

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE
 2. STATE: KS
 3. CITY: FREDONIA
 4. EP ID: 322 DEVICE NAME: KILN NO. 1
 EPA ID: KSD007148034
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP
 REGION: 7

5. Type: RAW MATERIAL

6. Description:
 Group: WET KILN Location: KILN Phase: SLURRY

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	322C1R1	1.00e+2	ug/g	1.02e+1 lbs/hr	CE
Chlorine	322C1R2	2.00e+2	ug/g	2.02e+1 lbs/hr	CE
Chlorine	322C1R3	2.00e+2	ug/g	2.02e+1 lbs/hr	CE
Chlorine	322C1R4	1.00e+2	ug/g	1.03e+1 lbs/hr	CE
Chlorine	322C1R5	1.00e+2	ug/g	1.03e+1 lbs/hr	CE
Chlorine	322C1R6	1.00e+2	ug/g	1.03e+1 lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	322C1R4	ND	7.00e+0 ug/g	7.18e-1 lbs/hr	CE
Antimony	322C1R5	ND	7.00e+0 ug/g	7.18e-1 lbs/hr	CE
Antimony	322C1R6	ND	7.00e+0 ug/g	7.18e-1 lbs/hr	CE
Arsenic	322C1R4	ND	3.70e+0 ug/g	3.80e-1 lbs/hr	CE
Arsenic	322C1R5	ND	1.20e+0 ug/g	1.23e-1 lbs/hr	CE
Arsenic	322C1R6	ND	3.60e+0 ug/g	3.69e-1 lbs/hr	CE
Barium	322C1R4		4.90e+1 ug/g	5.03e+0 lbs/hr	CE
Barium	322C1R5		4.40e+1 ug/g	4.51e+0 lbs/hr	CE
Barium	322C1R6		5.70e+1 ug/g	5.85e+0 lbs/hr	CE
Beryllium	322C1R4	ND	1.00e-1 ug/g	1.03e-2 lbs/hr	CE
Beryllium	322C1R5	ND	1.70e+0 ug/g	1.74e-1 lbs/hr	CE
Beryllium	322C1R6	ND	2.00e-1 ug/g	2.05e-2 lbs/hr	CE
Cadmium	322C1R4	ND	3.00e-1 ug/g	3.08e-2 lbs/hr	CE
Cadmium	322C1R5	ND	2.00e-1 ug/g	2.05e-2 lbs/hr	CE
Cadmium	322C1R6	ND	4.00e-1 ug/g	4.10e-2 lbs/hr	CE
Chromium	322C1R4		1.60e+1 ug/g	1.64e+0 lbs/hr	CE
Chromium	322C1R5		1.30e+1 ug/g	1.33e+0 lbs/hr	CE
Chromium	322C1R6		1.50e+1 ug/g	1.54e+0 lbs/hr	CE
Lead	322C1R4		4.90e+0 ug/g	5.03e-1 lbs/hr	CE
Lead	322C1R5		3.60e+0 ug/g	3.69e-1 lbs/hr	CE
Lead	322C1R6		5.90e+0 ug/g	6.05e-1 lbs/hr	CE
Mercury	322C1R4		4.00e-2 ug/g	4.10e-3 lbs/hr	CE
Mercury	322C1R5	ND	4.00e-2 ug/g	4.10e-3 lbs/hr	CE
Mercury	322C1R6	ND	2.00e-2 ug/g	2.05e-3 lbs/hr	CE
Silver	322C1R4	ND	2.00e+1 ug/g	2.05e+0 lbs/hr	CE
Silver	322C1R5	ND	1.80e+1 ug/g	1.85e+0 lbs/hr	CE
Silver	322C1R6	ND	1.90e+1 ug/g	1.95e+0 lbs/hr	CE
Thallium	322C1R4	ND	5.00e+0 ug/g	5.13e-1 lbs/hr	CE
Thallium	322C1R5	ND	5.00e+0 ug/g	5.13e-1 lbs/hr	CE
Thallium	322C1R6	ND	5.00e+0 ug/g	5.13e-1 lbs/hr	CE

5. Type: WASTE

6. Description: AIR CONVEYED, SPIKED METALS (PB)
 Group: WET KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	322C1R1	2.40e+3	ug/g	2.40e+0 lbs/hr	CE
Chlorine	322C1R2	3.40e+3	ug/g	2.72e+0 lbs/hr	CE
Chlorine	322C1R3	2.90e+3	ug/g	2.32e+0 lbs/hr	CE
Chlorine	322C1R4	4.20e+3	ug/g	2.52e+0 lbs/hr	CE
Chlorine	322C1R5	3.00e+3	ug/g	1.80e+0 lbs/hr	CE
Chlorine	322C1R6	2.70e+3	ug/g	1.62e+0 lbs/hr	CE

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE
 2. STATE: KS
 3. CITY: FREDONIA
 4. EP ID: 322 DEVICE NAME: KILN NO. 1

EPA ID: KSD007148034
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP REGION: 7

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	322C1R4	ND	1.00e+2 ug/g	6.00e-2 lbs/hr	CE
Antimony	322C1R5	ND	1.00e+2 ug/g	6.00e-2 lbs/hr	CE
Antimony	322C1R6	ND	1.00e+2 ug/g	6.00e-2 lbs/hr	CE
Arsenic	322C1R4		4.80e+0 ug/g	2.88e-3 lbs/hr	CE
Arsenic	322C1R5		9.10e+0 ug/g	5.46e-3 lbs/hr	CE
Arsenic	322C1R6		5.20e+0 ug/g	3.12e-3 lbs/hr	CE
Barium	322C1R4		1.20e+4 ug/g	7.22e+0 lbs/hr	CE
Barium	322C1R5		1.42e+4 ug/g	8.50e+0 lbs/hr	CE
Barium	322C1R6		1.45e+4 ug/g	8.71e+0 lbs/hr	CE
Beryllium	322C1R4	ND	1.60e+0 ug/g	9.60e-4 lbs/hr	CE
Beryllium	322C1R5	ND	1.90e+0 ug/g	1.14e-3 lbs/hr	CE
Beryllium	322C1R6	ND	1.60e+0 ug/g	9.60e-4 lbs/hr	CE
Cadmium	322C1R4		1.80e+0 ug/g	1.08e-3 lbs/hr	CE
Cadmium	322C1R5		2.60e+0 ug/g	1.56e-3 lbs/hr	CE
Cadmium	322C1R6		1.30e+0 ug/g	7.80e-4 lbs/hr	CE
Chromium	322C1R4		4.60e+2 ug/g	2.76e-1 lbs/hr	CE
Chromium	322C1R5		3.30e+2 ug/g	1.98e-1 lbs/hr	CE
Chromium	322C1R6		4.30e+2 ug/g	2.58e-1 lbs/hr	CE
Lead	322C1R4		3.65e+3 ug/g	2.19e+0 lbs/hr	CE
Lead	322C1R5		2.70e+3 ug/g	1.62e+0 lbs/hr	CE
Lead	322C1R6		2.50e+3 ug/g	1.50e+0 lbs/hr	CE
Mercury	322C1R4		7.10e-1 ug/g	4.26e-4 lbs/hr	CE
Mercury	322C1R5	ND	5.00e-2 ug/g	3.00e-5 lbs/hr	CE
Mercury	322C1R6		6.60e-1 ug/g	3.96e-4 lbs/hr	CE
Silver	322C1R4	ND	2.00e+1 ug/g	1.20e-2 lbs/hr	CE
Silver	322C1R5	ND	2.00e+1 ug/g	1.20e-2 lbs/hr	CE
Silver	322C1R6	ND	2.00e+1 ug/g	1.20e-2 lbs/hr	CE
Thallium	322C1R4	ND	1.00e+2 ug/g	6.00e-2 lbs/hr	CE
Thallium	322C1R5	ND	1.00e+2 ug/g	6.00e-2 lbs/hr	CE
Thallium	322C1R6	ND	1.00e+2 ug/g	6.00e-2 lbs/hr	CE

