—38.5 gallons of material drained from transformers to allow the closing of open PCB spill sites.
- January 29, 2019—The last waste material was added to the drum.
- January 29, 2019—Waste Operations placed the container into permanent storage.
- Container added to the Ztable tracking database.
- As part of the preparation for an upcoming shipment the DTS was discovered to be over 1 year.
- February 18, 2019—An inspection of the container and review of the paperwork to confirm the DTS was older than 1 year.
- February 20, 2019—Transportation Manager notified and a Waste Engineer was assigned and the characterization was completed.
- February 27, 2019—Drum shipped to DSSI in Oak Ridge, TN.

Backup documentation is kept on file in the Technical Services Project Document Control Center.

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