## Appendix D

## Emissions Results Tables – Hazardous Waste Thermal Emissions

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HWTE-CK-SVM: Hazardous Waste Thermal Emissions Approach, Cement Kilns, Semivolatile Metals

| Source ID | Cond IDs | No. Runs | SVM HW Therm Emiss (lb/10^12 Btu) | | | Rank |
|---|---|---|---|---|---|---|
| | | | Avg | Std Dev | UPL 99% | |
| 302 | 302C10 | 3 | 7.8 | 6.1 | 42.5 | 1 |
| 201 | 201C10 | 3 | 35.7 | 2.5 | 49.8 | 2 |
| 203 | 203C10 | 2 | 8.5 | 1.8 | 61.9 | 3 |
| 473 | 473C1 | 3 | 31.2 | 33.5 | 221.7 | 4 |
| 404 | 404C10 | 4 | 229.2 | 23.8 | 311.8 | 5 |
| 200 | 200C11 | 3 | 90.0 | 52.1 | 386.4 | 6 |
| 322 | 322C8 | 3 | 359.7 | 29.0 | 524.8 | 7 |
| 205 | 205C10 | 3 | 347.8 | 61.8 | 699.1 | 8 |
| 323 | 323B3 | 3 | 431.1 | 78.3 | 876.2 | 9 |
| 208 | 208C10 | 3 | 863.0 | 170.9 | 1835.1 | 10 |
| 319 | 319D6 | 3 | 1787.0 | 43.6 | 2035.1 | 11 |
| 300 | 300C11 | 3 | 1051.8 | 221.3 | 2310.1 | 12 |
| 204 | 204B3 | 3 | 1323.6 | 197.0 | 2443.9 | 13 |
| 207 | 207C10 | 3 | 1498.0 | 411.7 | 3839.1 | 14 |
| 403 | 403C10 | 4 | 3161.6 | 803.5 | 5948.0 | 15 |
| 206 | 206C10 | 3 | 3663.8 | 1936.6 | 14676.2 | 16 |

| | |
|---|---|
| MACT Floor | 130.2 |
| MACT Pool Avg | 62.5 |
| MACT Pool Variability | 24.5 |
| No. MACT Pool Sources | 5 |

HWTE-CK-LVM: Hazardous Waste Thermal Emissions Approach, Cement Kilns, Low Volatile Metals

| Source ID | Cond IDs | No. Runs | LVM HW Therm Emiss (lb/10^12 Btu) Avg | Std Dev | UPL 99% | Rank |
|---|---|---|---|---|---|---|
| 302 | 302C10 | 3 | 0.9 | 0.2 | 1.8 | 1 |
| 303 | 303C7 | 0 | 4.2 | 0.9 | 6.7 | 2 |
| 473 | 473C1 | 3 | 10.9 | 0.6 | 14.0 | 3 |
| 323 | 323B3 | 3 | 5.3 | 1.7 | 15.2 | 4 |
| 319 | 319D6 | 3 | 15.4 | 0.6 | 18.9 | 5 |
| 201 | 201C10 | 3 | 10.3 | 2.7 | 25.8 | 6 |
| 322 | 322C8 | 3 | 12.5 | 2.5 | 26.4 | 7 |
| 404 | 404C10 | 4 | 18.0 | 3.4 | 29.7 | 8 |
| 300 | 300C11 | 3 | 17.6 | 4.5 | 43.4 | 9 |
| 200 | 200C11 | 3 | 13.8 | 6.6 | 51.6 | 10 |
| 403 | 403C10 | 4 | 35.9 | 6.0 | 56.7 | 11 |
| 3029 | 3029C11 | 3 | 32.0 | 5.8 | 65.0 | 12 |
| 204 | 204B3 | 3 | 30.4 | 7.1 | 70.6 | 13 |
| 208 | 208C10 | 3 | 43.0 | 4.9 | 70.7 | 14 |
| 205 | 205C5 | 3 | 16.1 | 10.7 | 77.1 | 15 |
| 207 | 207C10 | 3 | 32.3 | 9.1 | 83.9 | 16 |
| 206 | 206C5 | 3 | 29.8 | 11.9 | 97.4 | 17 |
| 203 | 203C10 | 2 | 16.2 | 3.2 | 108.6 | 18 |

| | |
|---|---|
| MACT Floor | 11.0 |
| MACT Pool Avg | 7.3 |
| MACT Pool Variability | 1.3 |
| No. MACT Pool Sources | 5 |