6. Description: SPIKED METALS (AS,BE,CD,CR)
 Group: WET KILN

Location: KILN

Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	322C1R1		5.80e+4 ug/g	6.26e+2 lbs/hr	CC
Chlorine	322C1R2		5.47e+4 ug/g	5.25e+2 lbs/hr	CC
Chlorine	322C1R3		4.45e+4 ug/g	4.37e+2 lbs/hr	CC
Chlorine	322C1R4		4.90e+4 ug/g	5.29e+2 lbs/hr	CC
Chlorine	322C1R5		4.99e+4 ug/g	5.29e+2 lbs/hr	CC
Chlorine	322C1R6		4.55e+4 ug/g	4.92e+2 lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	322C1R4		2.02e+1 ug/g	2.18e-1 lbs/hr	CC
Antimony	322C1R5		2.02e+1 ug/g	2.14e-1 lbs/hr	CC
Antimony	322C1R6		2.00e+1 ug/g	2.16e-1 lbs/hr	CC
Arsenic	322C1R4		1.22e+3 ug/g	1.32e+1 lbs/hr	CC
Arsenic	322C1R5		1.16e+3 ug/g	1.23e+1 lbs/hr	CC
Arsenic	322C1R6		1.41e+3 ug/g	1.52e+1 lbs/hr	CC
Barium	322C1R4		5.31e+2 ug/g	5.73e+0 lbs/hr	CC
Barium	322C1R5		4.37e+2 ug/g	4.63e+0 lbs/hr	CC
Barium	322C1R6		4.90e+2 ug/g	5.29e+0 lbs/hr	CC
Beryllium	322C1R4		5.51e+1 ug/g	5.95e-1 lbs/hr	CC
Beryllium	322C1R5		6.24e+1 ug/g	6.61e-1 lbs/hr	CC
Beryllium	322C1R6		6.53e+1 ug/g	7.05e-1 lbs/hr	CC
Cadmium	322C1R4		1.37e+2 ug/g	1.48e+0 lbs/hr	CC
Cadmium	322C1R5		1.85e+2 ug/g	1.96e+0 lbs/hr	CC
Cadmium	322C1R6		1.67e+2 ug/g	1.81e+0 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE

2. STATE: KS

3. CITY: FREDONIA

EPA ID: KSD007148034

REGION: 7

4. EP ID: 322 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Chromium	322C1R4	1.37e+3	ug/g	1.48e+1	lbs/hr	CC
Chromium	322C1R5	1.50e+3	ug/g	1.59e+1	lbs/hr	CC
Chromium	322C1R6	1.67e+3	ug/g	1.81e+1	lbs/hr	CC
Lead	322C1R4	2.25e+3	ug/g	2.43e+1	lbs/hr	CC
Lead	322C1R5	1.96e+3	ug/g	2.07e+1	lbs/hr	CC
Lead	322C1R6	1.69e+3	ug/g	1.83e+1	lbs/hr	CC
Mercury	322C1R4	2.65e-1	ug/g	2.87e-3	lbs/hr	CC
Mercury	322C1R5	3.54e-1	ug/g	3.75e-3	lbs/hr	CC
Mercury	322C1R6	8.78e-1	ug/g	9.48e-3	lbs/hr	CC
Silver	322C1R4	4.49e+0	ug/g	4.85e-2	lbs/hr	CC
Silver	322C1R5	4.58e+0	ug/g	4.85e-2	lbs/hr	CC
Silver	322C1R6	4.49e+0	ug/g	4.85e-2	lbs/hr	CC
Thallium	322C1R4	2.02e+1	ug/g	2.18e-1	lbs/hr	CC
Thallium	322C1R5	2.02e+1	ug/g	2.14e-1	lbs/hr	CC
Thallium	322C1R6	2.00e+1	ug/g	2.16e-1	lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE

