

2021 Hanford Site Polychlorinated Biphenyl Annual Report

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management



P.O. Box 550
Richland, Washington 99352

2021 Hanford Site Polychlorinated Biphenyl Annual Report

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Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

 U.S. DEPARTMENT OF
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Office
P.O. Box 550
Richland, Washington 99352

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2021 HANFORD SITE POLYCHLORINATED BIPHENYL ANNUAL REPORT

Year Ending: December 31, 2021

U.S. Department of Energy, Richland Operations Office

P.O. Box 550, 2355 Stevens - Richland, WA 99352

EPA ID No.: WA7890008967

1.0 INTRODUCTION

The requirements for the reporting of polychlorinated biphenyl (PCB)-related activities are found in 40 CFR 761, "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions," Subpart J, "General Records and Reports." The U.S. Department of Energy, Richland Operations Office (DOE-RL) prepares and transmits two separate documents to the U.S. Environmental Protection Agency (EPA).

- The PCB Annual Document Log is a detailed record of the PCB waste handling activities at the facility. The facility must prepare the log each year by July 1 for the previous calendar year and maintain it at the facility for at least 3 years after the facility ceases using or storing PCBs and PCB items in quantities subject to the regulations. While submittal of the PCB Annual Document Log to EPA is not required by regulation, in a letter from Daniel L. Duncan, EPA, to J. E. Rasmussen, DOE-RL, WCM-128, FH-0104694.10, dated October 11, 2000, EPA requested that DOE-RL transmit a copy of the PCB Annual Document Log for the Hanford Site to EPA, Region 10, on an annual basis. Therefore, the PCB Annual Document Log will be submitted with the required transmittal of the PCB Annual Report.
- The PCB Annual Report is a written document that is submitted to EPA each year by each disposer and commercial storer of PCB waste. The facility must prepare the report each year and submit it to EPA by July 15 of the following calendar year. While the Hanford facility does not have an EPA approved chemical waste landfill, the onsite mixed waste disposal units (Mixed Waste Trenches 31, 34 and 94) and the Environmental Restoration Disposal Facility (ERDF) do accept Toxic Substances Control Act of 1976 (TSCA) regulated waste at 50 ppm or greater PCB under provisions in 40 CFR 761 Subpart D, "Storage and Disposal," which allows disposal of specified PCB wastes (e.g., PCB remediation waste) into a Resource Conservation and Recovery Act of 1976 (RCRA) Subtitle C landfill. By letter dated April 30, 2002, EPA accepted a modified version of the "Notification of PCB Activity," Form 7701-53, that classified Hanford as an "approved disposer" with this specified condition. The PCB Annual Report is a brief summary of the information included in the PCB Annual Document Log.

Additional PCB wastes from Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) cleanup activities are disposed of onsite in ERDF. Because ERDF is subject to the CERCLA exemption from administrative requirements such as reporting, disposal of PCB wastes in ERDF is not included in the PCB Annual Document Log or the PCB Annual Report. In addition, it has been determined that some tank wastes in the Hanford Site tank farms contain small concentrations of PCB remediation waste and are subject to TSCA requirements. A Framework Agreement for management of the double-shell tank (DST) PCB waste is discussed in Section 7.0 of the PCB Annual Document Log. Specific information on the

volumes and concentrations of PCBs in the Hanford tank farm systems is not addressed in the PCB Annual Document Log or Annual Report.

2.0 SUMMARY – MANIFESTS FOR PCB WASTE

2.1 OFFSITE SHIPMENT MANIFESTS - NONRADIOACTIVE

OFFSITE SHIPMENT MANIFESTS - NONRADIOACTIVE

| EPA Mfst Tracking # | Shipment Doc # | Ship Date | Transporter(s) | EPA ID # |
|----------------------------|-----------------------|------------------|-----------------------------------------------------------|------------------------------|
| 012604375FLE | HAZPCB2101 | 02/24/2021 | Clean Earth/ Burlington Environmental, LLC | NVD980895338 WAD991281767 |
| 012604307FLE | HAZPCB2102 | 05/19/2021 | Clean Earth/ Clean Earth Environmental Solutions, Inc. | NVD980895338 WAD991281767 |
| 012604379FLE | HAZPCB2201 | 11/03/2021 | Clean Earth/ Clean Earth Environmental Solutions, Inc. | NVD980895338 WAD991281767 |

