

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: NE
 3. CITY: LOUISVILLE
 4. EP ID: 406 DEVICE NAME: KILN NO. 2

EPA NED007260672
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

5. Type: CONTROLLED

6. Description: EMISSIONS Process Group: DRY KILN Location: STACK-MAIN Phase: GAS

7. Category: Dioxin & Furan

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
4D 2378	406C1R1	ND	6.00e-3 ng/dscm 7%O2	1.65e-9 lbs/hr	CE7%O2
4D 2378	406C1R2	ND	5.57e-3 ng/dscm 7%O2	1.65e-9 lbs/hr	CE7%O2
4D 2378	406C1R3		2.51e-2 ng/dscm 7%O2	6.62e-9 lbs/hr	CE7%O2
4D 2378	406C1R4		1.62e-2 ng/dscm 7%O2	4.09e-9 lbs/hr	CE7%O2
4D Other	406C1R1		1.41e-1 ng/dscm 7%O2	3.89e-8 lbs/hr	OCE
4D Other	406C1R2		1.39e-1 ng/dscm 7%O2	4.12e-8 lbs/hr	OCE
4D Other	406C1R3		9.78e-1 ng/dscm 7%O2	2.58e-7 lbs/hr	OCE
4D Other	406C1R4		4.69e-1 ng/dscm 7%O2	1.19e-7 lbs/hr	OCE
4D Total	406C1R1		1.47e-1 ng/dscm 7%O2	4.05e-8 lbs/hr	CE7%O2
4D Total	406C1R2		1.45e-1 ng/dscm 7%O2	4.28e-8 lbs/hr	CE7%O2
4D Total	406C1R3		1.00e+0 ng/dscm 7%O2	2.65e-7 lbs/hr	CE7%O2
4D Total	406C1R4		4.85e-1 ng/dscm 7%O2	1.23e-7 lbs/hr	CE7%O2
4F 2378	406C1R1		7.79e-1 ng/dscm 7%O2	2.15e-7 lbs/hr	CE7%O2
4F 2378	406C1R2		7.79e-1 ng/dscm 7%O2	2.31e-7 lbs/hr	CE7%O2
4F 2378	406C1R3		1.54e+0 ng/dscm 7%O2	4.06e-7 lbs/hr	CE7%O2
4F 2378	406C1R4		9.38e-1 ng/dscm 7%O2	2.37e-7 lbs/hr	CE7%O2
4F Other	406C1R1		3.27e+0 ng/dscm 7%O2	9.01e-7 lbs/hr	OCE
4F Other	406C1R2		3.09e+0 ng/dscm 7%O2	9.14e-7 lbs/hr	OCE
4F Other	406C1R3		7.02e+0 ng/dscm 7%O2	1.85e-6 lbs/hr	OCE
4F Other	406C1R4		4.56e+0 ng/dscm 7%O2	1.15e-6 lbs/hr	OCE
4F Total	406C1R1		4.05e+0 ng/dscm 7%O2	1.12e-6 lbs/hr	CE7%O2
4F Total	406C1R2		3.87e+0 ng/dscm 7%O2	1.14e-6 lbs/hr	CE7%O2
4F Total	406C1R3		8.56e+0 ng/dscm 7%O2	2.26e-6 lbs/hr	CE7%O2
4F Total	406C1R4		5.50e+0 ng/dscm 7%O2	1.39e-6 lbs/hr	CE7%O2
5D 12378	406C1R1		1.80e-2 ng/dscm 7%O2	4.96e-9 lbs/hr	CE7%O2
5D 12378	406C1R2		1.95e-2 ng/dscm 7%O2	5.76e-9 lbs/hr	CE7%O2
5D 12378	406C1R3		1.25e-1 ng/dscm 7%O2	3.31e-8 lbs/hr	CE7%O2
5D 12378	406C1R4		5.50e-2 ng/dscm 7%O2	1.39e-8 lbs/hr	CE7%O2
5D Other	406C1R1		2.19e-1 ng/dscm 7%O2	6.03e-8 lbs/hr	OCE
5D Other	406C1R2		2.59e-1 ng/dscm 7%O2	7.66e-8 lbs/hr	OCE
5D Other	406C1R3		1.16e+0 ng/dscm 7%O2	3.06e-7 lbs/hr	OCE
5D Other	406C1R4		5.59e-1 ng/dscm 7%O2	1.41e-7 lbs/hr	OCE
5D Total	406C1R1		2.37e-1 ng/dscm 7%O2	6.53e-8 lbs/hr	CE7%O2
5D Total	406C1R2		2.78e-1 ng/dscm 7%O2	8.23e-8 lbs/hr	CE7%O2
5D Total	406C1R3		1.29e+0 ng/dscm 7%O2	3.40e-7 lbs/hr	CE7%O2
5D Total	406C1R4		6.14e-1 ng/dscm 7%O2	1.55e-7 lbs/hr	CE7%O2
5F 12378	406C1R1		1.38e-1 ng/dscm 7%O2	3.80e-8 lbs/hr	CE7%O2
5F 12378	406C1R2	ND	1.53e-1 ng/dscm 7%O2	4.53e-8 lbs/hr	CE7%O2
5F 12378	406C1R3		4.70e-1 ng/dscm 7%O2	1.24e-7 lbs/hr	CE7%O2
5F 12378	406C1R4		2.23e-1 ng/dscm 7%O2	5.64e-8 lbs/hr	CE7%O2
5F 23478	406C1R1		2.94e-1 ng/dscm 7%O2	8.10e-8 lbs/hr	CE7%O2
5F 23478	406C1R2		3.34e-1 ng/dscm 7%O2	9.88e-8 lbs/hr	CE7%O2
5F 23478	406C1R3	ND	9.41e-1 ng/dscm 7%O2	2.48e-7 lbs/hr	CE7%O2
5F 23478	406C1R4		3.56e-1 ng/dscm 7%O2	8.99e-8 lbs/hr	CE7%O2
5F Other	406C1R1		2.21e+0 ng/dscm 7%O2	6.08e-7 lbs/hr	OCE
5F Other	406C1R2		1.55e+0 ng/dscm 7%O2	4.57e-7 lbs/hr	OCE
5F Other	406C1R3		1.47e+0 ng/dscm 7%O2	3.89e-7 lbs/hr	OCE
5F Other	406C1R4		2.65e+0 ng/dscm 7%O2	6.71e-7 lbs/hr	OCE
5F Total	406C1R1		2.64e+0 ng/dscm 7%O2	7.27e-7 lbs/hr	CE7%O2
5F Total	406C1R2		2.03e+0 ng/dscm 7%O2	6.01e-7 lbs/hr	CE7%O2
5F Total	406C1R3		2.89e+0 ng/dscm 7%O2	7.62e-7 lbs/hr	CE7%O2
5F Total	406C1R4		3.23e+0 ng/dscm 7%O2	8.17e-7 lbs/hr	CE7%O2
6D 123478	406C1R1		1.50e-2 ng/dscm 7%O2	4.13e-9 lbs/hr	CE7%O2
6D 123478	406C1R2		1.39e-2 ng/dscm 7%O2	4.12e-9 lbs/hr	CE7%O2

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EPA ID: NED007260672
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

6D 123478	406C1R3	9.72e-2	ng/dscm	7%O2	2.57e-8	lbs/hr	CE7%O2
6D 123478	406C1R4	5.82e-2	ng/dscm	7%O2	1.47e-8	lbs/hr	CE7%O2
6D 123678	406C1R1	1.50e-2	ng/dscm	7%O2	4.13e-9	lbs/hr	CE7%O2
6D 123678	406C1R2	1.67e-2	ng/dscm	7%O2	4.94e-9	lbs/hr	CE7%O2
6D 123678	406C1R3	8.15e-2	ng/dscm	7%O2	2.15e-8	lbs/hr	CE7%O2
6D 123678	406C1R4	4.53e-2	ng/dscm	7%O2	1.14e-8	lbs/hr	CE7%O2
6D 123789	406C1R1	2.70e-2	ng/dscm	7%O2	7.44e-9	lbs/hr	CE7%O2
6D 123789	406C1R2	3.06e-2	ng/dscm	7%O2	9.06e-9	lbs/hr	CE7%O2
6D 123789	406C1R3	2.07e-1	ng/dscm	7%O2	5.47e-8	lbs/hr	CE7%O2
6D 123789	406C1R4	1.10e-1	ng/dscm	7%O2	2.78e-8	lbs/hr	CE7%O2
6D Other	406C1R1	1.62e-1	ng/dscm	7%O2	4.46e-8	lbs/hr	OCE
6D Other	406C1R2	2.45e-1	ng/dscm	7%O2	7.24e-8	lbs/hr	OCE
6D Other	406C1R3	7.43e-1	ng/dscm	7%O2	1.96e-7	lbs/hr	OCE
6D Other	406C1R4	4.66e-1	ng/dscm	7%O2	1.18e-7	lbs/hr	OCE
6D Total	406C1R1	2.19e-1	ng/dscm	7%O2	6.03e-8	lbs/hr	CE7%O2
6D Total	406C1R2	3.06e-1	ng/dscm	7%O2	9.06e-8	lbs/hr	CE7%O2
6D Total	406C1R3	1.13e+0	ng/dscm	7%O2	2.98e-7	lbs/hr	CE7%O2
6D Total	406C1R4	6.79e-1	ng/dscm	7%O2	1.72e-7	lbs/hr	CE7%O2
6F 123478	406C1R1	1.83e-1	ng/dscm	7%O2	5.04e-8	lbs/hr	CE7%O2
6F 123478	406C1R2	1.89e-1	ng/dscm	7%O2	5.60e-8	lbs/hr	CE7%O2
6F 123478	406C1R3	7.84e-1	ng/dscm	7%O2	2.07e-7	lbs/hr	CE7%O2
6F 123478	406C1R4	3.88e-1	ng/dscm	7%O2	9.81e-8	lbs/hr	CE7%O2
6F 123678	406C1R1	8.99e-2	ng/dscm	7%O2	2.48e-8	lbs/hr	CE7%O2
6F 123678	406C1R2	9.19e-2	ng/dscm	7%O2	2.72e-8	lbs/hr	CE7%O2
6F 123678	406C1R3	3.45e-1	ng/dscm	7%O2	9.11e-8	lbs/hr	CE7%O2
6F 123678	406C1R4	1.68e-1	ng/dscm	7%O2	4.25e-8	lbs/hr	CE7%O2
6F 123789	406C1R1	1.20e-2	ng/dscm	7%O2	3.31e-9	lbs/hr	CE7%O2
6F 123789	406C1R2	1.95e-2	ng/dscm	7%O2	5.76e-9	lbs/hr	CE7%O2
6F 123789	406C1R3	5.64e-2	ng/dscm	7%O2	1.49e-8	lbs/hr	CE7%O2
6F 123789	406C1R4	2.91e-2	ng/dscm	7%O2	7.36e-9	lbs/hr	CE7%O2
6F 234678	406C1R1	1.71e-1	ng/dscm	7%O2	4.71e-8	lbs/hr	CE7%O2
6F 234678	406C1R2	1.81e-1	ng/dscm	7%O2	5.35e-8	lbs/hr	CE7%O2
6F 234678	406C1R3	4.70e-1	ng/dscm	7%O2	1.24e-7	lbs/hr	CE7%O2
6F 234678	406C1R4	2.59e-1	ng/dscm	7%O2	6.54e-8	lbs/hr	CE7%O2
6F Other	406C1R1	4.74e-1	ng/dscm	7%O2	1.31e-7	lbs/hr	OCE
6F Other	406C1R2	5.21e-1	ng/dscm	7%O2	1.54e-7	lbs/hr	OCE
6F Other	406C1R3	1.70e+0	ng/dscm	7%O2	4.49e-7	lbs/hr	OCE
6F Other	406C1R4	9.99e-1	ng/dscm	7%O2	2.53e-7	lbs/hr	OCE
6F Total	406C1R1	9.29e-1	ng/dscm	7%O2	2.56e-7	lbs/hr	CE7%O2
6F Total	406C1R2	1.00e+0	ng/dscm	7%O2	2.96e-7	lbs/hr	CE7%O2
6F Total	406C1R3	3.36e+0	ng/dscm	7%O2	8.86e-7	lbs/hr	CE7%O2
6F Total	406C1R4	1.84e+0	ng/dscm	7%O2	4.66e-7	lbs/hr	CE7%O2
7D 1234678	406C1R1	6.30e-2	ng/dscm	7%O2	1.74e-8	lbs/hr	CE7%O2
7D 1234678	406C1R2	8.07e-2	ng/dscm	7%O2	2.39e-8	lbs/hr	CE7%O2
7D 1234678	406C1R3	4.08e-1	ng/dscm	7%O2	1.08e-7	lbs/hr	CE7%O2
7D 1234678	406C1R4	2.42e-1	ng/dscm	7%O2	6.13e-8	lbs/hr	CE7%O2
7D Other	406C1R1	6.30e-2	ng/dscm	7%O2	1.74e-8	lbs/hr	OCE
7D Other	406C1R2	7.79e-2	ng/dscm	7%O2	2.31e-8	lbs/hr	OCE
7D Other	406C1R3	3.45e-1	ng/dscm	7%O2	9.11e-8	lbs/hr	OCE
7D Other	406C1R4	2.10e-1	ng/dscm	7%O2	5.31e-8	lbs/hr	OCE
7D Total	406C1R1	1.26e-1	ng/dscm	7%O2	3.47e-8	lbs/hr	CE7%O2
7D Total	406C1R2	1.59e-1	ng/dscm	7%O2	4.69e-8	lbs/hr	CE7%O2
7D Total	406C1R3	7.53e-1	ng/dscm	7%O2	1.99e-7	lbs/hr	CE7%O2
7D Total	406C1R4	4.53e-1	ng/dscm	7%O2	1.14e-7	lbs/hr	CE7%O2
7F 1234678	406C1R1	8.39e-2	ng/dscm	7%O2	2.31e-8	lbs/hr	CE7%O2
7F 1234678	406C1R2	1.03e-1	ng/dscm	7%O2	3.05e-8	lbs/hr	CE7%O2
7F 1234678	406C1R3	5.02e-1	ng/dscm	7%O2	1.32e-7	lbs/hr	CE7%O2
7F 1234678	406C1R4	2.46e-1	ng/dscm	7%O2	6.21e-8	lbs/hr	CE7%O2
7F 1234789	406C1R1	2.10e-2	ng/dscm	7%O2	5.79e-9	lbs/hr	CE7%O2
7F 1234789	406C1R2	3.62e-2	ng/dscm	7%O2	1.07e-8	lbs/hr	CE7%O2

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 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

7F 1234789	406C1R3	1.41e-1	ng/dscm	7%O2	3.73e-8	lbs/hr	CE7%O2
7F 1234789	406C1R4	6.79e-2	ng/dscm	7%O2	1.72e-8	lbs/hr	CE7%O2
7F Other	406C1R1	6.60e-2	ng/dscm	7%O2	1.82e-8	lbs/hr	OCE
7F Other	406C1R2	9.47e-2	ng/dscm	7%O2	2.80e-8	lbs/hr	OCE
7F Other	406C1R3	3.92e-1	ng/dscm	7%O2	1.04e-7	lbs/hr	OCE
7F Other	406C1R4	2.04e-1	ng/dscm	7%O2	5.15e-8	lbs/hr	OCE
7F Total	406C1R1	1.71e-1	ng/dscm	7%O2	4.71e-8	lbs/hr	CE7%O2
7F Total	406C1R2	2.34e-1	ng/dscm	7%O2	6.92e-8	lbs/hr	CE7%O2
7F Total	406C1R3	1.03e+0	ng/dscm	7%O2	2.73e-7	lbs/hr	CE7%O2
7F Total	406C1R4	5.17e-1	ng/dscm	7%O2	1.31e-7	lbs/hr	CE7%O2
8D	406C1R1	1.95e-1	ng/dscm	7%O2	5.37e-8	lbs/hr	CE7%O2
8D	406C1R2	2.06e-1	ng/dscm	7%O2	6.09e-8	lbs/hr	CE7%O2
8D	406C1R3	5.33e-1	ng/dscm	7%O2	1.41e-7	lbs/hr	CE7%O2
8D	406C1R4	3.56e-1	ng/dscm	7%O2	8.99e-8	lbs/hr	CE7%O2
8F	406C1R1	2.10e-2	ng/dscm	7%O2	5.79e-9	lbs/hr	CE7%O2
8F	406C1R2	4.18e-2	ng/dscm	7%O2	1.23e-8	lbs/hr	CE7%O2
8F	406C1R3	1.25e-1	ng/dscm	7%O2	3.31e-8	lbs/hr	CE7%O2
8F	406C1R4	7.44e-2	ng/dscm	7%O2	1.88e-8	lbs/hr	CE7%O2
TEQ	406C1R1	3.00e-1	ng/dscm	7%O2	8.27e-8	lbs/hr	CCET
TEQ	406C1R2	3.25e-1	ng/dscm	7%O2	9.60e-8	lbs/hr	CCET
TEQ	406C1R3	9.51e-1	ng/dscm	7%O2	2.51e-7	lbs/hr	CCET
TEQ	406C1R4	4.38e-1	ng/dscm	7%O2	1.11e-7	lbs/hr	CCET
Total PCDD/PCDF	406C1R1	8.73e+0	ng/dscm	7%O2	2.41e-6	lbs/hr	CCET
Total PCDD/PCDF	406C1R2	8.27e+0	ng/dscm	7%O2	2.45e-6	lbs/hr	CCET
Total PCDD/PCDF	406C1R3	2.07e+1	ng/dscm	7%O2	5.46e-6	lbs/hr	CCET
Total PCDD/PCDF	406C1R4	1.38e+1	ng/dscm	7%O2	3.48e-6	lbs/hr	CCET

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration			Mass Rate	Calc	
Chlorine	406C1R1	ND	1.98e-1	ppmv	7%O2	1.60e-1 lbs/hr	CC7%O2
Chlorine	406C1R2		2.07e-1	ppmv	7%O2	1.80e-1 lbs/hr	CC7%O2
Chlorine	406C1R3	ND	1.80e-1	ppmv	7%O2	1.40e-1 lbs/hr	CC7%O2
Chlorine	406C1R4	ND	1.88e-1	ppmv	7%O2	1.40e-1 lbs/hr	CC7%O2
Chlorine	406C1R5		1.88e-1	ppmv	7%O2	1.40e-1 lbs/hr	CC7%O2
Chlorine	406C1R6		2.53e-1	ppmv	7%O2	1.80e-1 lbs/hr	CC7%O2
Chlorine	406C1R7		2.23e-1	ppmv	7%O2	1.70e-1 lbs/hr	CC7%O2
Chlorine	406C1R8		1.93e-1	ppmv	7%O2	1.40e-1 lbs/hr	CC7%O2
HCl	406C1R1		1.22e+2	ppmv	7%O2	5.07e+1 lbs/hr	CC7%O2
HCl	406C1R2		7.15e+1	ppmv	7%O2	3.20e+1 lbs/hr	CC7%O2
HCl	406C1R3		6.28e+1	ppmv	7%O2	2.51e+1 lbs/hr	CC7%O2
HCl	406C1R4		6.41e+1	ppmv	7%O2	2.45e+1 lbs/hr	CC7%O2
HCl	406C1R5		5.47e+0	ppmv	7%O2	2.10e+0 lbs/hr	CC7%O2
HCl	406C1R6		5.18e+0	ppmv	7%O2	1.90e+0 lbs/hr	CC7%O2
HCl	406C1R7		4.18e+0	ppmv	7%O2	1.64e+0 lbs/hr	CC7%O2
HCl	406C1R8		4.67e+0	ppmv	7%O2	1.74e+0 lbs/hr	CC7%O2

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration			Mass Rate	Calc	
Antimony	406C1R5	ND	1.38e+2	ug/dscm	7%O2	3.50e-2 lbs/hr	CC7%O2
Antimony	406C1R6	ND	1.32e+2	ug/dscm	7%O2	3.20e-2 lbs/hr	CC7%O2
Antimony	406C1R7	ND	1.24e+2	ug/dscm	7%O2	3.22e-2 lbs/hr	CC7%O2
Antimony	406C1R8	ND	1.29e+2	ug/dscm	7%O2	3.18e-2 lbs/hr	CC7%O2
Arsenic	406C1R5	ND	4.22e+1	ug/dscm	7%O2	1.07e-2 lbs/hr	CC7%O2
Arsenic	406C1R6	ND	4.50e+1	ug/dscm	7%O2	1.09e-2 lbs/hr	CC7%O2
Arsenic	406C1R7	ND	4.25e+1	ug/dscm	7%O2	1.10e-2 lbs/hr	CC7%O2
Arsenic	406C1R8	ND	4.39e+1	ug/dscm	7%O2	1.08e-2 lbs/hr	CC7%O2
Barium	406C1R5	ND	9.98e+2	ug/dscm	7%O2	2.53e-1 lbs/hr	CC7%O2
Barium	406C1R6	ND	1.06e+3	ug/dscm	7%O2	2.56e-1 lbs/hr	CC7%O2

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EPA ID: NED007260672
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

Barium	406C1R7	ND	9.97e+2	ug/dscm	7%O2	2.58e-1	lbs/hr	CC7%O2
Barium	406C1R8	ND	1.03e+3	ug/dscm	7%O2	2.54e-1	lbs/hr	CC7%O2
Beryllium	406C1R5	ND	1.49e+0	ug/dscm	7%O2	3.79e-4	lbs/hr	CC7%O2
Beryllium	406C1R6	ND	1.59e+0	ug/dscm	7%O2	3.84e-4	lbs/hr	CC7%O2
Beryllium	406C1R7	ND	1.49e+0	ug/dscm	7%O2	3.86e-4	lbs/hr	CC7%O2
Beryllium	406C1R8	ND	1.55e+0	ug/dscm	7%O2	3.81e-4	lbs/hr	CC7%O2
Cadmium	406C1R5	ND	2.74e+1	ug/dscm	7%O2	6.95e-3	lbs/hr	CC7%O2
Cadmium	406C1R6	ND	4.26e+1	ug/dscm	7%O2	1.03e-2	lbs/hr	CC7%O2
Cadmium	406C1R7	ND	4.83e+1	ug/dscm	7%O2	1.25e-2	lbs/hr	CC7%O2
Cadmium	406C1R8	ND	5.20e+1	ug/dscm	7%O2	1.28e-2	lbs/hr	CC7%O2
Chromium	406C1R5	ND	8.95e+0	ug/dscm	7%O2	2.27e-3	lbs/hr	CC7%O2
Chromium	406C1R6	ND	5.78e+0	ug/dscm	7%O2	1.40e-3	lbs/hr	CC7%O2
Chromium	406C1R7	ND	1.14e+1	ug/dscm	7%O2	2.95e-3	lbs/hr	CC7%O2
Chromium	406C1R8	ND	7.76e+0	ug/dscm	7%O2	1.91e-3	lbs/hr	CC7%O2
Chromium (Hex)	406C1R1		1.13e+1	ug/dscm	7%O2	3.10e-3	lbs/hr	CC7%O2
Chromium (Hex)	406C1R2		1.86e+1	ug/dscm	7%O2	5.50e-3	lbs/hr	CC7%O2
Chromium (Hex)	406C1R3		1.33e+1	ug/dscm	7%O2	3.50e-3	lbs/hr	CC7%O2
Chromium (Hex)	406C1R4		2.02e+0	ug/dscm	7%O2	5.10e-4	lbs/hr	CC7%O2
Lead	406C1R5	ND	4.10e+2	ug/dscm	7%O2	1.04e-1	lbs/hr	CC7%O2
Lead	406C1R6	ND	6.36e+2	ug/dscm	7%O2	1.54e-1	lbs/hr	CC7%O2
Lead	406C1R7	ND	5.50e+2	ug/dscm	7%O2	1.42e-1	lbs/hr	CC7%O2
Lead	406C1R8	ND	8.80e+2	ug/dscm	7%O2	2.17e-1	lbs/hr	CC7%O2
Mercury	406C1R5	ND	4.89e+0	ug/dscm	7%O2	1.24e-3	lbs/hr	CC7%O2
Mercury	406C1R6	ND	1.57e+1	ug/dscm	7%O2	3.79e-3	lbs/hr	CC7%O2
Mercury	406C1R7	ND	5.37e+0	ug/dscm	7%O2	1.39e-3	lbs/hr	CC7%O2
Mercury	406C1R8	ND	4.92e+0	ug/dscm	7%O2	1.21e-3	lbs/hr	CC7%O2
Silver	406C1R5	ND	1.04e+1	ug/dscm	7%O2	2.65e-3	lbs/hr	CC7%O2
Silver	406C1R6	ND	1.11e+1	ug/dscm	7%O2	2.69e-3	lbs/hr	CC7%O2
Silver	406C1R7	ND	1.05e+1	ug/dscm	7%O2	2.71e-3	lbs/hr	CC7%O2
Silver	406C1R8	ND	1.08e+1	ug/dscm	7%O2	2.67e-3	lbs/hr	CC7%O2
Thallium	406C1R5	ND	7.96e+0	ug/dscm	7%O2	2.02e-3	lbs/hr	CC7%O2
Thallium	406C1R6	ND	8.43e+0	ug/dscm	7%O2	2.04e-3	lbs/hr	CC7%O2
Thallium	406C1R7	ND	7.96e+0	ug/dscm	7%O2	2.06e-3	lbs/hr	CC7%O2
Thallium	406C1R8	ND	8.25e+0	ug/dscm	7%O2	2.03e-3	lbs/hr	CC7%O2

7. Category: PAH

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Acenaphthylene	406C2R1	1.45e+3 ng/dscm 7%O2	4.58e-4 lbs/hr	CE7%O2
Acenaphthylene	406C2R2	1.01e+4 ng/dscm 7%O2	2.94e-3 lbs/hr	CE7%O2
Acenaphthylene	406C2R3	8.91e+2 ng/dscm 7%O2	2.80e-4 lbs/hr	CE7%O2
Acenaphthylene	406C2R4	3.48e+3 ng/dscm 7%O2	9.17e-4 lbs/hr	CE7%O2
Fluoranthene	406C2R2	1.85e+3 ng/dscm 7%O2	5.37e-4 lbs/hr	CE7%O2
Fluoranthene	406C2R4	2.72e+2 ng/dscm 7%O2	7.17e-5 lbs/hr	CE7%O2
Fluorene	406C2R1	5.04e+2 ng/dscm 7%O2	1.60e-4 lbs/hr	CE7%O2
Fluorene	406C2R2	9.42e+2 ng/dscm 7%O2	2.74e-4 lbs/hr	CE7%O2
Fluorene	406C2R4	3.49e+2 ng/dscm 7%O2	9.19e-5 lbs/hr	CE7%O2
Naphthalene	406C2R1	5.57e+4 ng/dscm 7%O2	1.76e-2 lbs/hr	CE7%O2
Naphthalene	406C2R2	1.47e+5 ng/dscm 7%O2	4.28e-2 lbs/hr	CE7%O2
Naphthalene	406C2R3	4.67e+4 ng/dscm 7%O2	1.47e-2 lbs/hr	CE7%O2
Naphthalene	406C2R4	9.34e+4 ng/dscm 7%O2	2.46e-2 lbs/hr	CE7%O2
Phenanthrene	406C2R1	3.62e+3 ng/dscm 7%O2	1.15e-3 lbs/hr	CE7%O2
Phenanthrene	406C2R2	1.84e+4 ng/dscm 7%O2	5.34e-3 lbs/hr	CE7%O2
Phenanthrene	406C2R3	1.79e+3 ng/dscm 7%O2	5.65e-4 lbs/hr	CE7%O2
Phenanthrene	406C2R4	5.89e+3 ng/dscm 7%O2	1.55e-3 lbs/hr	CE7%O2
Pyrene	406C2R2	6.22e+2 ng/dscm 7%O2	1.81e-4 lbs/hr	CE7%O2

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ASH GROVE CEMENT COMPANY

2. STATE: NE

3. CITY: LOUISVILLE

EPA ID: NED007260672

REGION: 7

4. EP ID: 406 DEVICE NAME: KILN NO. 2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

7. Category: Particulate

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Particulate	406C1R1	2.06e-2 gr/dscf 7%O2	1.30e+1 lbs/hr	CC7%O2
Particulate	406C1R2	1.88e-2 gr/dscf 7%O2	1.27e+1 lbs/hr	CC7%O2
Particulate	406C1R3	1.45e-2 gr/dscf 7%O2	8.77e+0 lbs/hr	CC7%O2
Particulate	406C1R4	2.60e-2 gr/dscf 7%O2	1.50e+1 lbs/hr	CC7%O2
Particulate	406C1R5	1.55e-2 gr/dscf 7%O2	9.02e+0 lbs/hr	CC7%O2
Particulate	406C1R6	1.70e-2 gr/dscf 7%O2	9.44e+0 lbs/hr	CC7%O2
Particulate	406C1R7	1.48e-2 gr/dscf 7%O2	8.78e+0 lbs/hr	CC7%O2
Particulate	406C1R8	2.40e-2 gr/dscf 7%O2	1.35e+1 lbs/hr	CC7%O2

7. Category: SVOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,2,4-Trichlorobenzene	406C2R1	ND 1.30e+2 ng/dscm 7%O2	4.10e-5 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	406C2R2	ND 1.41e+2 ng/dscm 7%O2	4.10e-5 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	406C2R3	ND 1.52e+2 ng/dscm 7%O2	4.76e-5 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	406C2R4	ND 1.36e+2 ng/dscm 7%O2	3.57e-5 lbs/hr	CC7%O2
1,3-Dichlorobenzene	406C2R1	2.05e+3 ng/dscm 7%O2	6.49e-4 lbs/hr	CE7%O2
1,3-Dichlorobenzene	406C2R2	1.99e+3 ng/dscm 7%O2	5.77e-4 lbs/hr	CE7%O2
1,3-Dichlorobenzene	406C2R3	2.08e+3 ng/dscm 7%O2	6.54e-4 lbs/hr	CE7%O2
1,3-Dichlorobenzene	406C2R4	2.00e+3 ng/dscm 7%O2	5.26e-4 lbs/hr	CE7%O2
2-Chloronaphthalene	406C2R1	3.10e+3 ng/dscm 7%O2	9.81e-4 lbs/hr	CE7%O2
2-Chloronaphthalene	406C2R2	1.82e+3 ng/dscm 7%O2	5.30e-4 lbs/hr	CE7%O2
2-Chloronaphthalene	406C2R3	1.63e+3 ng/dscm 7%O2	5.11e-4 lbs/hr	CE7%O2
2-Chloronaphthalene	406C2R4	1.64e+3 ng/dscm 7%O2	4.33e-4 lbs/hr	CE7%O2
2-Chlorophenol	406C2R1	1.18e+4 ng/dscm 7%O2	3.73e-3 lbs/hr	CE7%O2
2-Chlorophenol	406C2R2	1.01e+4 ng/dscm 7%O2	2.95e-3 lbs/hr	CE7%O2
2-Chlorophenol	406C2R3	9.71e+3 ng/dscm 7%O2	3.06e-3 lbs/hr	CE7%O2
2-Chlorophenol	406C2R4	1.16e+4 ng/dscm 7%O2	3.05e-3 lbs/hr	CE7%O2
2-Methylnaphthalene	406C2R1	9.96e+3 ng/dscm 7%O2	3.15e-3 lbs/hr	CE7%O2
2-Methylnaphthalene	406C2R2	1.13e+4 ng/dscm 7%O2	3.29e-3 lbs/hr	CE7%O2
2-Methylnaphthalene	406C2R3	7.17e+3 ng/dscm 7%O2	2.26e-3 lbs/hr	CE7%O2
2-Methylnaphthalene	406C2R4	7.55e+3 ng/dscm 7%O2	1.99e-3 lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	406C2R1	7.82e+3 ng/dscm 7%O2	2.48e-3 lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	406C2R2	4.96e+3 ng/dscm 7%O2	1.44e-3 lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	406C2R3	4.58e+3 ng/dscm 7%O2	1.44e-3 lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	406C2R4	5.77e+3 ng/dscm 7%O2	1.52e-3 lbs/hr	CE7%O2
Benzoic acid	406C2R1	1.83e+5 ng/dscm 7%O2	5.79e-2 lbs/hr	CE7%O2
Benzoic acid	406C2R2	1.60e+5 ng/dscm 7%O2	4.63e-2 lbs/hr	CE7%O2
Benzoic acid	406C2R3	1.80e+5 ng/dscm 7%O2	5.65e-2 lbs/hr	CE7%O2
Benzoic acid	406C2R4	1.55e+5 ng/dscm 7%O2	4.08e-2 lbs/hr	CE7%O2
bis(2-ethylexyl) Phthalate	406C2R1	2.09e+4 ng/dscm 7%O2	6.62e-3 lbs/hr	CE7%O2
bis(2-ethylexyl) Phthalate	406C2R2	2.58e+3 ng/dscm 7%O2	7.48e-4 lbs/hr	CE7%O2
bis(2-ethylexyl) Phthalate	406C2R3	1.82e+3 ng/dscm 7%O2	5.72e-4 lbs/hr	CE7%O2
bis(2-ethylexyl) Phthalate	406C2R4	1.07e+3 ng/dscm 7%O2	2.82e-4 lbs/hr	CE7%O2
di-n-Butyl Phthalate	406C2R1	5.55e+3 ng/dscm 7%O2	1.76e-3 lbs/hr	CE7%O2
di-n-Butyl Phthalate	406C2R2	6.22e+3 ng/dscm 7%O2	1.81e-3 lbs/hr	CE7%O2
di-n-Butyl Phthalate	406C2R3	7.02e+3 ng/dscm 7%O2	2.21e-3 lbs/hr	CE7%O2
di-n-Butyl Phthalate	406C2R4	1.83e+4 ng/dscm 7%O2	4.82e-3 lbs/hr	CE7%O2
di-n-Octyl Phthalate	406C2R2	3.38e+2 ng/dscm 7%O2	9.82e-5 lbs/hr	CE7%O2
Dibenzofuran	406C2R1	2.13e+4 ng/dscm 7%O2	6.75e-3 lbs/hr	CE7%O2
Dibenzofuran	406C2R2	3.31e+4 ng/dscm 7%O2	9.63e-3 lbs/hr	CE7%O2
Dibenzofuran	406C2R3	1.57e+4 ng/dscm 7%O2	4.95e-3 lbs/hr	CE7%O2
Dibenzofuran	406C2R4	2.39e+4 ng/dscm 7%O2	6.30e-3 lbs/hr	CE7%O2
Ethylbenzene	406C2R1	2.85e+4 ng/dscm 7%O2	9.02e-3 lbs/hr	CE7%O2
Ethylbenzene	406C2R2	3.07e+4 ng/dscm 7%O2	8.92e-3 lbs/hr	CE7%O2
Ethylbenzene	406C2R3	2.61e+4 ng/dscm 7%O2	8.20e-3 lbs/hr	CE7%O2