2. STATE: KS

3. CITY: FREDONIA

4. EP ID: 323 DEVICE NAME: KILN NO. 2

EPA ID: KSD007148034

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

5. Type: RAW MATERIAL

6. Description:

Group: WET KILN

Location: KILN

Phase: SLURRY

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	323C1R1	ND	1.00e+2 ug/g	1.52e+1 lbs/hr	CE
Chlorine	323C1R2	ND	1.00e+2 ug/g	1.53e+1 lbs/hr	CE
Chlorine	323C1R3	ND	1.00e+2 ug/g	1.55e+1 lbs/hr	CE
Chlorine	323C1R4	ND	1.00e+2 ug/g	1.62e+1 lbs/hr	CE
Chlorine	323C1R5	ND	1.00e+2 ug/g	1.62e+1 lbs/hr	CE
Chlorine	323C1R6	ND	1.00e+2 ug/g	1.62e+1 lbs/hr	CE
Chlorine	323C1R7	ND	1.00e+2 ug/g	1.61e+1 lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	323C1R4	ND	7.00e+0 ug/g	1.13e+0 lbs/hr	CE
Antimony	323C1R5	ND	7.00e+0 ug/g	1.13e+0 lbs/hr	CE
Antimony	323C1R6	ND	7.00e+0 ug/g	1.13e+0 lbs/hr	CE
Antimony	323C1R7	ND	7.00e+0 ug/g	1.13e+0 lbs/hr	CE
Arsenic	323C1R4	ND	3.90e+0 ug/g	6.32e-1 lbs/hr	CE
Arsenic	323C1R5	ND	3.70e+0 ug/g	5.99e-1 lbs/hr	CE
Arsenic	323C1R6	ND	9.00e-1 ug/g	1.46e-1 lbs/hr	CE
Arsenic	323C1R7	ND	3.70e+0 ug/g	5.97e-1 lbs/hr	CE
Barium	323C1R4		4.65e+1 ug/g	7.53e+0 lbs/hr	CE
Barium	323C1R5		5.00e+1 ug/g	8.10e+0 lbs/hr	CE
Barium	323C1R6		5.10e+1 ug/g	8.26e+0 lbs/hr	CE
Barium	323C1R7		5.80e+1 ug/g	9.36e+0 lbs/hr	CE
Beryllium	323C1R4	ND	2.00e-1 ug/g	3.24e-2 lbs/hr	CE
Beryllium	323C1R5	ND	1.90e+0 ug/g	3.08e-1 lbs/hr	CE
Beryllium	323C1R6	ND	2.00e+0 ug/g	3.24e-1 lbs/hr	CE
Beryllium	323C1R7	ND	1.00e-1 ug/g	1.61e-2 lbs/hr	CE
Cadmium	323C1R4	ND	2.00e-1 ug/g	3.24e-2 lbs/hr	CE
Cadmium	323C1R5	ND	3.00e-1 ug/g	4.86e-2 lbs/hr	CE
Cadmium	323C1R6	ND	4.00e-1 ug/g	6.48e-2 lbs/hr	CE
Cadmium	323C1R7	ND	4.00e-1 ug/g	6.46e-2 lbs/hr	CE
Chromium	323C1R4		1.30e+1 ug/g	2.11e+0 lbs/hr	CE
Chromium	323C1R5		1.20e+1 ug/g	1.94e+0 lbs/hr	CE
Chromium	323C1R6		1.40e+1 ug/g	2.27e+0 lbs/hr	CE
Chromium	323C1R7		1.40e+1 ug/g	2.26e+0 lbs/hr	CE
Lead	323C1R4		6.90e+0 ug/g	1.12e+0 lbs/hr	CE
Lead	323C1R5		7.40e+0 ug/g	1.20e+0 lbs/hr	CE
Lead	323C1R6		5.20e+0 ug/g	8.42e-1 lbs/hr	CE
Lead	323C1R7		7.40e+0 ug/g	1.19e+0 lbs/hr	CE
Mercury	323C1R4	ND	3.80e-2 ug/g	6.16e-3 lbs/hr	CE
Mercury	323C1R5	ND	3.10e-2 ug/g	5.02e-3 lbs/hr	CE
Mercury	323C1R6	ND	3.20e-2 ug/g	5.18e-3 lbs/hr	CE
Mercury	323C1R7	ND	2.90e-2 ug/g	4.68e-3 lbs/hr	CE
Silver	323C1R4	ND	2.10e+1 ug/g	3.40e+0 lbs/hr	CE
Silver	323C1R5	ND	2.00e+1 ug/g	3.24e+0 lbs/hr	CE
Silver	323C1R6	ND	2.10e+1 ug/g	3.40e+0 lbs/hr	CE
Silver	323C1R7	ND	2.00e+1 ug/g	3.23e+0 lbs/hr	CE
Thallium	323C1R4	ND	5.00e+0 ug/g	8.10e-1 lbs/hr	CE
Thallium	323C1R5	ND	5.00e+0 ug/g	8.10e-1 lbs/hr	CE
Thallium	323C1R6	ND	5.00e+0 ug/g	8.10e-1 lbs/hr	CE
Thallium	323C1R7	ND	5.00e+0 ug/g	8.07e-1 lbs/hr	CE

5. Type: WASTE

6. Description: AIR CONVEYED, SPIKED METALS (PB)

Group: WET KILN

Location: KILN

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
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SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE

2. STATE: KS

3. CITY: FREDONIA

4. EP ID: 323 DEVICE NAME: KILN NO. 2

EPA ID: KSD007148034

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

Chlorine	323C1R1	3.71e+3	ug/g	4.45e+0	lbs/hr	CC
Chlorine	323C1R2	4.41e+3	ug/g	2.65e+0	lbs/hr	CC
Chlorine	323C1R3	3.79e+3	ug/g	3.79e+0	lbs/hr	CC
Chlorine	323C1R4	2.56e+3	ug/g	2.56e+0	lbs/hr	CC
Chlorine	323C1R5	3.82e+3	ug/g	2.29e+0	lbs/hr	CC
Chlorine	323C1R6	3.51e+3	ug/g	3.51e+0	lbs/hr	CC
Chlorine	323C1R7	3.57e+3	ug/g	3.57e+0	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	323C1R4	ND	9.70e+1 ug/g	9.70e-2	lbs/hr	CE
Antimony	323C1R5	ND	1.00e+2 ug/g	6.00e-2	lbs/hr	CE
Antimony	323C1R6	ND	1.00e+2 ug/g	1.00e-1	lbs/hr	CE
Antimony	323C1R7	ND	9.80e+1 ug/g	9.80e-2	lbs/hr	CE
Arsenic	323C1R4		4.20e+0 ug/g	4.20e-3	lbs/hr	CE
Arsenic	323C1R5		4.20e+0 ug/g	2.52e-3	lbs/hr	CE
Arsenic	323C1R6	ND	3.80e+0 ug/g	3.80e-3	lbs/hr	CE
Arsenic	323C1R7		5.90e+0 ug/g	5.90e-3	lbs/hr	CE
Barium	323C1R4		2.57e+4 ug/g	2.57e+1	lbs/hr	CE
Barium	323C1R5		3.54e+4 ug/g	2.12e+1	lbs/hr	CE
Barium	323C1R6		2.30e+4 ug/g	2.30e+1	lbs/hr	CE
Barium	323C1R7		1.50e+4 ug/g	1.50e+1	lbs/hr	CE
Beryllium	323C1R4	ND	1.03e+0 ug/g	1.03e-3	lbs/hr	CE
Beryllium	323C1R5	ND	9.70e-1 ug/g	5.82e-4	lbs/hr	CE
Beryllium	323C1R6	ND	1.26e+0 ug/g	1.26e-3	lbs/hr	CE
Beryllium	323C1R7	ND	1.35e+0 ug/g	1.35e-3	lbs/hr	CE
Cadmium	323C1R4	ND	1.10e+0 ug/g	1.10e-3	lbs/hr	CE
Cadmium	323C1R5		4.60e+0 ug/g	2.76e-3	lbs/hr	CE
Cadmium	323C1R6		2.20e+0 ug/g	2.20e-3	lbs/hr	CE
Cadmium	323C1R7		1.90e+0 ug/g	1.90e-3	lbs/hr	CE
Chromium	323C1R4		8.85e+2 ug/g	8.85e-1	lbs/hr	CE
Chromium	323C1R5		8.60e+2 ug/g	5.16e-1	lbs/hr	CE
Chromium	323C1R6		1.60e+3 ug/g	1.60e+0	lbs/hr	CE
Chromium	323C1R7		1.40e+3 ug/g	1.40e+0	lbs/hr	CE
Lead	323C1R4		2.05e+3 ug/g	2.05e+0	lbs/hr	CE
Lead	323C1R5		1.20e+3 ug/g	7.20e-1	lbs/hr	CE
Lead	323C1R6		2.90e+3 ug/g	2.90e+0	lbs/hr	CE
Lead	323C1R7		2.60e+3 ug/g	2.60e+0	lbs/hr	CE
Mercury	323C1R4		1.00e-1 ug/g	1.00e-4	lbs/hr	CE
Mercury	323C1R5		2.70e+0 ug/g	1.62e-3	lbs/hr	CE
Mercury	323C1R6		2.20e+0 ug/g	2.20e-3	lbs/hr	CE
Mercury	323C1R7		5.00e-1 ug/g	5.00e-4	lbs/hr	CE
Silver	323C1R4	ND	2.00e+1 ug/g	2.00e-2	lbs/hr	CE
Silver	323C1R5	ND	2.00e+1 ug/g	1.20e-2	lbs/hr	CE
Silver	323C1R6	ND	2.00e+1 ug/g	2.00e-2	lbs/hr	CE
Silver	323C1R7	ND	2.00e+1 ug/g	2.00e-2	lbs/hr	CE
Thallium	323C1R4		1.04e+2 ug/g	1.03e-1	lbs/hr	CE
Thallium	323C1R5	ND	1.00e+2 ug/g	6.00e-2	lbs/hr	CE
Thallium	323C1R6	ND	1.00e+2 ug/g	1.00e-1	lbs/hr	CE
Thallium	323C1R7	ND	9.80e+1 ug/g	9.80e-2	lbs/hr	CE