Pacific Northwest National Laboratory

Pacific Northwest National Laboratory (PNNL) verifies receipt of waste shipment to nonradioactive treatment, storage, and disposal (TSD) facilities by directly contacting the offsite TSD and verifying that the waste was received on the date documented on the returned manifest.

| EPA Mfst Tracking # | Shipment Date | Transporter/ Designated Facility | EPA ID# |
|----------------------------|----------------------|-------------------------------------------------------------------------|-------------------------------|
| 019505394JJK | 02/09/2021 | Clean Harbors Environmental Services, Inc./ Clean Harbors Aragonite LLC | MAD039322250/ UTD981552177 |
| 019505441JJK | 06/08/2021 | Clean Harbors Environmental Services, Inc./ Clean Harbors Aragonite LLC | MAD039322250/ UTD981552177 |
| 019505461JJK | 08/10/2021 | Clean Harbors Environmental Services, Inc./ Clean Harbors Aragonite LLC | MAD039322250/ UTD981552177 |

2.2 OFFSITE SHIPMENT MANIFESTS - RADIOACTIVE**OFFSITE SHIPMENT MANIFESTS - RADIOACTIVE**

| EPA Mfst Tracking # | Shipment Doc # | Ship Date | Transporter / Designated Facility | EPA ID # |
|----------------------------|-----------------------|------------------|------------------------------------------|-----------------|
| 011280226FLE | A21098 | 03/31/2021 | CAST TRANSPORTATION | COR000005389 |
| | | 03/31/2021 | DIVERSIFIED SCIENTIFIC SERVICES, INC. | TND982109142 |
| 012604306FLE | MLLW2111 | 06/10/2021 | HITTMAN TRANSPORT SERVICES, INC. | TNR000034686 |
| | | 06/10/2021 | PERMA-FIX NORTHWEST | WAR000010355 |
| 012604418FLE | MLLW2203 | 10/21/2021 | HANFORD MISSION INTEGRATION SOLUTIONS | WA7890008967 |
| | | 10/21/2021 | PERMA-FIX NORTHWEST | WAR000010355 |
| 012604417FLE | MLLW2202 | 11/10/2021 | HANFORD MISSION INTEGRATION SOLUTIONS | WA7890008967 |
| | | 11/10/2021 | PERMA-FIX NORTHWEST | WAR000010355 |

Pacific Northwest National Laboratory

PNNL verifies receipt of waste shipment to radioactive TSD facilities by directly contacting the offsite TSD and verifying that the waste was received on the date documented on the returned manifest.

| EPA Mfst Tracking # | Shipment Date | Transporter/ Designated Facility | EPA ID# |
|----------------------------|----------------------|-----------------------------------------|----------------|
| 019505405JJK | 03/30/2021 | CAST Transportation/ | COR000005389/ |
| | | Diversified Scientific Services, Inc. | TND982109142 |
| 019505483JJK | 11/04/2021 | CAST Transportation/ | COR000005389/ |
| | | Perma-Fix Northwest Richland, Inc. | WAR000010355 |