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: NE
 3. CITY: LOUISVILLE
 4. EP ID: 406 DEVICE NAME: KILN NO. 2

EPA NED007260672
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

Ethylbenzene	406C2R4	2.11e+4	ng/dscm 7%O2	5.55e-3	lbs/hr	CE7%O2
Phenol	406C2R1	9.53e+4	ng/dscm 7%O2	3.02e-2	lbs/hr	CE7%O2
Phenol	406C2R2	7.56e+4	ng/dscm 7%O2	2.19e-2	lbs/hr	CE7%O2
Phenol	406C2R3	6.94e+4	ng/dscm 7%O2	2.18e-2	lbs/hr	CE7%O2
Phenol	406C2R4	8.66e+4	ng/dscm 7%O2	2.28e-2	lbs/hr	CE7%O2

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
1,1,1-Trichloroethane	406C2R1	ND	4.18e+3 ng/dscm 7%O2	1.32e-3	lbs/hr	CC7%O2
1,1,1-Trichloroethane	406C2R2	ND	1.45e+3 ng/dscm 7%O2	4.22e-4	lbs/hr	CC7%O2
1,1,1-Trichloroethane	406C2R3	ND	6.49e+3 ng/dscm 7%O2	2.04e-3	lbs/hr	CC7%O2
1,1,1-Trichloroethane	406C2R4	ND	1.58e+3 ng/dscm 7%O2	4.15e-4	lbs/hr	CC7%O2
1,1-Dichloroethene	406C2R2		6.20e+2 ng/dscm 7%O2	1.80e-4	lbs/hr	CE7%O2
1,1-Dichloroethene	406C2R3		7.03e+2 ng/dscm 7%O2	2.21e-4	lbs/hr	CE7%O2
Acetone	406C2R1		8.41e+4 ng/dscm 7%O2	2.66e-2	lbs/hr	CE7%O2
Acetone	406C2R2		1.29e+5 ng/dscm 7%O2	3.74e-2	lbs/hr	CE7%O2
Acetone	406C2R3		9.25e+4 ng/dscm 7%O2	2.91e-2	lbs/hr	CE7%O2
Acetone	406C2R4		1.22e+5 ng/dscm 7%O2	3.22e-2	lbs/hr	CE7%O2
Benzene	406C2R1		2.23e+5 ng/dscm 7%O2	7.05e-2	lbs/hr	CE7%O2
Benzene	406C2R2		2.93e+5 ng/dscm 7%O2	8.51e-2	lbs/hr	CE7%O2
Benzene	406C2R3		1.61e+5 ng/dscm 7%O2	5.05e-2	lbs/hr	CE7%O2
Benzene	406C2R4		1.86e+5 ng/dscm 7%O2	4.91e-2	lbs/hr	CE7%O2
Bromoethane	406C2R1		1.18e+4 ng/dscm 7%O2	3.72e-3	lbs/hr	CE7%O2
Bromoethane	406C2R2		1.62e+4 ng/dscm 7%O2	4.71e-3	lbs/hr	CE7%O2
Bromoethane	406C2R3		1.26e+4 ng/dscm 7%O2	3.98e-3	lbs/hr	CE7%O2
Bromoethane	406C2R4		1.90e+4 ng/dscm 7%O2	5.02e-3	lbs/hr	CE7%O2
Carbon disulfide	406C2R1		3.11e+4 ng/dscm 7%O2	9.85e-3	lbs/hr	CE7%O2
Carbon disulfide	406C2R2		4.20e+4 ng/dscm 7%O2	1.22e-2	lbs/hr	CE7%O2
Carbon disulfide	406C2R3		4.65e+4 ng/dscm 7%O2	1.46e-2	lbs/hr	CE7%O2
Carbon disulfide	406C2R4		5.57e+4 ng/dscm 7%O2	1.47e-2	lbs/hr	CE7%O2
Chlorobenzene	406C2R1		6.88e+4 ng/dscm 7%O2	2.18e-2	lbs/hr	CE7%O2
Chlorobenzene	406C2R2		6.39e+4 ng/dscm 7%O2	1.86e-2	lbs/hr	CE7%O2
Chlorobenzene	406C2R3		4.94e+4 ng/dscm 7%O2	1.55e-2	lbs/hr	CE7%O2
Chlorobenzene	406C2R4		4.21e+4 ng/dscm 7%O2	1.11e-2	lbs/hr	CE7%O2
Chloroethane	406C2R1		8.54e+3 ng/dscm 7%O2	2.70e-3	lbs/hr	CE7%O2
Chloroethane	406C2R2		1.09e+4 ng/dscm 7%O2	3.17e-3	lbs/hr	CE7%O2
Chloroethane	406C2R3		8.70e+3 ng/dscm 7%O2	2.74e-3	lbs/hr	CE7%O2
Chloroethane	406C2R4		1.43e+4 ng/dscm 7%O2	3.76e-3	lbs/hr	CE7%O2
Chloromethane	406C2R1		3.83e+5 ng/dscm 7%O2	1.21e-1	lbs/hr	CE7%O2
Chloromethane	406C2R2		2.42e+5 ng/dscm 7%O2	7.04e-2	lbs/hr	CE7%O2
Chloromethane	406C2R3		4.36e+5 ng/dscm 7%O2	1.37e-1	lbs/hr	CE7%O2
Chloromethane	406C2R4		4.66e+5 ng/dscm 7%O2	1.23e-1	lbs/hr	CE7%O2
m,p-Xylene	406C2R1		7.84e+4 ng/dscm 7%O2	2.48e-2	lbs/hr	CE7%O2
m,p-Xylene	406C2R2		8.01e+4 ng/dscm 7%O2	2.33e-2	lbs/hr	CE7%O2
m,p-Xylene	406C2R3		6.92e+4 ng/dscm 7%O2	2.18e-2	lbs/hr	CE7%O2
m,p-Xylene	406C2R4		5.74e+4 ng/dscm 7%O2	1.51e-2	lbs/hr	CE7%O2
Methyl Ethyl Ketone	406C2R1		2.03e+4 ng/dscm 7%O2	6.44e-3	lbs/hr	CE7%O2
Methyl Ethyl Ketone	406C2R2		2.18e+4 ng/dscm 7%O2	6.33e-3	lbs/hr	CE7%O2
Methyl Ethyl Ketone	406C2R3		2.21e+4 ng/dscm 7%O2	6.95e-3	lbs/hr	CE7%O2
Methyl Ethyl Ketone	406C2R4		1.67e+3 ng/dscm 7%O2	4.41e-4	lbs/hr	CE7%O2
Methylene Chloride	406C2R1		2.70e+4 ng/dscm 7%O2	8.56e-3	lbs/hr	CE7%O2
Methylene Chloride	406C2R2		1.79e+4 ng/dscm 7%O2	5.20e-3	lbs/hr	CE7%O2
Methylene Chloride	406C2R3		4.38e+4 ng/dscm 7%O2	1.38e-2	lbs/hr	CE7%O2
Methylene Chloride	406C2R4		4.19e+4 ng/dscm 7%O2	1.10e-2	lbs/hr	CE7%O2
o-Xylene	406C2R1		3.96e+4 ng/dscm 7%O2	1.25e-2	lbs/hr	CE7%O2
o-Xylene	406C2R2		3.86e+4 ng/dscm 7%O2	1.12e-2	lbs/hr	CE7%O2
o-Xylene	406C2R3		3.07e+4 ng/dscm 7%O2	9.67e-3	lbs/hr	CE7%O2
o-Xylene	406C2R4		2.56e+4 ng/dscm 7%O2	6.74e-3	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: NE
 3. CITY: LOUISVILLE
 4. EP ID: 406 DEVICE NAME: KILN NO. 2

EPA NED007260672
 SYSTEM TYPE: CEMENT KILN

REGION: 7
 APC SYSTEM: ESP

Styrene	406C2R1	3.43e+4	ng/dscm	7%O2	1.09e-2	lbs/hr	CE7%O2	
Styrene	406C2R2	5.81e+4	ng/dscm	7%O2	1.69e-2	lbs/hr	CE7%O2	
Styrene	406C2R3	3.36e+4	ng/dscm	7%O2	1.06e-2	lbs/hr	CE7%O2	
Styrene	406C2R4	2.95e+4	ng/dscm	7%O2	7.77e-3	lbs/hr	CE7%O2	
Tetrachloroethene	406C2R1	ND	2.72e+2	ng/dscm	7%O2	8.59e-5	lbs/hr	CC7%O2
Tetrachloroethene	406C2R2	ND	2.78e+2	ng/dscm	7%O2	8.06e-5	lbs/hr	CC7%O2
Tetrachloroethene	406C2R3	ND	2.94e+2	ng/dscm	7%O2	9.25e-5	lbs/hr	CC7%O2
Tetrachloroethene	406C2R4	ND	3.18e+2	ng/dscm	7%O2	8.37e-5	lbs/hr	CC7%O2
Toluene	406C2R1	1.45e+5	ng/dscm	7%O2	4.58e-2	lbs/hr	CE7%O2	
Toluene	406C2R2	1.78e+5	ng/dscm	7%O2	5.16e-2	lbs/hr	CE7%O2	
Toluene	406C2R3	1.36e+5	ng/dscm	7%O2	4.29e-2	lbs/hr	CE7%O2	
Toluene	406C2R4	1.44e+5	ng/dscm	7%O2	3.80e-2	lbs/hr	CE7%O2	
Trichlorofluoromethane	406C2R1	3.34e+4	ng/dscm	7%O2	1.06e-2	lbs/hr	CE7%O2	
Trichlorofluoromethane	406C2R3	1.24e+3	ng/dscm	7%O2	3.90e-4	lbs/hr	CE7%O2	
Vinyl Chloride	406C2R1	3.66e+4	ng/dscm	7%O2	1.16e-2	lbs/hr	CE7%O2	
Vinyl Chloride	406C2R2	1.88e+4	ng/dscm	7%O2	5.46e-3	lbs/hr	CE7%O2	
Vinyl Chloride	406C2R3	2.17e+4	ng/dscm	7%O2	6.82e-3	lbs/hr	CE7%O2	
Vinyl Chloride	406C2R4	2.83e+4	ng/dscm	7%O2	7.45e-3	lbs/hr	CE7%O2	

6. Description: EMISSIONS Process Group: DRY KILN Location: STACK-BYPASS Phase: GAS

7. Category: THC & CO

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
CO	406C1R1	2.11e+2	ppmv 7%O2	0.00e+0	
CO	406C1R2	1.81e+2	ppmv 7%O2	0.00e+0	
CO	406C1R3	2.56e+2	ppmv 7%O2	0.00e+0	
CO	406C1R4	3.15e+2	ppmv 7%O2	0.00e+0	
CO	406C1R5	1.79e+2	ppmv 7%O2	0.00e+0	
CO	406C1R6	2.82e+2	ppmv 7%O2	0.00e+0	
CO	406C1R7	1.86e+2	ppmv 7%O2	0.00e+0	
CO	406C1R8	2.27e+2	ppmv 7%O2	0.00e+0	
CO	406C2R1	2.52e+2	ppmv 7%O2	0.00e+0	
CO	406C2R2	3.25e+2	ppmv 7%O2	0.00e+0	
CO	406C2R3	3.22e+2	ppmv 7%O2	0.00e+0	
CO	406C2R4	2.46e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C1R1	5.49e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C1R2	3.73e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C1R3	5.41e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C1R4	5.35e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C1R5	3.50e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C1R6	5.19e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C1R7	5.55e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C1R8	7.56e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C2R1	6.55e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C2R2	6.09e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C2R3	5.76e+2	ppmv 7%O2	0.00e+0	
CO(MHRA)	406C2R4	4.32e+2	ppmv 7%O2	0.00e+0	
THC	406C1R1	1.90e+0	ppmv 7%O2	0.00e+0	
THC	406C1R2	1.40e+0	ppmv 7%O2	0.00e+0	
THC	406C1R3	4.10e+0	ppmv 7%O2	0.00e+0	
THC	406C1R4	3.00e+0	ppmv 7%O2	0.00e+0	
THC	406C1R5	2.20e+0	ppmv 7%O2	0.00e+0	
THC	406C1R6	1.38e+1	ppmv 7%O2	0.00e+0	
THC	406C1R7	1.41e+1	ppmv 7%O2	0.00e+0	
THC	406C1R8	1.06e+1	ppmv 7%O2	0.00e+0	
THC	406C2R1	3.16e+0	ppmv 7%O2	0.00e+0	
THC	406C2R2	2.40e+0	ppmv 7%O2	0.00e+0	
THC	406C2R3	2.30e+0	ppmv 7%O2	0.00e+0	
THC	406C2R4	4.20e+0	ppmv 7%O2	0.00e+0	
THC(MHRA)	406C1R1	2.50e+0	ppmv 7%O2	0.00e+0	

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ASH GROVE CEMENT COMPANY

2. STATE: NE

3. CITY: LOUISVILLE

EPA ID: NED007260672

REGION: 7

4. EP ID: 406 DEVICE NAME: KILN NO. 2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

THC(MHRA)	406C1R2	3.40e+0	ppmv	7%O2	0.00e+0
THC(MHRA)	406C1R3	1.12e+1	ppmv	7%O2	0.00e+0
THC(MHRA)	406C1R4	7.90e+0	ppmv	7%O2	0.00e+0
THC(MHRA)	406C1R5	4.30e+0	ppmv	7%O2	0.00e+0
THC(MHRA)	406C1R6	1.72e+1	ppmv	7%O2	0.00e+0
THC(MHRA)	406C1R7	1.69e+1	ppmv	7%O2	0.00e+0
THC(MHRA)	406C1R8	2.19e+1	ppmv	7%O2	0.00e+0
THC(MHRA)	406C2R1	6.19e+0	ppmv	7%O2	0.00e+0
THC(MHRA)	406C2R2	4.70e+0	ppmv	7%O2	0.00e+0
THC(MHRA)	406C2R3	2.80e+0	ppmv	7%O2	0.00e+0
THC(MHRA)	406C2R4	5.00e+0	ppmv	7%O2	0.00e+0

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

REGION: 7
 APC SYSTEM: ESP

5. Type: CONTROLLED

6. Description: EMISSIONS Process Group: WET KILN Location: STACK Phase: GAS

7. Category: Dioxin & Furan

Analysis:

8. Substance	9. Run ID		Concentration	Mass Rate	Calc
4D 2378	319B1A1	2	8.30e-3 ng/dscm 7%O2	0.00e+0	7%O2
4D 2378	319B1A2		1.10e-2 ng/dscm 7%O2	0.00e+0	7%O2
4D 2378	319B1A3	2	1.01e-2 ng/dscm 7%O2	0.00e+0	7%O2
4D 2378	319B1R1		8.06e-3 ng/dscm 7%O2	4.25e-9 lbs/hr	CE7%O2
4D 2378	319B1R2		1.09e-2 ng/dscm 7%O2	5.66e-9 lbs/hr	CE7%O2
4D 2378	319B1R3	2	5.79e-3 ng/dscm 7%O2	2.85e-9 lbs/hr	CE7%O2
4D 2378	319B1R4	2	1.02e-2 ng/dscm 7%O2	5.64e-9 lbs/hr	CE7%O2
4D 2378	319B1R5	2	7.92e-3 ng/dscm 7%O2	4.29e-9 lbs/hr	CE7%O2
4D 2378	319B1R6		1.26e-2 ng/dscm 7%O2	7.23e-9 lbs/hr	CE7%O2
4D 2378	319B1R7		1.58e-2 ng/dscm 7%O2	8.54e-9 lbs/hr	CE7%O2
4D 2378	319B1R8		1.19e-2 ng/dscm 7%O2	5.89e-9 lbs/hr	CE7%O2
4D 2378	319B1R9	2	1.40e-2 ng/dscm 7%O2	6.20e-9 lbs/hr	CE7%O2
4D 2378	319C2R1		2.36e+0 ng/dscm 7%O2	1.43e-6 lbs/hr	CE7%O2
4D 2378	319C2R2		1.32e+0 ng/dscm 7%O2	7.02e-7 lbs/hr	CE7%O2
4D 2378	319C2R3		1.70e+0 ng/dscm 7%O2	1.01e-6 lbs/hr	CE7%O2
4D 2378	319C5		4.48e-3 ng/dscm 7%O2	1.74e-9 lbs/hr	CE7%O2
4D 2378	319C6R2		2.92e-3 ng/dscm 7%O2	1.39e-9 lbs/hr	CE7%O2
4D 2378	319C6R3		6.42e-3 ng/dscm 7%O2	3.57e-9 lbs/hr	CE7%O2
4D 2378	319C7R1		3.30e-3 ng/dscm 7%O2	1.63e-9 lbs/hr	CE7%O2
4D 2378	319C9R1	2	3.03e-3 ng/dscm 7%O2	1.54e-9 lbs/hr	CE7%O2
4D 2378	319C9R2	2	3.01e-3 ng/dscm 7%O2	1.53e-9 lbs/hr	CE7%O2
4D 2378	319C9R3		3.10e-3 ng/dscm 7%O2	1.57e-9 lbs/hr	CE7%O2
4D 2378	319C9R4		6.01e-3 ng/dscm 7%O2	2.93e-9 lbs/hr	CE7%O2
4D 2378	319C9R5	2	3.10e-3 ng/dscm 7%O2	1.54e-9 lbs/hr	CE7%O2
4D 2378	319C9R6	2	2.83e-3 ng/dscm 7%O2	1.45e-9 lbs/hr	CE7%O2
4D Other	319B1A1		6.86e+0 ng/dscm 7%O2	0.00e+0	7%O2
4D Other	319B1A2		5.33e+0 ng/dscm 7%O2	0.00e+0	7%O2
4D Other	319B1A3		4.21e+0 ng/dscm 7%O2	0.00e+0	7%O2
4D Other	319B1R1		2.09e+0 ng/dscm 7%O2	1.10e-6 lbs/hr	CE7%O2
4D Other	319B1R2		2.08e+0 ng/dscm 7%O2	1.08e-6 lbs/hr	CE7%O2
4D Other	319B1R3		2.08e+0 ng/dscm 7%O2	1.03e-6 lbs/hr	CE7%O2
4D Other	319B1R4		2.09e+0 ng/dscm 7%O2	1.16e-6 lbs/hr	CE7%O2
4D Other	319B1R5		2.88e+0 ng/dscm 7%O2	1.56e-6 lbs/hr	CE7%O2
4D Other	319B1R6		2.28e+0 ng/dscm 7%O2	1.31e-6 lbs/hr	CE7%O2
4D Other	319B1R7		2.62e+0 ng/dscm 7%O2	1.41e-6 lbs/hr	CE7%O2
4D Other	319B1R8		1.60e+0 ng/dscm 7%O2	7.89e-7 lbs/hr	OCE
4D Other	319B1R9		1.38e+0 ng/dscm 7%O2	6.14e-7 lbs/hr	OCE
4D Other	319C2R1		2.10e+2 ng/dscm 7%O2	1.27e-4 lbs/hr	OCE
4D Other	319C2R2		9.34e+1 ng/dscm 7%O2	4.98e-5 lbs/hr	OCE
4D Other	319C2R3		2.41e+2 ng/dscm 7%O2	1.43e-4 lbs/hr	OCE
4D Other	319C5		7.75e+0 ng/dscm 7%O2	3.00e-6 lbs/hr	OCE
4D Other	319C6R2		2.58e+1 ng/dscm 7%O2	1.23e-5 lbs/hr	OCE
4D Other	319C6R3		5.55e+1 ng/dscm 7%O2	3.09e-5 lbs/hr	OCE
4D Other	319C7R1		2.48e+1 ng/dscm 7%O2	1.23e-5 lbs/hr	OCE
4D Other	319C9R1		2.21e+0 ng/dscm 7%O2	1.13e-6 lbs/hr	CE7%O2
4D Other	319C9R2		1.44e+0 ng/dscm 7%O2	7.34e-7 lbs/hr	CE7%O2
4D Other	319C9R3		8.64e-1 ng/dscm 7%O2	4.37e-7 lbs/hr	CE7%O2
4D Other	319C9R4		1.68e+0 ng/dscm 7%O2	8.17e-7 lbs/hr	CE7%O2
4D Other	319C9R5		1.49e+0 ng/dscm 7%O2	7.42e-7 lbs/hr	CE7%O2
4D Other	319C9R6		1.81e+0 ng/dscm 7%O2	9.29e-7 lbs/hr	CE7%O2
4D Total	319B1A1		6.87e+0 ng/dscm 7%O2	0.00e+0	OCE
4D Total	319B1A2		5.34e+0 ng/dscm 7%O2	0.00e+0	OCE
4D Total	319B1A3		4.22e+0 ng/dscm 7%O2	0.00e+0	OCE
4D Total	319B1R1		2.10e+0 ng/dscm 7%O2	1.11e-6 lbs/hr	OCE
4D Total	319B1R2		2.09e+0 ng/dscm 7%O2	1.09e-6 lbs/hr	OCE
4D Total	319B1R3		2.09e+0 ng/dscm 7%O2	1.03e-6 lbs/hr	OCE
4D Total	319B1R4		2.10e+0 ng/dscm 7%O2	1.16e-6 lbs/hr	OCE

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

4D Total	319B1R5	2.88e+0	ng/dscm 7%O2	1.56e-6	lbs/hr	OCE
4D Total	319B1R6	2.29e+0	ng/dscm 7%O2	1.32e-6	lbs/hr	OCE
4D Total	319B1R7	2.64e+0	ng/dscm 7%O2	1.42e-6	lbs/hr	OCE
4D Total	319B1R8	1.61e+0	ng/dscm 7%O2	7.95e-7	lbs/hr	CE7%O2
4D Total	319B1R9	1.40e+0	ng/dscm 7%O2	6.20e-7	lbs/hr	CE7%O2
4D Total	319C2R1	2.12e+2	ng/dscm 7%O2	1.29e-4	lbs/hr	CE7%O2
4D Total	319C2R2	9.48e+1	ng/dscm 7%O2	5.05e-5	lbs/hr	CE7%O2
4D Total	319C2R3	2.43e+2	ng/dscm 7%O2	1.44e-4	lbs/hr	CE7%O2
4D Total	319C5	7.75e+0	ng/dscm 7%O2	3.00e-6	lbs/hr	CE7%O2
4D Total	319C6R2	2.58e+1	ng/dscm 7%O2	1.23e-5	lbs/hr	CE7%O2
4D Total	319C6R3	5.55e+1	ng/dscm 7%O2	3.09e-5	lbs/hr	CE7%O2
4D Total	319C7R1	2.48e+1	ng/dscm 7%O2	1.23e-5	lbs/hr	CE7%O2
4D Total	319C9R1	2.21e+0	ng/dscm 7%O2	1.13e-6	lbs/hr	OCE
4D Total	319C9R2	1.45e+0	ng/dscm 7%O2	7.35e-7	lbs/hr	OCE
4D Total	319C9R3	8.67e-1	ng/dscm 7%O2	4.39e-7	lbs/hr	OCE
4D Total	319C9R4	1.68e+0	ng/dscm 7%O2	8.20e-7	lbs/hr	OCE
4D Total	319C9R5	1.49e+0	ng/dscm 7%O2	7.43e-7	lbs/hr	OCE
4D Total	319C9R6	1.81e+0	ng/dscm 7%O2	9.31e-7	lbs/hr	OCE
4F 2378	319B1A1	2.43e-1	ng/dscm 7%O2	0.00e+0		7%O2
4F 2378	319B1A2	1.86e-1	ng/dscm 7%O2	0.00e+0		7%O2
4F 2378	319B1A3	1.77e-1	ng/dscm 7%O2	0.00e+0		7%O2
4F 2378	319B1R1	3.23e-1	ng/dscm 7%O2	1.70e-7	lbs/hr	CE7%O2
4F 2378	319B1R2	2.99e-1	ng/dscm 7%O2	1.56e-7	lbs/hr	CE7%O2
4F 2378	319B1R3	2.46e-1	ng/dscm 7%O2	1.21e-7	lbs/hr	CE7%O2
4F 2378	319B1R4	2.47e-1	ng/dscm 7%O2	1.37e-7	lbs/hr	CE7%O2
4F 2378	319B1R5	2.56e-1	ng/dscm 7%O2	1.39e-7	lbs/hr	CE7%O2
4F 2378	319B1R6	3.02e-1	ng/dscm 7%O2	1.73e-7	lbs/hr	CE7%O2
4F 2378	319B1R7	2.61e-1	ng/dscm 7%O2	1.41e-7	lbs/hr	CE7%O2
4F 2378	319B1R8	1.88e-1	ng/dscm 7%O2	9.27e-8	lbs/hr	CE7%O2
4F 2378	319B1R9	2.34e-1	ng/dscm 7%O2	1.04e-7	lbs/hr	CE7%O2
4F 2378	319C2R1	8.95e+0	ng/dscm 7%O2	5.45e-6	lbs/hr	CE7%O2
4F 2378	319C2R2	5.67e+0	ng/dscm 7%O2	3.02e-6	lbs/hr	CE7%O2
4F 2378	319C2R3	8.53e+0	ng/dscm 7%O2	5.06e-6	lbs/hr	CE7%O2
4F 2378	319C5	5.76e-3	ng/dscm 7%O2	2.23e-9	lbs/hr	CE7%O2
4F 2378	319C6R2	0.00e+0		0.00e+0		
4F 2378	319C6R3	4.59e-3	ng/dscm 7%O2	2.55e-9	lbs/hr	CE7%O2
4F 2378	319C7R1	9.90e-3	ng/dscm 7%O2	4.90e-9	lbs/hr	CE7%O2
4F 2378	319C9R1	9.99e-2	ng/dscm 7%O2	5.09e-8	lbs/hr	CE7%O2
4F 2378	319C9R2	8.42e-2	ng/dscm 7%O2	4.28e-8	lbs/hr	CE7%O2
4F 2378	319C9R3	6.19e-2	ng/dscm 7%O2	3.13e-8	lbs/hr	CE7%O2
4F 2378	319C9R4	9.02e-2	ng/dscm 7%O2	4.39e-8	lbs/hr	CE7%O2
4F 2378	319C9R5	8.06e-2	ng/dscm 7%O2	4.02e-8	lbs/hr	CE7%O2
4F 2378	319C9R6	8.48e-2	ng/dscm 7%O2	4.36e-8	lbs/hr	CE7%O2
4F Other	319B1A1	1.08e+1	ng/dscm 7%O2	0.00e+0		7%O2
4F Other	319B1A2	7.90e+0	ng/dscm 7%O2	0.00e+0		7%O2
4F Other	319B1A3	8.01e+0	ng/dscm 7%O2	0.00e+0		7%O2
4F Other	319B1R1	1.23e+1	ng/dscm 7%O2	6.46e-6	lbs/hr	CE7%O2
4F Other	319B1R2	1.17e+1	ng/dscm 7%O2	6.10e-6	lbs/hr	CE7%O2
4F Other	319B1R3	9.97e+0	ng/dscm 7%O2	4.91e-6	lbs/hr	CE7%O2
4F Other	319B1R4	1.07e+1	ng/dscm 7%O2	5.91e-6	lbs/hr	CE7%O2
4F Other	319B1R5	1.09e+1	ng/dscm 7%O2	5.90e-6	lbs/hr	CE7%O2
4F Other	319B1R6	1.23e+1	ng/dscm 7%O2	7.02e-6	lbs/hr	CE7%O2
4F Other	319B1R7	1.12e+1	ng/dscm 7%O2	6.05e-6	lbs/hr	CE7%O2
4F Other	319B1R8	8.28e+0	ng/dscm 7%O2	4.09e-6	lbs/hr	OCE
4F Other	319B1R9	9.52e+0	ng/dscm 7%O2	4.22e-6	lbs/hr	OCE
4F Other	319C2R1	2.34e+2	ng/dscm 7%O2	1.42e-4	lbs/hr	OCE
4F Other	319C2R2	1.90e+2	ng/dscm 7%O2	1.01e-4	lbs/hr	OCE
4F Other	319C2R3	2.63e+2	ng/dscm 7%O2	1.56e-4	lbs/hr	OCE
4F Other	319C5	1.08e+1	ng/dscm 7%O2	4.19e-6	lbs/hr	OCE
4F Other	319C6R2	7.97e+1	ng/dscm 7%O2	3.80e-5	lbs/hr	OCE
4F Other	319C6R3	1.48e+2	ng/dscm 7%O2	8.21e-5	lbs/hr	OCE
4F Other	319C7R1	4.67e+1	ng/dscm 7%O2	2.31e-5	lbs/hr	OCE
4F Other	319C9R1	4.65e+0	ng/dscm 7%O2	2.37e-6	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

4F Other	319C9R2	3.28e+0	ng/dscm 7%O2	1.67e-6	lbs/hr	CE7%O2
4F Other	319C9R3	2.32e+0	ng/dscm 7%O2	1.18e-6	lbs/hr	CE7%O2
4F Other	319C9R4	3.82e+0	ng/dscm 7%O2	1.86e-6	lbs/hr	CE7%O2
4F Other	319C9R5	3.49e+0	ng/dscm 7%O2	1.74e-6	lbs/hr	CE7%O2
4F Other	319C9R6	3.76e+0	ng/dscm 7%O2	1.93e-6	lbs/hr	CE7%O2
4F Total	319B1A1	1.11e+1	ng/dscm 7%O2	0.00e+0		OCE
4F Total	319B1A2	8.08e+0	ng/dscm 7%O2	0.00e+0		OCE
4F Total	319B1A3	8.18e+0	ng/dscm 7%O2	0.00e+0		OCE
4F Total	319B1R1	1.26e+1	ng/dscm 7%O2	6.63e-6	lbs/hr	OCE
4F Total	319B1R2	1.20e+1	ng/dscm 7%O2	6.26e-6	lbs/hr	OCE
4F Total	319B1R3	1.02e+1	ng/dscm 7%O2	5.03e-6	lbs/hr	OCE
4F Total	319B1R4	1.09e+1	ng/dscm 7%O2	6.05e-6	lbs/hr	OCE
4F Total	319B1R5	1.11e+1	ng/dscm 7%O2	6.04e-6	lbs/hr	OCE
4F Total	319B1R6	1.26e+1	ng/dscm 7%O2	7.20e-6	lbs/hr	OCE
4F Total	319B1R7	1.15e+1	ng/dscm 7%O2	6.19e-6	lbs/hr	OCE
4F Total	319B1R8	8.47e+0	ng/dscm 7%O2	4.18e-6	lbs/hr	CE7%O2
4F Total	319B1R9	9.75e+0	ng/dscm 7%O2	4.33e-6	lbs/hr	CE7%O2
4F Total	319C2R1	2.43e+2	ng/dscm 7%O2	1.48e-4	lbs/hr	CE7%O2
4F Total	319C2R2	1.96e+2	ng/dscm 7%O2	1.04e-4	lbs/hr	CE7%O2
4F Total	319C2R3	2.72e+2	ng/dscm 7%O2	1.61e-4	lbs/hr	CE7%O2
4F Total	319C5	1.08e+1	ng/dscm 7%O2	4.19e-6	lbs/hr	CE7%O2
4F Total	319C6R2	7.97e+1	ng/dscm 7%O2	3.80e-5	lbs/hr	CE7%O2
4F Total	319C6R3	1.48e+2	ng/dscm 7%O2	8.21e-5	lbs/hr	CE7%O2
4F Total	319C7R1	4.67e+1	ng/dscm 7%O2	2.31e-5	lbs/hr	CE7%O2
4F Total	319C9R1	4.75e+0	ng/dscm 7%O2	2.42e-6	lbs/hr	OCE
4F Total	319C9R2	3.37e+0	ng/dscm 7%O2	1.71e-6	lbs/hr	OCE
4F Total	319C9R3	2.38e+0	ng/dscm 7%O2	1.21e-6	lbs/hr	OCE
4F Total	319C9R4	3.91e+0	ng/dscm 7%O2	1.90e-6	lbs/hr	OCE
4F Total	319C9R5	3.57e+0	ng/dscm 7%O2	1.78e-6	lbs/hr	OCE
4F Total	319C9R6	3.85e+0	ng/dscm 7%O2	1.97e-6	lbs/hr	OCE
5D 12378	319B1A1	6.08e-2	ng/dscm 7%O2	0.00e+0		7%O2
5D 12378	319B1A2	5.48e-2	ng/dscm 7%O2	0.00e+0		7%O2
5D 12378	319B1A3	4.56e-2	ng/dscm 7%O2	0.00e+0		7%O2
5D 12378	319B1R1	4.03e-2	ng/dscm 7%O2	2.13e-8	lbs/hr	CE7%O2
5D 12378	319B1R2	5.71e-2	ng/dscm 7%O2	2.97e-8	lbs/hr	CE7%O2
5D 12378	319B1R3	2.89e-2	ng/dscm 7%O2	1.42e-8	lbs/hr	CE7%O2
5D 12378	319B1R4	4.84e-2	ng/dscm 7%O2	2.68e-8	lbs/hr	CE7%O2
5D 12378	319B1R5	4.22e-2	ng/dscm 7%O2	2.29e-8	lbs/hr	CE7%O2
5D 12378	319B1R6	4.79e-2	ng/dscm 7%O2	2.75e-8	lbs/hr	CE7%O2
5D 12378	319B1R7	4.74e-2	ng/dscm 7%O2	2.56e-8	lbs/hr	CE7%O2
5D 12378	319B1R8	3.88e-2	ng/dscm 7%O2	1.91e-8	lbs/hr	CE7%O2
5D 12378	319B1R9	4.89e-2	ng/dscm 7%O2	2.17e-8	lbs/hr	CE7%O2
5D 12378	319C2R1	7.90e+0	ng/dscm 7%O2	4.81e-6	lbs/hr	CE7%O2
5D 12378	319C2R2	5.91e+0	ng/dscm 7%O2	3.15e-6	lbs/hr	CE7%O2
5D 12378	319C2R3	6.45e+0	ng/dscm 7%O2	3.83e-6	lbs/hr	CE7%O2
5D 12378	319C5	1.63e-1	ng/dscm 7%O2	6.33e-8	lbs/hr	CE7%O2
5D 12378	319C6R2	1.57e+0	ng/dscm 7%O2	7.50e-7	lbs/hr	CE7%O2
5D 12378	319C6R3	2.07e+0	ng/dscm 7%O2	1.15e-6	lbs/hr	CE7%O2
5D 12378	319C7R1	2.46e+0	ng/dscm 7%O2	1.22e-6	lbs/hr	CE7%O2
5D 12378	319C9R1	2.42e-2	ng/dscm 7%O2	1.23e-8	lbs/hr	CE7%O2
5D 12378	319C9R2	2.11e-2	ng/dscm 7%O2	1.07e-8	lbs/hr	CE7%O2
5D 12378	319C9R3	1.55e-2	ng/dscm 7%O2	7.83e-9	lbs/hr	CE7%O2
5D 12378	319C9R4	2.41e-2	ng/dscm 7%O2	1.17e-8	lbs/hr	CE7%O2
5D 12378	319C9R5	2.17e-2	ng/dscm 7%O2	1.08e-8	lbs/hr	CE7%O2
5D 12378	319C9R6	2.26e-2	ng/dscm 7%O2	1.16e-8	lbs/hr	CE7%O2
5D Other	319B1A1	9.59e+0	ng/dscm 7%O2	0.00e+0		7%O2
5D Other	319B1A2	6.82e+0	ng/dscm 7%O2	0.00e+0		7%O2
5D Other	319B1A3	5.81e+0	ng/dscm 7%O2	0.00e+0		7%O2
5D Other	319B1R1	3.27e+0	ng/dscm 7%O2	1.72e-6	lbs/hr	CE7%O2
5D Other	319B1R2	3.91e+0	ng/dscm 7%O2	2.04e-6	lbs/hr	CE7%O2
5D Other	319B1R3	2.92e+0	ng/dscm 7%O2	1.44e-6	lbs/hr	CE7%O2
5D Other	319B1R4	3.11e+0	ng/dscm 7%O2	1.72e-6	lbs/hr	CE7%O2
5D Other	319B1R5	4.26e+0	ng/dscm 7%O2	2.31e-6	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

