

| | B | C |
|----|--------------------------------------|-----------------------------------|
| 1 | Source Description | |
| 2 | | |
| 3 | Phase I ID No. | 479 |
| 4 | EPA ID No. | NYD080469935 |
| 5 | Facility Name | THERMALKEM (NORLITE) |
| 6 | Facility Location | |
| 7 | City | Cohoes |
| 8 | State | NY |
| 9 | Unit ID Name/No. | Kiln No. 2 |
| 10 | Other Sister Facilities | |
| 11 | Number of Sister Facilities | Sister unit of ID No. 307 |
| 12 | Combustor Class | Lightweight Aggregate Kiln (LWAK) |
| 13 | Combustor Type | |
| 14 | Combustor Characteristics | |
| 15 | Capacity (MMBtu/hr) | |
| 16 | Soot Blowing | |
| 17 | APCS Detailed Acronym | MC/HE/FF/VS/DM |
| 18 | APCS General Class | C, HE, FF, HEWS |
| 19 | APCS Characteristics | |
| 20 | Hazardous Wastes | Liq, solid |
| 21 | Haz Waste Description | NOS. 2,4,6 FUEL OIL, NG, LGF |
| 22 | Supplemental Fuel | |
| 23 | | |
| 24 | Stack Characteristics | |
| 25 | Diameter (ft) | 5.0 |
| 26 | Height (ft) | 0.0 |
| 27 | Gas Velocity (ft/sec) | 10.7 |
| 28 | Gas Temperature (°F) | 138.8 |
| 29 | | |
| 30 | Permitting Status | |
| 31 | HWC Burn Status (Date if Terminated) | |

| | B | C |
|----|------------------------------|--|
| 1 | Condition Description | |
| 2 | | |
| 3 | 479C1 | |
| 4 | | |
| 5 | Report Name/Date | Supplemental Low Grade Fuel Trial Burn, Kiln No. 2, Norlite Corporation, Cohoes, New York, June 1990, Prepared by APCC |
| 6 | Report Prepare | APCC |
| 7 | Testing Firm | APCC |
| 8 | Cond Descr | 100% LOW GRADE FUEL (LGF) |
| 9 | Testing Dates | June 12-13, 1990 |
| 10 | Cond Dates | Jun-90 |
| 11 | | |
| 12 | 479C2 | |
| 13 | | |
| 14 | Report Name/Date | Supplemental Low Grade Fuel Trial Burn, Kiln No. 2, Norlite Corporation, Cohoes, New York, June 1990, Prepared by APCC |
| 15 | Report Prepare | APCC |
| 16 | Testing Firm | APCC |
| 17 | Cond Descr | 100% COAL |
| 18 | Testing Dates | June 15, 1990 |
| 19 | Cond Dates | Jun-90 |

| | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
|----|------------------------------|----------|---------|---|----|---------|----|---------|----|---------|---|---------|---|----------|---|----------|---|----------|
| 1 | Stack Gas Emissions 2 | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | 479C1 | | | | | R1 | | R2 | | R3 | | R4 | | R5 | | R6 | | Cond Avg |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | PM | E1 | gr/dscf | y | | 0.01447 | | 0.01297 | | 0.01782 | | 0.01914 | | | | | | 0.01610 |
| 7 | CO (RA) | E3 | ppmv | y | | | | | | | | 39.00 | | 45.00 | | 56.00 | | |
| 8 | HCl | E1 | ppmv | y | | 4.38 | | 4.18 | | 4.51 | | | | | | | | 4.36 |
| 9 | Arsenic | E2 | ug/dscm | y | | 5.69 | | 4.00 | | 4.86 | | 3.03 | | | | | | 4.4 |
| 10 | Cadmium | E2 | ug/dscm | y | nd | 2.27 | nd | 1.54 | nd | 3.60 | | 7.31 | | | | | | 3.7 |
| 11 | Chromium | E2 | ug/dscm | y | | 12.01 | | 8.78 | | 15.82 | | 12.36 | | | | | | 12.2 |
| 12 | Copper | E2 | ug/dscm | y | | 11.61 | | 7.20 | | 1.14 | | 0.57 | | | | | | 5.1 |
| 13 | Lead | E2 | ug/dscm | y | | 11.17 | | 9.69 | | 9.17 | | 7.56 | | | | | | 9.4 |
| 14 | Zinc | E2 | ug/dscm | y | | 122.52 | | 81.46 | | 86.07 | | 59.10 | | | | | | 87.3 |
| 15 | SVM | E2 | ug/dscm | y | | 13.44 | | 11.23 | | 12.77 | | 14.87 | | | | | | 13.1 |
| 16 | LVM | E2 | ug/dscm | y | | 17.71 | | 12.79 | | 20.68 | | 15.39 | | | | | | 16.6 |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | 1,1,1-Trichloroethane | DRE | % | | | | | | | | | 99.999 | | 99.9992 | | 99.9994 | | |
| 19 | Carbon Tetrachloride | DRE | % | | | | | | | | | 99.9997 | | 99.9994 | | 99.9995 | | |
| 20 | Tetrachloroethene | DRE | % | | | | | | | | | 99.9996 | | 99.9993 | | 99.9993 | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | Sampling Train | Halogens | E1 | | | | | | | | | | | | | | | |
| 23 | Stack Gas Flowrate | | dscfm | | | 30063 | | 30719 | | 30630 | | | | | | | | |
| 24 | O2 | | % | | | 14.8 | | 15.1 | | 15.4 | | | | | | | | |
| 25 | Moisture | | % | | | 16.6 | | 15.9 | | 15.7 | | | | | | | | |
| 26 | Temperature | | °F | | | 138 | | 137 | | 139 | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | |
| 28 | Sampling Train | Metals | E2 | | | | | | | | | | | | | | | |
| 29 | Stack Gas Flowrate | | dscfm | | | 30063 | | 30719 | | 30630 | | 31058 | | | | | | |
| 30 | O2 | | % | | | 14.8 | | 15.1 | | 15.4 | | 15.4 | | | | | | |
| 31 | Moisture | | % | | | 16.56 | | 15.88 | | 15.66 | | 15.85 | | | | | | |
| 32 | Temperature | | °F | | | 138 | | 137 | | 139 | | 141 | | | | | | |
| 33 | | | | | | | | | | | | | | | | | | |
| 34 | Sampling Train | THC & CO | E3 | | | | | | | | | | | | | | | |
| 35 | Stack Gas Flowrate | | dscfm | | | | | | | | | 31058 | | 31058 | | 30006 | | |
| 36 | O2 | | % | | | | | | | | | 15.4 | | 15.14286 | | 15.14286 | | |
| 37 | Moisture | | % | | | | | | | | | | | | | | | |
| 38 | Temperature | | °F | | | | | | | | | | | | | | | |
| 39 | | | | | | | | | | | | | | | | | | |
| 40 | 479C2 | | | | | R1 | | R2 | | R3 | | R4 | | R5 | | R6 | | Cond Avg |
| 41 | | | | | | | | | | | | | | | | | | |
| 42 | PM | E1 | gr/dscf | y | | 0.01862 | | 0.01505 | | 0.01632 | | | | | | | | 0.01667 |
| 43 | CO (RA) | E1 | ppmv | y | | | | | | | | 29.00 | | 34.00 | | 27.00 | | 30.00 |
| 44 | HCl | E1 | ppmv | y | | 4.49 | | 2.84 | | 4.91 | | | | | | | | 4.08 |
| 45 | Arsenic | E2 | ug/dscm | y | | 3.18 | | 5.04 | | 4.88 | | | | | | | | 4.37 |
| 46 | Cadmium | E2 | ug/dscm | y | | 1.97 | | 1.85 | | 1.62 | | | | | | | | 1.82 |
| 47 | Chromium | E2 | ug/dscm | y | | 11.12 | | 4.42 | | 9.68 | | | | | | | | 8.40 |
| 48 | Copper | E2 | ug/dscm | y | | 1.97 | | 1.85 | | 1.62 | | | | | | | | 1.82 |
| 49 | Lead | E2 | ug/dscm | y | | 5.59 | | 7.20 | | 4.01 | | | | | | | | 5.60 |
| 50 | Zinc | E2 | ug/dscm | y | | 17.97 | | 24.28 | | 1.62 | | | | | | | | 14.62 |
| 51 | SVM | E2 | ug/dscm | y | | 7.56 | | 9.05 | | 5.63 | | | | | | | | 7.42 |
| 52 | LVM | E2 | ug/dscm | y | | 14.30 | | 9.46 | | 14.56 | | | | | | | | 12.77 |
| 53 | | | | | | | | | | | | | | | | | | |
| 54 | Sampling Train | Halogens | E1 | | | | | | | | | | | | | | | |
| 55 | Stack Gas Flowrate | | dscfm | | | 31058 | | 31911 | | 31889 | | | | | | | | |
| 56 | O2 | | % | | | 15.4 | | 15.7 | | 15.4 | | | | | | | | |
| 57 | Moisture | | % | | | 15.8 | | 14.1 | | 13.5 | | | | | | | | |
| 58 | Temperature | | °F | | | 141 | | 138 | | 142 | | | | | | | | |
| 59 | | | | | | | | | | | | | | | | | | |
| 60 | Sampling Train | Metals | E2 | | | | | | | | | | | | | | | |
| 61 | Stack Gas Flowrate | | dscfm | | | 31911 | | 31889 | | 32108 | | | | | | | | |
| 62 | O2 | | % | | | 15.7 | | 15.4 | | 14.7 | | | | | | | | |
| 63 | Moisture | | % | | | 14.13 | | 13.48 | | 14.26 | | | | | | | | |
| 64 | Temperature | | °F | | | 138 | | 142 | | 145 | | | | | | | | |