2.3 INBOUND SHIPMENT MANIFESTS - RADIOACTIVE**INBOUND SHIPMENT MANIFESTS - RADIOACTIVE**

| EPA Mfst Tracking # | Shipment Doc # | Ship Date | Transporter Name | Receiving Facility |
|--------------------------------|-----------------------|------------------|---------------------------------------|-------------------------------|
| 015483180JJK | WR2101 | 01/20/2021 | CAST TRANSPORTATION | LLBG |
| 015483183JJK | WR2102 | 02/24/2021 | CAST TRANSPORTATION | LLBG |
| 015483188JJK | WR2103 | 03/24/2021 | CAST TRANSPORTATION | LLBG |
| 021863503JJK | WR2104 | 04/28/2021 | HITTMAN TRANSPORT SERVICES, INC. | LLBG |
| 021863504JJK | WR2105 | 05/26/2021 | CAST TRANSPORTATION | LLBG |
| 021863505JJK | WR2106 | 06/16/2021 | CAST TRANSPORTATION | LLBG |
| 021863513JJK | WR2107 | 07/08/2021 | CAST TRANSPORTATION | LLBG |
| 021863514JJK | PR2102 | 07/22/2021 | CAST TRANSPORTATION | LLBG |
| 021863521JJK | TR2104 | 09/09/2021 | CAST TRANSPORTATION | CWC |
| 021863527JJK | WR2108 | 10/06/2021 | CAST TRANSPORTATION | LLBG |
| 021863544JJK | WR2110 | 11/18/2021 | HITTMAN TRANSPORT SERVICES, INC. | LLBG |
| 021863547JJK | TR2112 | 12/14/2021 | HANFORD MISSION INTEGRATION SOLUTIONS | CWC |
| 021863548JJK | CC2105 | 12/13/2021 | HITTMAN TRANSPORT SERVICES, INC. | LLBG |
| 021863551JJK | WR2111 | 12/16/2021 | MP ENVIRONMENTAL SERVICES, INC. | LLBG |

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3.0 SUMMARY – PCB WASTE MANAGEMENT ACTIVITIES

3.1 SUMMARY OF NONRADIOACTIVE PCB WASTE MANAGEMENT ACTIVITIES YEAR ENDING 2021

PCB WASTE IN STORAGE FOR DISPOSAL AT BEGINNING OF THE YEAR¹

| | |
|------------------------------------------------|------------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>0</u> PCB Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>1</u> PCB Article Containers | <u>2.50</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>7</u> PCB Containers | <u>39.46</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>0</u> Bulk PCB Waste Items | <u>0</u> kilograms |

PCB WASTE PLACED INTO STORAGE FOR DISPOSAL DURING THE YEAR

| | |
|------------------------------------------------|-------------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>0</u> PCB Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>2</u> PCB Article Containers | <u>11.80</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>16</u> PCB Containers | <u>486.78</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>0</u> Bulk PCB Waste Items | <u>0</u> kilograms |

¹ None of the nonradioactive PCB waste was reclassified in 2021.

PCB WASTE DISPOSED OR TRANSPORTED OFFSITE FOR STORAGE OR DISPOSAL

| | |
|------------------------------------------------|------------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>0</u> PCB Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>3</u> PCB Article Containers | <u>14.30</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>13</u> PCB Containers | <u>69.12</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>0</u> Bulk PCB Waste Items | <u>0</u> kilograms |

PCB WASTE REMAINING IN STORAGE AT THE END OF THE YEAR

| | |
|------------------------------------------------|-------------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>0</u> PCB Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Article Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>10</u> PCB Containers | <u>457.12</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>0</u> Bulk PCB Waste Items | <u>0</u> kilograms |

3.2 SUMMARY OF RADIOACTIVE PCB WASTE MANAGEMENT ACTIVITIES YEAR ENDING 2021

PCB WASTE IN STORAGE FOR DISPOSAL AT BEGINNING OF THE YEAR^{1,2}

| | |
|------------------------------------------------|-----------------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>2</u> PCB Capacitors | <u>313.60</u> kilograms |
| <u>0</u> PCB Transformers (drained) | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>1</u> PCB Electrical Equipment | <u>13.00</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>24</u> PCB Article Containers | <u>1,079.59</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>1,288</u> PCB Containers | <u>522,206.03</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>23</u> Bulk PCB Waste Items | <u>335,896.90</u> kilograms |

PCB WASTE PLACED INTO STORAGE FOR DISPOSAL DURING THE YEAR

| | |
|------------------------------------------------|----------------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>0</u> PCB Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Article Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>25</u> PCB Containers | <u>19,047.64</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>1</u> Bulk PCB Waste Items | <u>11,415.42</u> kilograms |

¹ Radioactive PCB waste reclassified in 2021 is summarized in Section 3.4. Reclassified waste refers to PCB wastes that have had any status change such as reporting requirements, PCB type, container identification number, weight, etc., during the reporting calendar year.