5D Other	319B1R6	3.40e+0	ng/dscm 7%O2	1.95e-6	lbs/hr	CE7%O2	
5D Other	319B1R7	4.09e+0	ng/dscm 7%O2	2.21e-6	lbs/hr	CE7%O2	
5D Other	319B1R8	2.32e+0	ng/dscm 7%O2	1.14e-6	lbs/hr	OCE	
5D Other	319B1R9	1.84e+0	ng/dscm 7%O2	8.16e-7	lbs/hr	OCE	
5D Other	319C2R1	7.78e+1	ng/dscm 7%O2	4.73e-5	lbs/hr	OCE	
5D Other	319C2R2	1.39e+2	ng/dscm 7%O2	7.40e-5	lbs/hr	OCE	
5D Other	319C2R3	2.26e+2	ng/dscm 7%O2	1.34e-4	lbs/hr	OCE	
5D Other	319C5	1.08e+1	ng/dscm 7%O2	4.18e-6	lbs/hr	OCE	
5D Other	319C6R2	7.18e+1	ng/dscm 7%O2	3.42e-5	lbs/hr	OCE	
5D Other	319C6R3	1.28e+2	ng/dscm 7%O2	7.13e-5	lbs/hr	OCE	
5D Other	319C7R1	2.48e+2	ng/dscm 7%O2	1.23e-4	lbs/hr	OCE	
5D Other	319C9R1	3.27e+0	ng/dscm 7%O2	1.67e-6	lbs/hr	CE7%O2	
5D Other	319C9R2	2.20e+0	ng/dscm 7%O2	1.12e-6	lbs/hr	CE7%O2	
5D Other	319C9R3	1.22e+0	ng/dscm 7%O2	6.19e-7	lbs/hr	CE7%O2	
5D Other	319C9R4	2.77e+0	ng/dscm 7%O2	1.35e-6	lbs/hr	CE7%O2	
5D Other	319C9R5	2.37e+0	ng/dscm 7%O2	1.18e-6	lbs/hr	CE7%O2	
5D Other	319C9R6	2.78e+0	ng/dscm 7%O2	1.43e-6	lbs/hr	CE7%O2	
5D Total	319B1A1	9.65e+0	ng/dscm 7%O2	0.00e+0		OCE	
5D Total	319B1A2	6.88e+0	ng/dscm 7%O2	0.00e+0		OCE	
5D Total	319B1A3	5.85e+0	ng/dscm 7%O2	0.00e+0		OCE	
5D Total	319B1R1	3.31e+0	ng/dscm 7%O2	1.74e-6	lbs/hr	OCE	
5D Total	319B1R2	3.97e+0	ng/dscm 7%O2	2.07e-6	lbs/hr	OCE	
5D Total	319B1R3	2.95e+0	ng/dscm 7%O2	1.45e-6	lbs/hr	OCE	
5D Total	319B1R4	3.16e+0	ng/dscm 7%O2	1.75e-6	lbs/hr	OCE	
5D Total	319B1R5	4.30e+0	ng/dscm 7%O2	2.33e-6	lbs/hr	OCE	
5D Total	319B1R6	3.45e+0	ng/dscm 7%O2	1.98e-6	lbs/hr	OCE	
5D Total	319B1R7	4.14e+0	ng/dscm 7%O2	2.23e-6	lbs/hr	OCE	
5D Total	319B1R8	2.36e+0	ng/dscm 7%O2	1.16e-6	lbs/hr	CE7%O2	
5D Total	319B1R9	1.89e+0	ng/dscm 7%O2	8.38e-7	lbs/hr	CE7%O2	
5D Total	319C2R1	8.57e+1	ng/dscm 7%O2	5.21e-5	lbs/hr	CE7%O2	
5D Total	319C2R2	1.45e+2	ng/dscm 7%O2	7.71e-5	lbs/hr	CE7%O2	
5D Total	319C2R3	2.32e+2	ng/dscm 7%O2	1.38e-4	lbs/hr	CE7%O2	
5D Total	319C5	1.10e+1	ng/dscm 7%O2	4.24e-6	lbs/hr	CE7%O2	
5D Total	319C6R2	7.34e+1	ng/dscm 7%O2	3.50e-5	lbs/hr	CE7%O2	
5D Total	319C6R3	1.30e+2	ng/dscm 7%O2	7.25e-5	lbs/hr	CE7%O2	
5D Total	319C7R1	2.50e+2	ng/dscm 7%O2	1.24e-4	lbs/hr	CE7%O2	
5D Total	319C9R1	3.30e+0	ng/dscm 7%O2	1.68e-6	lbs/hr	OCE	
5D Total	319C9R2	2.23e+0	ng/dscm 7%O2	1.13e-6	lbs/hr	OCE	
5D Total	319C9R3	1.24e+0	ng/dscm 7%O2	6.27e-7	lbs/hr	OCE	
5D Total	319C9R4	2.80e+0	ng/dscm 7%O2	1.36e-6	lbs/hr	OCE	
5D Total	319C9R5	2.39e+0	ng/dscm 7%O2	1.19e-6	lbs/hr	OCE	
5D Total	319C9R6	2.80e+0	ng/dscm 7%O2	1.44e-6	lbs/hr	OCE	
5F 12378	319B1A1	1.66e-1	ng/dscm 7%O2	0.00e+0		7%O2	
5F 12378	319B1A2	1.07e-1	ng/dscm 7%O2	0.00e+0		7%O2	
5F 12378	319B1A3	1.14e-1	ng/dscm 7%O2	0.00e+0		7%O2	
5F 12378	319B1R1	2	1.91e-1	ng/dscm 7%O2	1.01e-7	lbs/hr	CE7%O2
5F 12378	319B1R2	2	1.96e-1	ng/dscm 7%O2	1.02e-7	lbs/hr	CE7%O2
5F 12378	319B1R3	2	1.48e-1	ng/dscm 7%O2	7.26e-8	lbs/hr	CE7%O2
5F 12378	319B1R4	2	1.55e-1	ng/dscm 7%O2	8.60e-8	lbs/hr	CE7%O2
5F 12378	319B1R5	2	1.42e-1	ng/dscm 7%O2	7.72e-8	lbs/hr	CE7%O2
5F 12378	319B1R6	2	1.71e-1	ng/dscm 7%O2	9.83e-8	lbs/hr	CE7%O2
5F 12378	319B1R7	2	1.63e-1	ng/dscm 7%O2	8.82e-8	lbs/hr	CE7%O2
5F 12378	319B1R8	2	1.28e-1	ng/dscm 7%O2	6.33e-8	lbs/hr	CE7%O2
5F 12378	319B1R9	2	1.50e-1	ng/dscm 7%O2	6.67e-8	lbs/hr	CE7%O2
5F 12378	319C2R1	2	6.31e+0	ng/dscm 7%O2	3.84e-6	lbs/hr	CE7%O2
5F 12378	319C2R2	2	4.08e+0	ng/dscm 7%O2	2.17e-6	lbs/hr	CE7%O2
5F 12378	319C2R3	2	5.69e+0	ng/dscm 7%O2	3.38e-6	lbs/hr	CE7%O2
5F 12378	319C5	2	3.84e-3	ng/dscm 7%O2	1.49e-9	lbs/hr	CE7%O2
5F 12378	319C6R2	2	3.15e+0	ng/dscm 7%O2	1.50e-6	lbs/hr	CE7%O2
5F 12378	319C6R3	2	4.77e+0	ng/dscm 7%O2	2.65e-6	lbs/hr	CE7%O2
5F 12378	319C7R1	2	1.75e+0	ng/dscm 7%O2	8.67e-7	lbs/hr	CE7%O2
5F 12378	319C9R1	2	6.66e-2	ng/dscm 7%O2	3.39e-8	lbs/hr	CE7%O2
5F 12378	319C9R2	2	5.11e-2	ng/dscm 7%O2	2.60e-8	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN

REGION: 7
 APC SYSTEM: ESP

5F 12378	319C9R3	2	3.72e-2	ng/dscm 7%O2	1.88e-8	lbs/hr	CE7%O2
5F 12378	319C9R4	2	5.71e-2	ng/dscm 7%O2	2.78e-8	lbs/hr	CE7%O2
5F 12378	319C9R5	2	4.96e-2	ng/dscm 7%O2	2.47e-8	lbs/hr	CE7%O2
5F 12378	319C9R6	2	5.37e-2	ng/dscm 7%O2	2.76e-8	lbs/hr	CE7%O2
5F 23478	319B1A1		4.70e-1	ng/dscm 7%O2	0.00e+0		7%O2
5F 23478	319B1A2		3.29e-1	ng/dscm 7%O2	0.00e+0		7%O2
5F 23478	319B1A3		3.29e-1	ng/dscm 7%O2	0.00e+0		7%O2
5F 23478	319B1R1		4.30e-1	ng/dscm 7%O2	2.27e-7	lbs/hr	CE7%O2
5F 23478	319B1R2		4.62e-1	ng/dscm 7%O2	2.41e-7	lbs/hr	CE7%O2
5F 23478	319B1R3		3.47e-1	ng/dscm 7%O2	1.71e-7	lbs/hr	CE7%O2
5F 23478	319B1R4		3.31e-1	ng/dscm 7%O2	1.83e-7	lbs/hr	CE7%O2
5F 23478	319B1R5		3.69e-1	ng/dscm 7%O2	2.00e-7	lbs/hr	CE7%O2
5F 23478	319B1R6		3.78e-1	ng/dscm 7%O2	2.17e-7	lbs/hr	CE7%O2
5F 23478	319B1R7		3.69e-1	ng/dscm 7%O2	1.99e-7	lbs/hr	CE7%O2
5F 23478	319B1R8		2.42e-1	ng/dscm 7%O2	1.19e-7	lbs/hr	CE7%O2
5F 23478	319B1R9		2.83e-1	ng/dscm 7%O2	1.26e-7	lbs/hr	CE7%O2
5F 23478	319C2R1		1.48e+1	ng/dscm 7%O2	9.02e-6	lbs/hr	CE7%O2
5F 23478	319C2R2		8.69e+0	ng/dscm 7%O2	4.63e-6	lbs/hr	CE7%O2
5F 23478	319C2R3	2	1.35e+1	ng/dscm 7%O2	7.99e-6	lbs/hr	CE7%O2
5F 23478	319C5		1.49e+0	ng/dscm 7%O2	5.76e-7	lbs/hr	CE7%O2
5F 23478	319C6R2		7.24e+0	ng/dscm 7%O2	3.45e-6	lbs/hr	CE7%O2
5F 23478	319C6R3		1.26e+1	ng/dscm 7%O2	6.99e-6	lbs/hr	CE7%O2
5F 23478	319C7R1		5.09e+0	ng/dscm 7%O2	2.52e-6	lbs/hr	CE7%O2
5F 23478	319C9R1		2.69e-1	ng/dscm 7%O2	1.37e-7	lbs/hr	CE7%O2
5F 23478	319C9R2		1.86e-1	ng/dscm 7%O2	9.48e-8	lbs/hr	CE7%O2
5F 23478	319C9R3		1.30e-1	ng/dscm 7%O2	6.58e-8	lbs/hr	CE7%O2
5F 23478	319C9R4		2.29e-1	ng/dscm 7%O2	1.11e-7	lbs/hr	CE7%O2
5F 23478	319C9R5		1.92e-1	ng/dscm 7%O2	9.58e-8	lbs/hr	CE7%O2
5F 23478	319C9R6		2.26e-1	ng/dscm 7%O2	1.16e-7	lbs/hr	CE7%O2
5F Other	319B1A1		4.45e+0	ng/dscm 7%O2	0.00e+0		7%O2
5F Other	319B1A2		3.04e+0	ng/dscm 7%O2	0.00e+0		7%O2
5F Other	319B1A3		2.83e+0	ng/dscm 7%O2	0.00e+0		7%O2
5F Other	319B1R1		4.11e+0	ng/dscm 7%O2	2.17e-6	lbs/hr	CE7%O2
5F Other	319B1R2		4.75e+0	ng/dscm 7%O2	2.47e-6	lbs/hr	CE7%O2
5F Other	319B1R3		3.82e+0	ng/dscm 7%O2	1.88e-6	lbs/hr	CE7%O2
5F Other	319B1R4		3.69e+0	ng/dscm 7%O2	2.04e-6	lbs/hr	CE7%O2
5F Other	319B1R5		3.67e+0	ng/dscm 7%O2	1.99e-6	lbs/hr	CE7%O2
5F Other	319B1R6		4.06e+0	ng/dscm 7%O2	2.33e-6	lbs/hr	CE7%O2
5F Other	319B1R7		4.03e+0	ng/dscm 7%O2	2.17e-6	lbs/hr	CE7%O2
5F Other	319B1R8		2.64e+0	ng/dscm 7%O2	1.30e-6	lbs/hr	OCE
5F Other	319B1R9		3.27e+0	ng/dscm 7%O2	1.45e-6	lbs/hr	OCE
5F Other	319C2R1		3.58e+1	ng/dscm 7%O2	2.18e-5	lbs/hr	OCE
5F Other	319C2R2		3.11e+1	ng/dscm 7%O2	1.66e-5	lbs/hr	OCE
5F Other	319C2R3		3.01e+1	ng/dscm 7%O2	1.79e-5	lbs/hr	OCE
5F Other	319C5		2.23e+0	ng/dscm 7%O2	8.65e-7	lbs/hr	OCE
5F Other	319C6R2		8.22e+0	ng/dscm 7%O2	3.92e-6	lbs/hr	OCE
5F Other	319C6R3		6.48e+1	ng/dscm 7%O2	3.60e-5	lbs/hr	OCE
5F Other	319C7R1		2.64e+1	ng/dscm 7%O2	1.31e-5	lbs/hr	OCE
5F Other	319C9R1		1.79e+0	ng/dscm 7%O2	9.12e-7	lbs/hr	CE7%O2
5F Other	319C9R2		1.20e+0	ng/dscm 7%O2	6.08e-7	lbs/hr	CE7%O2
5F Other	319C9R3		8.61e-1	ng/dscm 7%O2	4.36e-7	lbs/hr	CE7%O2
5F Other	319C9R4		1.46e+0	ng/dscm 7%O2	7.09e-7	lbs/hr	CE7%O2
5F Other	319C9R5		1.27e+0	ng/dscm 7%O2	6.30e-7	lbs/hr	CE7%O2
5F Other	319C9R6		1.24e+0	ng/dscm 7%O2	6.39e-7	lbs/hr	CE7%O2
5F Total	319B1A1		5.09e+0	ng/dscm 7%O2	0.00e+0		OCE
5F Total	319B1A2		3.48e+0	ng/dscm 7%O2	0.00e+0		OCE
5F Total	319B1A3		3.27e+0	ng/dscm 7%O2	0.00e+0		OCE
5F Total	319B1R1		4.73e+0	ng/dscm 7%O2	2.50e-6	lbs/hr	OCE
5F Total	319B1R2		5.41e+0	ng/dscm 7%O2	2.82e-6	lbs/hr	OCE
5F Total	319B1R3		4.31e+0	ng/dscm 7%O2	2.12e-6	lbs/hr	OCE
5F Total	319B1R4		4.18e+0	ng/dscm 7%O2	2.31e-6	lbs/hr	OCE
5F Total	319B1R5		4.18e+0	ng/dscm 7%O2	2.27e-6	lbs/hr	OCE
5F Total	319B1R6		4.61e+0	ng/dscm 7%O2	2.64e-6	lbs/hr	OCE

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

5F Total	319B1R7	4.56e+0	ng/dscm 7%O2	2.46e-6	lbs/hr	OCE
5F Total	319B1R8	3.01e+0	ng/dscm 7%O2	1.49e-6	lbs/hr	CE7%O2
5F Total	319B1R9	3.71e+0	ng/dscm 7%O2	1.64e-6	lbs/hr	CE7%O2
5F Total	319C2R1	5.69e+1	ng/dscm 7%O2	3.46e-5	lbs/hr	CE7%O2
5F Total	319C2R2	4.39e+1	ng/dscm 7%O2	2.34e-5	lbs/hr	CE7%O2
5F Total	319C2R3	4.93e+1	ng/dscm 7%O2	2.92e-5	lbs/hr	CE7%O2
5F Total	319C5	3.72e+0	ng/dscm 7%O2	1.44e-6	lbs/hr	CE7%O2
5F Total	319C6R2	1.86e+1	ng/dscm 7%O2	8.87e-6	lbs/hr	CE7%O2
5F Total	319C6R3	8.21e+1	ng/dscm 7%O2	4.57e-5	lbs/hr	CE7%O2
5F Total	319C7R1	3.33e+1	ng/dscm 7%O2	1.65e-5	lbs/hr	CE7%O2
5F Total	319C9R1	2.12e+0	ng/dscm 7%O2	1.08e-6	lbs/hr	OCE
5F Total	319C9R2	1.43e+0	ng/dscm 7%O2	7.29e-7	lbs/hr	OCE
5F Total	319C9R3	1.03e+0	ng/dscm 7%O2	5.20e-7	lbs/hr	OCE
5F Total	319C9R4	1.74e+0	ng/dscm 7%O2	8.48e-7	lbs/hr	OCE
5F Total	319C9R5	1.51e+0	ng/dscm 7%O2	7.51e-7	lbs/hr	OCE
5F Total	319C9R6	1.52e+0	ng/dscm 7%O2	7.83e-7	lbs/hr	OCE
6D 123478	319B1A1	6.36e-2	ng/dscm 7%O2	0.00e+0		7%O2
6D 123478	319B1A2	5.21e-2	ng/dscm 7%O2	0.00e+0		7%O2
6D 123478	319B1A3	4.81e-2	ng/dscm 7%O2	0.00e+0		7%O2
6D 123478	319B1R1	5.11e-2	ng/dscm 7%O2	2.69e-8	lbs/hr	CE7%O2
6D 123478	319B1R2	8.16e-2	ng/dscm 7%O2	4.25e-8	lbs/hr	CE7%O2
6D 123478	319B1R3	4.34e-2	ng/dscm 7%O2	2.14e-8	lbs/hr	CE7%O2
6D 123478	319B1R4	6.11e-2	ng/dscm 7%O2	3.38e-8	lbs/hr	CE7%O2
6D 123478	319B1R5	4.75e-2	ng/dscm 7%O2	2.57e-8	lbs/hr	CE7%O2
6D 123478	319B1R6	6.05e-2	ng/dscm 7%O2	3.47e-8	lbs/hr	CE7%O2
6D 123478	319B1R7	5.53e-2	ng/dscm 7%O2	2.99e-8	lbs/hr	CE7%O2
6D 123478	319B1R8	2.98e-2	ng/dscm 7%O2	1.47e-8	lbs/hr	CE7%O2
6D 123478	319B1R9	3.85e-2	ng/dscm 7%O2	1.71e-8	lbs/hr	CE7%O2
6D 123478	319C2R1	1.10e+1	ng/dscm 7%O2	6.71e-6	lbs/hr	CE7%O2
6D 123478	319C2R2	8.63e+0	ng/dscm 7%O2	4.60e-6	lbs/hr	CE7%O2
6D 123478	319C2R3	7.74e+0	ng/dscm 7%O2	4.60e-6	lbs/hr	CE7%O2
6D 123478	319C5	3.52e-1	ng/dscm 7%O2	1.36e-7	lbs/hr	CE7%O2
6D 123478	319C6R2	2.23e+0	ng/dscm 7%O2	1.06e-6	lbs/hr	CE7%O2
6D 123478	319C6R3	3.29e+0	ng/dscm 7%O2	1.83e-6	lbs/hr	CE7%O2
6D 123478	319C7R1	4.38e+0	ng/dscm 7%O2	2.16e-6	lbs/hr	CE7%O2
6D 123478	319C9R1	3.93e-2	ng/dscm 7%O2	2.01e-8	lbs/hr	CE7%O2
6D 123478	319C9R2	2.71e-2	ng/dscm 7%O2	1.38e-8	lbs/hr	CE7%O2
6D 123478	319C9R3	1.86e-2	ng/dscm 7%O2	9.40e-9	lbs/hr	CE7%O2
6D 123478	319C9R4	3.31e-2	ng/dscm 7%O2	1.61e-8	lbs/hr	CE7%O2
6D 123478	319C9R5	2.79e-2	ng/dscm 7%O2	1.39e-8	lbs/hr	CE7%O2
6D 123478	319C9R6	3.39e-2	ng/dscm 7%O2	1.74e-8	lbs/hr	CE7%O2
6D 123678	319B1A1	1.52e-1	ng/dscm 7%O2	0.00e+0		7%O2
6D 123678	319B1A2	1.26e-1	ng/dscm 7%O2	0.00e+0		7%O2
6D 123678	319B1A3	1.06e-1	ng/dscm 7%O2	0.00e+0		7%O2
6D 123678	319B1R1	8.87e-2	ng/dscm 7%O2	4.68e-8	lbs/hr	CE7%O2
6D 123678	319B1R2	1.44e-1	ng/dscm 7%O2	7.50e-8	lbs/hr	CE7%O2
6D 123678	319B1R3	8.39e-2	ng/dscm 7%O2	4.13e-8	lbs/hr	CE7%O2
6D 123678	319B1R4	8.15e-2	ng/dscm 7%O2	4.51e-8	lbs/hr	CE7%O2
6D 123678	319B1R5	8.71e-2	ng/dscm 7%O2	4.72e-8	lbs/hr	CE7%O2
6D 123678	319B1R6	8.57e-2	ng/dscm 7%O2	4.91e-8	lbs/hr	CE7%O2
6D 123678	319B1R7	1.00e-1	ng/dscm 7%O2	5.41e-8	lbs/hr	CE7%O2
6D 123678	319B1R8	5.67e-2	ng/dscm 7%O2	2.80e-8	lbs/hr	CE7%O2
6D 123678	319B1R9	7.69e-2	ng/dscm 7%O2	3.41e-8	lbs/hr	CE7%O2
6D 123678	319C2R1	7.55e+0	ng/dscm 7%O2	4.59e-6	lbs/hr	CE7%O2
6D 123678	319C2R2	6.80e+0	ng/dscm 7%O2	3.62e-6	lbs/hr	CE7%O2
6D 123678	319C2R3	6.73e+0	ng/dscm 7%O2	3.99e-6	lbs/hr	CE7%O2
6D 123678	319C5	4.14e-1	ng/dscm 7%O2	1.61e-7	lbs/hr	CE7%O2
6D 123678	319C6R2	1.82e+0	ng/dscm 7%O2	8.68e-7	lbs/hr	CE7%O2
6D 123678	319C6R3	3.23e+0	ng/dscm 7%O2	1.80e-6	lbs/hr	CE7%O2
6D 123678	319C7R1	5.23e+0	ng/dscm 7%O2	2.59e-6	lbs/hr	CE7%O2
6D 123678	319C9R1	6.66e-2	ng/dscm 7%O2	3.39e-8	lbs/hr	CE7%O2
6D 123678	319C9R2	4.81e-2	ng/dscm 7%O2	2.45e-8	lbs/hr	CE7%O2
6D 123678	319C9R3	3.10e-2	ng/dscm 7%O2	1.57e-8	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

6D 123678	319C9R4	6.31e-2	ng/dscm 7%O2	3.08e-8	lbs/hr	CE7%O2
6D 123678	319C9R5	5.58e-2	ng/dscm 7%O2	2.78e-8	lbs/hr	CE7%O2
6D 123678	319C9R6	6.50e-2	ng/dscm 7%O2	3.34e-8	lbs/hr	CE7%O2
6D 123789	319B1A1	1.33e-1	ng/dscm 7%O2	0.00e+0		7%O2
6D 123789	319B1A2	1.01e-1	ng/dscm 7%O2	0.00e+0		7%O2
6D 123789	319B1A3	7.60e-2	ng/dscm 7%O2	0.00e+0		7%O2
6D 123789	319B1R1	8.06e-2	ng/dscm 7%O2	4.25e-8	lbs/hr	CE7%O2
6D 123789	319B1R2	1.44e-1	ng/dscm 7%O2	7.50e-8	lbs/hr	CE7%O2
6D 123789	319B1R3	6.36e-2	ng/dscm 7%O2	3.13e-8	lbs/hr	CE7%O2
6D 123789	319B1R4	1.04e-1	ng/dscm 7%O2	5.78e-8	lbs/hr	CE7%O2
6D 123789	319B1R5	1.16e-1	ng/dscm 7%O2	6.29e-8	lbs/hr	CE7%O2
6D 123789	319B1R6	1.03e-1	ng/dscm 7%O2	5.92e-8	lbs/hr	CE7%O2
6D 123789	319B1R7	9.75e-2	ng/dscm 7%O2	5.26e-8	lbs/hr	CE7%O2
6D 123789	319B1R8	6.56e-2	ng/dscm 7%O2	3.24e-8	lbs/hr	CE7%O2
6D 123789	319B1R9	9.09e-2	ng/dscm 7%O2	4.03e-8	lbs/hr	CE7%O2
6D 123789	319C2R1	7.02e+1	ng/dscm 7%O2	4.27e-5	lbs/hr	CE7%O2
6D 123789	319C2R2	2.58e+1	ng/dscm 7%O2	1.37e-5	lbs/hr	CE7%O2
6D 123789	319C2R3	1.97e+1	ng/dscm 7%O2	1.17e-5	lbs/hr	CE7%O2
6D 123789	319C5	3.33e-1	ng/dscm 7%O2	1.29e-7	lbs/hr	CE7%O2
6D 123789	319C6R2	2.42e+0	ng/dscm 7%O2	1.15e-6	lbs/hr	CE7%O2
6D 123789	319C6R3	3.62e+0	ng/dscm 7%O2	2.01e-6	lbs/hr	CE7%O2
6D 123789	319C7R1	4.31e+0	ng/dscm 7%O2	2.13e-6	lbs/hr	CE7%O2
6D 123789	319C9R1	3.33e-2	ng/dscm 7%O2	1.70e-8	lbs/hr	CE7%O2
6D 123789	319C9R2	3.91e-2	ng/dscm 7%O2	1.99e-8	lbs/hr	CE7%O2
6D 123789	319C9R3	2.79e-2	ng/dscm 7%O2	1.41e-8	lbs/hr	CE7%O2
6D 123789	319C9R4	4.81e-2	ng/dscm 7%O2	2.34e-8	lbs/hr	CE7%O2
6D 123789	319C9R5	4.34e-2	ng/dscm 7%O2	2.16e-8	lbs/hr	CE7%O2
6D 123789	319C9R6	4.81e-2	ng/dscm 7%O2	2.47e-8	lbs/hr	CE7%O2
6D Other	319B1A1	2.59e+1	ng/dscm 7%O2	0.00e+0		7%O2
6D Other	319B1A2	1.87e+1	ng/dscm 7%O2	0.00e+0		7%O2
6D Other	319B1A3	1.69e+1	ng/dscm 7%O2	0.00e+0		7%O2
6D Other	319B1R1	7.41e+0	ng/dscm 7%O2	3.91e-6	lbs/hr	CE7%O2
6D Other	319B1R2	8.82e+0	ng/dscm 7%O2	4.59e-6	lbs/hr	CE7%O2
6D Other	319B1R3	7.05e+0	ng/dscm 7%O2	3.47e-6	lbs/hr	CE7%O2
6D Other	319B1R4	5.46e+0	ng/dscm 7%O2	3.02e-6	lbs/hr	CE7%O2
6D Other	319B1R5	7.83e+0	ng/dscm 7%O2	4.25e-6	lbs/hr	CE7%O2
6D Other	319B1R6	6.18e+0	ng/dscm 7%O2	3.54e-6	lbs/hr	CE7%O2
6D Other	319B1R7	8.63e+0	ng/dscm 7%O2	4.66e-6	lbs/hr	CE7%O2
6D Other	319B1R8	3.58e+0	ng/dscm 7%O2	1.76e-6	lbs/hr	OCE
6D Other	319B1R9	2.73e+0	ng/dscm 7%O2	1.21e-6	lbs/hr	OCE
6D Other	319C2R1	4.61e+2	ng/dscm 7%O2	2.81e-4	lbs/hr	OCE
6D Other	319C2R2	3.96e+2	ng/dscm 7%O2	2.11e-4	lbs/hr	OCE
6D Other	319C2R3	4.25e+2	ng/dscm 7%O2	2.53e-4	lbs/hr	OCE
6D Other	319C5	5.15e+1	ng/dscm 7%O2	1.99e-5	lbs/hr	OCE
6D Other	319C6R2	1.28e+2	ng/dscm 7%O2	6.08e-5	lbs/hr	OCE
6D Other	319C6R3	2.72e+2	ng/dscm 7%O2	1.51e-4	lbs/hr	OCE
6D Other	319C7R1	4.62e+2	ng/dscm 7%O2	2.29e-4	lbs/hr	OCE
6D Other	319C9R1	1.04e+1	ng/dscm 7%O2	5.31e-6	lbs/hr	CE7%O2
6D Other	319C9R2	7.19e+0	ng/dscm 7%O2	3.66e-6	lbs/hr	CE7%O2
6D Other	319C9R3	3.67e+0	ng/dscm 7%O2	1.86e-6	lbs/hr	CE7%O2
6D Other	319C9R4	9.03e+0	ng/dscm 7%O2	4.40e-6	lbs/hr	CE7%O2
6D Other	319C9R5	7.78e+0	ng/dscm 7%O2	3.88e-6	lbs/hr	CE7%O2
6D Other	319C9R6	9.41e+0	ng/dscm 7%O2	4.83e-6	lbs/hr	CE7%O2
6D Total	319B1A1	2.63e+1	ng/dscm 7%O2	0.00e+0		OCE
6D Total	319B1A2	1.90e+1	ng/dscm 7%O2	0.00e+0		OCE
6D Total	319B1A3	1.71e+1	ng/dscm 7%O2	0.00e+0		OCE
6D Total	319B1R1	7.63e+0	ng/dscm 7%O2	4.02e-6	lbs/hr	OCE
6D Total	319B1R2	9.19e+0	ng/dscm 7%O2	4.79e-6	lbs/hr	OCE
6D Total	319B1R3	7.24e+0	ng/dscm 7%O2	3.56e-6	lbs/hr	OCE
6D Total	319B1R4	5.71e+0	ng/dscm 7%O2	3.16e-6	lbs/hr	OCE
6D Total	319B1R5	8.08e+0	ng/dscm 7%O2	4.38e-6	lbs/hr	OCE
6D Total	319B1R6	6.43e+0	ng/dscm 7%O2	3.68e-6	lbs/hr	OCE
6D Total	319B1R7	8.88e+0	ng/dscm 7%O2	4.79e-6	lbs/hr	OCE

