| | B | C |
|---|---|---|
| 1 | **Source Description** | |
| 2 | | |
| 3 | Phase I ID No. | 612 |
| 4 | EPA ID No. | ILD098642424 |
| 5 | Facility Name | Trade Waste Incineration |
| 6 | Facility Location | |
| 7 | City | Sauget |
| 8 | State | IL |
| 9 | Unit ID Name/No. | Unit No. 3 |
| 10 | Other Sister Facilities | |
| 11 | Number of Sister Facilities | 0 |
| 12 | Combustor Class | Commercial incinerator |
| 13 | Combustor Type | Fixed hearth |
| 14 | Combustor Characteristics | Made by North American |
| 15 | Capacity (MMBtu/hr) | |
| 16 | Soot Blowing | |
| 17 | APCS Detailed Acronym | SD/FF |
| 18 | APCS General Class | SD, FF |
| 19 | APCS Characteristics | Spray dryer, fabric filter (Pulseflo, pulse jet, fiberglass bags), lime spray dryer |
| 20 | Hazardous Wastes | solid,liq,sludge |
| 21 | Haz Waste Description | |
| 22 | Supplemental Fuel | Natural Gas, oil |
| 23 | | Fuel oil |
| 24 | Stack Characteristics | |
| 25 | Diameter (ft) | 4.0 |
| 26 | Height (ft) | 101.0 |
| 27 | Gas Velocity (ft/sec) | 6.8 |
| 28 | Gas Temperature (°F) | 348.5 |
| 29 | | |
| 30 | Permitting Status | |
| 31 | HWC Burn Status (Date if Terminated) | |

| | B | C |
|---|---|---|
| 1 | **Condition Description** | |
| 2 | | |
| 3 | **612C1** | |
| 4 | | |
| 5 | Report Name/Date | Test Report for the RCRA Trial Burn on the Unit 3 Incinerator, Trade Waste Incineration, Sauget, Illinois, ILD 098642424, Prepared by MRI, Project # 4341-02, January 21, 1997 |
| 6 | Report Prepare | MRI |
| 7 | Testing Firm | MRI |
| 8 | Cond Descr | Trial burn, Worst case operating conditions |
| 9 | Testing Dates | November 6-8, 1996 |
| 10 | Cond Dates | Jan-97 |

| | B | C | D | E | F | G | H | I | J | K | L | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Stack Gas Emissions 1** | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | |
| 4 | **612C1** | | | | | R1 | | R2 | | R3 | | Cond Avg |
| 5 | | | | | | | | | | | | |
| 6 | PM | E2 | gr/dscf | y | | 0.0017 | | 0.0004 | | 0.0009 | | 0.0010 |
| 7 | CO (RA) | E2 | ppmv | y | | 0.8 | | 2.1 | | 1.1 | | 1.3 |
| 8 | HC (RA) | E2 | ppmv | y | | 0.0 | | 0.0 | | 0.5 | | 0.2 |
| 9 | HCl | E2 | ppmv | y | | 17.8 | | 18.8 | | 9.7 | | 15.4 |
| 10 | Cl2 | E2 | ppmv | y | | 0.1 | | 0.1 | | 0.1 | | 0.1 |
| 11 | Total Chlorine | E2 | ppmv | y | | 18.1 | | 19.1 | | 10.0 | | 15.7 |
| 12 | | | | | | | | | | | | |
| 13 | Sampling Train | Dioxin & Furan | E1 | | | | | | | | | |
| 14 | Stack Gas Flowrate | | dscfm | | | 5454.0 | | 5706.0 | | 5971.0 | | |
| 15 | O2 | | % | | | 10.2 | | 9.4 | | 10.8 | | |
| 16 | Moisture | | % | | | 47.2 | | 48.8 | | 46.1 | | |
| 17 | Temperature | | °F | | | 352.0 | | 347.0 | | 346.0 | | |
| 18 | | | | | | | | | | | | |