² In addition to the waste reclassified in Section 3.4 that was captured on the audit report, the weight 0 kg was erroneously reported for container 0035476 in 2020; the correct weight of 476.17 kg is reported for 2021. In addition, four PCB containers returned from PFNW with a total weight of 1,912.38 kg were included in the beginning of the year 2021 inventory, but not included in the end of 2020 inventory: MW21700016 (160.9831 kg), MW21700025 (770.91 kg), MW21700038 (890.7 kg), MW21700043 (89.79 kg). Also, two bulk waste items [IXM-279 (19,505 kg) and IXM-281, (19,505 kg) were included in the beginning of the year 2021 inventory, but were inadvertently left off the 2020 report and not included in the end of 2020 inventory.

PCB WASTE DISPOSED OR TRANSPORTED OFFSITE FOR STORAGE OR DISPOSAL

| TOTAL NUMBER OF PCB ARTICLES | | TOTAL PCB WEIGHT |
|------------------------------|---------------------------------------|--------------------|
| <u>0</u> | PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> | PCB Transformers | <u>0</u> kilograms |
| <u>0</u> | PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>0</u> | PCB Electrical Equipment | <u>0</u> kilograms |

| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | | TOTAL PCB WEIGHT |
|----------------------------------------|------------------------|------------------------|
| <u>3</u> | PCB Article Containers | <u>84.91</u> kilograms |

| TOTAL NUMBER OF PCB CONTAINERS | | TOTAL PCB WEIGHT |
|--------------------------------|----------------|---------------------------|
| <u>5</u> | PCB Containers | <u>7,404.60</u> kilograms |

| TOTAL NUMBER OF BULK PCB WASTE ITEMS | | TOTAL PCB WEIGHT |
|--------------------------------------|----------------------|--------------------|
| <u>0</u> | Bulk PCB Waste Items | <u>0</u> kilograms |

PCB WASTE DISPOSED ONSITE¹

| TOTAL NUMBER OF PCB ARTICLES | | TOTAL PCB WEIGHT |
|------------------------------|---------------------------------------|--------------------|
| <u>0</u> | PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> | PCB Transformers | <u>0</u> kilograms |
| <u>0</u> | PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>0</u> | PCB Electrical Equipment | <u>0</u> kilograms |

| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | | TOTAL PCB WEIGHT |
|----------------------------------------|------------------------|--------------------|
| <u>0</u> | PCB Article Containers | <u>0</u> kilograms |

| TOTAL NUMBER OF PCB CONTAINERS | | TOTAL PCB WEIGHT |
|--------------------------------|----------------|----------------------------|
| <u>39</u> | PCB Containers | <u>38,498.15</u> kilograms |

| TOTAL NUMBER OF BULK PCB WASTE ITEMS | | TOTAL PCB WEIGHT |
|--------------------------------------|----------------------|-------------------------|
| <u>2</u> | Bulk PCB Waste Items | <u>612.19</u> kilograms |

¹ Four bulk waste items were disposed at ERDF during 2021 but not included with PCB Waste Disposed Onsite total: IXM-249, IXM-254, IXM-281, IXM-286 (each 19,505.00 kg; total weight 78,020.00 kg).

PCB WASTE REMAINING IN STORAGE AT THE END OF THE YEAR

| | | |
|----------------------------------------|---------------------------------------|-----------------------------|
| TOTAL NUMBER OF PCB ARTICLES | | TOTAL PCB WEIGHT |
| <u>2</u> | PCB Capacitors | <u>313.60</u> kilograms |
| <u>0</u> | PCB Transformers (drained) | <u>0</u> kilograms |
| <u>0</u> | PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| <u>1</u> | PCB Electrical Equipment | <u>13.00</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | | TOTAL PCB WEIGHT |
| <u>21</u> | PCB Article Containers | <u>994.68</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | | TOTAL PCB WEIGHT |
| <u>1,269</u> | PCB Containers | <u>495,350.91</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | | TOTAL PCB WEIGHT |
| <u>18</u> | Bulk PCB Waste Items | <u>268,680.14</u> kilograms |

3.3 NONRADIOACTIVE PCB WASTE RECLASSIFIED IN 2021

No nonradioactive PCB wastes were reclassified in 2021.