6. Description: SPIKED METALS (AS,BE,CD,CR)

Group: WET KILN

Location: KILN

Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	323C1R1		5.89e+4 ug/g	9.30e+2	lbs/hr	CC
Chlorine	323C1R2		4.29e+4 ug/g	6.61e+2	lbs/hr	CC
Chlorine	323C1R3		4.63e+4 ug/g	7.50e+2	lbs/hr	CC
Chlorine	323C1R4		4.82e+4 ug/g	7.80e+2	lbs/hr	CC
Chlorine	323C1R5		4.29e+4 ug/g	6.94e+2	lbs/hr	CC
Chlorine	323C1R6		4.63e+4 ug/g	7.32e+2	lbs/hr	CC
Chlorine	323C1R7		4.18e+4 ug/g	6.53e+2	lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE

2. STATE: KS

3. CITY: FREDONIA

4. EP ID: 323 DEVICE NAME: KILN NO. 2

EPA ID: KSD007148034

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	323C1R4	2.04e+1	ug/g	3.31e-1 lbs/hr	CC
Antimony	323C1R5	2.04e+1	ug/g	3.31e-1 lbs/hr	CC
Antimony	323C1R6	1.95e+1	ug/g	3.09e-1 lbs/hr	CC
Antimony	323C1R7	ND 9.75e+1	ug/g	1.52e+0 lbs/hr	CC
Arsenic	323C1R4	8.74e+2	ug/g	1.42e+1 lbs/hr	CC
Arsenic	323C1R5	4.60e+2	ug/g	7.45e+0 lbs/hr	CC
Arsenic	323C1R6	1.19e+3	ug/g	1.88e+1 lbs/hr	CC
Arsenic	323C1R7	ND 2.40e+0	ug/g	3.75e-2 lbs/hr	CC
Barium	323C1R4	4.08e+2	ug/g	6.61e+0 lbs/hr	CC
Barium	323C1R5	4.49e+2	ug/g	7.28e+0 lbs/hr	CC
Barium	323C1R6	3.77e+2	ug/g	5.95e+0 lbs/hr	CC
Barium	323C1R7	3.69e+2	ug/g	5.75e+0 lbs/hr	CC
Beryllium	323C1R4	7.78e+1	ug/g	1.26e+0 lbs/hr	CC
Beryllium	323C1R5	6.64e+1	ug/g	1.08e+0 lbs/hr	CC
Beryllium	323C1R6	6.22e+1	ug/g	9.83e-1 lbs/hr	CC
Beryllium	323C1R7	ND 1.55e-1	ug/g	2.43e-3 lbs/hr	CC
Cadmium	323C1R4	1.57e+2	ug/g	2.54e+0 lbs/hr	CC
Cadmium	323C1R5	1.58e+2	ug/g	2.56e+0 lbs/hr	CC
Cadmium	323C1R6	1.41e+2	ug/g	2.23e+0 lbs/hr	CC
Cadmium	323C1R7	9.19e+0	ug/g	1.43e-1 lbs/hr	CC
Chromium	323C1R4	1.67e+3	ug/g	2.71e+1 lbs/hr	CC
Chromium	323C1R5	1.30e+3	ug/g	2.10e+1 lbs/hr	CC
Chromium	323C1R6	1.97e+3	ug/g	3.11e+1 lbs/hr	CC
Chromium	323C1R7	2.09e+2	ug/g	3.26e+0 lbs/hr	CC
Lead	323C1R4	2.33e+3	ug/g	3.77e+1 lbs/hr	CC
Lead	323C1R5	2.00e+3	ug/g	3.24e+1 lbs/hr	CC
Lead	323C1R6	1.97e+3	ug/g	3.11e+1 lbs/hr	CC
Lead	323C1R7	5.77e+2	ug/g	8.99e+0 lbs/hr	CC
Mercury	323C1R4	5.85e-2	ug/g	9.48e-4 lbs/hr	CC
Mercury	323C1R5	9.93e-2	ug/g	1.61e-3 lbs/hr	CC
Mercury	323C1R6	3.35e-1	ug/g	5.29e-3 lbs/hr	CC
Mercury	323C1R7	ND 1.84e-2	ug/g	2.87e-4 lbs/hr	CC
Silver	323C1R4	4.63e+0	ug/g	7.50e-2 lbs/hr	CC
Silver	323C1R5	4.35e+0	ug/g	7.05e-2 lbs/hr	CC
Silver	323C1R6	4.47e+0	ug/g	7.05e-2 lbs/hr	CC
Silver	323C1R7	ND 4.38e+0	ug/g	6.83e-2 lbs/hr	CC
Thallium	323C1R4	2.04e+1	ug/g	3.31e-1 lbs/hr	CC
Thallium	323C1R5	2.04e+1	ug/g	3.31e-1 lbs/hr	CC
Thallium	323C1R6	1.95e+1	ug/g	3.09e-1 lbs/hr	CC
Thallium	323C1R7	ND 1.99e+1	ug/g	3.11e-1 lbs/hr	CC

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE
 2. STATE: MI
 3. CITY: ALPENA
 4. EP ID: 320 DEVICE NAME: KILN NO. 23
 EPA ID: MID005379607
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: FF
 REGION: 5