HWTE-LWAK-SVM: Hazardous Waste Thermal Emissions, Lightweight Aggregate Kilns, Semivolatile Metals

| Source ID | Cond IDs | No. Runs | SVM HW Therm Emiss (lb/10^12 Btu) Avg | Std Dev | UPL 99% | Rank |
|---|---|---|---|---|---|---|
| 311 | 311C10 | 3 | 5.3 | 3.3 | 24.0 | 1 |
| 307 | 307C11 | 3 | 7.4 | 5.2 | 37.1 | 2 |
| 312 | 312C10 | 3 | 68.9 | 23.4 | 201.7 | 3 |
| 474 | 474C10 | 3 | 89.1 | 24.7 | 229.4 | 4 |
| 476 | 476C11 | 3 | 438.9 | 106.8 | 1046.0 | 5 |
| 313 | 313C11 | 3 | 1129.5 | 112.9 | 1771.6 | 6 |
| 314 | 314C11 | 3 | 590.9 | 297.9 | 2284.8 | 7 |

| | |
|---|---|
| MACT Floor | 304.5 |
| MACT Pool Avg | 121.9 |
| MACT Pool Variability | 66.1 |
| No. MACT Pool Sources | 5 |

HWTE-LWAK-LVM: Hazardous Waste Thermal Emissions, Lightweight Aggregate Kilns, Low Volatile Metals

| Source ID | Cond IDs | No. Runs | LVM HW Therm Emiss (lb/10^12 Btu) | | | Rank |
|---|---|---|---|---|---|---|
| | | | Avg | Std Dev | UPL 99% | |
| 474 | 474C10 | 3 | 17.8 | 2.5 | 31.9 | 1 |
| 311 | 311C10 | 3 | 14.4 | 4.2 | 38.1 | 2 |
| 312 | 312C10 | 3 | 18.4 | 6.7 | 56.8 | 3 |
| 476 | 476C11 | 3 | 55.7 | 16.3 | 148.5 | 4 |
| 307 | 307C11 | 3 | 41.4 | 35.9 | 245.6 | 5 |
| 313 | 313C11 | 3 | 188.7 | 33.7 | 380.2 | 6 |
| 314 | 314C11 | 3 | 121.3 | 60.5 | 465.1 | 7 |

| | |
|---|---|
| MACT Floor | 95.1 |
| MACT Pool Avg | 29.6 |
| MACT Pool Variability | 23.7 |
| No. MACT Pool Sources | 5 |

HWTE-LWAK-CL: Hazardous Waste Thermal Emissions Approach, Lightweight Aggregate Kilns, Total Chlorine

| Source ID | Cond IDs | No. Runs | TCl HW Therm Emiss (lb/10^9 Btu) | | | Rank |
|---|---|---|---|---|---|---|
| | | | Avg | Std Dev | UPL 99% | |
| 307 | 307C10 | 3 | 359.7 | 99.2 | 923.7 | 1 |
| 476 | 476C11 | 3 | 1574.3 | 180.9 | 2603.0 | 2 |
| 312 | 312C10 | 3 | 1472.7 | 399.0 | 3741.4 | 3 |
| 311 | 311C10 | 3 | 2593.9 | 414.9 | 4953.2 | 4 |
| 474 | 474C10 | 3 | 2237.9 | 546.8 | 5347.4 | 5 |
| 314 | 314C11 | 3 | 1873.2 | 621.8 | 5408.9 | 6 |
| 313 | 313C11 | 3 | 3014.3 | 442.3 | 5529.2 | 7 |

| | |
|---|---|
| MACT Floor | 2982.5 |
| MACT Pool Avg | 1647.7 |
| MACT Pool Variability | 483.0 |
| # Sources in MACT Pool | 5 |