3.4 RADIOACTIVE PCB WASTE RECLASSIFIED IN CALENDAR YEAR 2021**ARTICLE****Added, with a removed from service date prior to 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|--------------------|--------------------------------|--------------------------------|-----------------|
| MW21800014 | 258.50 | 258.50 | N/A |
| TOTAL: 1 | 258.50 | 258.50 | |

ARTICLE CONTAINER**Added, with a removed from service date prior to 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|--------------------|--------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0105268 | 10.43 | 10.43 | Contains previously reported PNNL item 194068 |
| 0105376 | 7.05 | 7.05 | Contains previously reported PNNL items 198092, 198093, 201933, 202089, 202221, and 203421. Also includes items 205013, 205222, 205305, 205744, 205745, 206565 removed from service in 2021. |
| 0105380 | 3.23 | 3.23 | Previously reported PNNL items 201936, 203168, 203703, and 203704 packaged into this drum |
| PNL-21-2970 | 67.35 | 67.35 | Contains previously reported PNNL items 193031, 195822, 195823, 195824, 195825, 195826, 200481, and 201784 |
| TOTAL: 4 | 88.06 | 88.06 | |

ARTICLE CONTAINER**In storage at the end of 2020, and the weight changed in 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|--------------------|--------------------------------|--------------------------------|-----------------|
| HC00451 | 13.68 | 16.58 | N/A |
| HC00452 | 9.70 | 12.02 | N/A |
| HC00474 | 9.94 | 12.26 | N/A |
| TOTAL: 3 | 33.32 | 40.86 | |

ARTICLE CONTAINER**Removed from the list for reporting year 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|--------------------|--------------------------------|--------------------------------|--------------------------------|
| 0104443 | 0.08 | 0.08 | N/A |
| 195822 | 8.40 | 8.40 | PNNL overpacked in PNL-21-2970 |
| 195823 | 8.40 | 8.40 | PNNL overpacked in PNL-21-2970 |
| 195824 | 8.40 | 8.40 | PNNL overpacked in PNL-21-2970 |
| 195825 | 8.40 | 8.40 | PNNL overpacked in PNL-21-2970 |
| 195826 | 8.40 | 8.40 | PNNL overpacked in PNL-21-2970 |
| 200481 | 7.20 | 7.20 | PNNL overpacked in PNL-21-2970 |

ARTICLE CONTAINER**Removed from the list for reporting year 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|------------------|-------------------------|-------------------------|--------------------------------|
| 201784 | 18.10 | 18.10 | PNNL overpacked in PNL-21-2970 |
| 201933 | 0.16 | 0.16 | PNNL overpacked in 0105376 |
| 202221 | 0.01 | 0.01 | PNNL overpacked in 0105376 |
| 203703 | 0.01 | 0.01 | PNNL overpacked in 0105380 |
| 203704 | 0.01 | 0.01 | PNNL overpacked in 0105380 |
| TOTAL: 12 | 67.57 | 67.57 | |

BULK WASTE**Added, with a removed from service date prior to 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|------------------|-------------------------|-------------------------|----------------------------------------|
| IXM-228 | 19704.00 | 19704.00 | Inadvertently left off the 2020 report |
| IXM-249 | 19505.00 | 19505.00 | Inadvertently left off the 2020 report |
| IXM-252 | 19505.00 | 19505.00 | Inadvertently left off the 2020 report |
| IXM-254 | 19505.00 | 19505.00 | Inadvertently left off the 2020 report |
| IXM-256 | 19931.00 | 19931.00 | Inadvertently left off the 2020 report |
| IXM-280 | 19504.40 | 19504.40 | Inadvertently left off the 2020 report |
| IXM-282 | 19505.00 | 19505.00 | Inadvertently left off the 2020 report |
| IXM-285 | 20112.00 | 20112.00 | Inadvertently left off the 2020 report |
| MW21700085 | 283.42 | 283.42 | PFNW return; re-pack of 236Z9-24 |
| MW21700086 | 328.76 | 328.76 | PFNW return; re-pack of 236Z9-24 |
| MW21800022 | 564.63 | 564.63 | PFNW return; re-pack of 236Z9-24 |
| MW21800023 | 619.05 | 619.05 | PFNW return; re-pack of 236Z9-24 |
| MW21800027 | 582.77 | 582.77 | PFNW return; re-pack of 236Z9-24 |
| MW21800029 | 657.60 | 657.60 | PFNW return; re-pack of 236Z9-24 |
| TOTAL: 14 | 160,307.63 | 160,307.63 | |