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

6D Total	319B1R8	3.73e+0	ng/dscm 7%O2	1.84e-6	lbs/hr	CE7%O2	
6D Total	319B1R9	2.94e+0	ng/dscm 7%O2	1.30e-6	lbs/hr	CE7%O2	
6D Total	319C2R1	5.50e+2	ng/dscm 7%O2	3.35e-4	lbs/hr	CE7%O2	
6D Total	319C2R2	4.37e+2	ng/dscm 7%O2	2.33e-4	lbs/hr	CE7%O2	
6D Total	319C2R3	4.60e+2	ng/dscm 7%O2	2.73e-4	lbs/hr	CE7%O2	
6D Total	319C5	5.26e+1	ng/dscm 7%O2	2.04e-5	lbs/hr	CE7%O2	
6D Total	319C6R2	1.34e+2	ng/dscm 7%O2	6.39e-5	lbs/hr	CE7%O2	
6D Total	319C6R3	2.82e+2	ng/dscm 7%O2	1.57e-4	lbs/hr	CE7%O2	
6D Total	319C7R1	4.76e+2	ng/dscm 7%O2	2.35e-4	lbs/hr	CE7%O2	
6D Total	319C9R1	1.06e+1	ng/dscm 7%O2	5.38e-6	lbs/hr	OCE	
6D Total	319C9R2	7.31e+0	ng/dscm 7%O2	3.72e-6	lbs/hr	OCE	
6D Total	319C9R3	3.75e+0	ng/dscm 7%O2	1.90e-6	lbs/hr	OCE	
6D Total	319C9R4	9.17e+0	ng/dscm 7%O2	4.47e-6	lbs/hr	OCE	
6D Total	319C9R5	7.91e+0	ng/dscm 7%O2	3.94e-6	lbs/hr	OCE	
6D Total	319C9R6	9.56e+0	ng/dscm 7%O2	4.91e-6	lbs/hr	OCE	
6F 123478	319B1A1	2.77e-1	ng/dscm 7%O2	0.00e+0		7%O2	
6F 123478	319B1A2	1.95e-1	ng/dscm 7%O2	0.00e+0		7%O2	
6F 123478	319B1A3	2.15e-1	ng/dscm 7%O2	0.00e+0		7%O2	
6F 123478	319B1R1	3.23e-1	ng/dscm 7%O2	1.70e-7	lbs/hr	CE7%O2	
6F 123478	319B1R2	4.89e-1	ng/dscm 7%O2	2.55e-7	lbs/hr	CE7%O2	
6F 123478	319B1R3	2.57e-1	ng/dscm 7%O2	1.27e-7	lbs/hr	CE7%O2	
6F 123478	319B1R4	2.55e-1	ng/dscm 7%O2	1.41e-7	lbs/hr	CE7%O2	
6F 123478	319B1R5	2.11e-1	ng/dscm 7%O2	1.14e-7	lbs/hr	CE7%O2	
6F 123478	319B1R6	3.02e-1	ng/dscm 7%O2	1.73e-7	lbs/hr	CE7%O2	
6F 123478	319B1R7	2.53e-1	ng/dscm 7%O2	1.37e-7	lbs/hr	CE7%O2	
6F 123478	319B1R8	2.12e-1	ng/dscm 7%O2	1.04e-7	lbs/hr	CE7%O2	
6F 123478	319B1R9	2.83e-1	ng/dscm 7%O2	1.26e-7	lbs/hr	CE7%O2	
6F 123478	319C2R1	ND	1.19e-1	ng/dscm 7%O2	7.24e-8	lbs/hr	CE7%O2
6F 123478	319C2R2	ND	1.85e-1	ng/dscm 7%O2	9.87e-8	lbs/hr	CE7%O2
6F 123478	319C2R3	ND	3.30e-1	ng/dscm 7%O2	1.96e-7	lbs/hr	CE7%O2
6F 123478	319C5		7.30e-1	ng/dscm 7%O2	2.83e-7	lbs/hr	CE7%O2
6F 123478	319C6R2		2.42e+0	ng/dscm 7%O2	1.15e-6	lbs/hr	CE7%O2
6F 123478	319C6R3		3.41e+0	ng/dscm 7%O2	1.90e-6	lbs/hr	CE7%O2
6F 123478	319C7R1		1.75e+0	ng/dscm 7%O2	8.67e-7	lbs/hr	CE7%O2
6F 123478	319C9R1		8.17e-2	ng/dscm 7%O2	4.17e-8	lbs/hr	CE7%O2
6F 123478	319C9R2		6.32e-2	ng/dscm 7%O2	3.21e-8	lbs/hr	CE7%O2
6F 123478	319C9R3		4.65e-2	ng/dscm 7%O2	2.35e-8	lbs/hr	CE7%O2
6F 123478	319C9R4		6.31e-2	ng/dscm 7%O2	3.08e-8	lbs/hr	CE7%O2
6F 123478	319C9R5		5.89e-2	ng/dscm 7%O2	2.94e-8	lbs/hr	CE7%O2
6F 123478	319C9R6		6.50e-2	ng/dscm 7%O2	3.34e-8	lbs/hr	CE7%O2
6F 123678	319B1A1		1.16e-1	ng/dscm 7%O2	0.00e+0		7%O2
6F 123678	319B1A2		9.04e-2	ng/dscm 7%O2	0.00e+0		7%O2
6F 123678	319B1A3		9.12e-2	ng/dscm 7%O2	0.00e+0		7%O2
6F 123678	319B1R1		1.48e-1	ng/dscm 7%O2	7.79e-8	lbs/hr	CE7%O2
6F 123678	319B1R2		2.04e-1	ng/dscm 7%O2	1.06e-7	lbs/hr	CE7%O2
6F 123678	319B1R3		1.13e-1	ng/dscm 7%O2	5.55e-8	lbs/hr	CE7%O2
6F 123678	319B1R4		1.12e-1	ng/dscm 7%O2	6.20e-8	lbs/hr	CE7%O2
6F 123678	319B1R5		1.03e-1	ng/dscm 7%O2	5.58e-8	lbs/hr	CE7%O2
6F 123678	319B1R6		1.36e-1	ng/dscm 7%O2	7.80e-8	lbs/hr	CE7%O2
6F 123678	319B1R7		1.13e-1	ng/dscm 7%O2	6.12e-8	lbs/hr	CE7%O2
6F 123678	319B1R8		8.95e-2	ng/dscm 7%O2	4.41e-8	lbs/hr	CE7%O2
6F 123678	319B1R9		1.22e-1	ng/dscm 7%O2	5.43e-8	lbs/hr	CE7%O2
6F 123678	319C2R1		6.67e-1	ng/dscm 7%O2	4.06e-7	lbs/hr	CE7%O2
6F 123678	319C2R2	ND	1.44e-1	ng/dscm 7%O2	7.68e-8	lbs/hr	CE7%O2
6F 123678	319C2R3	ND	2.54e-1	ng/dscm 7%O2	1.51e-7	lbs/hr	CE7%O2
6F 123678	319C5		3.66e-1	ng/dscm 7%O2	1.42e-7	lbs/hr	CE7%O2
6F 123678	319C6R2		1.14e+0	ng/dscm 7%O2	5.44e-7	lbs/hr	CE7%O2
6F 123678	319C6R3		1.82e+0	ng/dscm 7%O2	1.01e-6	lbs/hr	CE7%O2
6F 123678	319C7R1		9.43e-1	ng/dscm 7%O2	4.66e-7	lbs/hr	CE7%O2
6F 123678	319C9R1		4.24e-2	ng/dscm 7%O2	2.16e-8	lbs/hr	CE7%O2
6F 123678	319C9R2		3.61e-2	ng/dscm 7%O2	1.83e-8	lbs/hr	CE7%O2
6F 123678	319C9R3		2.48e-2	ng/dscm 7%O2	1.25e-8	lbs/hr	CE7%O2
6F 123678	319C9R4		3.61e-2	ng/dscm 7%O2	1.76e-8	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

6F 123678	319C9R5	3.10e-2	ng/dscm 7%O2	1.54e-8	lbs/hr	CE7%O2	
6F 123678	319C9R6	3.68e-2	ng/dscm 7%O2	1.89e-8	lbs/hr	CE7%O2	
6F 123789	319B1A1	1.94e-2	ng/dscm 7%O2	0.00e+0		7%O2	
6F 123789	319B1A2	1.37e-2	ng/dscm 7%O2	0.00e+0		7%O2	
6F 123789	319B1A3	1.77e-2	ng/dscm 7%O2	0.00e+0		7%O2	
6F 123789	319B1R1	2.69e-2	ng/dscm 7%O2	1.42e-8	lbs/hr	CE7%O2	
6F 123789	319B1R2	4.35e-2	ng/dscm 7%O2	2.27e-8	lbs/hr	CE7%O2	
6F 123789	319B1R3	2	2.31e-2	ng/dscm 7%O2	1.14e-8	lbs/hr	CE7%O2
6F 123789	319B1R4	2	1.78e-2	ng/dscm 7%O2	9.87e-9	lbs/hr	CE7%O2
6F 123789	319B1R5		1.58e-2	ng/dscm 7%O2	8.58e-9	lbs/hr	CE7%O2
6F 123789	319B1R6		2.52e-2	ng/dscm 7%O2	1.45e-8	lbs/hr	CE7%O2
6F 123789	319B1R7		1.84e-2	ng/dscm 7%O2	9.96e-9	lbs/hr	CE7%O2
6F 123789	319B1R8	2	8.95e-3	ng/dscm 7%O2	4.41e-9	lbs/hr	CE7%O2
6F 123789	319B1R9		1.40e-2	ng/dscm 7%O2	6.20e-9	lbs/hr	CE7%O2
6F 123789	319C2R1		2.00e+0	ng/dscm 7%O2	1.22e-6	lbs/hr	CE7%O2
6F 123789	319C2R2		1.05e+0	ng/dscm 7%O2	5.59e-7	lbs/hr	CE7%O2
6F 123789	319C2R3		2.34e+0	ng/dscm 7%O2	1.39e-6	lbs/hr	CE7%O2
6F 123789	319C5		8.77e-2	ng/dscm 7%O2	3.40e-8	lbs/hr	CE7%O2
6F 123789	319C6R2		2.75e-1	ng/dscm 7%O2	1.31e-7	lbs/hr	CE7%O2
6F 123789	319C6R3		3.40e-1	ng/dscm 7%O2	1.89e-7	lbs/hr	CE7%O2
6F 123789	319C7R1		1.30e-1	ng/dscm 7%O2	6.41e-8	lbs/hr	CE7%O2
6F 123789	319C9R1		6.05e-3	ng/dscm 7%O2	3.09e-9	lbs/hr	CE7%O2
6F 123789	319C9R2	2	6.02e-3	ng/dscm 7%O2	3.06e-9	lbs/hr	CE7%O2
6F 123789	319C9R3	2	3.10e-3	ng/dscm 7%O2	1.57e-9	lbs/hr	CE7%O2
6F 123789	319C9R4	2	6.01e-3	ng/dscm 7%O2	2.93e-9	lbs/hr	CE7%O2
6F 123789	319C9R5	2	6.20e-3	ng/dscm 7%O2	3.09e-9	lbs/hr	CE7%O2
6F 123789	319C9R6	2	5.65e-3	ng/dscm 7%O2	2.90e-9	lbs/hr	CE7%O2
6F 234678	319B1A1		2.43e-1	ng/dscm 7%O2	0.00e+0		7%O2
6F 234678	319B1A2		1.59e-1	ng/dscm 7%O2	0.00e+0		7%O2
6F 234678	319B1A3		1.65e-1	ng/dscm 7%O2	0.00e+0		7%O2
6F 234678	319B1R1		2.47e-1	ng/dscm 7%O2	1.30e-7	lbs/hr	CE7%O2
6F 234678	319B1R2		3.81e-1	ng/dscm 7%O2	1.98e-7	lbs/hr	CE7%O2
6F 234678	319B1R3		2.11e-1	ng/dscm 7%O2	1.04e-7	lbs/hr	CE7%O2
6F 234678	319B1R4		1.66e-1	ng/dscm 7%O2	9.16e-8	lbs/hr	CE7%O2
6F 234678	319B1R5		1.61e-1	ng/dscm 7%O2	8.73e-8	lbs/hr	CE7%O2
6F 234678	319B1R6		1.99e-1	ng/dscm 7%O2	1.14e-7	lbs/hr	CE7%O2
6F 234678	319B1R7		1.84e-1	ng/dscm 7%O2	9.96e-8	lbs/hr	CE7%O2
6F 234678	319B1R8		1.07e-1	ng/dscm 7%O2	5.30e-8	lbs/hr	CE7%O2
6F 234678	319B1R9		1.68e-1	ng/dscm 7%O2	7.45e-8	lbs/hr	CE7%O2
6F 234678	319C2R1		1.50e+1	ng/dscm 7%O2	9.10e-6	lbs/hr	CE7%O2
6F 234678	319C2R2		8.94e+0	ng/dscm 7%O2	4.76e-6	lbs/hr	CE7%O2
6F 234678	319C2R3		1.95e+1	ng/dscm 7%O2	1.16e-5	lbs/hr	CE7%O2
6F 234678	319C5		1.44e-1	ng/dscm 7%O2	5.58e-8	lbs/hr	CE7%O2
6F 234678	319C6R2		4.30e-1	ng/dscm 7%O2	2.05e-7	lbs/hr	CE7%O2
6F 234678	319C6R3		7.89e-1	ng/dscm 7%O2	4.39e-7	lbs/hr	CE7%O2
6F 234678	319C7R1		5.89e-1	ng/dscm 7%O2	2.91e-7	lbs/hr	CE7%O2
6F 234678	319C9R1		3.93e-2	ng/dscm 7%O2	2.01e-8	lbs/hr	CE7%O2
6F 234678	319C9R2		3.01e-2	ng/dscm 7%O2	1.53e-8	lbs/hr	CE7%O2
6F 234678	319C9R3		2.48e-2	ng/dscm 7%O2	1.25e-8	lbs/hr	CE7%O2
6F 234678	319C9R4		3.01e-2	ng/dscm 7%O2	1.46e-8	lbs/hr	CE7%O2
6F 234678	319C9R5		3.10e-2	ng/dscm 7%O2	1.54e-8	lbs/hr	CE7%O2
6F 234678	319C9R6		2.83e-2	ng/dscm 7%O2	1.45e-8	lbs/hr	CE7%O2
6F Other	319B1A1		1.03e+0	ng/dscm 7%O2	0.00e+0		7%O2
6F Other	319B1A2		7.48e-1	ng/dscm 7%O2	0.00e+0		7%O2
6F Other	319B1A3		7.78e-1	ng/dscm 7%O2	0.00e+0		7%O2
6F Other	319B1R1		1.11e+0	ng/dscm 7%O2	5.85e-7	lbs/hr	CE7%O2
6F Other	319B1R2		1.36e+0	ng/dscm 7%O2	7.06e-7	lbs/hr	CE7%O2
6F Other	319B1R3		8.94e-1	ng/dscm 7%O2	4.40e-7	lbs/hr	CE7%O2
6F Other	319B1R4		8.69e-1	ng/dscm 7%O2	4.81e-7	lbs/hr	CE7%O2
6F Other	319B1R5		6.97e-1	ng/dscm 7%O2	3.78e-7	lbs/hr	CE7%O2
6F Other	319B1R6		1.03e+0	ng/dscm 7%O2	5.88e-7	lbs/hr	CE7%O2
6F Other	319B1R7		9.07e-1	ng/dscm 7%O2	4.89e-7	lbs/hr	CE7%O2
6F Other	319B1R8		6.26e-1	ng/dscm 7%O2	3.09e-7	lbs/hr	COE

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

6F Other	319B1R9	8.81e-1	ng/dscm 7%O2	3.91e-7	lbs/hr	OCE
6F Other	319C2R1	9.40e+0	ng/dscm 7%O2	5.72e-6	lbs/hr	OCE
6F Other	319C2R2	1.02e+1	ng/dscm 7%O2	5.42e-6	lbs/hr	OCE
6F Other	319C2R3	2.96e+1	ng/dscm 7%O2	1.76e-5	lbs/hr	OCE
6F Other	319C5	2.80e-1	ng/dscm 7%O2	1.08e-7	lbs/hr	OCE
6F Other	319C6R2	2.64e+0	ng/dscm 7%O2	1.26e-6	lbs/hr	OCE
6F Other	319C6R3	3.50e+0	ng/dscm 7%O2	1.95e-6	lbs/hr	OCE
6F Other	319C7R1	2.19e+0	ng/dscm 7%O2	1.09e-6	lbs/hr	OCE
6F Other	319C9R1	3.15e-1	ng/dscm 7%O2	1.60e-7	lbs/hr	CE7%O2
6F Other	319C9R2	2.02e-1	ng/dscm 7%O2	1.02e-7	lbs/hr	CE7%O2
6F Other	319C9R3	1.52e-1	ng/dscm 7%O2	7.68e-8	lbs/hr	CE7%O2
6F Other	319C9R4	2.62e-1	ng/dscm 7%O2	1.27e-7	lbs/hr	CE7%O2
6F Other	319C9R5	2.20e-1	ng/dscm 7%O2	1.10e-7	lbs/hr	CE7%O2
6F Other	319C9R6	2.37e-1	ng/dscm 7%O2	1.22e-7	lbs/hr	CE7%O2
6F Total	319B1A1	1.69e+0	ng/dscm 7%O2	0.00e+0		OCE
6F Total	319B1A2	1.21e+0	ng/dscm 7%O2	0.00e+0		OCE
6F Total	319B1A3	1.27e+0	ng/dscm 7%O2	0.00e+0		OCE
6F Total	319B1R1	1.85e+0	ng/dscm 7%O2	9.78e-7	lbs/hr	OCE
6F Total	319B1R2	2.47e+0	ng/dscm 7%O2	1.29e-6	lbs/hr	OCE
6F Total	319B1R3	1.50e+0	ng/dscm 7%O2	7.38e-7	lbs/hr	OCE
6F Total	319B1R4	1.42e+0	ng/dscm 7%O2	7.85e-7	lbs/hr	OCE
6F Total	319B1R5	1.19e+0	ng/dscm 7%O2	6.44e-7	lbs/hr	OCE
6F Total	319B1R6	1.69e+0	ng/dscm 7%O2	9.68e-7	lbs/hr	OCE
6F Total	319B1R7	1.48e+0	ng/dscm 7%O2	7.97e-7	lbs/hr	OCE
6F Total	319B1R8	1.04e+0	ng/dscm 7%O2	5.15e-7	lbs/hr	CE7%O2
6F Total	319B1R9	1.47e+0	ng/dscm 7%O2	6.51e-7	lbs/hr	CE7%O2
6F Total	319C2R1	2.71e+1	ng/dscm 7%O2	1.65e-5	lbs/hr	CE7%O2
6F Total	319C2R2	2.05e+1	ng/dscm 7%O2	1.09e-5	lbs/hr	CE7%O2
6F Total	319C2R3	5.21e+1	ng/dscm 7%O2	3.09e-5	lbs/hr	CE7%O2
6F Total	319C5	1.61e+0	ng/dscm 7%O2	6.23e-7	lbs/hr	CE7%O2
6F Total	319C6R2	6.90e+0	ng/dscm 7%O2	3.29e-6	lbs/hr	CE7%O2
6F Total	319C6R3	9.86e+0	ng/dscm 7%O2	5.49e-6	lbs/hr	CE7%O2
6F Total	319C7R1	5.61e+0	ng/dscm 7%O2	2.77e-6	lbs/hr	CE7%O2
6F Total	319C9R1	4.84e-1	ng/dscm 7%O2	2.47e-7	lbs/hr	OCE
6F Total	319C9R2	3.37e-1	ng/dscm 7%O2	1.71e-7	lbs/hr	OCE
6F Total	319C9R3	2.51e-1	ng/dscm 7%O2	1.27e-7	lbs/hr	OCE
6F Total	319C9R4	3.97e-1	ng/dscm 7%O2	1.93e-7	lbs/hr	OCE
6F Total	319C9R5	3.47e-1	ng/dscm 7%O2	1.73e-7	lbs/hr	OCE
6F Total	319C9R6	3.73e-1	ng/dscm 7%O2	1.92e-7	lbs/hr	OCE
7D 1234678	319B1A1	1.30e+0	ng/dscm 7%O2	0.00e+0		7%O2
7D 1234678	319B1A2	1.01e+0	ng/dscm 7%O2	0.00e+0		7%O2
7D 1234678	319B1A3	9.38e-1	ng/dscm 7%O2	0.00e+0		7%O2
7D 1234678	319B1R1	6.18e-1	ng/dscm 7%O2	3.26e-7	lbs/hr	CE7%O2
7D 1234678	319B1R2	1.01e+0	ng/dscm 7%O2	5.24e-7	lbs/hr	CE7%O2
7D 1234678	319B1R3	5.79e-1	ng/dscm 7%O2	2.85e-7	lbs/hr	CE7%O2
7D 1234678	319B1R4	5.61e-1	ng/dscm 7%O2	3.10e-7	lbs/hr	CE7%O2
7D 1234678	319B1R5	5.28e-1	ng/dscm 7%O2	2.86e-7	lbs/hr	CE7%O2
7D 1234678	319B1R6	6.30e-1	ng/dscm 7%O2	3.61e-7	lbs/hr	CE7%O2
7D 1234678	319B1R7	6.59e-1	ng/dscm 7%O2	3.56e-7	lbs/hr	CE7%O2
7D 1234678	319B1R8	3.58e-1	ng/dscm 7%O2	1.77e-7	lbs/hr	CE7%O2
7D 1234678	319B1R9	4.55e-1	ng/dscm 7%O2	2.02e-7	lbs/hr	CE7%O2
7D 1234678	319C2R1	2.24e+1	ng/dscm 7%O2	1.36e-5	lbs/hr	CE7%O2
7D 1234678	319C2R2	1.46e+1	ng/dscm 7%O2	7.76e-6	lbs/hr	CE7%O2
7D 1234678	319C2R3	1.40e+1	ng/dscm 7%O2	8.32e-6	lbs/hr	CE7%O2
7D 1234678	319C5	2.65e+0	ng/dscm 7%O2	1.03e-6	lbs/hr	CE7%O2
7D 1234678	319C6R2	6.03e+0	ng/dscm 7%O2	2.87e-6	lbs/hr	CE7%O2
7D 1234678	319C6R3	9.77e+0	ng/dscm 7%O2	5.43e-6	lbs/hr	CE7%O2
7D 1234678	319C7R1	1.70e+1	ng/dscm 7%O2	8.39e-6	lbs/hr	CE7%O2
7D 1234678	319C9R1	6.05e-1	ng/dscm 7%O2	3.09e-7	lbs/hr	CE7%O2
7D 1234678	319C9R2	4.51e-1	ng/dscm 7%O2	2.29e-7	lbs/hr	CE7%O2
7D 1234678	319C9R3	3.03e-1	ng/dscm 7%O2	1.54e-7	lbs/hr	CE7%O2
7D 1234678	319C9R4	5.41e-1	ng/dscm 7%O2	2.64e-7	lbs/hr	CE7%O2
7D 1234678	319C9R5	4.96e-1	ng/dscm 7%O2	2.47e-7	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP REGION: 7

7D 1234678	319C9R6	5.65e-1	ng/dscm 7%O2	2.90e-7	lbs/hr	CE7%O2
7D Other	319B1A1	2.21e+0	ng/dscm 7%O2	0.00e+0		7%O2
7D Other	319B1A2	1.70e+0	ng/dscm 7%O2	0.00e+0		7%O2
7D Other	319B1A3	1.55e+0	ng/dscm 7%O2	0.00e+0		7%O2
7D Other	319B1R1	9.94e-1	ng/dscm 7%O2	5.24e-7	lbs/hr	CE7%O2
7D Other	319B1R2	1.33e+0	ng/dscm 7%O2	6.94e-7	lbs/hr	CE7%O2
7D Other	319B1R3	9.55e-1	ng/dscm 7%O2	4.70e-7	lbs/hr	CE7%O2
7D Other	319B1R4	9.68e-1	ng/dscm 7%O2	5.36e-7	lbs/hr	CE7%O2
7D Other	319B1R5	9.50e-1	ng/dscm 7%O2	5.15e-7	lbs/hr	CE7%O2
7D Other	319B1R6	1.03e+0	ng/dscm 7%O2	5.92e-7	lbs/hr	CE7%O2
7D Other	319B1R7	1.16e+0	ng/dscm 7%O2	6.26e-7	lbs/hr	CE7%O2
7D Other	319B1R8	6.56e-1	ng/dscm 7%O2	3.24e-7	lbs/hr	OCE
7D Other	319B1R9	6.64e-1	ng/dscm 7%O2	2.95e-7	lbs/hr	OCE
7D Other	319C2R1	3.86e+1	ng/dscm 7%O2	2.35e-5	lbs/hr	OCE
7D Other	319C2R2	2.13e+1	ng/dscm 7%O2	1.13e-5	lbs/hr	OCE
7D Other	319C2R3	1.95e+1	ng/dscm 7%O2	1.16e-5	lbs/hr	OCE
7D Other	319C5	3.43e+0	ng/dscm 7%O2	1.33e-6	lbs/hr	OCE
7D Other	319C6R2	6.27e+0	ng/dscm 7%O2	2.99e-6	lbs/hr	OCE
7D Other	319C6R3	1.23e+1	ng/dscm 7%O2	6.84e-6	lbs/hr	OCE
7D Other	319C7R1	2.42e+1	ng/dscm 7%O2	1.20e-5	lbs/hr	OCE
7D Other	319C9R1	7.57e-1	ng/dscm 7%O2	3.86e-7	lbs/hr	CE7%O2
7D Other	319C9R2	5.71e-1	ng/dscm 7%O2	2.90e-7	lbs/hr	CE7%O2
7D Other	319C9R3	3.47e-1	ng/dscm 7%O2	1.75e-7	lbs/hr	CE7%O2
7D Other	319C9R4	6.92e-1	ng/dscm 7%O2	3.37e-7	lbs/hr	CE7%O2
7D Other	319C9R5	5.89e-1	ng/dscm 7%O2	2.94e-7	lbs/hr	CE7%O2
7D Other	319C9R6	6.79e-1	ng/dscm 7%O2	3.48e-7	lbs/hr	CE7%O2
7D Total	319B1A1	3.51e+0	ng/dscm 7%O2	0.00e+0		OCE
7D Total	319B1A2	2.71e+0	ng/dscm 7%O2	0.00e+0		OCE
7D Total	319B1A3	2.48e+0	ng/dscm 7%O2	0.00e+0		OCE
7D Total	319B1R1	1.61e+0	ng/dscm 7%O2	8.50e-7	lbs/hr	OCE
7D Total	319B1R2	2.34e+0	ng/dscm 7%O2	1.22e-6	lbs/hr	OCE
7D Total	319B1R3	1.53e+0	ng/dscm 7%O2	7.55e-7	lbs/hr	OCE
7D Total	319B1R4	1.53e+0	ng/dscm 7%O2	8.46e-7	lbs/hr	OCE
7D Total	319B1R5	1.48e+0	ng/dscm 7%O2	8.01e-7	lbs/hr	OCE
7D Total	319B1R6	1.66e+0	ng/dscm 7%O2	9.54e-7	lbs/hr	OCE
7D Total	319B1R7	1.82e+0	ng/dscm 7%O2	9.82e-7	lbs/hr	OCE
7D Total	319B1R8	1.01e+0	ng/dscm 7%O2	5.00e-7	lbs/hr	CE7%O2
7D Total	319B1R9	1.12e+0	ng/dscm 7%O2	4.96e-7	lbs/hr	CE7%O2
7D Total	319C2R1	6.10e+1	ng/dscm 7%O2	3.71e-5	lbs/hr	CE7%O2
7D Total	319C2R2	3.58e+1	ng/dscm 7%O2	1.91e-5	lbs/hr	CE7%O2
7D Total	319C2R3	3.35e+1	ng/dscm 7%O2	1.99e-5	lbs/hr	CE7%O2
7D Total	319C5	6.08e+0	ng/dscm 7%O2	2.35e-6	lbs/hr	CE7%O2
7D Total	319C6R2	1.23e+1	ng/dscm 7%O2	5.86e-6	lbs/hr	CE7%O2
7D Total	319C6R3	2.21e+1	ng/dscm 7%O2	1.23e-5	lbs/hr	CE7%O2
7D Total	319C7R1	4.12e+1	ng/dscm 7%O2	2.04e-5	lbs/hr	CE7%O2
7D Total	319C9R1	1.36e+0	ng/dscm 7%O2	6.94e-7	lbs/hr	OCE
7D Total	319C9R2	1.02e+0	ng/dscm 7%O2	5.20e-7	lbs/hr	OCE
7D Total	319C9R3	6.50e-1	ng/dscm 7%O2	3.29e-7	lbs/hr	OCE
7D Total	319C9R4	1.23e+0	ng/dscm 7%O2	6.00e-7	lbs/hr	OCE
7D Total	319C9R5	1.09e+0	ng/dscm 7%O2	5.41e-7	lbs/hr	OCE
7D Total	319C9R6	1.24e+0	ng/dscm 7%O2	6.39e-7	lbs/hr	OCE
7F 1234678	319B1A1	1.60e-1	ng/dscm 7%O2	0.00e+0		7%O2
7F 1234678	319B1A2	1.21e-1	ng/dscm 7%O2	0.00e+0		7%O2
7F 1234678	319B1A3	1.60e-1	ng/dscm 7%O2	0.00e+0		7%O2
7F 1234678	319B1R1	2.20e-1	ng/dscm 7%O2	1.16e-7	lbs/hr	CE7%O2
7F 1234678	319B1R2	4.35e-1	ng/dscm 7%O2	2.27e-7	lbs/hr	CE7%O2
7F 1234678	319B1R3	1.48e-1	ng/dscm 7%O2	7.26e-8	lbs/hr	CE7%O2
7F 1234678	319B1R4	1.66e-1	ng/dscm 7%O2	9.16e-8	lbs/hr	CE7%O2
7F 1234678	319B1R5	1.19e-1	ng/dscm 7%O2	6.44e-8	lbs/hr	CE7%O2
7F 1234678	319B1R6	1.81e-1	ng/dscm 7%O2	1.04e-7	lbs/hr	CE7%O2
7F 1234678	319B1R7	1.53e-1	ng/dscm 7%O2	8.25e-8	lbs/hr	CE7%O2
7F 1234678	319B1R8	1.16e-1	ng/dscm 7%O2	5.74e-8	lbs/hr	CE7%O2
7F 1234678	319B1R9	2.03e-1	ng/dscm 7%O2	9.00e-8	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