HWTE-LFB-HG: Hazardous Waste Thermal Emissions Approach, Liquid Fuel Boilers, Mercury

| Source ID | Cond IDs | No. Runs | Hg HW Therm Emiss (lb/10^12 Btu) | | | Rank |
|---|---|---|---|---|---|---|
| | | | Avg | Std Dev | UPL 99% | |
| 814 | 814C2 | 3 | 0.3 | 0.0 | 0.4 | 1 |
| 849 | 849C5 | 3 | 0.3 | 0.2 | 1.2 | 2 |
| 815 | 815C2 | 3 | 1.0 | 0.1 | 1.8 | 3 |
| 912 | 912C4 | 3 | 0.4 | 0.3 | 2.2 | 4 |
| 232 | 232C11 | 3 | 10.2 | 0.7 | 14.1 | 5 |
| 812 | 812C2 | 3 | 5.6 | 2.7 | 20.9 | 6 |
| 843 | 843C3 | 3 | 12.9 | 22.1 | 138.7 | 7 |

| | |
|---|---|
| MACT Floor | 3.7 |
| MACT Pool Avg | 2.4 |
| MACT Pool Variability | 0.5 |
| No. MACT Pool Sources | 5 |

HWTE-LFB-SVM: HW Thermal Emissions Approach, Liquid Fuel Boilers, Semivolatile Metals

| Source ID | Cond IDs | No. Runs | SVM HW Therm Emiss (lb/10^12 Btu) | | | Rank |
|---|---|---|---|---|---|---|
| | | | Avg | Std Dev | UPL 99% | |
| 843 | 843C3 | 3 | 1.2 | 0.5 | 4.3 | 1 |
| 849 | 849C5 | 3 | 3.4 | 0.4 | 5.4 | 2 |
| 815 | 815C2 | 3 | 8.3 | 1.4 | 16.1 | 3 |
| 814 | 814C2 | 3 | 7.3 | 1.8 | 17.3 | 4 |
| 232 | 232C11 | 3 | 5.4 | 2.9 | 21.6 | 5 |
| 812 | 812C2 | 3 | 15.5 | 4.1 | 38.6 | 6 |
| 912 | 912C4 | 3 | 48.4 | 39.3 | 271.8 | 7 |

| | |
|---|---|
| MACT Floor | 11.1 |
| MACT Pool Avg | 5.1 |
| MACT Pool Variability | 2.2 |
| No. MACT Pool Sources | 5 |

HWTE-LFB-CR/CT: Hazardous Waste Thermal Emissions Approach, Liquid Fuel Boilers, Compliance Test Data, Chromium

| Source ID | Cond IDs | No. Runs | Cr HW Therm Emiss (lb/10^12 Btu) | | | Rank |
|---|---|---|---|---|---|---|
| | | | Avg | Std Dev | UPL 99% | |
| 901 | 901C2 | 0 | 8.5 | 1.0 | 11.1 | 1 |
| 777 | 777C10 | 3 | 12.5 | 4.1 | 35.7 | 2 |
| 776 | 776C10 | 2 | 3.2 | 1.2 | 38.9 | 3 |
| 849 | 849C3 | 3 | 20.0 | 8.9 | 70.5 | 4 |
| 724 | 724C2 | 3 | 106.3 | 24.8 | 247.2 | 5 |
| 812 | 812C2 | 3 | 113.4 | 41.7 | 350.5 | 6 |
| 911 | 911C1 | 2 | 224.6 | 4.8 | 364.6 | 7 |
| 819 | 819C2 | 2 | 28.5 | 13.1 | 410.3 | 8 |
| 910 | 910C1 | 2 | 233.5 | 13.6 | 628.9 | 9 |
| 759 | 759C1 | 2 | 640.3 | 68.7 | 2635.0 | 10 |
| 760 | 760C1 | 2 | 878.4 | 110.8 | 4095.6 | 11 |

| | |
|---|---|
| MACT Floor | 77.2 |
| MACT Pool Avg | 30.1 |
| MACT Pool Variability | 15.7 |
| No. MACT Pool Sources | 5 |