BULK WASTE**In storage at the end of 2020, and the weight changed in 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|-----------------|-------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------|
| IXM-257 | 19277.00 | 19277.68 | N/A |
| TK219-S | 9597.60 | 11415.42 | 222-S tank waste weight zeroed out at beginning of reporting year: 11,415.42 kg added to tank during 2021 |
| TOTAL: 2 | 28,874.60 | 30,693.10 | |

BULK WASTE

FOOTNOTE ADDED TO SECTION 3.2: Two bulk waste items [IXM-279 (19,505 kg) and IXM-281 (19,505 kg)] were included in the beginning of the year 2021 inventory, but were inadvertently left off the 2020 report and not included in the end of 2020 inventory.

FOOTNOTE ADDED TO SECTION 3.2: Four bulk waste items were disposed at ERDF during 2021 but not included with PCB Waste Disposed Onsite total: IXM-249, IXM-254, IXM-281, IXM-286 (each 19,505.00 kg; total weight 78,020.00 kg).

CONTAINER**Added, with a removed from service date prior to 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|--------------------|------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| 0044924 | 99.60 | 99.60 | Global update 55968 revised designation T11-DES-04-00 |
| 0078230 | 996.00 | 996.00 | Global update 55969 revised designation T11-DES-04-00 |
| 011309W4BT7-06 | 2241.00 | 2241.00 | Amended global update to designation 4BT7-DES-03 |
| 021009W4BT7-3 | 1752.00 | 1752.00 | Global update 55964 revised designation 4BT7-DES-03 |
| 7503DMA01 | 2900.00 | 2900.00 | Global update 55963 revised designation PFP-DES-11-00 |
| 7510DMA06 | 2709.09 | 2709.09 | Global update 55964 revised designation PFP-DES-11-00 |
| ECRT-CON-W-407 | 5379.61 | 5379.61 | Inadvertently left off the 2020 report |
| ECRT-CON-W-409 | 5244.00 | 5244.00 | Inadvertently left off the 2020 report |
| ECRT-CON-W-414 | 3892.00 | 3892.00 | Inadvertently left off the 2020 report |
| ECRT-CON-W-417 | 4653.90 | 4653.90 | Inadvertently left off the 2020 report |
| MW20700166 | 534.65 | 534.65 | PFNW return; re-pack of 0098186, CON-20-212-04, 0097548, 0102215, 0102214, 0100573, and 0100561 |
| MW20700174 | 572.74 | 572.74 | PFNW return; re-pack of 0100573, 0100561, 0100574, and 0100137 |
| MW20700180 | 4260.38 | 4260.38 | PFNW return; re-pack of WTS-20-056-04, CON-20-274-29, TFE-20-281-09, CON-20-021-05, 0103572, 0098186, and CON-20-252-02 |
| MW20700181 | 1493.29 | 1493.29 | PFNW return; re-pack of CON-20-252-02, CON-20-274-30, and WTS-20-056-04 |
| MW20700183 | 346.91 | 346.91 | PFNW return; re-pack of 0098173, CON-20-295-13, 0098011, 0102226, 0102247, 0098166, 0103024, 0098206, and 0098177 |
| MW21700001 | 47.61 | 47.61 | PFNW return; re-pack of 0098167 |
| MW21700002 | 695.18 | 695.18 | PFNW return; re-pack of 0102211, 0102199, CON-20-295-13, 0092041, CON-20-212-05, 0102203, and CON-20-300-07 |
| MW21700003 | 1002.18 | 1002.18 | PFNW return; re-pack of CON-20-300-07, 0102124, 0103031, and CON-20-286-03 |
| MW21700010 | 777.25 | 777.25 | PFNW return; re-pack of CON-20-300-07, 0104514, 0103128, 0103061, 0102202, 0099261, and CON-20-286-02 |