5. Type: FUEL

6. Description: COAL
 Group: DRY KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	320C1R1	4.00e+2 ug/g	6.72e+0 lbs/hr	CE
Chlorine	320C1R2	5.00e+2 ug/g	8.40e+0 lbs/hr	CE
Chlorine	320C1R3	5.00e+2 ug/g	8.40e+0 lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	320C1R4	ND 9.80e+1 ug/g	1.57e+0 lbs/hr	CE
Antimony	320C1R5	ND 1.00e+2 ug/g	1.62e+0 lbs/hr	CE
Antimony	320C1R6	ND 9.90e+1 ug/g	1.58e+0 lbs/hr	CE
Arsenic	320C1R4	5.00e+0 ug/g	8.00e-2 lbs/hr	CE
Arsenic	320C1R5	ND 4.20e+0 ug/g	6.80e-2 lbs/hr	CE
Arsenic	320C1R6	4.50e+0 ug/g	7.20e-2 lbs/hr	CE
Barium	320C1R4	1.30e+2 ug/g	2.08e+0 lbs/hr	CE
Barium	320C1R5	1.20e+2 ug/g	1.94e+0 lbs/hr	CE
Barium	320C1R6	1.10e+2 ug/g	1.76e+0 lbs/hr	CE
Beryllium	320C1R4	ND 1.10e+0 ug/g	1.76e-2 lbs/hr	CE
Beryllium	320C1R5	ND 9.00e-1 ug/g	1.46e-2 lbs/hr	CE
Beryllium	320C1R6	ND 1.20e+0 ug/g	1.92e-2 lbs/hr	CE
Cadmium	320C1R4	ND 1.00e+0 ug/g	1.60e-2 lbs/hr	CE
Cadmium	320C1R5	ND 1.00e+0 ug/g	1.62e-2 lbs/hr	CE
Cadmium	320C1R6	ND 1.00e+0 ug/g	1.60e-2 lbs/hr	CE
Chromium	320C1R4	2.70e+1 ug/g	4.32e-1 lbs/hr	CE
Chromium	320C1R5	2.05e+1 ug/g	3.32e-1 lbs/hr	CE
Chromium	320C1R6	2.10e+1 ug/g	3.36e-1 lbs/hr	CE
Lead	320C1R4	5.70e+0 ug/g	9.12e-2 lbs/hr	CE
Lead	320C1R5	8.40e+0 ug/g	1.36e-1 lbs/hr	CE
Lead	320C1R6	5.30e+0 ug/g	8.48e-2 lbs/hr	CE
Mercury	320C1R4	ND 1.80e-1 ug/g	2.88e-3 lbs/hr	CE
Mercury	320C1R5	ND 1.80e-1 ug/g	2.92e-3 lbs/hr	CE
Mercury	320C1R6	ND 1.80e-1 ug/g	2.88e-3 lbs/hr	CE
Silver	320C1R4	ND 1.80e+1 ug/g	2.88e-1 lbs/hr	CE
Silver	320C1R5	ND 1.80e+1 ug/g	2.92e-1 lbs/hr	CE
Silver	320C1R6	ND 1.80e+1 ug/g	2.88e-1 lbs/hr	CE
Thallium	320C1R4	ND 9.80e+1 ug/g	1.57e+0 lbs/hr	CE
Thallium	320C1R5	ND 1.00e+2 ug/g	1.62e+0 lbs/hr	CE
Thallium	320C1R6	ND 9.90e+1 ug/g	1.58e+0 lbs/hr	CE

5. Type: RAW MATERIAL

6. Description:
 Group: DRY KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	320C1R1	3.00e+2 ug/g	8.77e+1 lbs/hr	CE
Chlorine	320C1R2	3.00e+2 ug/g	8.66e+1 lbs/hr	CE
Chlorine	320C1R3	3.00e+2 ug/g	8.84e+1 lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	320C1R4	ND 9.80e+1 ug/g	2.82e+1 lbs/hr	CE
Antimony	320C1R5	ND 9.70e+1 ug/g	2.74e+1 lbs/hr	CE
Antimony	320C1R6	ND 9.90e+1 ug/g	2.76e+1 lbs/hr	CE
Arsenic	320C1R4	6.60e+0 ug/g	1.90e+0 lbs/hr	CE

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE

2. STATE: MI

3. CITY: ALPENA

4. EP ID: 320 DEVICE NAME: KILN NO. 23

EPA ID: MID005379607

REGION: 5

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: FF

Arsenic	320C1R5	6.60e+0	ug/g	1.86e+0	lbs/hr	CE
Arsenic	320C1R6	6.70e+0	ug/g	1.87e+0	lbs/hr	CE
Barium	320C1R4	8.50e+1	ug/g	2.45e+1	lbs/hr	CE
Barium	320C1R5	7.60e+1	ug/g	2.15e+1	lbs/hr	CE
Barium	320C1R6	8.10e+1	ug/g	2.26e+1	lbs/hr	CE
Beryllium	320C1R4	ND 1.10e+0	ug/g	3.17e-1	lbs/hr	CE
Beryllium	320C1R5	ND 6.00e-1	ug/g	1.69e-1	lbs/hr	CE
Beryllium	320C1R6	ND 8.00e-1	ug/g	2.23e-1	lbs/hr	CE
Cadmium	320C1R4	ND 1.00e-1	ug/g	2.88e-2	lbs/hr	CE
Cadmium	320C1R5	ND 1.00e-1	ug/g	2.82e-2	lbs/hr	CE
Cadmium	320C1R6	ND 1.00e+0	ug/g	2.79e-1	lbs/hr	CE
Chromium	320C1R4	2.00e+1	ug/g	5.76e+0	lbs/hr	CE
Chromium	320C1R5	1.45e+1	ug/g	4.09e+0	lbs/hr	CE
Chromium	320C1R6	1.50e+1	ug/g	4.18e+0	lbs/hr	CE
Lead	320C1R4	6.20e+0	ug/g	1.78e+0	lbs/hr	CE
Lead	320C1R5	6.00e+0	ug/g	1.69e+0	lbs/hr	CE
Lead	320C1R6	5.20e+0	ug/g	1.45e+0	lbs/hr	CE
Mercury	320C1R4	ND 1.80e-1	ug/g	5.18e-2	lbs/hr	CE
Mercury	320C1R5	ND 1.80e-1	ug/g	5.08e-2	lbs/hr	CE
Mercury	320C1R6	ND 1.80e-1	ug/g	5.01e-2	lbs/hr	CE
Silver	320C1R4	ND 3.27e+1	ug/g	9.40e+0	lbs/hr	CE
Silver	320C1R5	ND 3.23e+1	ug/g	9.13e+0	lbs/hr	CE
Silver	320C1R6	ND 3.30e+1	ug/g	9.19e+0	lbs/hr	CE
Thallium	320C1R4	ND 9.80e+1	ug/g	2.82e+1	lbs/hr	CE
Thallium	320C1R5	ND 9.70e+1	ug/g	2.74e+1	lbs/hr	CE
Thallium	320C1R6	ND 9.90e+1	ug/g	2.76e+1	lbs/hr	CE