7F 1234678	319C2R1	2	1.88e-1	ng/dscm 7%O2	1.14e-7	lbs/hr	CE7%O2
7F 1234678	319C2R2		1.61e-1	ng/dscm 7%O2	8.56e-8	lbs/hr	CE7%O2
7F 1234678	319C2R3		3.05e-1	ng/dscm 7%O2	1.81e-7	lbs/hr	CE7%O2
7F 1234678	319C5		1.31e+0	ng/dscm 7%O2	5.09e-7	lbs/hr	CE7%O2
7F 1234678	319C6R2		2.31e+0	ng/dscm 7%O2	1.10e-6	lbs/hr	CE7%O2
7F 1234678	319C6R3		2.23e+0	ng/dscm 7%O2	1.24e-6	lbs/hr	CE7%O2
7F 1234678	319C7R1		6.60e-1	ng/dscm 7%O2	3.26e-7	lbs/hr	CE7%O2
7F 1234678	319C9R1		4.54e-2	ng/dscm 7%O2	2.31e-8	lbs/hr	CE7%O2
7F 1234678	319C9R2		3.61e-2	ng/dscm 7%O2	1.83e-8	lbs/hr	CE7%O2
7F 1234678	319C9R3		3.41e-2	ng/dscm 7%O2	1.72e-8	lbs/hr	CE7%O2
7F 1234678	319C9R4		3.61e-2	ng/dscm 7%O2	1.76e-8	lbs/hr	CE7%O2
7F 1234678	319C9R5		3.72e-2	ng/dscm 7%O2	1.85e-8	lbs/hr	CE7%O2
7F 1234678	319C9R6		3.39e-2	ng/dscm 7%O2	1.74e-8	lbs/hr	CE7%O2
7F 1234789	319B1A1		3.04e-2	ng/dscm 7%O2	0.00e+0		7%O2
7F 1234789	319B1A2		2.19e-2	ng/dscm 7%O2	0.00e+0		7%O2
7F 1234789	319B1A3		3.04e-2	ng/dscm 7%O2	0.00e+0		7%O2
7F 1234789	319B1R1		7.53e-2	ng/dscm 7%O2	3.97e-8	lbs/hr	CE7%O2
7F 1234789	319B1R2		9.24e-2	ng/dscm 7%O2	4.81e-8	lbs/hr	CE7%O2
7F 1234789	319B1R3		4.63e-2	ng/dscm 7%O2	2.28e-8	lbs/hr	CE7%O2
7F 1234789	319B1R4		3.06e-2	ng/dscm 7%O2	1.69e-8	lbs/hr	CE7%O2
7F 1234789	319B1R5		2.37e-2	ng/dscm 7%O2	1.29e-8	lbs/hr	CE7%O2
7F 1234789	319B1R6		3.53e-2	ng/dscm 7%O2	2.02e-8	lbs/hr	CE7%O2
7F 1234789	319B1R7		2.90e-2	ng/dscm 7%O2	1.56e-8	lbs/hr	CE7%O2
7F 1234789	319B1R8		2.68e-2	ng/dscm 7%O2	1.32e-8	lbs/hr	CE7%O2
7F 1234789	319B1R9		4.89e-2	ng/dscm 7%O2	2.17e-8	lbs/hr	CE7%O2
7F 1234789	319C2R1		1.98e-1	ng/dscm 7%O2	1.20e-7	lbs/hr	CE7%O2
7F 1234789	319C2R2		2.47e-1	ng/dscm 7%O2	1.32e-7	lbs/hr	CE7%O2
7F 1234789	319C2R3		4.32e-1	ng/dscm 7%O2	2.56e-7	lbs/hr	CE7%O2
7F 1234789	319C5		2.28e-1	ng/dscm 7%O2	8.83e-8	lbs/hr	CE7%O2
7F 1234789	319C6R2		2.65e-1	ng/dscm 7%O2	1.26e-7	lbs/hr	CE7%O2
7F 1234789	319C6R3		2.86e-1	ng/dscm 7%O2	1.59e-7	lbs/hr	CE7%O2
7F 1234789	319C7R1		8.96e-2	ng/dscm 7%O2	4.43e-8	lbs/hr	CE7%O2
7F 1234789	319C9R1		9.08e-3	ng/dscm 7%O2	4.63e-9	lbs/hr	CE7%O2
7F 1234789	319C9R2		9.02e-3	ng/dscm 7%O2	4.59e-9	lbs/hr	CE7%O2
7F 1234789	319C9R3		6.19e-3	ng/dscm 7%O2	3.13e-9	lbs/hr	CE7%O2
7F 1234789	319C9R4		9.02e-3	ng/dscm 7%O2	4.39e-9	lbs/hr	CE7%O2
7F 1234789	319C9R5		9.31e-3	ng/dscm 7%O2	4.63e-9	lbs/hr	CE7%O2
7F 1234789	319C9R6		8.48e-3	ng/dscm 7%O2	4.36e-9	lbs/hr	CE7%O2
7F Other	319B1A1		1.41e-1	ng/dscm 7%O2	0.00e+0		7%O2
7F Other	319B1A2		1.01e-1	ng/dscm 7%O2	0.00e+0		7%O2
7F Other	319B1A3		1.39e-1	ng/dscm 7%O2	0.00e+0		7%O2
7F Other	319B1R1		2.15e-1	ng/dscm 7%O2	1.13e-7	lbs/hr	CE7%O2
7F Other	319B1R2		3.43e-1	ng/dscm 7%O2	1.78e-7	lbs/hr	CE7%O2
7F Other	319B1R3		1.53e-1	ng/dscm 7%O2	7.55e-8	lbs/hr	CE7%O2
7F Other	319B1R4		1.35e-1	ng/dscm 7%O2	7.47e-8	lbs/hr	CE7%O2
7F Other	319B1R5		6.33e-2	ng/dscm 7%O2	3.43e-8	lbs/hr	CE7%O2
7F Other	319B1R6		8.57e-2	ng/dscm 7%O2	4.91e-8	lbs/hr	CE7%O2
7F Other	319B1R7		1.34e-1	ng/dscm 7%O2	7.25e-8	lbs/hr	CE7%O2
7F Other	319B1R8		5.97e-2	ng/dscm 7%O2	2.94e-8	lbs/hr	OCE
7F Other	319B1R9		4.55e-2	ng/dscm 7%O2	2.02e-8	lbs/hr	OCE
7F Other	319C2R1		-2.38e-1	ng/dscm 7%O2	-1.45e-7	lbs/hr	OCE
7F Other	319C2R2		2.51e-1	ng/dscm 7%O2	1.34e-7	lbs/hr	OCE
7F Other	319C2R3		-5.08e-2	ng/dscm 7%O2	-3.01e-8	lbs/hr	OCE
7F Other	319C5		6.37e-1	ng/dscm 7%O2	2.47e-7	lbs/hr	OCE
7F Other	319C6R2		1.73e+0	ng/dscm 7%O2	8.23e-7	lbs/hr	OCE
7F Other	319C6R3		1.34e+0	ng/dscm 7%O2	7.44e-7	lbs/hr	OCE
7F Other	319C7R1		4.15e-1	ng/dscm 7%O2	2.05e-7	lbs/hr	OCE
7F Other	319C9R1		3.93e-2	ng/dscm 7%O2	2.01e-8	lbs/hr	CE7%O2
7F Other	319C9R2		3.01e-2	ng/dscm 7%O2	1.53e-8	lbs/hr	CE7%O2
7F Other	319C9R3		2.48e-2	ng/dscm 7%O2	1.25e-8	lbs/hr	CE7%O2
7F Other	319C9R4		3.31e-2	ng/dscm 7%O2	1.61e-8	lbs/hr	CE7%O2
7F Other	319C9R5		2.48e-2	ng/dscm 7%O2	1.24e-8	lbs/hr	CE7%O2
7F Other	319C9R6		2.54e-2	ng/dscm 7%O2	1.31e-8	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

7F Total	319B1A1		3.32e-1	ng/dscm 7%O2	0.00e+0	OCE
7F Total	319B1A2		2.44e-1	ng/dscm 7%O2	0.00e+0	OCE
7F Total	319B1A3		3.29e-1	ng/dscm 7%O2	0.00e+0	OCE
7F Total	319B1R1		5.11e-1	ng/dscm 7%O2	2.69e-7 lbs/hr	OCE
7F Total	319B1R2		8.70e-1	ng/dscm 7%O2	4.53e-7 lbs/hr	OCE
7F Total	319B1R3		3.47e-1	ng/dscm 7%O2	1.71e-7 lbs/hr	OCE
7F Total	319B1R4		3.31e-1	ng/dscm 7%O2	1.83e-7 lbs/hr	OCE
7F Total	319B1R5		2.06e-1	ng/dscm 7%O2	1.12e-7 lbs/hr	OCE
7F Total	319B1R6		3.02e-1	ng/dscm 7%O2	1.73e-7 lbs/hr	OCE
7F Total	319B1R7		3.16e-1	ng/dscm 7%O2	1.71e-7 lbs/hr	OCE
7F Total	319B1R8		2.03e-1	ng/dscm 7%O2	1.00e-7 lbs/hr	CE7%O2
7F Total	319B1R9		2.97e-1	ng/dscm 7%O2	1.32e-7 lbs/hr	CE7%O2
7F Total	319C2R1		1.48e-1	ng/dscm 7%O2	8.98e-8 lbs/hr	CE7%O2
7F Total	319C2R2		6.59e-1	ng/dscm 7%O2	3.51e-7 lbs/hr	CE7%O2
7F Total	319C2R3		6.86e-1	ng/dscm 7%O2	4.07e-7 lbs/hr	CE7%O2
7F Total	319C5	ND	2.18e+0	ng/dscm 7%O2	8.44e-7 lbs/hr	CE7%O2
7F Total	319C6R2		4.30e+0	ng/dscm 7%O2	2.05e-6 lbs/hr	CE7%O2
7F Total	319C6R3		3.85e+0	ng/dscm 7%O2	2.14e-6 lbs/hr	CE7%O2
7F Total	319C7R1		1.16e+0	ng/dscm 7%O2	5.76e-7 lbs/hr	CE7%O2
7F Total	319C9R1		9.38e-2	ng/dscm 7%O2	4.78e-8 lbs/hr	OCE
7F Total	319C9R2		7.52e-2	ng/dscm 7%O2	3.82e-8 lbs/hr	OCE
7F Total	319C9R3		6.50e-2	ng/dscm 7%O2	3.29e-8 lbs/hr	OCE
7F Total	319C9R4		7.82e-2	ng/dscm 7%O2	3.81e-8 lbs/hr	OCE
7F Total	319C9R5		7.13e-2	ng/dscm 7%O2	3.55e-8 lbs/hr	OCE
7F Total	319C9R6		6.79e-2	ng/dscm 7%O2	3.48e-8 lbs/hr	OCE
8D	319B1A1		1.36e+0	ng/dscm 7%O2	0.00e+0	7%O2
8D	319B1A2		1.01e+0	ng/dscm 7%O2	0.00e+0	7%O2
8D	319B1A3		1.06e+0	ng/dscm 7%O2	0.00e+0	7%O2
8D	319B1R1		8.87e-1	ng/dscm 7%O2	4.68e-7 lbs/hr	CE7%O2
8D	319B1R2		1.11e+0	ng/dscm 7%O2	5.80e-7 lbs/hr	CE7%O2
8D	319B1R3		7.81e-1	ng/dscm 7%O2	3.84e-7 lbs/hr	CE7%O2
8D	319B1R4		8.92e-1	ng/dscm 7%O2	4.93e-7 lbs/hr	CE7%O2
8D	319B1R5		6.60e-1	ng/dscm 7%O2	3.58e-7 lbs/hr	CE7%O2
8D	319B1R6		1.21e+0	ng/dscm 7%O2	6.94e-7 lbs/hr	CE7%O2
8D	319B1R7		9.22e-1	ng/dscm 7%O2	4.98e-7 lbs/hr	CE7%O2
8D	319B1R8		8.35e-1	ng/dscm 7%O2	4.12e-7 lbs/hr	CE7%O2
8D	319B1R9		1.08e+0	ng/dscm 7%O2	4.81e-7 lbs/hr	CE7%O2
8D	319C2R1		6.55e+0	ng/dscm 7%O2	3.98e-6 lbs/hr	CE7%O2
8D	319C2R2		4.92e+0	ng/dscm 7%O2	2.62e-6 lbs/hr	CE7%O2
8D	319C2R3		4.72e+0	ng/dscm 7%O2	2.80e-6 lbs/hr	CE7%O2
8D	319C5		3.43e+0	ng/dscm 7%O2	1.33e-6 lbs/hr	CE7%O2
8D	319C6R2		8.21e+0	ng/dscm 7%O2	3.91e-6 lbs/hr	CE7%O2
8D	319C6R3		8.95e+0	ng/dscm 7%O2	4.97e-6 lbs/hr	CE7%O2
8D	319C7R1		7.45e+0	ng/dscm 7%O2	3.68e-6 lbs/hr	CE7%O2
8D	319C9R1		3.63e-1	ng/dscm 7%O2	1.85e-7 lbs/hr	CE7%O2
8D	319C9R2		2.20e-1	ng/dscm 7%O2	1.12e-7 lbs/hr	CE7%O2
8D	319C9R3		2.26e-1	ng/dscm 7%O2	1.14e-7 lbs/hr	CE7%O2
8D	319C9R4		2.47e-1	ng/dscm 7%O2	1.20e-7 lbs/hr	CE7%O2
8D	319C9R5		2.54e-1	ng/dscm 7%O2	1.27e-7 lbs/hr	CE7%O2
8D	319C9R6		2.69e-1	ng/dscm 7%O2	1.38e-7 lbs/hr	CE7%O2
8F	319B1A1	2	3.59e-2	ng/dscm 7%O2	0.00e+0	7%O2
8F	319B1A2	2	3.29e-2	ng/dscm 7%O2	0.00e+0	7%O2
8F	319B1A3	2	4.31e-2	ng/dscm 7%O2	0.00e+0	7%O2
8F	319B1R1		1.42e-1	ng/dscm 7%O2	7.51e-8 lbs/hr	CE7%O2
8F	319B1R2	2	1.55e-1	ng/dscm 7%O2	8.07e-8 lbs/hr	CE7%O2
8F	319B1R3	2	3.76e-2	ng/dscm 7%O2	1.85e-8 lbs/hr	CE7%O2
8F	319B1R4	2	3.57e-2	ng/dscm 7%O2	1.97e-8 lbs/hr	CE7%O2
8F	319B1R5	ND	2.37e-2	ng/dscm 7%O2	1.29e-8 lbs/hr	CE7%O2
8F	319B1R6		4.03e-2	ng/dscm 7%O2	2.31e-8 lbs/hr	CE7%O2
8F	319B1R7	2	4.22e-2	ng/dscm 7%O2	2.28e-8 lbs/hr	CE7%O2
8F	319B1R8	2	3.58e-2	ng/dscm 7%O2	1.77e-8 lbs/hr	CE7%O2
8F	319B1R9	2	5.59e-2	ng/dscm 7%O2	2.48e-8 lbs/hr	CE7%O2
8F	319C2R1	2	1.10e-1	ng/dscm 7%O2	6.66e-8 lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

8F	319C2R2	2	1.13e-1	ng/dscm	7%O2	6.03e-8	lbs/hr	CE7%O2
8F	319C2R3	2	9.90e-2	ng/dscm	7%O2	5.88e-8	lbs/hr	CE7%O2
8F	319C5		4.48e-3	ng/dscm	7%O2	1.74e-9	lbs/hr	CE7%O2
8F	319C6R2	ND	4.86e-3	ng/dscm	7%O2	2.32e-9	lbs/hr	CE7%O2
8F	319C6R3	ND	1.24e-2	ng/dscm	7%O2	6.89e-9	lbs/hr	CE7%O2
8F	319C7R1	ND	1.89e-3	ng/dscm	7%O2	9.32e-10	lbs/hr	CE7%O2
8F	319C9R1	2	1.81e-3	ng/dscm	7%O2	9.23e-10	lbs/hr	CE7%O2
8F	319C9R2	2	1.50e-2	ng/dscm	7%O2	7.64e-9	lbs/hr	CE7%O2
8F	319C9R3	2	1.55e-2	ng/dscm	7%O2	7.83e-9	lbs/hr	CE7%O2
8F	319C9R4	2	1.20e-2	ng/dscm	7%O2	5.86e-9	lbs/hr	CE7%O2
8F	319C9R5	2	1.55e-2	ng/dscm	7%O2	7.72e-9	lbs/hr	CE7%O2
8F	319C9R6	2	1.13e-2	ng/dscm	7%O2	5.81e-9	lbs/hr	CE7%O2
TEQ	319B1A1		4.23e-1	ng/dscm	7%O2	0.00e+0		CCET
TEQ	319B1A2		3.13e-1	ng/dscm	7%O2	0.00e+0		CCET
TEQ	319B1A3		3.05e-1	ng/dscm	7%O2	0.00e+0		CCET
TEQ	319B1R1		3.92e-1	ng/dscm	7%O2	2.07e-7	lbs/hr	CCET
TEQ	319B1R2		4.76e-1	ng/dscm	7%O2	2.48e-7	lbs/hr	CCET
TEQ	319B1R3		3.14e-1	ng/dscm	7%O2	1.55e-7	lbs/hr	CCET
TEQ	319B1R4		3.21e-1	ng/dscm	7%O2	1.77e-7	lbs/hr	CCET
TEQ	319B1R5		3.28e-1	ng/dscm	7%O2	1.78e-7	lbs/hr	CCET
TEQ	319B1R6		3.65e-1	ng/dscm	7%O2	2.09e-7	lbs/hr	CCET
TEQ	319B1R7		3.50e-1	ng/dscm	7%O2	1.89e-7	lbs/hr	CCET
TEQ	319B1R8		2.40e-1	ng/dscm	7%O2	1.18e-7	lbs/hr	CCET
TEQ	319B1R9		2.99e-1	ng/dscm	7%O2	1.32e-7	lbs/hr	CCET
TEQ	319C2R1		2.58e+1	ng/dscm	7%O2	1.57e-5	lbs/hr	CCET
TEQ	319C2R2		1.47e+1	ng/dscm	7%O2	7.83e-6	lbs/hr	CCET
TEQ	319C2R3		1.86e+1	ng/dscm	7%O2	1.10e-5	lbs/hr	CCET
TEQ	319C5		1.12e+0	ng/dscm	7%O2	4.33e-7	lbs/hr	CCET
TEQ	319C6R2		5.74e+0	ng/dscm	7%O2	2.73e-6	lbs/hr	CCET
TEQ	319C6R3		9.35e+0	ng/dscm	7%O2	5.20e-6	lbs/hr	CCET
TEQ	319C7R1		5.79e+0	ng/dscm	7%O2	2.86e-6	lbs/hr	CCET
TEQ	319C9R1		2.01e-1	ng/dscm	7%O2	1.02e-7	lbs/hr	CCET
TEQ	319C9R2		1.48e-1	ng/dscm	7%O2	7.52e-8	lbs/hr	CCET
TEQ	319C9R3		1.05e-1	ng/dscm	7%O2	5.33e-8	lbs/hr	CCET
TEQ	319C9R4		1.78e-1	ng/dscm	7%O2	8.68e-8	lbs/hr	CCET
TEQ	319C9R5		1.52e-1	ng/dscm	7%O2	7.56e-8	lbs/hr	CCET
TEQ	319C9R6		1.73e-1	ng/dscm	7%O2	8.89e-8	lbs/hr	CCET
Total PCDD/PCDF	319B1A1		6.59e+1	ng/dscm	7%O2	0.00e+0		CCET
Total PCDD/PCDF	319B1A2		4.80e+1	ng/dscm	7%O2	0.00e+0		CCET
Total PCDD/PCDF	319B1A3		4.38e+1	ng/dscm	7%O2	0.00e+0		CCET
Total PCDD/PCDF	319B1R1		3.54e+1	ng/dscm	7%O2	1.86e-5	lbs/hr	CCET
Total PCDD/PCDF	319B1R2		3.96e+1	ng/dscm	7%O2	2.06e-5	lbs/hr	CCET
Total PCDD/PCDF	319B1R3		3.10e+1	ng/dscm	7%O2	1.53e-5	lbs/hr	CCET
Total PCDD/PCDF	319B1R4		3.03e+1	ng/dscm	7%O2	1.68e-5	lbs/hr	CCET
Total PCDD/PCDF	319B1R5		3.41e+1	ng/dscm	7%O2	1.85e-5	lbs/hr	CCET
Total PCDD/PCDF	319B1R6		3.42e+1	ng/dscm	7%O2	1.96e-5	lbs/hr	CCET
Total PCDD/PCDF	319B1R7		3.63e+1	ng/dscm	7%O2	1.96e-5	lbs/hr	CCET
Total PCDD/PCDF	319B1R8		2.23e+1	ng/dscm	7%O2	1.10e-5	lbs/hr	CCET
Total PCDD/PCDF	319B1R9		2.37e+1	ng/dscm	7%O2	1.05e-5	lbs/hr	CCET
Total PCDD/PCDF	319C2R1		1.24e+3	ng/dscm	7%O2	7.56e-4	lbs/hr	CCET
Total PCDD/PCDF	319C2R2		9.78e+2	ng/dscm	7%O2	5.21e-4	lbs/hr	CCET
Total PCDD/PCDF	319C2R3		1.35e+3	ng/dscm	7%O2	7.99e-4	lbs/hr	CCET
Total PCDD/PCDF	319C5		9.91e+1	ng/dscm	7%O2	3.84e-5	lbs/hr	CCET
Total PCDD/PCDF	319C6R2		3.63e+2	ng/dscm	7%O2	1.73e-4	lbs/hr	CCET
Total PCDD/PCDF	319C6R3		7.43e+2	ng/dscm	7%O2	4.13e-4	lbs/hr	CCET
Total PCDD/PCDF	319C7R1		8.87e+2	ng/dscm	7%O2	4.38e-4	lbs/hr	CCET
Total PCDD/PCDF	319C9R1		2.53e+1	ng/dscm	7%O2	1.29e-5	lbs/hr	CCET
Total PCDD/PCDF	319C9R2		1.75e+1	ng/dscm	7%O2	8.87e-6	lbs/hr	CCET
Total PCDD/PCDF	319C9R3		1.05e+1	ng/dscm	7%O2	5.30e-6	lbs/hr	CCET
Total PCDD/PCDF	319C9R4		2.13e+1	ng/dscm	7%O2	1.04e-5	lbs/hr	CCET
Total PCDD/PCDF	319C9R5		1.86e+1	ng/dscm	7%O2	9.28e-6	lbs/hr	CCET
Total PCDD/PCDF	319C9R6		2.15e+1	ng/dscm	7%O2	1.10e-5	lbs/hr	CCET

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration			Mass Rate	Calc
Chlorine	319C2R1	ND	2.01e-1	ppmv 7%O2	3.60e-1 lbs/hr	CC7%O2
Chlorine	319C2R2	ND	2.11e-1	ppmv 7%O2	3.30e-1 lbs/hr	CC7%O2
Chlorine	319C2R3	ND	2.01e-1	ppmv 7%O2	3.50e-1 lbs/hr	CC7%O2
Chlorine	319C4R1	ND	1.59e-1	ppmv 7%O2	2.60e-1 lbs/hr	CC7%O2
Chlorine	319C4R2	ND	1.71e-1	ppmv 7%O2	2.70e-1 lbs/hr	CC7%O2
Chlorine	319C4R3	ND	1.88e-1	ppmv 7%O2	3.00e-1 lbs/hr	CC7%O2
Chlorine	319C4R4	ND	1.62e-1	ppmv 7%O2	2.70e-1 lbs/hr	CC7%O2
Chlorine	319C4R5	ND	2.00e-1	ppmv 7%O2	2.90e-1 lbs/hr	CC7%O2
Chlorine	319C6R2		3.98e+1	ppmv 7%O2	5.57e+1 lbs/hr	CE7%O2
Chlorine	319C6R3		3.24e+1	ppmv 7%O2	5.30e+1 lbs/hr	CE7%O2
Chlorine	319C7R2		1.41e+1	ppmv 7%O2	2.22e+1 lbs/hr	CE7%O2
Chlorine	319C8		5.60e-1	ppmv	0.00e+0	
HCl	319C2R1		2.88e+1	ppmv 7%O2	2.64e+1 lbs/hr	CC7%O2
HCl	319C2R2		2.61e+1	ppmv 7%O2	2.10e+1 lbs/hr	CC7%O2
HCl	319C2R3		2.52e+1	ppmv 7%O2	2.26e+1 lbs/hr	CC7%O2
HCl	319C4R1		5.43e+1	ppmv 7%O2	4.57e+1 lbs/hr	CC7%O2
HCl	319C4R2		5.50e+1	ppmv 7%O2	4.47e+1 lbs/hr	CC7%O2
HCl	319C4R3		4.89e+1	ppmv 7%O2	4.02e+1 lbs/hr	CC7%O2
HCl	319C4R4		5.68e+1	ppmv 7%O2	4.88e+1 lbs/hr	CC7%O2
HCl	319C4R5		3.89e+1	ppmv 7%O2	2.89e+1 lbs/hr	CC7%O2
HCl	319C6R2		1.35e+2	ppmv 7%O2	9.73e+1 lbs/hr	CE7%O2
HCl	319C6R3		1.62e+2	ppmv 7%O2	1.37e+2 lbs/hr	CE7%O2
HCl	319C7R1		2.95e+1	ppmv 7%O2	2.21e+1 lbs/hr	CE7%O2
HCl	319C7R2		2.54e+1	ppmv 7%O2	2.05e+1 lbs/hr	CE7%O2
HCl	319C8		4.13e+1	ppmv	0.00e+0	

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration			Mass Rate	Calc
Antimony	319C1R1		1.20e-1	ug/dscm 7%O2	7.01e-5 lbs/hr	7%O2
Antimony	319C1R2		3.00e-1	ug/dscm 7%O2	1.85e-4 lbs/hr	7%O2
Antimony	319C1R3		2.43e-1	ug/dscm 7%O2	1.49e-4 lbs/hr	7%O2
Arsenic	319C1R1		1.70e+0	ug/dscm 7%O2	9.77e-4 lbs/hr	7%O2
Arsenic	319C1R2		2.21e+0	ug/dscm 7%O2	1.37e-3 lbs/hr	7%O2
Arsenic	319C1R3		1.80e+0	ug/dscm 7%O2	1.10e-3 lbs/hr	7%O2
Barium	319C1R1		1.77e+1	ug/dscm 7%O2	1.02e-2 lbs/hr	7%O2
Barium	319C1R2		3.60e+1	ug/dscm 7%O2	2.27e-2 lbs/hr	7%O2
Barium	319C1R3		2.87e+1	ug/dscm 7%O2	1.74e-2 lbs/hr	7%O2
Beryllium	319C1R1		9.53e-1	ug/dscm 7%O2	5.46e-4 lbs/hr	7%O2
Beryllium	319C1R2		1.43e+0	ug/dscm 7%O2	8.89e-4 lbs/hr	7%O2
Beryllium	319C1R3		9.81e-1	ug/dscm 7%O2	5.96e-4 lbs/hr	7%O2
Cadmium	319C1R1		6.71e+1	ug/dscm 7%O2	3.85e-2 lbs/hr	7%O2
Cadmium	319C1R2		1.47e+2	ug/dscm 7%O2	9.13e-2 lbs/hr	7%O2
Cadmium	319C1R3		1.44e+2	ug/dscm 7%O2	8.73e-2 lbs/hr	7%O2
Chromium	319C1R1		6.07e+1	ug/dscm 7%O2	3.49e-2 lbs/hr	7%O2
Chromium	319C1R2		6.92e+1	ug/dscm 7%O2	4.31e-2 lbs/hr	7%O2
Chromium	319C1R3		4.09e+1	ug/dscm 7%O2	2.49e-2 lbs/hr	7%O2
Chromium (Hex)	319C1R1		3.44e+1	ug/dscm 7%O2	2.26e-2 lbs/hr	7%O2
Chromium (Hex)	319C1R2		2.27e+1	ug/dscm 7%O2	1.32e-2 lbs/hr	7%O2
Chromium (Hex)	319C1R3		1.42e+1	ug/dscm 7%O2	8.42e-3 lbs/hr	7%O2
Lead	319C1R1		5.57e+2	ug/dscm 7%O2	3.19e-1 lbs/hr	7%O2
Lead	319C1R2		1.00e+3	ug/dscm 7%O2	6.24e-1 lbs/hr	7%O2
Lead	319C1R3		1.17e+2	ug/dscm 7%O2	7.12e-2 lbs/hr	7%O2
Mercury	319C1R1		5.33e+1	ug/dscm 7%O2	3.10e-2 lbs/hr	CE
Mercury	319C1R2		5.90e+1	ug/dscm 7%O2	3.57e-2 lbs/hr	CE
Mercury	319C1R3		5.53e+1	ug/dscm 7%O2	3.28e-2 lbs/hr	CE

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

Silver	319C1R1	ND	2.40e-1	ug/dscm	7%O2	1.38e-4	lbs/hr	7%O2
Silver	319C1R2		3.08e-1	ug/dscm	7%O2	1.95e-4	lbs/hr	7%O2
Silver	319C1R3		6.62e-1	ug/dscm	7%O2	4.04e-4	lbs/hr	7%O2
Thallium	319C1R1		7.96e+0	ug/dscm	7%O2	4.57e-3	lbs/hr	7%O2
Thallium	319C1R2		9.78e+0	ug/dscm	7%O2	6.09e-3	lbs/hr	7%O2
Thallium	319C1R3		9.49e+0	ug/dscm	7%O2	5.76e-3	lbs/hr	7%O2

7. Category: PAH

Analysis:

8. Substance	9. Run ID		Concentration		Mass Rate	Calc	
Acenaphthene	319C3R1		2.84e+4	ng/dscm	7%O2	1.56e-2 lbs/hr	CC7%O2
Acenaphthene	319C3R2		4.61e+4	ng/dscm	7%O2	2.44e-2 lbs/hr	CC7%O2
Acenaphthene	319C3R3		5.71e+4	ng/dscm	7%O2	3.08e-2 lbs/hr	CC7%O2
Acenaphthylene	319C3R1		4.00e+5	ng/dscm	7%O2	2.20e-1 lbs/hr	CC7%O2
Acenaphthylene	319C3R2		5.67e+5	ng/dscm	7%O2	3.00e-1 lbs/hr	CC7%O2
Acenaphthylene	319C3R3		7.05e+5	ng/dscm	7%O2	3.80e-1 lbs/hr	CC7%O2
Acenaphthylene	319C5	ND	0.00e+0			0.00e+0	
Acenaphthylene	319C6R1		7.78e+4	ng/dscm	7%O2	3.66e-2 lbs/hr	CE7%O2
Acenaphthylene	319C6R2		9.75e+4	ng/dscm	7%O2	4.65e-2 lbs/hr	CE7%O2
Acenaphthylene	319C6R3		5.96e+4	ng/dscm	7%O2	3.32e-2 lbs/hr	CE7%O2
Acenaphthylene	319C7R1		8.94e+4	ng/dscm	7%O2	4.42e-2 lbs/hr	CE7%O2
Acenaphthylene	319C7R2		7.30e+4	ng/dscm	7%O2	3.90e-2 lbs/hr	CE7%O2
Anthracene	319C3R1		7.27e+4	ng/dscm	7%O2	4.00e-2 lbs/hr	CC7%O2
Anthracene	319C3R2		1.13e+5	ng/dscm	7%O2	6.00e-2 lbs/hr	CC7%O2
Anthracene	319C3R3		1.67e+5	ng/dscm	7%O2	9.00e-2 lbs/hr	CC7%O2
Anthracene	319C5	ND	0.00e+0			0.00e+0	
Anthracene	319C6R1		1.06e+4	ng/dscm	7%O2	5.01e-3 lbs/hr	CE7%O2
Anthracene	319C6R2		1.25e+4	ng/dscm	7%O2	5.96e-3 lbs/hr	CE7%O2
Anthracene	319C6R3	ND	0.00e+0			0.00e+0	
Anthracene	319C7R1		1.94e+4	ng/dscm	7%O2	9.59e-3 lbs/hr	CE7%O2
Anthracene	319C7R2		2.12e+4	ng/dscm	7%O2	1.14e-2 lbs/hr	CE7%O2
Benzo(a)anthracene	319C3R1		5.20e-1	ng/dscm	7%O2	2.86e-7 lbs/hr	CC7%O2
Benzo(a)anthracene	319C3R2		1.05e+0	ng/dscm	7%O2	5.56e-7 lbs/hr	CC7%O2
Benzo(a)anthracene	319C3R3		2.08e+0	ng/dscm	7%O2	1.12e-6 lbs/hr	CC7%O2
Benzo(a)anthracene	319C5	ND	0.00e+0			0.00e+0	
Benzo(a)anthracene	319C6R1	ND	0.00e+0			0.00e+0	
Benzo(a)anthracene	319C6R2	ND	0.00e+0			0.00e+0	
Benzo(a)anthracene	319C6R3	ND	0.00e+0			0.00e+0	
Benzo(a)anthracene	319C7R1	ND	0.00e+0			0.00e+0	
Benzo(a)anthracene	319C7R2		8.48e+3	ng/dscm	7%O2	4.54e-3 lbs/hr	CE7%O2
Benzo(a)pyrene	319C3R1		5.98e+3	ng/dscm	7%O2	3.29e-3 lbs/hr	CC7%O2
Benzo(a)pyrene	319C3R2		1.30e+4	ng/dscm	7%O2	6.89e-3 lbs/hr	CC7%O2
Benzo(a)pyrene	319C3R3		2.19e+4	ng/dscm	7%O2	1.18e-2 lbs/hr	CC7%O2
Benzo(b)fluoranthene	319C3R1		1.93e+4	ng/dscm	7%O2	1.06e-2 lbs/hr	CC7%O2
Benzo(b)fluoranthene	319C3R2		3.93e+4	ng/dscm	7%O2	2.08e-2 lbs/hr	CC7%O2
Benzo(b)fluoranthene	319C3R3		5.81e+4	ng/dscm	7%O2	3.13e-2 lbs/hr	CC7%O2
Benzo(g,h,i)perylene	319C3R1	ND	1.19e+2	ng/dscm	7%O2	6.53e-5 lbs/hr	CC7%O2
Benzo(g,h,i)perylene	319C3R2		7.61e+3	ng/dscm	7%O2	4.03e-3 lbs/hr	CC7%O2
Benzo(g,h,i)perylene	319C3R3		1.22e+4	ng/dscm	7%O2	6.57e-3 lbs/hr	CC7%O2
Chrysene	319C3R1		5.26e+4	ng/dscm	7%O2	2.89e-2 lbs/hr	CC7%O2
Chrysene	319C3R2		1.06e+5	ng/dscm	7%O2	5.59e-2 lbs/hr	CC7%O2
Chrysene	319C3R3		1.45e+5	ng/dscm	7%O2	7.79e-2 lbs/hr	CC7%O2
Chrysene	319C5	ND	0.00e+0			0.00e+0	
Chrysene	319C6R1		1.88e+4	ng/dscm	7%O2	8.87e-3 lbs/hr	CE7%O2
Chrysene	319C6R2		1.83e+4	ng/dscm	7%O2	8.74e-3 lbs/hr	CE7%O2
Chrysene	319C6R3	ND	0.00e+0			0.00e+0	
Chrysene	319C7R1		2.70e+4	ng/dscm	7%O2	1.33e-2 lbs/hr	CE7%O2
Chrysene	319C7R2		2.72e+4	ng/dscm	7%O2	1.45e-2 lbs/hr	CE7%O2
Fluoranthene	319C3R1		1.10e+5	ng/dscm	7%O2	6.07e-2 lbs/hr	CC7%O2
Fluoranthene	319C3R2		1.93e+5	ng/dscm	7%O2	1.02e-1 lbs/hr	CC7%O2
Fluoranthene	319C3R3		2.45e+5	ng/dscm	7%O2	1.32e-1 lbs/hr	CC7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