CONTAINER**Added, with a removed from service date prior to 2021**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|--------------------|--------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| MW21700011 | 966.81 | 966.81 | PFNW return; re-pack of CON-20-286-02, CON-20-324-02, 0102146, and 0102796 |
| MW21700012 | 1802.56 | 1802.56 | PFNW return; re-pack of 0102204 and TFE-20-309-02 |
| MW21700013 | 1201.25 | 1201.25 | PFNW return; re-pack of CON-20-286-01, 0102885, 0100569, 0103025, CON-20-274-31, and WTS-20-309-03 |
| MW21700014 | 455.74 | 455.74 | PFNW return; re-pack of CON-20-286-01, 0102139, CON-20-274-31, 0102128, 0102122, and 0102868 |
| MW21700018 | 663.88 | 663.88 | PFNW return; re-pack of CON-20-350-02 and WTS-20-329-15 |
| MW21700031 | 1900.96 | 1900.96 | PFNW return; re-pack of 0104657 |
| MW21700045 | 893.88 | 893.88 | PFNW return; re-pack of 0103120, 0103141, 0103129, 0104938, 0102889, 0104944, WTS-21-082-02, 0102188, and 0102196 |
| MW21800009 | 328.80 | 328.80 | PFNW return; re-pack of 3928-CSB1 |
| PNL-21-2993 | 3.90 | 3.90 | Contains previously reported PNNL items 202082 and 203705; and 204893, 205004, and 205309 removed from service in 2021. |
| SB80101 | 2282.00 | 2282.00 | Global update 55955 revised designation PFP-DES-11-00 |
| SB81021 | 1782.00 | 1782.00 | Global update 55961 revised designation PFP-DES-11-00 |
| SB83042 | 4175.00 | 4175.00 | Global update 55956 revised designation PFP-DES-11-00 |
| SB83043 | 932.00 | 932.00 | Global update 55957 revised designation PFP-DES-11-00 |
| SB8457 | 1197.30 | 1197.30 | Global update 55962 revised designation PFP-DES-11-00 |
| ZB7507001 | 1331.00 | 1331.00 | Global update 55965 revised designation PFP-DES-11-00 |
| TOTAL: 34 | 59,514.47 | 59,514.47 | |

CONTAINER

FOOTNOTE ADDED TO SECTION 3.2: The weight 0 kg was erroneously reported for container 0035476 in 2020; the correct weight of 476.17 kg is reported for 2021. In addition, four PCB containers returned from PFW with a total weight of 1,912.38 kg were included in the beginning of the year 2021 inventory, but not included in the end of 2020 inventory: MW21700016 (160.9831 kg), MW21700025 (770.91 kg), MW21700038 (890.7 kg), MW21700043 (89.79 kg).

CONTAINER**Reclassified from reportable to non-reportable**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|--------------------|------------------------------------|------------------------------------|-----------------|
| 0102545 | 17.35 | 17.35 | N/A |
| 0102635 | 11.82 | 11.82 | N/A |
| 0103229 | 48.88 | 48.88 | N/A |
| 0104273 | 4.75 | 4.75 | N/A |
| TOTAL: 4 | 82.80 | 82.80 | |