| | 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 | 479C1 | | R1 | R2 | R3 | R4 | R5 | R6 | R1 | R2 | R3 | R4 | R5 | R6 | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Feedstream Number | | F1 | F1 | F1 | F1 | F1 | F1 | F2 | F2 | F2 | F2 | F2 | F2 | | | | | | | | | | | | | |
| 7 | Feed Class | | Liq HW | Liq HW | Liq HW | Liq HW | Liq HW | Liq HW | Raw material | Raw material | Raw material | Raw material | Raw material | Raw material | | | | | | | | | | | | | |
| 8 | Feed Class 2 | | HW | HW | HW | HW | HW | HW | RM | RM | RM | RM | RM | RM | | | | | | | | | | | | | |
| 9 | Feedstream Description | | Waste | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Feedrate | gpm | 10 | 10.1 | 9.9 | 10.2 | 10.1 | 10 | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Feedrate | lb/hr | | | | | | | 6080 | | | | 5760 | | | | 6000 | | | | 6320 | | | 6040 | | | 6140 |

| | C | D | E | F | G | H | I | J |
|----|------------------------|--------|------|------|------|------|------|------|
| 1 | Process Info 2 | | | | | | | |
| 2 | | | | | | | | |
| 3 | 479C1 | | R1 | R2 | R3 | R4 | R5 | R6 |
| 4 | | | | | | | | |
| 5 | Combustion Temperature | F | 2659 | 2643 | 2620 | 2603 | 2606 | 2704 |
| 6 | Cyclone Pressure Drop | in H2O | 2.2 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| 7 | WS Pressure Drop | in H2O | | | | 6.3 | 6.1 | 6.2 |
| 8 | FF Pressure Drop | in H2O | 5.3 | 5.4 | 5.3 | 5.2 | 5 | 5 |
| 9 | | | | | | | | |
| 10 | 479C2 | | R1 | R2 | R3 | R4 | R5 | R6 |
| 11 | | | | | | | | |
| 12 | Combustion Temperature | F | 2253 | 1534 | 1530 | 1533 | 1532 | 1533 |
| 13 | Cyclone Pressure Drop | in H2O | 2.7 | 2.7 | 2.7 | 2.7 | 2.5 | 2.6 |
| 14 | WS Pressure Drop | in H2O | 5 | 5 | 5 | 4.7 | 4.7 | 4.6 |
| 15 | FF Pressure Drop | in H2O | 6 | 6.2 | 6 | 6 | 6 | 5.9 |