Fluoranthene	319C5	ND	0.00e+0		0.00e+0	
Fluoranthene	319C6R1		3.77e+4	ng/dscm 7%O2	1.77e-2	lbs/hr CE7%O2
Fluoranthene	319C6R2		3.92e+4	ng/dscm 7%O2	1.87e-2	lbs/hr CE7%O2
Fluoranthene	319C6R3	ND	0.00e+0		0.00e+0	
Fluoranthene	319C7R1		5.23e+4	ng/dscm 7%O2	2.59e-2	lbs/hr CE7%O2
Fluoranthene	319C7R2		4.33e+4	ng/dscm 7%O2	2.32e-2	lbs/hr CE7%O2
Fluorene	319C3R1		5.42e+4	ng/dscm 7%O2	2.98e-2	lbs/hr CC7%O2
Fluorene	319C3R2		1.03e+5	ng/dscm 7%O2	5.45e-2	lbs/hr CC7%O2
Fluorene	319C3R3		1.55e+5	ng/dscm 7%O2	8.33e-2	lbs/hr CC7%O2
Fluorene	319C5	ND	0.00e+0		0.00e+0	
Fluorene	319C6R1		2.13e+4	ng/dscm 7%O2	1.00e-2	lbs/hr CE7%O2
Fluorene	319C6R2		2.42e+4	ng/dscm 7%O2	1.15e-2	lbs/hr CE7%O2
Fluorene	319C6R3	ND	0.00e+0		0.00e+0	
Fluorene	319C7R1		3.54e+4	ng/dscm 7%O2	1.75e-2	lbs/hr CE7%O2
Fluorene	319C7R2		3.22e+4	ng/dscm 7%O2	1.73e-2	lbs/hr CE7%O2
Indeno(1,2,3-cd)pyrene	319C3R1	ND	1.30e+2	ng/dscm 7%O2	7.13e-5	lbs/hr CC7%O2
Indeno(1,2,3-cd)pyrene	319C3R2		5.87e+3	ng/dscm 7%O2	3.11e-3	lbs/hr CC7%O2
Indeno(1,2,3-cd)pyrene	319C3R3		9.96e+3	ng/dscm 7%O2	5.37e-3	lbs/hr CC7%O2
Naphthalene	319C3R1		1.40e+6	ng/dscm 7%O2	7.70e-1	lbs/hr CC7%O2
Naphthalene	319C3R2		1.83e+6	ng/dscm 7%O2	9.70e-1	lbs/hr CC7%O2
Naphthalene	319C3R3		2.28e+6	ng/dscm 7%O2	1.23e+0	lbs/hr CC7%O2
Naphthalene	319C5		1.34e+5	ng/dscm 7%O2	5.21e-2	lbs/hr CE7%O2
Naphthalene	319C6R1	2	4.91e+5	ng/dscm 7%O2	2.31e-1	lbs/hr CE7%O2
Naphthalene	319C6R2	2	5.00e+5	ng/dscm 7%O2	2.38e-1	lbs/hr CE7%O2
Naphthalene	319C6R3	2	4.97e+5	ng/dscm 7%O2	2.76e-1	lbs/hr CE7%O2
Naphthalene	319C7R1	2	5.06e+5	ng/dscm 7%O2	2.50e-1	lbs/hr CE7%O2
Naphthalene	319C7R2	2	4.24e+5	ng/dscm 7%O2	2.27e-1	lbs/hr CE7%O2
Phenanthrene	319C3R1		5.27e+5	ng/dscm 7%O2	2.90e-1	lbs/hr CC7%O2
Phenanthrene	319C3R2		7.18e+5	ng/dscm 7%O2	3.80e-1	lbs/hr CC7%O2
Phenanthrene	319C3R3		8.53e+5	ng/dscm 7%O2	4.60e-1	lbs/hr CC7%O2
Phenanthrene	319C5		1.95e+4	ng/dscm 7%O2	7.54e-3	lbs/hr CE7%O2
Phenanthrene	319C6R1	2	8.19e+4	ng/dscm 7%O2	3.86e-2	lbs/hr CE7%O2
Phenanthrene	319C6R2		1.32e+5	ng/dscm 7%O2	6.27e-2	lbs/hr CE7%O2
Phenanthrene	319C6R3		6.88e+4	ng/dscm 7%O2	3.82e-2	lbs/hr CE7%O2
Phenanthrene	319C7R1		1.37e+5	ng/dscm 7%O2	6.76e-2	lbs/hr CE7%O2
Phenanthrene	319C7R2	2	8.48e+4	ng/dscm 7%O2	4.54e-2	lbs/hr CE7%O2
Pyrene	319C3R1		6.93e+4	ng/dscm 7%O2	3.81e-2	lbs/hr CC7%O2
Pyrene	319C3R2		2.55e+0	ng/dscm 7%O2	1.35e-6	lbs/hr CC7%O2
Pyrene	319C3R3		4.88e+0	ng/dscm 7%O2	2.63e-6	lbs/hr CC7%O2
Pyrene	319C5	ND	0.00e+0		0.00e+0	
Pyrene	319C6R1		2.37e+4	ng/dscm 7%O2	1.12e-2	lbs/hr CE7%O2
Pyrene	319C6R2		2.33e+4	ng/dscm 7%O2	1.11e-2	lbs/hr CE7%O2
Pyrene	319C6R3	ND	0.00e+0		0.00e+0	
Pyrene	319C7R1		4.13e+4	ng/dscm 7%O2	2.04e-2	lbs/hr CE7%O2
Pyrene	319C7R2		3.82e+4	ng/dscm 7%O2	2.04e-2	lbs/hr CE7%O2

7. Category: Particulate

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Particulate	319C1R1	4.03e-2 gr/dscf 7%O2	5.38e+1 lbs/hr	CE
Particulate	319C1R2	3.75e-2 gr/dscf 7%O2	5.18e+1 lbs/hr	CE
Particulate	319C1R3	3.43e-2 gr/dscf 7%O2	4.51e+1 lbs/hr	CE

7. Category: SVOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,2,4-Trichlorobenzene	319C3R1	ND 6.73e+2 ng/dscm 7%O2	3.70e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	319C3R2	ND 6.57e+2 ng/dscm 7%O2	3.48e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	319C3R3	ND 7.44e+2 ng/dscm 7%O2	4.01e-4 lbs/hr	CC7%O2
2,4,6-Trichlorophenol	319C3R1	4.02e+4 ng/dscm 7%O2	2.21e-2 lbs/hr	CC7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP REGION: 7

2,4,6-Trichlorophenol	319C3R2		3.31e+4	ng/dscm 7%O2	1.75e-2	lbs/hr	CC7%O2
2,4,6-Trichlorophenol	319C3R3	ND	1.34e+3	ng/dscm 7%O2	7.20e-4	lbs/hr	CC7%O2
2,4,6-Trichlorophenol	319C5	ND	0.00e+0		0.00e+0		
2,4,6-Trichlorophenol	319C6R1		2.13e+4	ng/dscm 7%O2	1.00e-2	lbs/hr	CE7%O2
2,4,6-Trichlorophenol	319C6R2	ND	0.00e+0		0.00e+0		
2,4,6-Trichlorophenol	319C6R3		2.65e+4	ng/dscm 7%O2	1.47e-2	lbs/hr	CE7%O2
2,4,6-Trichlorophenol	319C7R1	ND	0.00e+0		0.00e+0		
2,4,6-Trichlorophenol	319C7R2	ND	0.00e+0		0.00e+0		
2-Chlorophenol	319C3R1		3.93e+4	ng/dscm 7%O2	2.16e-2	lbs/hr	CC7%O2
2-Chlorophenol	319C3R2	ND	7.91e+2	ng/dscm 7%O2	4.19e-4	lbs/hr	CC7%O2
2-Chlorophenol	319C3R3	ND	8.59e+2	ng/dscm 7%O2	4.63e-4	lbs/hr	CC7%O2
2-Chlorophenol	319C5	ND	0.00e+0		0.00e+0		
2-Chlorophenol	319C6R1	ND	0.00e+0		0.00e+0		
2-Chlorophenol	319C6R2	ND	0.00e+0		0.00e+0		
2-Chlorophenol	319C6R3		7.46e+3	ng/dscm 7%O2	4.15e-3	lbs/hr	CE7%O2
2-Chlorophenol	319C7R1	ND	0.00e+0		0.00e+0		
2-Chlorophenol	319C7R2	ND	0.00e+0		0.00e+0		
2-Methylnaphthalene	319C3R1		6.36e+5	ng/dscm 7%O2	3.50e-1	lbs/hr	CC7%O2
2-Methylnaphthalene	319C3R2		9.82e+5	ng/dscm 7%O2	5.20e-1	lbs/hr	CC7%O2
2-Methylnaphthalene	319C3R3		1.28e+6	ng/dscm 7%O2	6.90e-1	lbs/hr	CC7%O2
2-Methylnaphthalene	319C5		4.82e+4	ng/dscm 7%O2	1.87e-2	lbs/hr	CE7%O2
2-Methylnaphthalene	319C6R1		8.27e+4	ng/dscm 7%O2	3.90e-2	lbs/hr	CE7%O2
2-Methylnaphthalene	319C6R2		1.27e+5	ng/dscm 7%O2	6.04e-2	lbs/hr	CE7%O2
2-Methylnaphthalene	319C6R3		7.37e+4	ng/dscm 7%O2	4.10e-2	lbs/hr	CE7%O2
2-Methylnaphthalene	319C7R1		1.22e+5	ng/dscm 7%O2	6.05e-2	lbs/hr	CE7%O2
2-Methylnaphthalene	319C7R2	2	8.48e+4	ng/dscm 7%O2	4.54e-2	lbs/hr	CE7%O2
2-Methylphenol (o-Cresol)	319C3R1		7.38e+4	ng/dscm 7%O2	4.06e-2	lbs/hr	CC7%O2
2-Methylphenol (o-Cresol)	319C3R2		1.10e+5	ng/dscm 7%O2	5.80e-2	lbs/hr	CC7%O2
2-Methylphenol (o-Cresol)	319C3R3		1.19e+5	ng/dscm 7%O2	6.43e-2	lbs/hr	CC7%O2
2-Methylphenol (o-Cresol)	319C5	ND	0.00e+0		0.00e+0		
2-Methylphenol (o-Cresol)	319C6R1	ND	0.00e+0		0.00e+0		
2-Methylphenol (o-Cresol)	319C6R2	ND	0.00e+0		0.00e+0		
2-Methylphenol (o-Cresol)	319C6R3	ND	0.00e+0		0.00e+0		
2-Methylphenol (o-Cresol)	319C7R1	ND	0.00e+0		0.00e+0		
2-Methylphenol (o-Cresol)	319C7R2		1.27e+4	ng/dscm 7%O2	6.81e-3	lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	319C3R1		1.69e+5	ng/dscm 7%O2	9.27e-2	lbs/hr	CC7%O2
4-Methylphenol (p-Cresol)	319C3R2		2.13e+5	ng/dscm 7%O2	1.13e-1	lbs/hr	CC7%O2
4-Methylphenol (p-Cresol)	319C3R3		2.36e+5	ng/dscm 7%O2	1.27e-1	lbs/hr	CC7%O2
4-Methylphenol (p-Cresol)	319C5	ND	0.00e+0		0.00e+0		
4-Methylphenol (p-Cresol)	319C6R1		4.26e+4	ng/dscm 7%O2	2.01e-2	lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	319C6R2		4.42e+4	ng/dscm 7%O2	2.10e-2	lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	319C6R3		5.05e+4	ng/dscm 7%O2	2.81e-2	lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	319C7R1		5.23e+4	ng/dscm 7%O2	2.59e-2	lbs/hr	CE7%O2
4-Methylphenol (p-Cresol)	319C7R2		4.75e+4	ng/dscm 7%O2	2.54e-2	lbs/hr	CE7%O2
Benzoic acid	319C5	2	9.27e+5	ng/dscm 7%O2	3.59e-1	lbs/hr	CE7%O2
Benzoic acid	319C6R1	2	4.91e+5	ng/dscm 7%O2	2.31e-1	lbs/hr	CE7%O2
Benzoic acid	319C6R2	2	8.33e+5	ng/dscm 7%O2	3.97e-1	lbs/hr	CE7%O2
Benzoic acid	319C6R3	2	8.28e+5	ng/dscm 7%O2	4.61e-1	lbs/hr	CE7%O2
Benzoic acid	319C7R1	2	5.06e+5	ng/dscm 7%O2	2.50e-1	lbs/hr	CE7%O2
Benzoic acid	319C7R2	2	1.70e+5	ng/dscm 7%O2	9.08e-2	lbs/hr	CE7%O2
Benzyl alcohol	319C3R1		2.67e+4	ng/dscm 7%O2	1.47e-2	lbs/hr	CC7%O2
Benzyl alcohol	319C3R2	ND	1.39e+3	ng/dscm 7%O2	7.35e-4	lbs/hr	CC7%O2
Benzyl alcohol	319C3R3	ND	1.51e+3	ng/dscm 7%O2	8.15e-4	lbs/hr	CC7%O2
Benzyl alcohol	319C5	2	6.49e+5	ng/dscm 7%O2	2.51e-1	lbs/hr	CE7%O2
Benzyl alcohol	319C6R1	2	4.91e+5	ng/dscm 7%O2	2.31e-1	lbs/hr	CE7%O2
Benzyl alcohol	319C6R2	2	4.17e+5	ng/dscm 7%O2	1.99e-1	lbs/hr	CE7%O2
Benzyl alcohol	319C6R3	2	3.31e+5	ng/dscm 7%O2	1.84e-1	lbs/hr	CE7%O2
Benzyl alcohol	319C7R1	2	5.06e+5	ng/dscm 7%O2	2.50e-1	lbs/hr	CE7%O2
Benzyl alcohol	319C7R2	2	3.39e+5	ng/dscm 7%O2	1.82e-1	lbs/hr	CE7%O2
bis(2-ethylexyl) Phthalate	319C3R1		4.95e+3	ng/dscm 7%O2	2.72e-3	lbs/hr	CC7%O2
bis(2-ethylexyl) Phthalate	319C3R2	ND	1.39e+2	ng/dscm 7%O2	7.38e-5	lbs/hr	CC7%O2
bis(2-ethylexyl) Phthalate	319C3R3		1.63e+4	ng/dscm 7%O2	8.77e-3	lbs/hr	CC7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN

REGION: 7
 APC SYSTEM: ESP

bis(2-ethylexyl) Phthalate	319C5	ND	0.00e+0	0.00e+0	
bis(2-ethylexyl) Phthalate	319C6R1	ND	0.00e+0	0.00e+0	
bis(2-ethylexyl) Phthalate	319C6R2	ND	0.00e+0	0.00e+0	
bis(2-ethylexyl) Phthalate	319C6R3	ND	0.00e+0	0.00e+0	
bis(2-ethylexyl) Phthalate	319C7R1		4.47e+4 ng/dscm 7%O2	2.21e-2 lbs/hr	CE7%O2
bis(2-ethylexyl) Phthalate	319C7R2		2.29e+4 ng/dscm 7%O2	1.23e-2 lbs/hr	CE7%O2
Butylbenzylphthalate	319C3R1		2.84e+4 ng/dscm 7%O2	1.56e-2 lbs/hr	CC7%O2
Butylbenzylphthalate	319C3R2		3.59e+4 ng/dscm 7%O2	1.90e-2 lbs/hr	CC7%O2
Butylbenzylphthalate	319C3R3		4.55e+4 ng/dscm 7%O2	2.45e-2 lbs/hr	CC7%O2
Dibenzofuran	319C3R1		2.55e+5 ng/dscm 7%O2	1.40e-1 lbs/hr	CC7%O2
Dibenzofuran	319C3R2		3.21e+5 ng/dscm 7%O2	1.70e-1 lbs/hr	CC7%O2
Dibenzofuran	319C3R3		3.15e+5 ng/dscm 7%O2	1.70e-1 lbs/hr	CC7%O2
Dibenzofuran	319C5	ND	0.00e+0	0.00e+0	
Dibenzofuran	319C6R1		8.27e+4 ng/dscm 7%O2	3.90e-2 lbs/hr	CE7%O2
Dibenzofuran	319C6R2		1.22e+5 ng/dscm 7%O2	5.80e-2 lbs/hr	CE7%O2
Dibenzofuran	319C6R3		7.79e+4 ng/dscm 7%O2	4.33e-2 lbs/hr	CE7%O2
Dibenzofuran	319C7R1		1.09e+5 ng/dscm 7%O2	5.38e-2 lbs/hr	CE7%O2
Dibenzofuran	319C7R2		7.72e+4 ng/dscm 7%O2	4.13e-2 lbs/hr	CE7%O2
Diethylphthalate	319C5	ND	0.00e+0	0.00e+0	
Diethylphthalate	319C6R1	ND	0.00e+0	0.00e+0	
Diethylphthalate	319C6R2	ND	0.00e+0	0.00e+0	
Diethylphthalate	319C6R3		2.15e+4 ng/dscm 7%O2	1.20e-2 lbs/hr	CE7%O2
Diethylphthalate	319C7R1	ND	0.00e+0	0.00e+0	
Diethylphthalate	319C7R2	ND	0.00e+0	0.00e+0	
Ethylbenzene	319C3R1		5.49e+1 ng/dscm 7%O2	3.02e-5 lbs/hr	CC7%O2
Ethylbenzene	319C3R2		1.63e+1 ng/dscm 7%O2	8.65e-6 lbs/hr	CC7%O2
Ethylbenzene	319C3R3		2.17e+2 ng/dscm 7%O2	1.17e-4 lbs/hr	CC7%O2
Ethylbenzene	319C5		2.41e+4 ng/dscm 7%O2	9.34e-3 lbs/hr	CE7%O2
Ethylbenzene	319C6R1		1.39e+5 ng/dscm 7%O2	6.56e-2 lbs/hr	CE7%O2
Ethylbenzene	319C6R2		1.58e+5 ng/dscm 7%O2	7.55e-2 lbs/hr	CE7%O2
Ethylbenzene	319C6R3		6.21e+4 ng/dscm 7%O2	3.45e-2 lbs/hr	CE7%O2
Ethylbenzene	319C7R1		1.69e+5 ng/dscm 7%O2	8.34e-2 lbs/hr	CE7%O2
Ethylbenzene	319C7R2		1.70e+5 ng/dscm 7%O2	9.08e-2 lbs/hr	CE7%O2
Phenol	319C3R1		7.91e+5 ng/dscm 7%O2	4.35e-1 lbs/hr	CC7%O2
Phenol	319C3R2		9.65e+5 ng/dscm 7%O2	5.11e-1 lbs/hr	CC7%O2
Phenol	319C3R3		1.13e+6 ng/dscm 7%O2	6.11e-1 lbs/hr	CC7%O2
Phenol	319C5	ND	0.00e+0	0.00e+0	
Phenol	319C6R1		6.30e+4 ng/dscm 7%O2	2.97e-2 lbs/hr	CE7%O2
Phenol	319C6R2		1.41e+5 ng/dscm 7%O2	6.71e-2 lbs/hr	CE7%O2
Phenol	319C6R3		4.47e+4 ng/dscm 7%O2	2.49e-2 lbs/hr	CE7%O2
Phenol	319C7R1		5.65e+4 ng/dscm 7%O2	2.79e-2 lbs/hr	CE7%O2
Phenol	319C7R2		1.16e+5 ng/dscm 7%O2	6.22e-2 lbs/hr	CE7%O2
Pyridine	319C3R1		5.62e+1 ng/dscm 7%O2	3.09e-5 lbs/hr	CC7%O2
Pyridine	319C3R2		3.38e+3 ng/dscm 7%O2	1.79e-3 lbs/hr	CC7%O2
Pyridine	319C3R3		5.44e+3 ng/dscm 7%O2	2.93e-3 lbs/hr	CC7%O2
Sulfur Hexafluoride	319C3R1		2.02e+2 ng/dscm 7%O2	1.11e-4 lbs/hr	CC7%O2
Sulfur Hexafluoride	319C3R2		2.27e+2 ng/dscm 7%O2	1.20e-4 lbs/hr	CC7%O2
Sulfur Hexafluoride	319C3R3		1.97e+2 ng/dscm 7%O2	1.06e-4 lbs/hr	CC7%O2

7. Category: THC & CO

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
CO	319C1R1	3.01e+2 ppmv 7%O2	2.03e+2 lbs/hr	CE7%O2
CO	319C1R2	2.92e+2 ppmv 7%O2	2.05e+2 lbs/hr	CE7%O2
CO	319C1R3	2.93e+2 ppmv 7%O2	2.02e+2 lbs/hr	CE7%O2
CO	319C2R1	3.29e+2 ppmv 7%O2	2.33e+2 lbs/hr	CE7%O2
CO	319C2R2	3.64e+2 ppmv 7%O2	2.25e+2 lbs/hr	CE7%O2
CO	319C2R3	3.37e+2 ppmv 7%O2	2.32e+2 lbs/hr	CE7%O2
CO	319C4R1	3.31e+2 ppmv 7%O2	2.14e+2 lbs/hr	CE7%O2
CO	319C4R2	3.41e+2 ppmv 7%O2	2.13e+2 lbs/hr	CE7%O2
CO	319C4R3	3.35e+2 ppmv 7%O2	2.12e+2 lbs/hr	CE7%O2

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP REGION: 7

CO	319C4R4	3.33e+2	ppmv 7%O2	2.20e+2	lbs/hr	CE7%O2
CO	319C4R5	4.06e+2	ppmv 7%O2	2.32e+2	lbs/hr	CE7%O2
CO	319C5	1.84e+2	ppmv 7%O2	8.28e+1	lbs/hr	CE
CO	319C6R1	2.29e+2	ppmv 7%O2	1.25e+2	lbs/hr	CE
CO	319C6R2	2.72e+2	ppmv 7%O2	1.51e+2	lbs/hr	CE
CO	319C6R3	2.20e+2	ppmv 7%O2	1.42e+2	lbs/hr	CE
CO	319C7R1	2.29e+2	ppmv 7%O2	1.31e+2	lbs/hr	CE
CO	319C7R2	2.06e+2	ppmv 7%O2	1.28e+2	lbs/hr	CE7%O2
THC	319C1R1	7.73e+1	ppmv 7%O2	8.19e+1	lbs/hr	CE7%O2
THC	319C1R2	7.50e+1	ppmv 7%O2	8.28e+1	lbs/hr	CE7%O2
THC	319C1R3	7.54e+1	ppmv 7%O2	8.16e+1	lbs/hr	CE7%O2
THC	319C2R1	5.76e+1	ppmv 7%O2	6.40e+1	lbs/hr	CE7%O2
THC	319C2R2	6.36e+1	ppmv 7%O2	6.19e+1	lbs/hr	CE7%O2
THC	319C2R3	5.90e+1	ppmv 7%O2	6.40e+1	lbs/hr	CE7%O2
THC	319C4R1	5.80e+1	ppmv 7%O2	5.90e+1	lbs/hr	CE7%O2
THC	319C4R2	5.98e+1	ppmv 7%O2	5.87e+1	lbs/hr	CE7%O2
THC	319C4R3	5.87e+1	ppmv 7%O2	5.82e+1	lbs/hr	CE7%O2
THC	319C4R4	5.83e+1	ppmv 7%O2	6.06e+1	lbs/hr	CE7%O2
THC	319C4R5	7.10e+1	ppmv 7%O2	6.39e+1	lbs/hr	CE7%O2

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,1,1-Trichloroethane	319C5	7.23e+3 ng/dscm 7%O2	2.80e-3 lbs/hr	CE7%O2
1,1,1-Trichloroethane	319C6R1	1.15e+4 ng/dscm 7%O2	5.40e-3 lbs/hr	CE7%O2
1,1,1-Trichloroethane	319C6R2	1.75e+3 ng/dscm 7%O2	8.34e-4 lbs/hr	CE7%O2
1,1,1-Trichloroethane	319C6R3	5.80e+2 ng/dscm 7%O2	3.22e-4 lbs/hr	CE7%O2
1,1,1-Trichloroethane	319C7R1	ND 0.00e+0	0.00e+0	
1,1,1-Trichloroethane	319C7R2	ND 0.00e+0	0.00e+0	
1,1,2,2-Tetrachloroethane	319C5	9.27e+3 ng/dscm 7%O2	3.59e-3 lbs/hr	CE7%O2
1,1,2,2-Tetrachloroethane	319C6R1	1.47e+4 ng/dscm 7%O2	6.94e-3 lbs/hr	CE7%O2
1,1,2,2-Tetrachloroethane	319C6R2	1.00e+4 ng/dscm 7%O2	4.77e-3 lbs/hr	CE7%O2
1,1,2,2-Tetrachloroethane	319C6R3	1.16e+4 ng/dscm 7%O2	6.45e-3 lbs/hr	CE7%O2
1,1,2,2-Tetrachloroethane	319C7R1	1.18e+4 ng/dscm 7%O2	5.84e-3 lbs/hr	CE7%O2
1,1,2,2-Tetrachloroethane	319C7R2	1.19e+4 ng/dscm 7%O2	6.36e-3 lbs/hr	CE7%O2
1,1,2-Trichloroethane	319C5	3.25e+3 ng/dscm 7%O2	1.26e-3 lbs/hr	CE7%O2
1,1,2-Trichloroethane	319C6R1	1.96e+4 ng/dscm 7%O2	9.26e-3 lbs/hr	CE7%O2
1,1,2-Trichloroethane	319C6R2	6.75e+3 ng/dscm 7%O2	3.22e-3 lbs/hr	CE7%O2
1,1,2-Trichloroethane	319C6R3	ND 0.00e+0	0.00e+0	
1,1,2-Trichloroethane	319C7R1	1.77e+3 ng/dscm 7%O2	8.76e-4 lbs/hr	CE7%O2
1,1,2-Trichloroethane	319C7R2	4.84e+3 ng/dscm 7%O2	2.59e-3 lbs/hr	CE7%O2
1,1-Dichloroethane	319C5	1.85e+2 ng/dscm 7%O2	7.18e-5 lbs/hr	CE7%O2
1,1-Dichloroethane	319C6R1	2.13e+3 ng/dscm 7%O2	1.00e-3 lbs/hr	CE7%O2
1,1-Dichloroethane	319C6R2	ND 0.00e+0	0.00e+0	
1,1-Dichloroethane	319C6R3	1.66e+3 ng/dscm 7%O2	9.21e-4 lbs/hr	CE7%O2
1,1-Dichloroethane	319C7R1	8.43e+2 ng/dscm 7%O2	4.17e-4 lbs/hr	CE7%O2
1,1-Dichloroethane	319C7R2	2.29e+3 ng/dscm 7%O2	1.23e-3 lbs/hr	CE7%O2
1,1-Dichloroethane	319C5	ND 0.00e+0	0.00e+0	
1,1-Dichloroethane	319C6R1	1.96e+3 ng/dscm 7%O2	9.26e-4 lbs/hr	CE7%O2
1,1-Dichloroethane	319C6R2	5.00e+2 ng/dscm 7%O2	2.38e-4 lbs/hr	CE7%O2
1,1-Dichloroethane	319C6R3	8.28e+1 ng/dscm 7%O2	4.61e-5 lbs/hr	CE7%O2
1,1-Dichloroethane	319C7R1	8.43e+1 ng/dscm 7%O2	4.17e-5 lbs/hr	CE7%O2
1,1-Dichloroethane	319C7R2	ND 0.00e+0	0.00e+0	
1,2-Dichloroethane	319C5	3.25e+3 ng/dscm 7%O2	1.26e-3 lbs/hr	CE7%O2
1,2-Dichloroethane	319C6R1	1.31e+4 ng/dscm 7%O2	6.17e-3 lbs/hr	CE7%O2
1,2-Dichloroethane	319C6R2	3.17e+4 ng/dscm 7%O2	1.51e-2 lbs/hr	CE7%O2
1,2-Dichloroethane	319C6R3	ND 0.00e+0	0.00e+0	
1,2-Dichloroethane	319C7R1	8.43e+1 ng/dscm 7%O2	4.17e-5 lbs/hr	CE7%O2
1,2-Dichloroethane	319C7R2	8.48e+1 ng/dscm 7%O2	4.54e-5 lbs/hr	CE7%O2
1,2-Dichloropropane	319C5	4.64e+2 ng/dscm 7%O2	1.80e-4 lbs/hr	CE7%O2
1,2-Dichloropropane	319C6R1	2.46e+3 ng/dscm 7%O2	1.16e-3 lbs/hr	CE7%O2

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

1,2-Dichloropropane	319C6R2		1.75e+3	ng/dscm	7%O2	8.34e-4	lbs/hr	CE7%O2
1,2-Dichloropropane	319C6R3		1.41e+3	ng/dscm	7%O2	7.83e-4	lbs/hr	CE7%O2
1,2-Dichloropropane	319C7R1		2.11e+3	ng/dscm	7%O2	1.04e-3	lbs/hr	CE7%O2
1,2-Dichloropropane	319C7R2		2.29e+3	ng/dscm	7%O2	1.23e-3	lbs/hr	CE7%O2
1,4-Dioxane	319C5		2.50e+4	ng/dscm	7%O2	9.70e-3	lbs/hr	CE7%O2
1,4-Dioxane	319C6R1	ND	0.00e+0			0.00e+0		
1,4-Dioxane	319C6R2	ND	0.00e+0			0.00e+0		
1,4-Dioxane	319C6R3		4.97e+2	ng/dscm	7%O2	2.76e-4	lbs/hr	CE7%O2
1,4-Dioxane	319C7R1		6.75e+3	ng/dscm	7%O2	3.34e-3	lbs/hr	CE7%O2
1,4-Dioxane	319C7R2	ND	0.00e+0			0.00e+0		
Acetone	319C3R1		7.82e+3	ng/dscm	7%O2	4.30e-3	lbs/hr	CC7%O2
Acetone	319C3R2		1.59e+3	ng/dscm	7%O2	8.43e-4	lbs/hr	CC7%O2
Acetone	319C3R3		8.42e+2	ng/dscm	7%O2	4.54e-4	lbs/hr	CC7%O2
Acetone	319C5		1.95e+5	ng/dscm	7%O2	7.54e-2	lbs/hr	CE7%O2
Acetone	319C6R1		4.18e+5	ng/dscm	7%O2	1.97e-1	lbs/hr	CE7%O2
Acetone	319C6R2		4.00e+5	ng/dscm	7%O2	1.91e-1	lbs/hr	CE7%O2
Acetone	319C6R3		3.23e+5	ng/dscm	7%O2	1.80e-1	lbs/hr	CE7%O2
Acetone	319C7R1		8.10e+5	ng/dscm	7%O2	4.00e-1	lbs/hr	CE7%O2
Acetone	319C7R2		7.04e+5	ng/dscm	7%O2	3.77e-1	lbs/hr	CE7%O2
Acrolein	319C5		1.48e+5	ng/dscm	7%O2	5.75e-2	lbs/hr	CE7%O2
Acrolein	319C6R1		1.96e+5	ng/dscm	7%O2	9.26e-2	lbs/hr	CE7%O2
Acrolein	319C6R2		7.25e+4	ng/dscm	7%O2	3.45e-2	lbs/hr	CE7%O2
Acrolein	319C6R3		1.08e+5	ng/dscm	7%O2	5.99e-2	lbs/hr	CE7%O2
Acrolein	319C7R1		6.33e+5	ng/dscm	7%O2	3.13e-1	lbs/hr	CE7%O2
Acrolein	319C7R2		4.84e+5	ng/dscm	7%O2	2.59e-1	lbs/hr	CE7%O2
Acrylonitrile	319C5		2.50e+5	ng/dscm	7%O2	9.70e-2	lbs/hr	CE7%O2
Acrylonitrile	319C6R1		3.36e+5	ng/dscm	7%O2	1.58e-1	lbs/hr	CE7%O2
Acrylonitrile	319C6R2		4.58e+5	ng/dscm	7%O2	2.18e-1	lbs/hr	CE7%O2
Acrylonitrile	319C6R3		5.14e+5	ng/dscm	7%O2	2.86e-1	lbs/hr	CE7%O2
Acrylonitrile	319C7R1		3.20e+5	ng/dscm	7%O2	1.58e-1	lbs/hr	CE7%O2
Acrylonitrile	319C7R2		4.58e+5	ng/dscm	7%O2	2.45e-1	lbs/hr	CE7%O2
Benzene	319C3R1		8.80e+2	ng/dscm	7%O2	4.84e-4	lbs/hr	CC7%O2
Benzene	319C3R2		1.96e+3	ng/dscm	7%O2	1.04e-3	lbs/hr	CC7%O2
Benzene	319C3R3		2.08e+3	ng/dscm	7%O2	1.12e-3	lbs/hr	CC7%O2
Benzene	319C5		4.73e+5	ng/dscm	7%O2	1.83e-1	lbs/hr	CE7%O2
Benzene	319C6R1		1.47e+6	ng/dscm	7%O2	6.94e-1	lbs/hr	CE7%O2
Benzene	319C6R2		2.33e+6	ng/dscm	7%O2	1.11e+0	lbs/hr	CE7%O2
Benzene	319C6R3		1.16e+6	ng/dscm	7%O2	6.45e-1	lbs/hr	CE7%O2
Benzene	319C7R1		1.77e+6	ng/dscm	7%O2	8.76e-1	lbs/hr	CE7%O2
Benzene	319C7R2		1.78e+6	ng/dscm	7%O2	9.53e-1	lbs/hr	CE7%O2
Bromodichloromethane	319C5		4.73e+3	ng/dscm	7%O2	1.83e-3	lbs/hr	CE7%O2
Bromodichloromethane	319C6R1		2.05e+3	ng/dscm	7%O2	9.64e-4	lbs/hr	CE7%O2
Bromodichloromethane	319C6R2		2.00e+3	ng/dscm	7%O2	9.53e-4	lbs/hr	CE7%O2
Bromodichloromethane	319C6R3		1.91e+3	ng/dscm	7%O2	1.06e-3	lbs/hr	CE7%O2
Bromodichloromethane	319C7R1		3.37e+3	ng/dscm	7%O2	1.67e-3	lbs/hr	CE7%O2
Bromodichloromethane	319C7R2		5.09e+2	ng/dscm	7%O2	2.72e-4	lbs/hr	CE7%O2
Bromoform	319C5		1.02e+3	ng/dscm	7%O2	3.95e-4	lbs/hr	CE7%O2
Bromoform	319C6R1		8.19e+1	ng/dscm	7%O2	3.86e-5	lbs/hr	CE7%O2
Bromoform	319C6R2		4.17e+2	ng/dscm	7%O2	1.99e-4	lbs/hr	CE7%O2
Bromoform	319C6R3	ND	0.00e+0			0.00e+0		
Bromoform	319C7R1	ND	0.00e+0			0.00e+0		
Bromoform	319C7R2	ND	0.00e+0			0.00e+0		
Bromomethane	319C3R1	ND	1.98e+0	ng/dscm	7%O2	1.09e-6	lbs/hr	CC7%O2
Bromomethane	319C3R2	ND	1.64e+1	ng/dscm	7%O2	8.68e-6	lbs/hr	CC7%O2
Bromomethane	319C3R3		1.67e+1	ng/dscm	7%O2	8.98e-6	lbs/hr	CC7%O2
Carbon disulfide	319C3R1	ND	5.73e-1	ng/dscm	7%O2	3.15e-7	lbs/hr	CC7%O2
Carbon disulfide	319C3R2		1.51e+2	ng/dscm	7%O2	8.02e-5	lbs/hr	CC7%O2
Carbon disulfide	319C3R3		1.89e+2	ng/dscm	7%O2	1.02e-4	lbs/hr	CC7%O2
Carbon Tetrachloride	319C5		4.64e+2	ng/dscm	7%O2	1.80e-4	lbs/hr	CE7%O2
Carbon Tetrachloride	319C6R1		1.88e+3	ng/dscm	7%O2	8.87e-4	lbs/hr	CE7%O2
Carbon Tetrachloride	319C6R2	ND	0.00e+0			0.00e+0		