CONTAINER**Removed from the list for reporting year 2020**

| Item Number | End of 2020 Weight (kg) | End of 2021 Weight (kg) | Comments |
|--------------------|------------------------------------|------------------------------------|-------------------------------------------------------|
| 0103182 | 76.78 | 76.78 | PFNW Return, Re-Packed into MW21700062 and MW21700098 |
| 0103210 | 31.17 | 31.17 | PFNW Return, Re-Packed into MW21700025 |
| 193031 | 0.05 | 0.05 | PNNL overpacked in PNL-21-2970 |
| 194068 | 1.30 | 1.30 | PNNL overpacked in 0105268 |
| 198092 | 0.80 | 0.80 | PNNL overpacked in 0105376 |
| 198093 | 0.07 | 0.07 | PNNL overpacked in 0105376 |
| 201936 | 0.71 | 0.71 | PNNL overpacked in 0105380 |
| 202082 | 1.80 | 1.80 | PNNL overpacked in PNL-21-2993 |
| 202089 | 0.43 | 0.43 | PNNL overpacked in 0105376 |
| 203168 | 2.50 | 2.50 | PNNL overpacked in 0105380 |
| 203421 | 2.00 | 2.00 | PNNL overpacked in 0105376 |
| 203705 | 0.50 | 0.50 | PNNL overpacked in PNL-21-2993 |
| TOTAL: 12 | 118.11 | 118.11 | |

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4.0 SUMMARY – PCB WASTE MANAGEMENT ACTIVITIES AT THE LOW-LEVEL BURIAL GROUND (218-W-5)

The 218-W-5 is not an approved chemical waste landfill. PCB waste is disposed into the 218-W-5 as noted in the Notification of PCB Activity Form 7701-53, submitted March 14, 2002. Provisions in 40 CFR 761, Subpart D, allow disposal of certain specific ≥ 50 ppm PCB waste into a RCRA Subtitle C landfill and/or a landfill approved for disposal of radioactive waste per 40 CFR 761.50(b)(7).

PCB WASTE IN STORAGE AT THE 218-W-5 AT BEGINNING OF THE YEAR

| | |
|------------------------------------------------|--------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Article Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>0</u> Bulk PCB Waste Items | <u>0</u> kilograms |

PCB WASTE RECEIVED OR GENERATED AT THE 218-W-5 DURING THE YEAR

| | |
|------------------------------------------------|----------------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Article Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>39</u> PCB Containers | <u>38,498.15</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>2</u> Bulk PCB Waste Items | <u>612.19</u> kilograms |

PCB WASTE TRANSFERRED TO ANOTHER FACILITY DURING THE YEAR

| | |
|------------------------------------------------|--------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Article Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>0</u> Bulk PCB Waste Items | <u>0</u> kilograms |

PCB WASTE DISPOSED AT THE 218-W-5 DURING THE YEAR

| | |
|------------------------------------------------|----------------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Article Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>39</u> PCB Containers | <u>38,498.15</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>2</u> Bulk PCB Waste Items | <u>612.19</u> kilograms |

PCB WASTE REMAINING IN STORAGE AT THE 218-W-5 AT THE END THE YEAR

| | |
|------------------------------------------------|--------------------|
| TOTAL NUMBER OF PCB ARTICLES | TOTAL PCB WEIGHT |
| <u>0</u> PCB Capacitors | <u>0</u> kilograms |
| <u>0</u> PCB Transformers | <u>0</u> kilograms |
| <u>0</u> PCB Contaminated Electrical Equipment | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB ARTICLE CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Article Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF PCB CONTAINERS | TOTAL PCB WEIGHT |
| <u>0</u> PCB Containers | <u>0</u> kilograms |
| TOTAL NUMBER OF BULK PCB WASTE ITEMS | TOTAL PCB WEIGHT |
| <u>0</u> Bulk PCB Waste Items | <u>0</u> kilograms |

**5.0 SUMMARY – PCB TRANSFORMERS AND PCB CAPACITORS REMAINING
IN SERVICE AT THE END OF CALENDAR YEAR 2021**

**NONRADIOACTIVE PCB TRANSFORMERS AND PCB CAPACITORS REMAINING
IN SERVICE AT THE END OF CALENDAR YEAR 2021**

There are no nonradioactive PCB transformers or PCB capacitors remaining in service at the Hanford Site.

**RADIOACTIVE PCB TRANSFORMERS AND PCB CAPACITORS REMAINING IN
SERVICE AT THE END OF CALENDAR YEAR 2021**

There are no radioactive PCB transformers or PCB capacitors remaining in service at the Hanford Site.

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