| 19 | Sampling Train | PM/HCl | E2 | | | | | | | | | |
| 20 | Stack Gas Flowrate | | dscfm | | | 5588.0 | | 5964.0 | | 6346.0 | | |
| 21 | O2 | | % | | | 10.2 | | 9.6 | | 10.0 | | |
| 22 | Moisture | | % | | | 47.1 | | 48.3 | | 45.9 | | |
| 23 | Temperature | | °F | | | 352.0 | | 348.0 | | 346.0 | | |
| 24 | | | | | | | | | | | | |
| 25 | 1,2,3-Trichlorobenzene | DRE | % | | | 99.99985 | | 99.99984 | | 99.99983 | | |
| 26 | Carbon Tetrachloride | DRE | % | | | 99.99991 | | 99.99997 | | 99.99997 | | |
| 27 | Tetrachloroethene | DRE | % | | | 99.99993 | | 99.99997 | | 99.99998 | | |

| | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Feedstream 2** | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | **612C1** | | | | R1 | | R2 | | R3 | | R1 | | R2 | | R3 | | R1 | | R2 | | R3 | | R1 | | R2 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Feedstream Number | | | | F1 | | F1 | | F1 | | F2 | | F2 | | F2 | | F3 | | F3 | | F3 | | F4 | | F4 |
| 7 | Feed Class 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Feed Class | | | | Solid HW | | Solid HW | | Solid HW | | Liq HW | | Liq HW | | Liq HW | | Liq HW | | Liq HW | | Liq HW | | Sludge HW | | Sludge HW |
| 9 | Feedstream Description | | | | Solid | | Solid | | Solid | | Liquid | | Liquid | | Liquid | | Aqueous | | Aqueous | | Aqueous | | Sludge | | Sludge |
| 10 | Feed Rate | | lb/hr | | 1088 | | 1084 | | 987 | | 1804 | | 2130 | | 2101 | | 1842 | | 2165 | | 1971 | | 706.6 | | 756 |
| 11 | Heating value | | Btu/lb | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Ash | | wt % | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Chlorine | | ppmw | | 85202.2 | | 85055.4 | | 91590.7 | | 28825 | | 24836 | | 24941 | | 760 | | 16212 | | 4921 | | 103312 | | 95899 |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Stack Gas Flowrate | | dscfm | | 5588 | | 5964 | | 6346 | | 5588 | | 5964 | | 6346 | | 5588 | | 5964 | | 6346 | | 5588 | | 5964 |
| 16 | Oxygen | | % | | 10.2 | | 9.6 | | 10 | | 10.2 | | 9.6 | | 10 | | 10.2 | | 9.6 | | 10 | | 10.2 | | 9.6 |
| 17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | Estimated Firing Rate | | MMBtu/hr | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Ash | | mg/dscm | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Chlorine | | ug/dscm | | 5749707.9 | | 5076152.2 | | 4847545 | | 3225295 | | 2912456 | | 2809860 | | 86835 | | 1932461 | | 520146 | | 4527817 | | 3991551 |

| | B | AA | AB | AC | AD | AE | AF | AG | AH | AI | AJ | AK | AL | AM | AN | AO | AP | AQ | AR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Feedstream 2** | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | |
| 4 | **612C1** | | R3 | | R1 | | R2 | | R3 | | Cond Avg | | R1 | | R2 | | R3 | | Cond Avg |