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

Carbon Tetrachloride	319C6R3	ND	0.00e+0	0.00e+0	
Carbon Tetrachloride	319C7R1	ND	0.00e+0	0.00e+0	
Carbon Tetrachloride	319C7R2	ND	0.00e+0	0.00e+0	
Chlorobenzene	319C5		3.06e+4 ng/dscm 7%O2	1.19e-2 lbs/hr	CE7%O2
Chlorobenzene	319C6R1		4.09e+4 ng/dscm 7%O2	1.93e-2 lbs/hr	CE7%O2
Chlorobenzene	319C6R2		5.17e+4 ng/dscm 7%O2	2.46e-2 lbs/hr	CE7%O2
Chlorobenzene	319C6R3		3.48e+4 ng/dscm 7%O2	1.93e-2 lbs/hr	CE7%O2
Chlorobenzene	319C7R1		2.78e+4 ng/dscm 7%O2	1.38e-2 lbs/hr	CE7%O2
Chlorobenzene	319C7R2		2.80e+4 ng/dscm 7%O2	1.50e-2 lbs/hr	CE7%O2
Chloroform	319C5		8.34e+3 ng/dscm 7%O2	3.23e-3 lbs/hr	CE7%O2
Chloroform	319C6R1		4.26e+3 ng/dscm 7%O2	2.01e-3 lbs/hr	CE7%O2
Chloroform	319C6R2		2.17e+3 ng/dscm 7%O2	1.03e-3 lbs/hr	CE7%O2
Chloroform	319C6R3		5.14e+3 ng/dscm 7%O2	2.86e-3 lbs/hr	CE7%O2
Chloroform	319C7R1		1.18e+4 ng/dscm 7%O2	5.84e-3 lbs/hr	CE7%O2
Chloroform	319C7R2		9.33e+3 ng/dscm 7%O2	4.99e-3 lbs/hr	CE7%O2
Chloromethane	319C3R1	ND	6.16e+1 ng/dscm 7%O2	3.39e-5 lbs/hr	CC7%O2
Chloromethane	319C3R2	ND	1.72e+2 ng/dscm 7%O2	9.13e-5 lbs/hr	CC7%O2
Chloromethane	319C3R3		1.41e+2 ng/dscm 7%O2	7.60e-5 lbs/hr	CC7%O2
Dibromochloromethane	319C5		5.56e+2 ng/dscm 7%O2	2.16e-4 lbs/hr	CE7%O2
Dibromochloromethane	319C6R1		3.27e+2 ng/dscm 7%O2	1.54e-4 lbs/hr	CE7%O2
Dibromochloromethane	319C6R2		5.00e+2 ng/dscm 7%O2	2.38e-4 lbs/hr	CE7%O2
Dibromochloromethane	319C6R3		4.14e+1 ng/dscm 7%O2	2.30e-5 lbs/hr	CE7%O2
Dibromochloromethane	319C7R1		2.53e+1 ng/dscm 7%O2	1.25e-5 lbs/hr	CE7%O2
Dibromochloromethane	319C7R2	ND	0.00e+0	0.00e+0	
m,p-Xylene	319C3R1		8.93e+2 ng/dscm 7%O2	4.91e-4 lbs/hr	CC7%O2
m,p-Xylene	319C3R2		3.00e+2 ng/dscm 7%O2	1.59e-4 lbs/hr	CC7%O2
m,p-Xylene	319C3R3		4.69e+2 ng/dscm 7%O2	2.53e-4 lbs/hr	CC7%O2
Methyl Ethyl Ketone	319C3R1		1.04e+3 ng/dscm 7%O2	5.74e-4 lbs/hr	CC7%O2
Methyl Ethyl Ketone	319C3R2		1.89e+2 ng/dscm 7%O2	1.00e-4 lbs/hr	CC7%O2
Methyl Ethyl Ketone	319C3R3		1.25e+2 ng/dscm 7%O2	6.72e-5 lbs/hr	CC7%O2
Methyl Ethyl Ketone	319C5		3.99e+4 ng/dscm 7%O2	1.54e-2 lbs/hr	CE7%O2
Methyl Ethyl Ketone	319C6R1		9.01e+4 ng/dscm 7%O2	4.24e-2 lbs/hr	CE7%O2
Methyl Ethyl Ketone	319C6R2		1.33e+5 ng/dscm 7%O2	6.35e-2 lbs/hr	CE7%O2
Methyl Ethyl Ketone	319C6R3		9.11e+4 ng/dscm 7%O2	5.07e-2 lbs/hr	CE7%O2
Methyl Ethyl Ketone	319C7R1		1.10e+5 ng/dscm 7%O2	5.42e-2 lbs/hr	CE7%O2
Methyl Ethyl Ketone	319C7R2		1.53e+5 ng/dscm 7%O2	8.17e-2 lbs/hr	CE7%O2
Methylene Chloride	319C3R1	ND	1.41e+0 ng/dscm 7%O2	7.74e-7 lbs/hr	CC7%O2
Methylene Chloride	319C3R2		1.23e+2 ng/dscm 7%O2	6.51e-5 lbs/hr	CC7%O2
Methylene Chloride	319C3R3	ND	1.64e+0 ng/dscm 7%O2	8.82e-7 lbs/hr	CC7%O2
Methylene Chloride	319C5	2	6.68e+4 ng/dscm 7%O2	2.59e-2 lbs/hr	CE7%O2
Methylene Chloride	319C6R1	2	2.13e+5 ng/dscm 7%O2	1.00e-1 lbs/hr	CE7%O2
Methylene Chloride	319C6R2		1.00e+4 ng/dscm 7%O2	4.77e-3 lbs/hr	CE7%O2
Methylene Chloride	319C6R3		8.28e+3 ng/dscm 7%O2	4.61e-3 lbs/hr	CE7%O2
Methylene Chloride	319C7R1		1.18e+4 ng/dscm 7%O2	5.84e-3 lbs/hr	CE7%O2
Methylene Chloride	319C7R2		3.48e+3 ng/dscm 7%O2	1.86e-3 lbs/hr	CE7%O2
o-Xylene	319C3R1		1.39e+2 ng/dscm 7%O2	7.63e-5 lbs/hr	CC7%O2
o-Xylene	319C3R2		9.99e+1 ng/dscm 7%O2	5.29e-5 lbs/hr	CC7%O2
o-Xylene	319C3R3		1.66e+2 ng/dscm 7%O2	8.94e-5 lbs/hr	CC7%O2
Styrene	319C3R1		4.69e+1 ng/dscm 7%O2	2.58e-5 lbs/hr	CC7%O2
Styrene	319C3R2		5.42e+2 ng/dscm 7%O2	2.87e-4 lbs/hr	CC7%O2
Styrene	319C3R3		7.20e+2 ng/dscm 7%O2	3.88e-4 lbs/hr	CC7%O2
t-1,2-Dichloroethane	319C5		3.71e+1 ng/dscm 7%O2	1.44e-5 lbs/hr	CE7%O2
t-1,2-Dichloroethane	319C6R1		8.19e+1 ng/dscm 7%O2	3.86e-5 lbs/hr	CE7%O2
t-1,2-Dichloroethane	319C6R2		8.33e+1 ng/dscm 7%O2	3.97e-5 lbs/hr	CE7%O2
t-1,2-Dichloroethane	319C6R3		2.49e+2 ng/dscm 7%O2	1.38e-4 lbs/hr	CE7%O2
t-1,2-Dichloroethane	319C7R1		8.43e+1 ng/dscm 7%O2	4.17e-5 lbs/hr	CE7%O2
t-1,2-Dichloroethane	319C7R2	ND	0.00e+0	0.00e+0	
Tetrachloroethene	319C5		1.67e+3 ng/dscm 7%O2	6.47e-4 lbs/hr	CE7%O2
Tetrachloroethene	319C6R1		5.73e+2 ng/dscm 7%O2	2.70e-4 lbs/hr	CE7%O2
Tetrachloroethene	319C6R2		3.75e+3 ng/dscm 7%O2	1.79e-3 lbs/hr	CE7%O2
Tetrachloroethene	319C6R3		1.91e+3 ng/dscm 7%O2	1.06e-3 lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: CONTINENTAL CEMENT COMPANY
 2. STATE: MO
 3. CITY: HANNIBAL
 4. EP ID: 319 DEVICE NAME: KILN NO. 1

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

Tetrachloroethene	319C7R1	3.37e+2	ng/dscm	7%O2	1.67e-4	lbs/hr	CE7%O2
Tetrachloroethene	319C7R2	2.55e+2	ng/dscm	7%O2	1.36e-4	lbs/hr	CE7%O2
Toluene	319C3R1	9.60e+2	ng/dscm	7%O2	5.28e-4	lbs/hr	CC7%O2
Toluene	319C3R2	1.21e+3	ng/dscm	7%O2	6.43e-4	lbs/hr	CC7%O2
Toluene	319C3R3	1.43e+3	ng/dscm	7%O2	7.69e-4	lbs/hr	CC7%O2
Toluene	319C5	1.48e+5	ng/dscm	7%O2	5.75e-2	lbs/hr	CE7%O2
Toluene	319C6R1	4.75e+5	ng/dscm	7%O2	2.24e-1	lbs/hr	CE7%O2
Toluene	319C6R2	7.58e+5	ng/dscm	7%O2	3.61e-1	lbs/hr	CE7%O2
Toluene	319C6R3	3.73e+5	ng/dscm	7%O2	2.07e-1	lbs/hr	CE7%O2
Toluene	319C7R1	8.01e+5	ng/dscm	7%O2	3.96e-1	lbs/hr	CE7%O2
Toluene	319C7R2	8.15e+5	ng/dscm	7%O2	4.36e-1	lbs/hr	CE7%O2
trans-1,3-Dichloropropene	319C5	2.78e+2	ng/dscm	7%O2	1.08e-4	lbs/hr	CE7%O2
trans-1,3-Dichloropropene	319C6R1	4.67e+3	ng/dscm	7%O2	2.20e-3	lbs/hr	CE7%O2
trans-1,3-Dichloropropene	319C6R2	4.83e+3	ng/dscm	7%O2	2.30e-3	lbs/hr	CE7%O2
trans-1,3-Dichloropropene	319C6R3	5.30e+3	ng/dscm	7%O2	2.95e-3	lbs/hr	CE7%O2
trans-1,3-Dichloropropene	319C7R1	1.01e+4	ng/dscm	7%O2	5.00e-3	lbs/hr	CE7%O2
trans-1,3-Dichloropropene	319C7R2	1.02e+4	ng/dscm	7%O2	5.45e-3	lbs/hr	CE7%O2
Trichloroethene	319C5	3.34e+3	ng/dscm	7%O2	1.29e-3	lbs/hr	CE7%O2
Trichloroethene	319C6R1	1.88e+3	ng/dscm	7%O2	8.87e-4	lbs/hr	CE7%O2
Trichloroethene	319C6R2	1.75e+3	ng/dscm	7%O2	8.34e-4	lbs/hr	CE7%O2
Trichloroethene	319C6R3	1.33e+3	ng/dscm	7%O2	7.37e-4	lbs/hr	CE7%O2
Trichloroethene	319C7R1	3.04e+3	ng/dscm	7%O2	1.50e-3	lbs/hr	CE7%O2
Trichloroethene	319C7R2	2.72e+3	ng/dscm	7%O2	1.45e-3	lbs/hr	CE7%O2
Trichlorofluoromethane	319C3R1	ND	1.27e+1	ng/dscm	6.97e-6	lbs/hr	CC7%O2
Trichlorofluoromethane	319C3R2	ND	1.84e+0	ng/dscm	9.75e-7	lbs/hr	CC7%O2
Trichlorofluoromethane	319C3R3	ND	1.84e+0	ng/dscm	9.93e-7	lbs/hr	CC7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION

2. STATE: IN

3. CITY: LOGANSPORT

EPA IND005081542

REGION: 5

4. EP ID: 300 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

5. Type: CONTROLLED

6. Description: EMISSIONS

Process Group: WET KILN

Location: STACK

Phase: GAS

7. Category: Dioxin & Furan

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
4D 2378	300C2R1	ND	1.67e-2 ng/dscm 7%O2	3.52e-9 lbs/hr	CE7%O2
4D 2378	300C2R2	ND	3.22e-2 ng/dscm 7%O2	6.43e-9 lbs/hr	CE7%O2
4D 2378	300C2R3	ND	1.74e-2 ng/dscm 7%O2	3.78e-9 lbs/hr	CE7%O2
4D 2378	300C2R4	ND	1.87e-2 ng/dscm 7%O2	3.74e-9 lbs/hr	CE7%O2
4D Other	300C2R1		2.10e+2 ng/dscm 7%O2	4.42e-5 lbs/hr	OCE
4D Other	300C2R2		1.99e+2 ng/dscm 7%O2	3.98e-5 lbs/hr	OCE
4D Other	300C2R3		2.27e+2 ng/dscm 7%O2	4.94e-5 lbs/hr	OCE
4D Other	300C2R4		2.92e+2 ng/dscm 7%O2	5.83e-5 lbs/hr	OCE
4D Total	300C2R1		2.10e+2 ng/dscm 7%O2	4.42e-5 lbs/hr	CE7%O2
4D Total	300C2R2		2.00e+2 ng/dscm 7%O2	3.98e-5 lbs/hr	CE7%O2
4D Total	300C2R3		2.27e+2 ng/dscm 7%O2	4.94e-5 lbs/hr	CE7%O2
4D Total	300C2R4		2.92e+2 ng/dscm 7%O2	5.83e-5 lbs/hr	CE7%O2
4F 2378	300C2R1		1.93e+1 ng/dscm 7%O2	4.07e-6 lbs/hr	CE7%O2
4F 2378	300C2R2		4.45e+1 ng/dscm 7%O2	8.89e-6 lbs/hr	CE7%O2
4F 2378	300C2R3		3.91e+1 ng/dscm 7%O2	8.49e-6 lbs/hr	CE7%O2
4F 2378	300C2R4		4.36e+1 ng/dscm 7%O2	8.71e-6 lbs/hr	CE7%O2
4F Other	300C2R1		8.19e+1 ng/dscm 7%O2	1.73e-5 lbs/hr	OCE
4F Other	300C2R2		1.85e+2 ng/dscm 7%O2	3.69e-5 lbs/hr	OCE
4F Other	300C2R3		1.54e+2 ng/dscm 7%O2	3.36e-5 lbs/hr	OCE
4F Other	300C2R4		1.89e+2 ng/dscm 7%O2	3.78e-5 lbs/hr	OCE
4F Total	300C2R1		1.01e+2 ng/dscm 7%O2	2.13e-5 lbs/hr	CE7%O2
4F Total	300C2R2		2.29e+2 ng/dscm 7%O2	4.58e-5 lbs/hr	CE7%O2
4F Total	300C2R3		1.94e+2 ng/dscm 7%O2	4.21e-5 lbs/hr	CE7%O2
4F Total	300C2R4		2.33e+2 ng/dscm 7%O2	4.65e-5 lbs/hr	CE7%O2
5D 12378	300C2R1		1.28e+0 ng/dscm 7%O2	2.70e-7 lbs/hr	CE7%O2
5D 12378	300C2R2		1.54e+0 ng/dscm 7%O2	3.08e-7 lbs/hr	CE7%O2
5D 12378	300C2R3		1.62e+0 ng/dscm 7%O2	3.53e-7 lbs/hr	CE7%O2
5D 12378	300C2R4		2.00e+0 ng/dscm 7%O2	3.99e-7 lbs/hr	CE7%O2
5D Other	300C2R1		3.17e+2 ng/dscm 7%O2	6.68e-5 lbs/hr	OCE
5D Other	300C2R2		2.98e+2 ng/dscm 7%O2	5.95e-5 lbs/hr	OCE
5D Other	300C2R3		3.44e+2 ng/dscm 7%O2	7.47e-5 lbs/hr	OCE
5D Other	300C2R4		4.51e+2 ng/dscm 7%O2	9.00e-5 lbs/hr	OCE
5D Total	300C2R1		3.18e+2 ng/dscm 7%O2	6.71e-5 lbs/hr	CE7%O2
5D Total	300C2R2		2.99e+2 ng/dscm 7%O2	5.98e-5 lbs/hr	CE7%O2
5D Total	300C2R3		3.45e+2 ng/dscm 7%O2	7.51e-5 lbs/hr	CE7%O2
5D Total	300C2R4		4.53e+2 ng/dscm 7%O2	9.04e-5 lbs/hr	CE7%O2
5F 12378	300C2R1		1.83e+0 ng/dscm 7%O2	3.87e-7 lbs/hr	CE7%O2
5F 12378	300C2R2		4.18e+0 ng/dscm 7%O2	8.36e-7 lbs/hr	CE7%O2
5F 12378	300C2R3		3.53e+0 ng/dscm 7%O2	7.68e-7 lbs/hr	CE7%O2
5F 12378	300C2R4		4.12e+0 ng/dscm 7%O2	8.22e-7 lbs/hr	CE7%O2
5F 23478	300C2R1		3.28e+0 ng/dscm 7%O2	6.92e-7 lbs/hr	CE7%O2
5F 23478	300C2R2		7.21e+0 ng/dscm 7%O2	1.44e-6 lbs/hr	CE7%O2
5F 23478	300C2R3		5.50e+0 ng/dscm 7%O2	1.20e-6 lbs/hr	CE7%O2
5F 23478	300C2R4		6.92e+0 ng/dscm 7%O2	1.38e-6 lbs/hr	CE7%O2
5F Other	300C2R1		3.64e+1 ng/dscm 7%O2	7.68e-6 lbs/hr	OCE
5F Other	300C2R2		9.35e+1 ng/dscm 7%O2	1.87e-5 lbs/hr	OCE
5F Other	300C2R3		6.63e+1 ng/dscm 7%O2	1.44e-5 lbs/hr	OCE
5F Other	300C2R4		9.13e+1 ng/dscm 7%O2	1.82e-5 lbs/hr	OCE
5F Total	300C2R1		4.15e+1 ng/dscm 7%O2	8.76e-6 lbs/hr	CE7%O2
5F Total	300C2R2		1.05e+2 ng/dscm 7%O2	2.10e-5 lbs/hr	CE7%O2
5F Total	300C2R3		7.53e+1 ng/dscm 7%O2	1.64e-5 lbs/hr	CE7%O2
5F Total	300C2R4		1.02e+2 ng/dscm 7%O2	2.04e-5 lbs/hr	CE7%O2
6D 123478	300C2R1		1.67e+0 ng/dscm 7%O2	3.52e-7 lbs/hr	CE7%O2
6D 123478	300C2R2		2.19e+0 ng/dscm 7%O2	4.37e-7 lbs/hr	CE7%O2

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION

2. STATE: IN

3. CITY: LOGANSPORT

EPA ID: IND005081542

REGION: 5

4. EP ID: 300 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

6D 123478	300C2R3	1.91e+0	ng/dscm 7%O2	4.16e-7	lbs/hr	CE7%O2
6D 123478	300C2R4	2.18e+0	ng/dscm 7%O2	4.36e-7	lbs/hr	CE7%O2
6D 123678	300C2R1	5.34e+0	ng/dscm 7%O2	1.13e-6	lbs/hr	CE7%O2
6D 123678	300C2R2	6.69e+0	ng/dscm 7%O2	1.34e-6	lbs/hr	CE7%O2
6D 123678	300C2R3	6.78e+0	ng/dscm 7%O2	1.47e-6	lbs/hr	CE7%O2
6D 123678	300C2R4	8.55e+0	ng/dscm 7%O2	1.71e-6	lbs/hr	CE7%O2
6D 123789	300C2R1	5.23e+0	ng/dscm 7%O2	1.10e-6	lbs/hr	CE7%O2
6D 123789	300C2R2	7.40e+0	ng/dscm 7%O2	1.48e-6	lbs/hr	CE7%O2
6D 123789	300C2R3	8.46e+0	ng/dscm 7%O2	1.84e-6	lbs/hr	CE7%O2
6D 123789	300C2R4	9.92e+0	ng/dscm 7%O2	1.98e-6	lbs/hr	CE7%O2
6D Other	300C2R1	4.94e+2	ng/dscm 7%O2	1.04e-4	lbs/hr	OCE
6D Other	300C2R2	4.83e+2	ng/dscm 7%O2	9.64e-5	lbs/hr	OCE
6D Other	300C2R3	4.64e+2	ng/dscm 7%O2	1.01e-4	lbs/hr	OCE
6D Other	300C2R4	5.55e+2	ng/dscm 7%O2	1.11e-4	lbs/hr	OCE
6D Total	300C2R1	5.06e+2	ng/dscm 7%O2	1.07e-4	lbs/hr	CE7%O2
6D Total	300C2R2	4.99e+2	ng/dscm 7%O2	9.96e-5	lbs/hr	CE7%O2
6D Total	300C2R3	4.81e+2	ng/dscm 7%O2	1.05e-4	lbs/hr	CE7%O2
6D Total	300C2R4	5.76e+2	ng/dscm 7%O2	1.15e-4	lbs/hr	CE7%O2
6F 123478	300C2R1	3.89e+0	ng/dscm 7%O2	8.21e-7	lbs/hr	CE7%O2
6F 123478	300C2R2	8.50e+0	ng/dscm 7%O2	1.70e-6	lbs/hr	CE7%O2
6F 123478	300C2R3	6.84e+0	ng/dscm 7%O2	1.49e-6	lbs/hr	CE7%O2
6F 123478	300C2R4	7.61e+0	ng/dscm 7%O2	1.52e-6	lbs/hr	CE7%O2
6F 123678	300C2R1	1.28e+0	ng/dscm 7%O2	2.70e-7	lbs/hr	CE7%O2
6F 123678	300C2R2	3.22e+0	ng/dscm 7%O2	6.43e-7	lbs/hr	CE7%O2
6F 123678	300C2R3	2.55e+0	ng/dscm 7%O2	5.54e-7	lbs/hr	CE7%O2
6F 123678	300C2R4	2.93e+0	ng/dscm 7%O2	5.85e-7	lbs/hr	CE7%O2
6F 123789	300C2R1	1.67e-1	ng/dscm 7%O2	3.52e-8	lbs/hr	CE7%O2
6F 123789	300C2R2	3.67e-1	ng/dscm 7%O2	7.33e-8	lbs/hr	CE7%O2
6F 123789	300C2R3	2.55e-1	ng/dscm 7%O2	5.54e-8	lbs/hr	CE7%O2
6F 123789	300C2R4	2.81e-1	ng/dscm 7%O2	5.61e-8	lbs/hr	CE7%O2
6F 234678	300C2R1	2.78e+0	ng/dscm 7%O2	5.86e-7	lbs/hr	CE7%O2
6F 234678	300C2R2	6.05e+0	ng/dscm 7%O2	1.21e-6	lbs/hr	CE7%O2
6F 234678	300C2R3	4.87e+0	ng/dscm 7%O2	1.06e-6	lbs/hr	CE7%O2
6F 234678	300C2R4	5.93e+0	ng/dscm 7%O2	1.18e-6	lbs/hr	CE7%O2
6F Other	300C2R1	9.95e+0	ng/dscm 7%O2	2.10e-6	lbs/hr	OCE
6F Other	300C2R2	2.33e+1	ng/dscm 7%O2	4.64e-6	lbs/hr	OCE
6F Other	300C2R3	1.84e+1	ng/dscm 7%O2	4.00e-6	lbs/hr	OCE
6F Other	300C2R4	2.20e+1	ng/dscm 7%O2	4.40e-6	lbs/hr	OCE
6F Total	300C2R1	1.81e+1	ng/dscm 7%O2	3.81e-6	lbs/hr	CE7%O2
6F Total	300C2R2	4.14e+1	ng/dscm 7%O2	8.27e-6	lbs/hr	CE7%O2
6F Total	300C2R3	3.29e+1	ng/dscm 7%O2	7.15e-6	lbs/hr	CE7%O2
6F Total	300C2R4	3.88e+1	ng/dscm 7%O2	7.75e-6	lbs/hr	CE7%O2
7D 1234678	300C2R1	2.57e+1	ng/dscm 7%O2	5.42e-6	lbs/hr	CE7%O2
7D 1234678	300C2R2	3.15e+1	ng/dscm 7%O2	6.30e-6	lbs/hr	CE7%O2
7D 1234678	300C2R3	3.15e+1	ng/dscm 7%O2	6.84e-6	lbs/hr	CE7%O2
7D 1234678	300C2R4	3.71e+1	ng/dscm 7%O2	7.41e-6	lbs/hr	CE7%O2
7D Other	300C2R1	6.22e+1	ng/dscm 7%O2	1.31e-5	lbs/hr	OCE
7D Other	300C2R2	9.40e+1	ng/dscm 7%O2	1.88e-5	lbs/hr	OCE
7D Other	300C2R3	9.72e+1	ng/dscm 7%O2	2.11e-5	lbs/hr	OCE
7D Other	300C2R4	1.15e+2	ng/dscm 7%O2	2.30e-5	lbs/hr	OCE
7D Total	300C2R1	8.79e+1	ng/dscm 7%O2	1.85e-5	lbs/hr	CE7%O2
7D Total	300C2R2	1.26e+2	ng/dscm 7%O2	2.51e-5	lbs/hr	CE7%O2
7D Total	300C2R3	1.29e+2	ng/dscm 7%O2	2.80e-5	lbs/hr	CE7%O2
7D Total	300C2R4	1.52e+2	ng/dscm 7%O2	3.04e-5	lbs/hr	CE7%O2
7F 1234678	300C2R1	1.50e+0	ng/dscm 7%O2	3.17e-7	lbs/hr	CE7%O2
7F 1234678	300C2R2	3.15e+0	ng/dscm 7%O2	6.30e-7	lbs/hr	CE7%O2
7F 1234678	300C2R3	2.49e+0	ng/dscm 7%O2	5.42e-7	lbs/hr	CE7%O2
7F 1234678	300C2R4	2.68e+0	ng/dscm 7%O2	5.36e-7	lbs/hr	CE7%O2
7F 1234789	300C2R1	2.72e-1	ng/dscm 7%O2	5.75e-8	lbs/hr	CE7%O2
7F 1234789	300C2R2	9.01e-1	ng/dscm 7%O2	1.80e-7	lbs/hr	CE7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION

2. STATE: IN

3. CITY: LOGANSPORT

EPA IND005081542

REGION: 5

4. EP ID: 300 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

7F 1234789	300C2R3	5.79e-1	ng/dscm	7%O2	1.26e-7	lbs/hr	CE7%O2
7F 1234789	300C2R4	7.48e-1	ng/dscm	7%O2	1.49e-7	lbs/hr	CE7%O2
7F Other	300C2R1	1.62e+0	ng/dscm	7%O2	3.41e-7	lbs/hr	OCE
7F Other	300C2R2	2.00e+0	ng/dscm	7%O2	3.98e-7	lbs/hr	OCE
7F Other	300C2R3	2.78e+0	ng/dscm	7%O2	6.05e-7	lbs/hr	OCE
7F Other	300C2R4	3.18e+0	ng/dscm	7%O2	6.35e-7	lbs/hr	OCE
7F Total	300C2R1	3.39e+0	ng/dscm	7%O2	7.15e-7	lbs/hr	CE7%O2
7F Total	300C2R2	6.05e+0	ng/dscm	7%O2	1.21e-6	lbs/hr	CE7%O2
7F Total	300C2R3	5.85e+0	ng/dscm	7%O2	1.27e-6	lbs/hr	CE7%O2
7F Total	300C2R4	6.61e+0	ng/dscm	7%O2	1.32e-6	lbs/hr	CE7%O2
8D	300C2R1	6.78e+0	ng/dscm	7%O2	1.43e-6	lbs/hr	CE7%O2
8D	300C2R2	6.76e+0	ng/dscm	7%O2	1.35e-6	lbs/hr	CE7%O2
8D	300C2R3	6.66e+0	ng/dscm	7%O2	1.45e-6	lbs/hr	CE7%O2
8D	300C2R4	7.67e+0	ng/dscm	7%O2	1.53e-6	lbs/hr	CE7%O2
8F	300C2R1	2	4.34e-1	ng/dscm	9.15e-8	lbs/hr	CE7%O2
8F	300C2R2	2	7.08e-1	ng/dscm	1.41e-7	lbs/hr	CE7%O2
8F	300C2R3	2	5.50e-1	ng/dscm	1.20e-7	lbs/hr	CE7%O2
8F	300C2R4	2	6.86e-1	ng/dscm	1.37e-7	lbs/hr	CE7%O2
TEQ	300C2R1	6.63e+0	ng/dscm	7%O2	1.40e-6	lbs/hr	CCET
TEQ	300C2R2	1.29e+1	ng/dscm	7%O2	2.57e-6	lbs/hr	CCET
TEQ	300C2R3	1.12e+1	ng/dscm	7%O2	2.43e-6	lbs/hr	CCET
TEQ	300C2R4	1.32e+1	ng/dscm	7%O2	2.64e-6	lbs/hr	CCET
Total PCDD/PCDF	300C2R1	1.29e+3	ng/dscm	7%O2	2.73e-4	lbs/hr	CCET
Total PCDD/PCDF	300C2R2	1.51e+3	ng/dscm	7%O2	3.02e-4	lbs/hr	CCET
Total PCDD/PCDF	300C2R3	1.50e+3	ng/dscm	7%O2	3.25e-4	lbs/hr	CCET
Total PCDD/PCDF	300C2R4	1.86e+3	ng/dscm	7%O2	3.72e-4	lbs/hr	CCET

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	300C1R1	1.56e-1	ppmv 7%O2	1.12e-1 lbs/hr	CC7%O2
Chlorine	300C1R2	1.78e-1	ppmv 7%O2	1.09e-1 lbs/hr	CC7%O2
Chlorine	300C1R3	4.08e-1	ppmv 7%O2	2.33e-1 lbs/hr	CC7%O2
Chlorine	300C1R4	6.63e-1	ppmv 7%O2	3.76e-1 lbs/hr	CC7%O2
HCl	300C1R1	3.52e+1	ppmv 7%O2	1.30e+1 lbs/hr	CC7%O2
HCl	300C1R2	2.34e+1	ppmv 7%O2	7.41e+0 lbs/hr	CC7%O2
HCl	300C1R3	3.14e+1	ppmv 7%O2	9.22e+0 lbs/hr	CC7%O2
HCl	300C1R4	4.24e+1	ppmv 7%O2	1.23e+1 lbs/hr	CC7%O2

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	300C2R1	8.97e+1	ug/dscm 7%O2	1.89e-2 lbs/hr	CC7%O2
Antimony	300C2R2	3.93e+1	ug/dscm 7%O2	7.85e-3 lbs/hr	CC7%O2
Antimony	300C2R3	1.01e+1	ug/dscm 7%O2	2.18e-3 lbs/hr	CC7%O2
Antimony	300C2R4	1.40e+1	ug/dscm 7%O2	2.80e-3 lbs/hr	CC7%O2
Arsenic	300C2R1	5.46e+1	ug/dscm 7%O2	1.15e-2 lbs/hr	CC7%O2
Arsenic	300C2R2	3.32e+1	ug/dscm 7%O2	6.61e-3 lbs/hr	CC7%O2
Arsenic	300C2R3	1.54e+1	ug/dscm 7%O2	3.35e-3 lbs/hr	CC7%O2
Arsenic	300C2R4	1.76e+1	ug/dscm 7%O2	3.51e-3 lbs/hr	CC7%O2
Beryllium	300C2R1	8.37e+0	ug/dscm 7%O2	1.76e-3 lbs/hr	CC7%O2
Beryllium	300C2R2	1.11e-1	ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Beryllium	300C2R3	1.02e-1	ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Beryllium	300C2R4	1.11e-1	ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Cadmium	300C2R1	5.17e+1	ug/dscm 7%O2	1.09e-2 lbs/hr	CC7%O2
Cadmium	300C2R2	2.44e+1	ug/dscm 7%O2	4.87e-3 lbs/hr	CC7%O2
Cadmium	300C2R3	7.92e+0	ug/dscm 7%O2	1.72e-3 lbs/hr	CC7%O2
Cadmium	300C2R4	5.86e+0	ug/dscm 7%O2	1.17e-3 lbs/hr	CC7%O2
Chromium	300C2R1	4.42e+1	ug/dscm 7%O2	9.30e-3 lbs/hr	CC7%O2

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION

2. STATE: IN

3. CITY: LOGANSPORT

EPA IND005081542

REGION: 5

4. EP ID: 300 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Chromium	300C2R2	3.14e+1	ug/dscm 7%O2	6.26e-3	lbs/hr	CC7%O2
Chromium	300C2R3	1.22e+1	ug/dscm 7%O2	2.65e-3	lbs/hr	CC7%O2
Chromium	300C2R4	3.95e+1	ug/dscm 7%O2	7.87e-3	lbs/hr	CC7%O2
Chromium (Hex)	300C2R1	5.86e+0	ug/dscm 7%O2	1.23e-3	lbs/hr	CC7%O2
Chromium (Hex)	300C2R2	1.23e+1	ug/dscm 7%O2	2.45e-3	lbs/hr	CC7%O2
Chromium (Hex)	300C2R3	4.87e+0	ug/dscm 7%O2	1.06e-3	lbs/hr	CC7%O2
Chromium (Hex)	300C2R4	1.55e+0	ug/dscm 7%O2	3.09e-4	lbs/hr	CC7%O2
Lead	300C2R1	4.81e+3	ug/dscm 7%O2	1.01e+0	lbs/hr	CC7%O2
Lead	300C2R2	2.93e+3	ug/dscm 7%O2	5.84e-1	lbs/hr	CC7%O2
Lead	300C2R3	8.53e+2	ug/dscm 7%O2	1.85e-1	lbs/hr	CC7%O2
Lead	300C2R4	6.96e+2	ug/dscm 7%O2	1.39e-1	lbs/hr	CC7%O2