5. Type: WASTE

6. Description:

Group: DRY KILN

Location: KILN

Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	320C1R1	2.20e+4 ug/g	2.60e+2 lbs/hr	CC
Chlorine	320C1R2	2.73e+4 ug/g	3.22e+2 lbs/hr	CC
Chlorine	320C1R3	2.42e+4 ug/g	2.86e+2 lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	320C1R4	2.80e+1 ug/g	3.31e-1 lbs/hr	CC
Antimony	320C1R5	2.85e+1 ug/g	3.31e-1 lbs/hr	CC
Antimony	320C1R6	2.66e+1 ug/g	3.09e-1 lbs/hr	CC
Arsenic	320C1R4	1.21e+3 ug/g	1.43e+1 lbs/hr	CC
Arsenic	320C1R5	1.25e+3 ug/g	1.46e+1 lbs/hr	CC
Arsenic	320C1R6	1.44e+3 ug/g	1.68e+1 lbs/hr	CC
Barium	320C1R4	2.06e+2 ug/g	2.43e+0 lbs/hr	CC
Barium	320C1R5	1.90e+2 ug/g	2.20e+0 lbs/hr	CC
Barium	320C1R6	2.09e+2 ug/g	2.43e+0 lbs/hr	CC
Beryllium	320C1R4	1.87e+2 ug/g	2.20e+0 lbs/hr	CC
Beryllium	320C1R5	1.90e+2 ug/g	2.20e+0 lbs/hr	CC
Beryllium	320C1R6	2.28e+2 ug/g	2.65e+0 lbs/hr	CC
Cadmium	320C1R4	2.62e+2 ug/g	3.09e+0 lbs/hr	CC
Cadmium	320C1R5	1.75e+2 ug/g	2.03e+0 lbs/hr	CC
Cadmium	320C1R6	9.12e+2 ug/g	1.06e+1 lbs/hr	CC
Chromium	320C1R4	3.18e+2 ug/g	3.75e+0 lbs/hr	CC
Chromium	320C1R5	3.04e+2 ug/g	3.53e+0 lbs/hr	CC
Chromium	320C1R6	3.23e+2 ug/g	3.75e+0 lbs/hr	CC
Lead	320C1R4	1.87e+3 ug/g	2.20e+1 lbs/hr	CC
Lead	320C1R5	2.09e+3 ug/g	2.43e+1 lbs/hr	CC
Lead	320C1R6	2.09e+3 ug/g	2.43e+1 lbs/hr	CC
Mercury	320C1R4	4.30e-1 ug/g	5.07e-3 lbs/hr	CC
Mercury	320C1R5	5.13e-1 ug/g	5.95e-3 lbs/hr	CC
Mercury	320C1R6	3.23e-1 ug/g	3.75e-3 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE

2. STATE: MI

3. CITY: ALPENA

EPA ID: MID005379607

REGION: 5

4. EP ID: 320 DEVICE NAME: KILN NO. 23

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: FF

Silver	320C1R4	1.16e+0	ug/g	1.37e-2	lbs/hr	CC
Silver	320C1R5	1.08e+0	ug/g	1.26e-2	lbs/hr	CC
Silver	320C1R6	1.12e+0	ug/g	1.30e-2	lbs/hr	CC
Thallium	320C1R4	7.29e+0	ug/g	8.60e-2	lbs/hr	CC
Thallium	320C1R5	6.84e+0	ug/g	7.94e-2	lbs/hr	CC
Thallium	320C1R6	7.03e+0	ug/g	8.16e-2	lbs/hr	CC

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE
 2. STATE: OH
 3. CITY: PAULDING
 4. EP ID: 302 DEVICE NAME: KILN NO. 2 EPA ID: OHD005048947 REGION: 5
 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

5. Type: RAW MATERIAL

6. Description:
 Group: WET KILN Location: KILN Phase: SLURRY

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	302C1R1	2.00e+2	ug/g	3.13e+1 lbs/hr	CC
Chlorine	302C1R2	1.00e+2	ug/g	1.63e+1 lbs/hr	CC
Chlorine	302C1R3	2.00e+2	ug/g	3.23e+1 lbs/hr	CC
Chlorine	302C1R4	4.00e+2	ug/g	6.26e+1 lbs/hr	CC
Chlorine	302C1R5	2.00e+2	ug/g	3.26e+1 lbs/hr	CC
Chlorine	302C1R6	1.00e+2	ug/g	1.61e+1 lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	302C1R4	ND	9.80e+1 ug/g	1.53e+1 lbs/hr	
Antimony	302C1R5	ND	8.20e+1 ug/g	1.34e+1 lbs/hr	
Antimony	302C1R6	ND	9.80e+1 ug/g	1.57e+1 lbs/hr	
Arsenic	302C1R4		4.40e+0 ug/g	6.88e-1 lbs/hr	
Arsenic	302C1R5		3.80e+0 ug/g	6.19e-1 lbs/hr	
Arsenic	302C1R6		4.70e+0 ug/g	7.50e-1 lbs/hr	
Barium	302C1R4		1.90e+2 ug/g	2.98e+1 lbs/hr	
Barium	302C1R5		1.60e+2 ug/g	2.61e+1 lbs/hr	
Barium	302C1R6		1.70e+2 ug/g	2.73e+1 lbs/hr	
Beryllium	302C1R4		4.00e-1 ug/g	5.95e-2 lbs/hr	
Beryllium	302C1R5		3.00e-1 ug/g	4.63e-2 lbs/hr	
Beryllium	302C1R6		3.00e-1 ug/g	5.07e-2 lbs/hr	
Cadmium	302C1R4	ND	1.00e+0 ug/g	1.54e-1 lbs/hr	
Cadmium	302C1R5	ND	8.00e-1 ug/g	1.34e-1 lbs/hr	
Cadmium	302C1R6		9.00e-1 ug/g	1.43e-1 lbs/hr	
Chromium	302C1R4		5.10e+1 ug/g	7.98e+0 lbs/hr	
Chromium	302C1R5		2.90e+1 ug/g	4.74e+0 lbs/hr	
Chromium	302C1R6		3.20e+1 ug/g	5.16e+0 lbs/hr	
Lead	302C1R4		1.10e+0 ug/g	1.70e-1 lbs/hr	
Lead	302C1R5		1.10e+0 ug/g	1.72e-1 lbs/hr	
Lead	302C1R6		5.00e-1 ug/g	8.38e-2 lbs/hr	
Mercury	302C1R4	ND	1.50e-2 ug/g	2.43e-3 lbs/hr	
Mercury	302C1R5	ND	1.30e-2 ug/g	2.20e-3 lbs/hr	
Mercury	302C1R6	ND	1.70e-2 ug/g	2.65e-3 lbs/hr	
Silver	302C1R4	ND	4.40e+1 ug/g	6.81e+0 lbs/hr	
Silver	302C1R5	ND	3.60e+1 ug/g	5.95e+0 lbs/hr	
Silver	302C1R6	ND	4.30e+1 ug/g	6.99e+0 lbs/hr	
Thallium	302C1R4	ND	4.90e+0 ug/g	7.72e-1 lbs/hr	
Thallium	302C1R5	ND	4.10e+0 ug/g	6.61e-1 lbs/hr	
Thallium	302C1R6	ND	5.00e+0 ug/g	8.16e-1 lbs/hr	