| 5 | | | | | | | | | | | | | | | | | | | |
| 6 | Feedstream Number | | F4 | | F5 | | F5 | | F5 | | F5 | | | | | | | | |
| 7 | Feed Class 2 | | | | Total | | Total | | Total | | Total | | HW | | HW | | HW | | HW |
| 8 | Feed Class | | Sludge HW | | Total | | Total | | Total | | Total | | | | | | | | |
| 9 | Feedstream Description | | Sludge | | Total | | Total | | Total | | Total | | | | | | | | |
| 10 | Feed Rate | | 709.6 | | | | | | | | | | | | | | | | |
| 11 | Heating value | | | | | | | | | | | | | | | | | | |
| 12 | Ash | | | | | | | | | | | | | | | | | | |
| 13 | Chlorine | | 102875 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| 15 | Stack Gas Flowrate | | 6346 | | 5588 | | 5964 | | 6346 | | 5966 | | | | | | | | |
| 16 | Oxygen | | 10 | | 10.2 | | 9.6 | | 10 | | 9.9 | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | |
| 18 | Estimated Firing Rate | | | | 19.16 | | 21.58 | | 22.16 | | 20.96 | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | |
| 20 | Ash | | | | | | | | | | | | | | | | | | |
| 21 | Chlorine | | 3914500 | | 13589655 | | 13912621 | | 12092052 | | 13198109 | | 13589655 | | 13912621 | | 12092052 | | 13198109 |

| | C | D | E | F | G |
|---|---|---|---|---|---|
| 1 | **Process Information 2** | | | | |
| 2 | | | | | |
| 3 | **612C1** | | R1 | R2 | R3 |
| 4 | | | | | |
| 5 | Hearth Temperature | F | 1608 | 1638 | 1635 |
| 6 | Afterburner Temperature | F | 1870 | 1827 | 1838 |
| 7 | FF Temperature | F | 386 | 386 | 386 |

| | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **612C1** | | | | R1 | | | | R2 | | | | R3 | |
| 2 | | I-TEF | | Total | Total | TEQ | | Total | Total | TEQ | | Total | Total | TEQ |
| 3 | ng/dscm | Wt Fact | | Full ND | 1/2 ND | 1/2 ND | | Full ND | 1/2 ND | 1/2 ND | | Full ND | 1/2 ND | 1/2 ND |
| 4 | | | | | | | | | | | | | | |
| 5 | 4D 2378 | 1 | 1 | 0.012 | 0.006 | 0.006 | | 0.010 | 0.010 | 0.010 | 1 | 0.011 | 0.005 | 0.005 |
| 6 | 4D Other | 0 | | 0.180 | 0.180 | 0.000 | | 0.146 | 0.146 | 0.000 | | | 0.000 | 0.000 |
| 7 | 4D Total | 0 | | 0.192 | 0.192 | 0.000 | | 0.156 | 0.156 | 0.000 | | 0.108 | 0.108 | 0.000 |
| 8 | 5D 12378 | 0.5 | 1 | 0.041 | 0.021 | 0.010 | | 0.027 | 0.027 | 0.013 | | 0.028 | 0.028 | 0.014 |
| 9 | 5D Other | 0 | | 0.570 | 0.570 | 0.000 | | 0.317 | 0.317 | 0.000 | | 0.449 | 0.449 | 0.000 |
| 10 | 5D Total | 0 | | 0.612 | 0.612 | 0.000 | | 0.344 | 0.344 | 0.000 | | 0.477 | 0.477 | 0.000 |
| 11 | 6D 123478 | 0.1 | 1 | 0.031 | 0.016 | 0.002 | | 0.014 | 0.014 | 0.001 | | 0.023 | 0.023 | 0.002 |
| 12 | 6D 123678 | 0.1 | | 0.048 | 0.048 | 0.005 | | 0.023 | 0.023 | 0.002 | | 0.038 | 0.038 | 0.004 |