HWTE-LFB-CR/N: Hazardous Waste Thermal Emissions Approach, Liquid Fuel Boilers, Normal Data, Chromium

| Source ID | Cond IDs | No. Runs | Cr HW Therm Emiss (lb/10^12 Btu) | | | Rank |
|---|---|---|---|---|---|---|
| | | | Avg | Std Dev | UPL 99% | |
| 815 | 815C2 | 3 | 10.1 | 0.8 | 14.7 | 1 |
| 843 | 843C3 | 3 | 9.2 | 1.1 | 15.2 | 2 |
| 2008 | 2008C1 | 2 | 10.3 | 0.2 | 16.6 | 3 |
| 232 | 232C11 | 3 | 23.9 | 0.7 | 27.7 | 4 |
| 912 | 912C1 | 2 | 5.4 | 2.0 | 64.4 | 5 |
| 778 | 778C10 | 2 | 49.3 | 0.9 | 74.8 | 6 |
| 849 | 849C5 | 3 | 14.8 | 18.1 | 118.0 | 7 |
| 814 | 814C2 | 3 | 25.7 | 22.6 | 154.0 | 8 |
| 1000 | 1000C1 | 0 | 260.0 | 58.0 | 415.9 | 9 |

| | |
|---|---|
| MACT Floor | 16.1 |
| MACT Pool Avg | 11.8 |
| MACT Pool Variability | 1.5 |
| No. MACT Pool Sources | 5 |

HWTE-LFB-CL: Hazardous Waste Thermal Emissions Approach, Liquid Fuel Boilers, Total Chlorine

| Source ID | Cond IDs | No. Runs | Chlorine HW Therm Emiss (lb/10^9 Btu) Avg | Std Dev | UPL 99% | Rank |
|---|---|---|---|---|---|---|
| 738 | 738C1 | 2 | 0.08 | 0.02 | 0.72 | 1 |
| 901 | 901C1 | 0 | 2.12 | 0.11 | 2.42 | 2 |
| 2003 | 2003C2 | 3 | 2.95 | 0.91 | 8.14 | 3 |
| 777 | 777C10 | 3 | 7.38 | 0.41 | 9.69 | 4 |
| 811 | 811C11 | 2 | 6.50 | 0.14 | 10.66 | 5 |
| 812 | 812C2 | 3 | 4.21 | 1.81 | 14.50 | 6 |
| 767 | 767C1 | 2 | 17.67 | 0.30 | 26.45 | 7 |
| 776 | 776C10 | 2 | 3.91 | 0.89 | 29.73 | 8 |
| 911 | 911C2 | 3 | 26.21 | 1.09 | 32.40 | 9 |
| 912 | 912C1 | 2 | 15.83 | 0.90 | 42.11 | 10 |
| 2001 | 2001C3 | 3 | 7.36 | 11.28 | 71.51 | 11 |
| 849 | 849C3 | 3 | 46.02 | 5.72 | 78.58 | 12 |
| 819 | 819C1 | 2 | 146.33 | 0.26 | 153.86 | 13 |
| 2002 | 2002C1 | 3 | 16.12 | 25.72 | 162.37 | 14 |
| 724 | 724C2 | 3 | 42.09 | 24.60 | 182.00 | 15 |
| 735 | 735C1 | 2 | 140.70 | 3.49 | 242.10 | 16 |
| 763 | 763C1 | 3 | 1425.93 | 41.42 | 1661.48 | 17 |
| 910 | 910C1 | 2 | 1283.54 | 107.44 | 4404.40 | 18 |

| | |
|---|---|
| MACT Floor | 5.69 |
| MACT Pool Avg | 3.81 |
| MACT Pool Variability | 0.60 |