5. Type: WASTE

6. Description: SPIKED METALS (AS,CD,CR,PB)
 Group: WET KILN Location: KILN Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	302C1R1	3.10e+4	ug/g	4.52e+2 lbs/hr	CC
Chlorine	302C1R2	3.00e+4	ug/g	4.44e+2 lbs/hr	CC
Chlorine	302C1R3	2.60e+4	ug/g	3.78e+2 lbs/hr	CC
Chlorine	302C1R4	2.80e+4	ug/g	4.07e+2 lbs/hr	CC
Chlorine	302C1R5	2.70e+4	ug/g	4.09e+2 lbs/hr	CC
Chlorine	302C1R6	2.80e+4	ug/g	4.22e+2 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LAFARGE

2. STATE: OH

3. CITY: PAULDING

4. EP ID: 302 DEVICE NAME: KILN NO. 2

EPA ID: OHD005048947

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 5

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	302C1R4	1.08e+3	ug/g	1.56e+1 lbs/hr	CC
Antimony	302C1R5	9.11e+2	ug/g	1.38e+1 lbs/hr	CC
Antimony	302C1R6	1.06e+3	ug/g	1.60e+1 lbs/hr	CC
Arsenic	302C1R4	5.46e+2	ug/g	7.93e+0 lbs/hr	CC
Arsenic	302C1R5	4.62e+2	ug/g	7.00e+0 lbs/hr	CC
Arsenic	302C1R6	5.42e+2	ug/g	8.16e+0 lbs/hr	CC
Barium	302C1R4	3.16e+3	ug/g	4.59e+1 lbs/hr	CC
Barium	302C1R5	3.14e+3	ug/g	4.75e+1 lbs/hr	CC
Barium	302C1R6	3.23e+3	ug/g	4.86e+1 lbs/hr	CC
Beryllium	302C1R4	3.75e+1	ug/g	5.45e-1 lbs/hr	CC
Beryllium	302C1R5	3.49e+1	ug/g	5.29e-1 lbs/hr	CC
Beryllium	302C1R6	3.84e+1	ug/g	5.78e-1 lbs/hr	CC
Cadmium	302C1R4	3.09e+2	ug/g	4.49e+0 lbs/hr	CC
Cadmium	302C1R5	3.01e+2	ug/g	4.55e+0 lbs/hr	CC
Cadmium	302C1R6	3.43e+2	ug/g	5.17e+0 lbs/hr	CC
Chromium	302C1R4	1.86e+3	ug/g	2.70e+1 lbs/hr	CC
Chromium	302C1R5	1.62e+3	ug/g	2.45e+1 lbs/hr	CC
Chromium	302C1R6	1.65e+3	ug/g	2.49e+1 lbs/hr	CC
Lead	302C1R4	3.97e+3	ug/g	5.76e+1 lbs/hr	CC
Lead	302C1R5	4.53e+3	ug/g	6.86e+1 lbs/hr	CC
Lead	302C1R6	4.26e+3	ug/g	6.42e+1 lbs/hr	CC
Mercury	302C1R4	6.07e-1	ug/g	8.82e-3 lbs/hr	CC
Mercury	302C1R5	5.09e-1	ug/g	7.72e-3 lbs/hr	CC
Mercury	302C1R6	5.56e-1	ug/g	8.38e-3 lbs/hr	CC
Silver	302C1R4	4.82e+2	ug/g	7.00e+0 lbs/hr	CC
Silver	302C1R5	3.98e+2	ug/g	6.03e+0 lbs/hr	CC
Silver	302C1R6	4.91e+2	ug/g	7.39e+0 lbs/hr	CC
Thallium	302C1R4	7.21e+1	ug/g	1.05e+0 lbs/hr	CC
Thallium	302C1R5	6.38e+1	ug/g	9.66e-1 lbs/hr	CC
Thallium	302C1R6	7.36e+1	ug/g	1.11e+0 lbs/hr	CC

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: IN
 3. CITY: GREENCASTLE EPA ID: IND006419212 REGION: 5
 4. EP ID: 304 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

5. Type: CLINKER

6. Description: PRODUCT
 Group: WET KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	304C1	ND	1.00e+2 ug/g	1.74e+1 lbs/hr	CE
Chlorine	304C2	ND	1.00e+2 ug/g	0.00e+0	

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	304C1		3.39e+0 ug/g	5.89e-1 lbs/hr	CE
Arsenic	304C1		6.32e+1 ug/g	1.10e+1 lbs/hr	CE
Barium	304C1		2.97e+2 ug/g	5.16e+1 lbs/hr	CE
Beryllium	304C1		1.70e+1 ug/g	2.95e+0 lbs/hr	CE
Cadmium	304C1	ND	1.29e-1 ug/g	2.24e-2 lbs/hr	CE
Chromium	304C1		4.37e+2 ug/g	7.59e+1 lbs/hr	CE
Lead	304C1		1.18e+1 ug/g	2.05e+0 lbs/hr	CE
Mercury	304C1	ND	1.00e-1 ug/g	1.74e-2 lbs/hr	CE
Silver	304C1	ND	1.29e+0 ug/g	2.24e-1 lbs/hr	CE
Thallium	304C1	ND	7.30e+0 ug/g	1.27e+0 lbs/hr	CE

5. Type: ESP ASH

6. Description: NONRECYCLE
 Group: WET KILN Location: ESP Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	304C1		2.16e+4 ug/g	3.51e+2 lbs/hr	CE
Chlorine	304C2		2.88e+4 ug/g	0.00e+0	

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	304C1		4.08e+0 ug/g	6.63e-2 lbs/hr	CE
Arsenic	304C1		6.52e+1 ug/g	1.06e+0 lbs/hr	CE
Barium	304C1		1.61e+2 ug/g	2.62e+0 lbs/hr	CE
Beryllium	304C1		9.76e+0 ug/g	1.59e-1 lbs/hr	CE
Cadmium	304C1		4.75e+2 ug/g	7.72e+0 lbs/hr	CE
Chromium	304C1		3.02e+2 ug/g	4.91e+0 lbs/hr	CE
Lead	304C1		3.72e+3 ug/g	6.05e+1 lbs/hr	CE
Mercury	304C1	ND	1.00e-1 ug/g	1.63e-3 lbs/hr	CE
Silver	304C1		3.09e+0 ug/g	5.02e-2 lbs/hr	CE
Thallium	304C1	ND	8.34e+0 ug/g	1.36e-1 lbs/hr	CE

6. Description: RECYCLE
 Group: WET KILN Location: ESP Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	304C1		8.00e+3 ug/g	0.00e+0	
Chlorine	304C2		1.27e+4 ug/g	0.00e+0	

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: IN
 3. CITY: GREENCASTLE
 4. EP ID: 304 DEVICE NAME: KILN NO. 1

EPA ID: IND006419212
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP REGION: 5