| 13 | 6D 123789 | 0.1 | | 0.047 | 0.047 | 0.005 | | 0.031 | 0.031 | 0.003 | | 0.036 | 0.036 | 0.004 |
| 14 | 6D Other | 0 | | 0.980 | 0.980 | 0.000 | | 0.829 | 0.829 | 0.000 | | 0.737 | 0.737 | 0.000 |
| 15 | 6D Total | 0 | | 1.106 | 1.106 | 0.000 | | 0.897 | 0.897 | 0.000 | | 0.835 | 0.835 | 0.000 |
| 16 | 7D 1234678 | 0.01 | | 0.317 | 0.317 | 0.003 | | 0.151 | 0.151 | 0.002 | | 0.263 | 0.263 | 0.003 |
| 17 | 7D Other | 0 | | 0.289 | 0.289 | 0.000 | | 0.138 | 0.138 | 0.000 | | 0.232 | 0.232 | 0.000 |
| 18 | 7D Total | 0 | | 0.606 | 0.606 | 0.000 | | 0.288 | 0.288 | 0.000 | | 0.496 | 0.496 | 0.000 |
| 19 | 8D | 0.001 | | 0.723 | 0.723 | 0.001 | | 0.233 | 0.233 | 0.000 | | 0.673 | 0.673 | 0.001 |
| 20 | 4F 2378 | 0.1 | | 0.418 | 0.418 | 0.042 | | 0.015 | 0.015 | 0.001 | | 0.025 | 0.025 | 0.002 |
| 21 | 4F Other | 0 | | 0.623 | 0.623 | 0.000 | | 0.267 | 0.267 | 0.000 | | 0.470 | 0.470 | 0.000 |
| 22 | 4F Total | 0 | | 1.041 | 1.041 | 0.000 | | 0.282 | 0.282 | 0.000 | | 0.495 | 0.495 | 0.000 |
| 23 | 5F 12378 | 0.05 | | 0.055 | 0.055 | 0.003 | | 0.019 | 0.019 | 0.001 | | 0.033 | 0.033 | 0.002 |
| 24 | 5F 23478 | 0.5 | | 0.110 | 0.110 | 0.055 | | 0.032 | 0.032 | 0.016 | | 0.007 | 0.007 | 0.003 |
| 25 | 5F Other | 0 | | 0.829 | 0.829 | 0.000 | | 0.158 | 0.158 | 0.000 | | 0.334 | 0.334 | 0.000 |
| 26 | 5F Total | 0 | | 0.994 | 0.994 | 0.000 | | 0.209 | 0.209 | 0.000 | | 0.374 | 0.374 | 0.000 |
| 27 | 6F 123478 | 0.1 | | 0.125 | 0.125 | 0.012 | 1 | 0.034 | 0.017 | 0.002 | 1 | 0.085 | 0.043 | 0.004 |
| 28 | 6F 123678 | 0.1 | 1 | 0.115 | 0.058 | 0.006 | 1 | 0.034 | 0.017 | 0.002 | 1 | 0.073 | 0.037 | 0.004 |
| 29 | 6F 123789 | 0.1 | | 0.075 | 0.075 | 0.007 | | 0.045 | 0.045 | 0.005 | | 0.052 | 0.052 | 0.005 |
| 30 | 6F 234678 | 0.1 | 1 | 0.229 | 0.114 | 0.011 | | 0.072 | 0.072 | 0.007 | | 0.141 | 0.141 | 0.014 |
| 31 | 6F Other | 0 | | 0.286 | 0.286 | 0.000 | | 0.056 | 0.056 | 0.000 | | 0.346 | 0.346 | 0.000 |
| 32 | 6F Total | 0 | | 0.829 | 0.829 | 0.000 | | 0.241 | 0.241 | 0.000 | | 0.697 | 0.697 | 0.000 |
| 33 | 7F 1234678 | 0.01 | | 0.461 | 0.461 | 0.005 | | 0.098 | 0.098 | 0.001 | | 0.324 | 0.324 | 0.003 |
| 34 | 7F 1234789 | 0.01 | 1 | 0.094 | 0.047 | 0.000 | | 0.029 | 0.029 | 0.000 | | 0.059 | 0.059 | 0.001 |
| 35 | 7F Other | 0 | | 0.152 | 0.152 | 0.000 | | 0.083 | 0.083 | 0.000 | | 0.226 | 0.226 | 0.000 |
| 36 | 7F Total | 0 | | 0.706 | 0.706 | 0.000 | | 0.210 | 0.210 | 0.000 | | 0.610 | 0.610 | 0.000 |
| 37 | 8F | 0.001 | | 0.315 | 0.315 | 0.000 | | 0.066 | 0.066 | 0.000 | | 0.323 | 0.323 | 0.000 |
| 38 | Total PCDD/PCDF | | | 7.124 | 7.124 | | | 2.926 | 2.926 | | | 5.088 | 5.088 | |
| 39 | TEQ | | 34.2 | 0.209 | | 0.174 | 9.7 | 0.070 | | 0.066 | 31.6 | 0.085 | | 0.071 |