7. Category: Particulate

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Particulate	300C1R1	8.30e-2 gr/dscf 7%O2	4.66e+1 lbs/hr	
Particulate	300C1R2	7.50e-2 gr/dscf 7%O2	3.57e+1 lbs/hr	
Particulate	300C1R3	6.80e-2 gr/dscf 7%O2	3.01e+1 lbs/hr	
Particulate	300C1R4	5.70e-2 gr/dscf 7%O2	2.50e+1 lbs/hr	

7. Category: SVOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,2,4-Trichlorobenzene	300C1R1	1.60e+3 ng/dscm 7%O2	3.90e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	300C1R2	1.48e+3 ng/dscm 7%O2	3.09e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	300C1R3	5.45e+2 ng/dscm 7%O2	1.06e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	300C1R4	1.25e+3 ng/dscm 7%O2	2.40e-4 lbs/hr	CC7%O2

7. Category: THC & CO

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
CO	300C1R1	5.95e+2 ppmv 7%O2	1.69e+2 lbs/hr	CE
CO	300C1R2	2.34e+2 ppmv 7%O2	5.69e+1 lbs/hr	CE
CO	300C1R3	3.53e+2 ppmv 7%O2	7.97e+1 lbs/hr	CE
CO	300C1R4	3.33e+2 ppmv 7%O2	7.46e+1 lbs/hr	CE
CO	300C2R1	1.86e+2 ppmv 7%O2	4.56e+1 lbs/hr	CE
CO	300C2R2	5.60e+1 ppmv 7%O2	1.30e+1 lbs/hr	CE
CO	300C2R3	7.00e+1 ppmv 7%O2	1.77e+1 lbs/hr	CE
CO	300C2R4	7.90e+1 ppmv 7%O2	1.83e+1 lbs/hr	CE
CO(MHRA)	300C1R1	7.57e+2 ppmv 7%O2	2.15e+2 lbs/hr	CE
CO(MHRA)	300C1R2	5.57e+2 ppmv 7%O2	1.36e+2 lbs/hr	CE
CO(MHRA)	300C1R3	5.56e+2 ppmv 7%O2	1.26e+2 lbs/hr	CE
CO(MHRA)	300C1R4	6.21e+2 ppmv 7%O2	1.39e+2 lbs/hr	CE
CO(MHRA)	300C2R1	2.96e+2 ppmv 7%O2	7.25e+1 lbs/hr	CE
CO(MHRA)	300C2R2	7.30e+1 ppmv 7%O2	1.69e+1 lbs/hr	CE
CO(MHRA)	300C2R3	1.56e+2 ppmv 7%O2	3.94e+1 lbs/hr	CE
CO(MHRA)	300C2R4	1.54e+2 ppmv 7%O2	3.57e+1 lbs/hr	CE
THC	300C1R1	1.64e+1 ppmv 7%O2	7.33e+0 lbs/hr	CE
THC	300C1R2	1.40e+1 ppmv 7%O2	5.35e+0 lbs/hr	CE
THC	300C1R3	1.59e+1 ppmv 7%O2	5.64e+0 lbs/hr	CE
THC	300C1R4	1.69e+1 ppmv 7%O2	5.95e+0 lbs/hr	CE
THC	300C2R1	1.72e+1 ppmv 7%O2	6.62e+0 lbs/hr	CE
THC	300C2R2	1.64e+1 ppmv 7%O2	5.98e+0 lbs/hr	CE
THC	300C2R3	1.79e+1 ppmv 7%O2	7.10e+0 lbs/hr	CE
THC	300C2R4	1.67e+1 ppmv 7%O2	6.09e+0 lbs/hr	CE
THC(MHRA)	300C1R1	1.92e+1 ppmv 7%O2	8.58e+0 lbs/hr	CE
THC(MHRA)	300C1R2	1.91e+1 ppmv 7%O2	7.30e+0 lbs/hr	CE
THC(MHRA)	300C1R3	1.89e+1 ppmv 7%O2	6.71e+0 lbs/hr	CE
THC(MHRA)	300C1R4	1.89e+1 ppmv 7%O2	6.66e+0 lbs/hr	CE
THC(MHRA)	300C2R1	1.89e+1 ppmv 7%O2	7.28e+0 lbs/hr	CE

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION

2. STATE: IN

3. CITY: LOGANSPOUT

EPA ID: IND005081542

REGION: 5

4. EP ID: 300 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

THC(MHRA)	300C2R2	1.89e+1	ppmv 7%O2	6.89e+0	lbs/hr	CE
THC(MHRA)	300C2R3	1.96e+1	ppmv 7%O2	7.78e+0	lbs/hr	CE
THC(MHRA)	300C2R4	1.98e+1	ppmv 7%O2	7.22e+0	lbs/hr	CE

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,1,1-Trichloroethane	300C1R1	1.08e+4 ng/dscm 7%O2	2.64e-3 lbs/hr	CC7%O2
1,1,1-Trichloroethane	300C1R2	1.94e+4 ng/dscm 7%O2	4.05e-3 lbs/hr	CC7%O2
1,1,1-Trichloroethane	300C1R3	3.18e+4 ng/dscm 7%O2	6.18e-3 lbs/hr	CC7%O2
1,1,1-Trichloroethane	300C1R4	1.24e+4 ng/dscm 7%O2	2.39e-3 lbs/hr	CC7%O2
Carbon Tetrachloride	300C1R1	6.27e+3 ng/dscm 7%O2	1.53e-3 lbs/hr	CC7%O2
Carbon Tetrachloride	300C1R2	7.39e+3 ng/dscm 7%O2	1.55e-3 lbs/hr	CC7%O2
Carbon Tetrachloride	300C1R3	1.73e+4 ng/dscm 7%O2	3.35e-3 lbs/hr	CC7%O2
Carbon Tetrachloride	300C1R4	5.20e+3 ng/dscm 7%O2	1.00e-3 lbs/hr	CC7%O2
Tetrachloroethene	300C1R1	5.09e+3 ng/dscm 7%O2	1.25e-3 lbs/hr	CC7%O2
Tetrachloroethene	300C1R2	2.24e+4 ng/dscm 7%O2	4.68e-3 lbs/hr	CC7%O2
Tetrachloroethene	300C1R3	2.46e+4 ng/dscm 7%O2	4.78e-3 lbs/hr	CC7%O2
Tetrachloroethene	300C1R4	1.40e+4 ng/dscm 7%O2	2.70e-3 lbs/hr	CC7%O2

US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION
 2. STATE: PR
 3. CITY: DORADO
 4. EP ID: 301 DEVICE NAME: KILN NO. 1

EPA ID: PRD980526115
 SYSTEM TYPE: CEMENT KILN

REGION: 2
 APC SYSTEM: FF

5. Type: CONTROLLED

6. Description: EMISSIONS Process Group: DRY KILN Location: STACK-MAIN 2 Phase: GAS

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	301C1R1	1.20e-1 ppmv 7%O2	6.10e-2 lbs/hr	CC7%O2
Chlorine	301C1R2	7.87e-2 ppmv 7%O2	4.70e-2 lbs/hr	CC7%O2
Chlorine	301C1R3	5.85e-2 ppmv 7%O2	3.60e-2 lbs/hr	CC7%O2
HCl	301C1R1	3.78e-1 ppmv 7%O2	9.90e-2 lbs/hr	CC7%O2
HCl	301C1R2	2.12e-1 ppmv 7%O2	6.50e-2 lbs/hr	CC7%O2
HCl	301C1R3	2.21e-1 ppmv 7%O2	7.00e-2 lbs/hr	CC7%O2

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	301C2R1	ND 1.89e+0 ug/dscm 7%O2	3.75e-4 lbs/hr	CC7%O2
Antimony	301C2R2	ND 1.54e+0 ug/dscm 7%O2	3.09e-4 lbs/hr	CC7%O2
Antimony	301C2R3	ND 1.54e+0 ug/dscm 7%O2	3.09e-4 lbs/hr	CC7%O2
Arsenic	301C2R1	ND 1.33e+0 ug/dscm 7%O2	2.65e-4 lbs/hr	CC7%O2
Arsenic	301C2R2	ND 9.89e-1 ug/dscm 7%O2	1.98e-4 lbs/hr	CC7%O2
Arsenic	301C2R3	ND 9.91e-1 ug/dscm 7%O2	1.98e-4 lbs/hr	CC7%O2
Barium	301C2R1	ND 1.66e+1 ug/dscm 7%O2	3.31e-3 lbs/hr	CC7%O2
Barium	301C2R2	ND 1.43e+1 ug/dscm 7%O2	2.87e-3 lbs/hr	CC7%O2
Barium	301C2R3	ND 1.44e+1 ug/dscm 7%O2	2.89e-3 lbs/hr	CC7%O2
Beryllium	301C2R1	ND 1.33e+0 ug/dscm 7%O2	2.65e-4 lbs/hr	CC7%O2
Beryllium	301C2R2	ND 9.89e-1 ug/dscm 7%O2	1.98e-4 lbs/hr	CC7%O2
Beryllium	301C2R3	ND 9.91e-1 ug/dscm 7%O2	1.98e-4 lbs/hr	CC7%O2
Cadmium	301C2R1	ND 1.77e+0 ug/dscm 7%O2	3.53e-4 lbs/hr	CC7%O2
Cadmium	301C2R2	ND 1.65e+0 ug/dscm 7%O2	3.31e-4 lbs/hr	CC7%O2
Cadmium	301C2R3	ND 1.10e+0 ug/dscm 7%O2	2.20e-4 lbs/hr	CC7%O2
Chromium	301C2R1	ND 1.40e+1 ug/dscm 7%O2	2.78e-3 lbs/hr	CC7%O2
Chromium	301C2R2	ND 1.31e+1 ug/dscm 7%O2	2.62e-3 lbs/hr	CC7%O2
Chromium	301C2R3	ND 1.05e+1 ug/dscm 7%O2	2.09e-3 lbs/hr	CC7%O2
Chromium (Hex)	301C2R1	1.77e+0 ug/dscm 7%O2	3.51e-4 lbs/hr	CC7%O2
Chromium (Hex)	301C2R2	8.52e-1 ug/dscm 7%O2	1.71e-4 lbs/hr	CC7%O2
Lead	301C2R1	ND 5.55e+0 ug/dscm 7%O2	1.10e-3 lbs/hr	CC7%O2
Lead	301C2R2	ND 4.50e+0 ug/dscm 7%O2	9.04e-4 lbs/hr	CC7%O2
Lead	301C2R3	ND 1.12e+1 ug/dscm 7%O2	2.25e-3 lbs/hr	CC7%O2
Mercury	301C2R1	1.17e+2 ug/dscm 7%O2	2.33e-2 lbs/hr	CC7%O2
Mercury	301C2R2	1.43e+2 ug/dscm 7%O2	2.87e-2 lbs/hr	CC7%O2
Mercury	301C2R3	1.23e+2 ug/dscm 7%O2	2.45e-2 lbs/hr	CC7%O2
Nickel	301C2R1	ND 1.30e+1 ug/dscm 7%O2	2.58e-3 lbs/hr	CC7%O2
Nickel	301C2R2	ND 1.03e+1 ug/dscm 7%O2	2.07e-3 lbs/hr	CC7%O2
Nickel	301C2R3	ND 1.01e+1 ug/dscm 7%O2	2.03e-3 lbs/hr	CC7%O2
Selenium	301C2R1	ND 1.33e+0 ug/dscm 7%O2	2.65e-4 lbs/hr	CC7%O2
Selenium	301C2R2	ND 9.89e-1 ug/dscm 7%O2	1.98e-4 lbs/hr	CC7%O2
Selenium	301C2R3	ND 9.91e-1 ug/dscm 7%O2	1.98e-4 lbs/hr	CC7%O2
Silver	301C2R1	ND 1.30e+1 ug/dscm 7%O2	2.58e-3 lbs/hr	CC7%O2
Silver	301C2R2	ND 1.03e+1 ug/dscm 7%O2	2.07e-3 lbs/hr	CC7%O2
Silver	301C2R3	ND 1.01e+1 ug/dscm 7%O2	2.03e-3 lbs/hr	CC7%O2
Thallium	301C2R1	ND 1.03e+1 ug/dscm 7%O2	2.05e-3 lbs/hr	CC7%O2
Thallium	301C2R2	ND 8.24e+0 ug/dscm 7%O2	1.65e-3 lbs/hr	CC7%O2
Thallium	301C2R3	ND 8.15e+0 ug/dscm 7%O2	1.63e-3 lbs/hr	CC7%O2

7. Category: Particulate

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
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SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION
 2. STATE: PR
 3. CITY: DORADO
 4. EP ID: 301

EPA PRD980526115
 SYSTEM TYPE: CEMENT KILN

REGION: 2
 APC SYSTEM: FF

Particulate	301C1R1	2.92e-2	gr/dscf	7%O2	1.16e+1	lbs/hr	CC7%O2
Particulate	301C1R2	3.53e-2	gr/dscf	7%O2	1.64e+1	lbs/hr	CC7%O2
Particulate	301C1R3	5.35e-2	gr/dscf	7%O2	2.56e+1	lbs/hr	CC7%O2
Particulate	301C3R1	4.47e-2	gr/dscf	7%O2	1.26e+1	lbs/hr	CC7%O2
Particulate	301C3R2	3.10e-2	gr/dscf	7%O2	7.38e+0	lbs/hr	CC7%O2
Particulate	301C3R3	4.61e-2	gr/dscf	7%O2	1.04e+1	lbs/hr	CC7%O2

7. Category: SVOC

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc	
1,2,4-Trichlorobenzene	301C1R1	1.68e+3	ng/dscm	7%O2	2.91e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	301C1R2	1.84e+3	ng/dscm	7%O2	3.74e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	301C1R3	2.89e+3	ng/dscm	7%O2	6.04e-4 lbs/hr	CC7%O2

7. Category: THC & CO

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc	
CO	301C1R1	1.36e+3	ppmv	7%O2	2.74e+2 lbs/hr	CC7%O2
CO	301C1R2	1.01e+3	ppmv	7%O2	2.37e+2 lbs/hr	CC7%O2
CO	301C1R3	1.45e+3	ppmv	7%O2	3.53e+2 lbs/hr	CC7%O2
CO	301C2R1	4.52e+2	ppmv	7%O2	1.04e+2 lbs/hr	CC7%O2
CO	301C2R2	8.19e+2	ppmv	7%O2	1.91e+2 lbs/hr	CC7%O2
CO	301C2R3	6.59e+2	ppmv	7%O2	1.53e+2 lbs/hr	CC7%O2
CO	301C3R1	1.64e+2	ppmv	7%O2	2.35e+1 lbs/hr	CC7%O2
CO	301C3R2	1.84e+2	ppmv	7%O2	2.22e+1 lbs/hr	CC7%O2
CO	301C3R3	6.83e+1	ppmv	7%O2	7.80e+0 lbs/hr	CC7%O2
THC	301C1R1	9.71e+0	ppmv	7%O2	3.07e+0 lbs/hr	CC7%O2
THC	301C1R2	1.31e+1	ppmv	7%O2	4.86e+0 lbs/hr	CC7%O2
THC	301C1R3	1.09e+1	ppmv	7%O2	4.15e+0 lbs/hr	CC7%O2
THC	301C2R1	8.87e+0	ppmv	7%O2	3.22e+0 lbs/hr	CC7%O2
THC	301C2R2	1.05e+1	ppmv	7%O2	3.86e+0 lbs/hr	CC7%O2
THC	301C2R3	1.12e+1	ppmv	7%O2	4.08e+0 lbs/hr	CC7%O2
THC	301C3R1	1.85e+1	ppmv	7%O2	4.16e+0 lbs/hr	CC7%O2
THC	301C3R2	1.74e+1	ppmv	7%O2	3.30e+0 lbs/hr	CC7%O2
THC	301C3R3	1.97e+1	ppmv	7%O2	3.53e+0 lbs/hr	CC7%O2

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc		
1,1,1-Trichloroethane	301C1R1	ND	5.50e+3	ng/dscm	7%O2	9.52e-4 lbs/hr	CC7%O2
1,1,1-Trichloroethane	301C1R2	ND	2.16e+4	ng/dscm	7%O2	4.39e-3 lbs/hr	CC7%O2
1,1,1-Trichloroethane	301C1R3	ND	1.83e+4	ng/dscm	7%O2	3.82e-3 lbs/hr	CC7%O2

6. Description: EMISSIONS

Process Group: DRY KILN

Location: STACK-MAIN 3

Phase: GAS

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc	
Chlorine	301C1R1	4.84e-2	ppmv	7%O2	6.00e-2 lbs/hr	CC7%O2
Chlorine	301C1R2	3.41e-1	ppmv	7%O2	1.80e-1 lbs/hr	CC7%O2
Chlorine	301C1R3	2.76e-1	ppmv	7%O2	1.80e-1 lbs/hr	CC7%O2
HCl	301C1R1	2.20e-1	ppmv	7%O2	1.40e-1 lbs/hr	CC7%O2
HCl	301C1R2	2.21e-1	ppmv	7%O2	6.00e-2 lbs/hr	CC7%O2
HCl	301C1R3	4.77e-1	ppmv	7%O2	1.60e-1 lbs/hr	CC7%O2

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc		
Antimony	301C2R1	ND	2.72e+0	ug/dscm	7%O2	4.41e-4 lbs/hr	CC7%O2

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION
 2. STATE: PR
 3. CITY: DORADO
 4. EP ID: 301 DEVICE NAME: KILN NO. 1

EPA PRD980526115
 SYSTEM TYPE: CEMENT KILN

REGION: 2
 APC SYSTEM: FF

Antimony	301C2R2	ND	2.15e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Antimony	301C2R3	ND	2.42e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Arsenic	301C2R1	ND	2.72e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Arsenic	301C2R2	ND	2.15e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Arsenic	301C2R3	ND	2.42e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Barium	301C2R1	ND	1.91e+1	ug/dscm	7%O2	3.09e-3	lbs/hr	CC7%O2
Barium	301C2R2	ND	4.29e+0	ug/dscm	7%O2	8.82e-4	lbs/hr	CC7%O2
Barium	301C2R3	ND	7.27e+0	ug/dscm	7%O2	1.32e-3	lbs/hr	CC7%O2
Beryllium	301C2R1	ND	2.72e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Beryllium	301C2R2	ND	2.15e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Beryllium	301C2R3	ND	2.42e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Cadmium	301C2R1	ND	2.72e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Cadmium	301C2R2	ND	2.15e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Cadmium	301C2R3	ND	2.67e+1	ug/dscm	7%O2	4.85e-3	lbs/hr	CC7%O2
Chromium	301C2R1	ND	1.36e+1	ug/dscm	7%O2	2.20e-3	lbs/hr	CC7%O2
Chromium	301C2R2	ND	6.44e+0	ug/dscm	7%O2	1.32e-3	lbs/hr	CC7%O2
Chromium	301C2R3	ND	9.69e+0	ug/dscm	7%O2	1.76e-3	lbs/hr	CC7%O2
Chromium (Hex)	301C2R1		1.09e+0	ug/dscm	7%O2	1.77e-4	lbs/hr	CC7%O2
Chromium (Hex)	301C2R2		7.35e-1	ug/dscm	7%O2	1.51e-4	lbs/hr	CC7%O2
Lead	301C2R1	ND	8.17e+0	ug/dscm	7%O2	1.32e-3	lbs/hr	CC7%O2
Lead	301C2R2	ND	2.15e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Lead	301C2R3	ND	2.42e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Mercury	301C2R1	ND	1.39e+2	ug/dscm	7%O2	2.25e-2	lbs/hr	CC7%O2
Mercury	301C2R2		6.87e+1	ug/dscm	7%O2	1.41e-2	lbs/hr	CC7%O2
Mercury	301C2R3		1.09e+2	ug/dscm	7%O2	1.98e-2	lbs/hr	CC7%O2
Nickel	301C2R1	ND	1.36e+1	ug/dscm	7%O2	2.20e-3	lbs/hr	CC7%O2
Nickel	301C2R2	ND	8.58e+0	ug/dscm	7%O2	1.76e-3	lbs/hr	CC7%O2
Nickel	301C2R3	ND	1.21e+1	ug/dscm	7%O2	2.20e-3	lbs/hr	CC7%O2
Selenium	301C2R1	ND	2.72e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Selenium	301C2R2	ND	2.15e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Selenium	301C2R3	ND	2.42e+0	ug/dscm	7%O2	4.41e-4	lbs/hr	CC7%O2
Silver	301C2R1	ND	1.36e+1	ug/dscm	7%O2	2.20e-3	lbs/hr	CC7%O2
Silver	301C2R2	ND	8.58e+0	ug/dscm	7%O2	1.76e-3	lbs/hr	CC7%O2
Silver	301C2R3	ND	1.21e+1	ug/dscm	7%O2	2.20e-3	lbs/hr	CC7%O2
Thallium	301C2R1	ND	1.09e+1	ug/dscm	7%O2	1.76e-3	lbs/hr	CC7%O2
Thallium	301C2R2	ND	6.44e+0	ug/dscm	7%O2	1.32e-3	lbs/hr	CC7%O2
Thallium	301C2R3	ND	9.69e+0	ug/dscm	7%O2	1.76e-3	lbs/hr	CC7%O2

7. Category: Particulate

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Particulate	301C1R1	3.11e-3 gr/dscf 7%O2	3.00e+0 lbs/hr	CC7%O2
Particulate	301C1R2	1.12e-2 gr/dscf 7%O2	4.60e+0 lbs/hr	CC7%O2
Particulate	301C1R3	1.73e-2 gr/dscf 7%O2	8.80e+0 lbs/hr	CC7%O2
Particulate	301C3R1	3.92e-3 gr/dscf 7%O2	1.20e+0 lbs/hr	CC7%O2
Particulate	301C3R2	6.63e-2 gr/dscf 7%O2	3.02e+1 lbs/hr	CC7%O2
Particulate	301C3R3	7.83e-2 gr/dscf 7%O2	3.54e+1 lbs/hr	CC7%O2

7. Category: SVOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,2,4-Trichlorobenzene	301C1R1	6.12e+2 ng/dscm 7%O2	2.58e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	301C1R2	2.14e+3 ng/dscm 7%O2	3.84e-4 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	301C1R3	3.25e+3 ng/dscm 7%O2	7.22e-4 lbs/hr	CC7%O2

7. Category: THC & CO

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
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SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION
 2. STATE: PR
 3. CITY: DORADO
 4. EP ID: 301

EPA PRD980526115

REGION: 2

DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: FF

CO	301C1R1	5.64e+2	ppmv 7%O2	2.76e+2	lbs/hr	CC7%O2
CO	301C1R2	1.21e+3	ppmv 7%O2	2.52e+2	lbs/hr	CC7%O2
CO	301C1R3	1.38e+3	ppmv 7%O2	3.56e+2	lbs/hr	CC7%O2
CO	301C2R1	4.47e+2	ppmv 7%O2	8.40e+1	lbs/hr	CC7%O2
CO	301C2R2	6.71e+2	ppmv 7%O2	1.60e+2	lbs/hr	CC7%O2
CO	301C2R3	5.87e+2	ppmv 7%O2	1.24e+2	lbs/hr	CC7%O2
CO	301C3R1	1.29e+2	ppmv 7%O2	2.00e+1	lbs/hr	CC7%O2
CO	301C3R2	1.13e+2	ppmv 7%O2	2.60e+1	lbs/hr	CC7%O2
CO	301C3R3	1.05e+2	ppmv 7%O2	2.40e+1	lbs/hr	CC7%O2
THC	301C1R1	5.45e+0	ppmv 7%O2	4.20e+0	lbs/hr	CC7%O2
THC	301C1R2	1.04e+1	ppmv 7%O2	3.40e+0	lbs/hr	CC7%O2
THC	301C1R3	7.89e+0	ppmv 7%O2	3.20e+0	lbs/hr	CC7%O2
THC	301C2R1	8.12e+0	ppmv 7%O2	2.40e+0	lbs/hr	CC7%O2
THC	301C2R2	9.06e+0	ppmv 7%O2	3.40e+0	lbs/hr	CC7%O2
THC	301C2R3	1.63e+1	ppmv 7%O2	5.40e+0	lbs/hr	CC7%O2
THC	301C3R1	1.56e+1	ppmv 7%O2	3.80e+0	lbs/hr	CC7%O2
THC	301C3R2	1.16e+1	ppmv 7%O2	4.20e+0	lbs/hr	CC7%O2
THC	301C3R3	2.27e+1	ppmv 7%O2	8.20e+0	lbs/hr	CC7%O2

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,1,1-Trichloroethane	301C1R1	ND 2.02e+3 ng/dscm 7%O2	8.50e-4 lbs/hr	CC7%O2
1,1,1-Trichloroethane	301C1R2	ND 2.17e+4 ng/dscm 7%O2	3.90e-3 lbs/hr	CC7%O2
1,1,1-Trichloroethane	301C1R3	ND 1.57e+4 ng/dscm 7%O2	3.48e-3 lbs/hr	CC7%O2

6. Description: EMISSIONS

Process Group: DRY KILN

Location: STACK-BYPASS

Phase: GAS

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	301C1R1	1.15e+0 ppmv 7%O2	1.00e-2 lbs/hr	CC7%O2
Chlorine	301C1R2	5.75e-1 ppmv 7%O2	8.00e-3 lbs/hr	CC7%O2
Chlorine	301C1R3	1.59e+0 ppmv 7%O2	2.40e-2 lbs/hr	CC7%O2
HCl	301C1R1	1.12e+0 ppmv 7%O2	5.00e-3 lbs/hr	CC7%O2
HCl	301C1R2	1.54e+0 ppmv 7%O2	1.10e-2 lbs/hr	CC7%O2
HCl	301C1R3	2.31e+1 ppmv 7%O2	1.80e-1 lbs/hr	CC7%O2

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	301C2R1	ND 1.75e+1 ug/dscm 7%O2	4.41e-5 lbs/hr	CC7%O2
Antimony	301C2R2	ND 9.47e+0 ug/dscm 7%O2	6.61e-5 lbs/hr	CC7%O2
Antimony	301C2R3	ND 7.08e+0 ug/dscm 7%O2	4.41e-5 lbs/hr	CC7%O2
Arsenic	301C2R1	ND 8.73e+0 ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Arsenic	301C2R2	ND 3.16e+0 ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Arsenic	301C2R3	ND 3.54e+0 ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Barium	301C2R1	ND 6.98e+1 ug/dscm 7%O2	1.76e-4 lbs/hr	CC7%O2
Barium	301C2R2	ND 9.15e+1 ug/dscm 7%O2	6.39e-4 lbs/hr	CC7%O2
Barium	301C2R3	ND 1.77e+1 ug/dscm 7%O2	1.10e-4 lbs/hr	CC7%O2
Beryllium	301C2R1	ND 8.73e+0 ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Beryllium	301C2R2	ND 3.16e+0 ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Beryllium	301C2R3	ND 3.54e+0 ug/dscm 7%O2	2.20e-5 lbs/hr	CC7%O2
Cadmium	301C2R1	ND 3.23e+2 ug/dscm 7%O2	8.16e-4 lbs/hr	CC7%O2
Cadmium	301C2R2	ND 1.86e+2 ug/dscm 7%O2	1.30e-3 lbs/hr	CC7%O2
Cadmium	301C2R3	ND 1.10e+2 ug/dscm 7%O2	6.83e-4 lbs/hr	CC7%O2
Chromium	301C2R1	ND 1.05e+2 ug/dscm 7%O2	2.65e-4 lbs/hr	CC7%O2
Chromium	301C2R2	ND 1.10e+2 ug/dscm 7%O2	7.72e-4 lbs/hr	CC7%O2
Chromium	301C2R3	ND 4.95e+1 ug/dscm 7%O2	3.09e-4 lbs/hr	CC7%O2

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION
 2. STATE: PR
 3. CITY: DORADO
 4. EP ID: 301 DEVICE NAME: KILN NO. 1

EPA ID: PRD980526115
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: FF REGION: 2

Chromium (Hex)	301C2R1	7.13e+1	ug/dscm 7%O2	1.80e-4	lbs/hr	CC7%O2	
Chromium (Hex)	301C2R2	1.39e+1	ug/dscm 7%O2	9.73e-5	lbs/hr	CC7%O2	
Chromium (Hex)	301C2R3	9.32e+0	ug/dscm 7%O2	5.81e-5	lbs/hr	CC7%O2	
Lead	301C2R1	ND	5.78e+3	ug/dscm 7%O2	1.46e-2	lbs/hr	CC7%O2
Lead	301C2R2	ND	3.89e+3	ug/dscm 7%O2	2.72e-2	lbs/hr	CC7%O2
Lead	301C2R3	ND	2.03e+3	ug/dscm 7%O2	1.27e-2	lbs/hr	CC7%O2
Mercury	301C2R1	ND	6.11e+1	ug/dscm 7%O2	1.54e-4	lbs/hr	CC7%O2
Mercury	301C2R2	ND	5.05e+1	ug/dscm 7%O2	3.53e-4	lbs/hr	CC7%O2
Mercury	301C2R3	ND	4.95e+1	ug/dscm 7%O2	3.09e-4	lbs/hr	CC7%O2
Nickel	301C2R1	ND	1.31e+2	ug/dscm 7%O2	3.31e-4	lbs/hr	CC7%O2
Nickel	301C2R2	ND	4.42e+1	ug/dscm 7%O2	3.09e-4	lbs/hr	CC7%O2
Nickel	301C2R3	ND	3.89e+1	ug/dscm 7%O2	2.43e-4	lbs/hr	CC7%O2
Selenium	301C2R1	ND	8.73e+0	ug/dscm 7%O2	2.20e-5	lbs/hr	CC7%O2
Selenium	301C2R2	ND	3.16e+0	ug/dscm 7%O2	2.20e-5	lbs/hr	CC7%O2
Selenium	301C2R3	ND	3.54e+0	ug/dscm 7%O2	2.20e-5	lbs/hr	CC7%O2
Silver	301C2R1	ND	1.05e+2	ug/dscm 7%O2	2.65e-4	lbs/hr	CC7%O2
Silver	301C2R2	ND	3.47e+1	ug/dscm 7%O2	2.43e-4	lbs/hr	CC7%O2
Silver	301C2R3	ND	3.89e+1	ug/dscm 7%O2	2.43e-4	lbs/hr	CC7%O2
Thallium	301C2R1	ND	8.73e+1	ug/dscm 7%O2	2.20e-4	lbs/hr	CC7%O2
Thallium	301C2R2	ND	2.84e+1	ug/dscm 7%O2	1.98e-4	lbs/hr	CC7%O2
Thallium	301C2R3	ND	3.18e+1	ug/dscm 7%O2	1.98e-4	lbs/hr	CC7%O2

7. Category: Particulate

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Particulate	301C1R1	3.24e-1 gr/dscf 7%O2	2.19e+0 lbs/hr	CC7%O2
Particulate	301C1R2	2.81e-1 gr/dscf 7%O2	3.04e+0 lbs/hr	CC7%O2
Particulate	301C1R3	8.49e-2 gr/dscf 7%O2	1.00e+0 lbs/hr	CC7%O2
Particulate	301C3R1	5.52e-2 gr/dscf 7%O2	4.70e-1 lbs/hr	CC7%O2
Particulate	301C3R2	2.97e-2 gr/dscf 7%O2	2.50e-1 lbs/hr	CC7%O2
Particulate	301C3R3	3.75e-2 gr/dscf 7%O2	7.20e-1 lbs/hr	CC7%O2

7. Category: SVOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,2,4-Trichlorobenzene	301C1R1	ND 3.39e+3 ng/dscm 7%O2	1.00e-5 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	301C1R2	ND 2.79e+3 ng/dscm 7%O2	1.32e-5 lbs/hr	CC7%O2
1,2,4-Trichlorobenzene	301C1R3	ND 1.72e+3 ng/dscm 7%O2	8.86e-6 lbs/hr	CC7%O2

7. Category: THC & CO

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
CO	301C1R1	3.80e+2 ppmv 7%O2	1.30e+0 lbs/hr	CC7%O2
CO	301C1R2	1.46e+2 ppmv 7%O2	8.00e-1 lbs/hr	CC7%O2
CO	301C1R3	2.18e+2 ppmv 7%O2	1.30e+0 lbs/hr	CC7%O2
CO	301C2R3	1.38e+1 ppmv 7%O2	1.00e-1 lbs/hr	CC7%O2
THC	301C1R1	5.94e+1 ppmv 7%O2	3.20e-1 lbs/hr	CC7%O2
THC	301C1R2	1.39e+1 ppmv 7%O2	1.20e-1 lbs/hr	CC7%O2
THC	301C2R1	2.17e+1 ppmv 7%O2	1.00e-1 lbs/hr	CC7%O2
THC	301C2R2	3.92e+0 ppmv 7%O2	5.00e-2 lbs/hr	CC7%O2
THC	301C2R3	3.52e+0 ppmv 7%O2	4.00e-2 lbs/hr	CC7%O2
THC	301C3R1	4.42e+1 ppmv 7%O2	3.00e-1 lbs/hr	CC7%O2
THC	301C3R2	2.23e+1 ppmv 7%O2	1.50e-1 lbs/hr	CC7%O2
THC	301C3R3	6.53e+0 ppmv 7%O2	1.00e-1 lbs/hr	CC7%O2

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
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US EPA ARCHIVE DOCUMENT

SECTION 7: EMISSIONS ANALYSES

1. COMPANY: ESSROC CORPORATION

2. STATE: PR

3. CITY: DORADO

EPA PRD980526115

REGION: 2

4. EP ID: 301 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: FF

1,1,1-Trichloroethane	301C1R1	ND	9.84e+4	ng/dscm	7%O2	2.90e-4	lbs/hr	CC7%O2
1,1,1-Trichloroethane	301C1R2	ND	3.25e+4	ng/dscm	7%O2	1.54e-4	lbs/hr	CC7%O2
1,1,1-Trichloroethane	301C1R3	ND	3.25e+4	ng/dscm	7%O2	1.67e-4	lbs/hr	CC7%O2