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	304C1	3.06e+0	ug/g	0.00e+0	
Arsenic	304C1	3.74e+1	ug/g	0.00e+0	
Barium	304C1	1.73e+2	ug/g	0.00e+0	
Beryllium	304C1	5.43e+0	ug/g	0.00e+0	
Cadmium	304C1	1.17e+2	ug/g	0.00e+0	
Chromium	304C1	2.08e+2	ug/g	0.00e+0	
Lead	304C1	1.04e+3	ug/g	0.00e+0	
Mercury	304C1	ND 1.00e-2	ug/g	0.00e+0	
Silver	304C1	1.40e+0	ug/g	0.00e+0	
Thallium	304C1	ND 7.96e+0	ug/g	0.00e+0	

5. Type: FUEL

6. Description: COAL

Group: WET KILN

Location: KILN

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	304C1	1.19e+3	ug/g	2.10e+1 lbs/hr	CE
Chlorine	304C2	1.00e+3	ug/g	0.00e+0	

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	304C1	2.02e+0	ug/g	3.57e-2 lbs/hr	CE
Arsenic	304C1	7.78e+0	ug/g	1.37e-1 lbs/hr	CE
Barium	304C1	3.76e+2	ug/g	6.64e+0 lbs/hr	CE
Beryllium	304C1	1.94e+0	ug/g	3.43e-2 lbs/hr	CE
Cadmium	304C1	ND 1.36e+0	ug/g	2.40e-2 lbs/hr	CE
Chromium	304C1	1.49e+2	ug/g	2.63e+0 lbs/hr	CE
Lead	304C1	3.15e+0	ug/g	5.56e-2 lbs/hr	CE
Mercury	304C1	ND 1.00e-1	ug/g	1.77e-3 lbs/hr	CE
Silver	304C1	ND 1.36e+0	ug/g	2.40e-2 lbs/hr	CE
Thallium	304C1	ND 7.69e+0	ug/g	1.36e-1 lbs/hr	CE

5. Type: RAW MATERIAL

6. Description:

Group: WET KILN

Location: KILN

Phase: SLURRY

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	304C1	1.56e+2	ug/g	6.83e+1 lbs/hr	CE
Chlorine	304C2	1.54e+2	ug/g	0.00e+0	

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	304C1	ND 5.52e-1	ug/g	2.42e-1 lbs/hr	CE
Arsenic	304C1	ND 5.59e-1	ug/g	2.45e-1 lbs/hr	CE
Barium	304C1	7.38e+1	ug/g	3.23e+1 lbs/hr	CE
Beryllium	304C1	ND 5.92e-1	ug/g	2.59e-1 lbs/hr	CE
Cadmium	304C1	ND 9.86e-1	ug/g	4.32e-1 lbs/hr	CE

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: IN
 3. CITY: GREENCASTLE EPA IND006419212 REGION: 5
 4. EP ID: 304 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

Chromium	304C1	3.89e+1	ug/g	1.70e+1	lbs/hr	CE	
Lead	304C1	2.93e+0	ug/g	1.28e+0	lbs/hr	CE	
Mercury	304C1	ND	1.00e-1	ug/g	4.38e-2	lbs/hr	CE
Silver	304C1	ND	9.86e-1	ug/g	4.32e-1	lbs/hr	CE
Thallium	304C1	ND	5.59e+0	ug/g	2.45e+0	lbs/hr	CE

5. Type: SPIKE

6. Description: METALS (AS,BE,CD,CR,PB)
 Group: WET KILN Location: KILN Phase: LIQUID

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Arsenic	304C1	0.00e+0		1.09e+1	lbs/hr	
Barium	304C1	0.00e+0		0.00e+0		
Beryllium	304C1	0.00e+0		3.10e+0	lbs/hr	
Cadmium	304C1	0.00e+0		9.00e+0	lbs/hr	
Chromium	304C1	0.00e+0		7.02e+1	lbs/hr	
Lead	304C1	0.00e+0		5.03e+1	lbs/hr	
Mercury	304C1	0.00e+0		0.00e+0		
Silver	304C1	0.00e+0		0.00e+0		

5. Type: WASTE

6. Description:
 Group: WET KILN Location: KILN Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	304C1	1.84e+4	ug/g	2.52e+2	lbs/hr	CE
Chlorine	304C2	3.01e+4	ug/g	0.00e+0		

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc	
Antimony	304C1	1.26e+1	ug/g	1.73e-1	lbs/hr	CE	
Arsenic	304C1	1.74e+0	ug/g	2.39e-2	lbs/hr	CE	
Barium	304C1	3.25e+2	ug/g	4.46e+0	lbs/hr	CE	
Beryllium	304C1	4.28e-1	ug/g	5.87e-3	lbs/hr	CE	
Cadmium	304C1	1.92e+0	ug/g	2.63e-2	lbs/hr	CE	
Chromium	304C1	9.96e+1	ug/g	1.37e+0	lbs/hr	CE	
Lead	304C1	2.21e+2	ug/g	3.03e+0	lbs/hr	CE	
Mercury	304C1	2.00e-1	ug/g	2.74e-3	lbs/hr	CE	
Silver	304C1	ND	2.50e-1	ug/g	3.43e-3	lbs/hr	CE
Thallium	304C1	ND	6.38e-1	ug/g	8.75e-3	lbs/hr	CE

6. Description:
 Group: WET KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	304C1	2.64e+4	ug/g	2.84e+2	lbs/hr	CE
Chlorine	304C2	3.25e+4	ug/g	0.00e+0		

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: IN
 3. CITY: GREENCASTLE EPA IND006419212 REGION: 5
 4. EP ID: 304 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	304C1	2.81e+1 ug/g	3.02e-1 lbs/hr	CE
Arsenic	304C1	1.08e+0 ug/g	1.16e-2 lbs/hr	CE
Barium	304C1	7.38e+2 ug/g	7.94e+0 lbs/hr	CE
Beryllium	304C1	1.22e+0 ug/g	1.31e-2 lbs/hr	CE
Cadmium	304C1	3.47e+0 ug/g	3.73e-2 lbs/hr	CE
Chromium	304C1	2.07e+2 ug/g	2.23e+0 lbs/hr	CE
Lead	304C1	3.98e+2 ug/g	4.28e+0 lbs/hr	CE
Mercury	304C1	ND 2.05e-2 ug/g	2.20e-4 lbs/hr	CC
Silver	304C1	8.59e-1 ug/g	9.24e-3 lbs/hr	CE
Thallium	304C1	ND 7.61e-1 ug/g	8.19e-3 lbs/hr	CE

6. Description: CONTAINERIZED
 Group: WET KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	304C1	1.44e+4 ug/g	9.08e+0 lbs/hr	CE
Chlorine	304C2	2.02e+4 ug/g	0.00e+0	

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	304C1	1.35e+2 ug/g	8.51e-2 lbs/hr	CE
Arsenic	304C1	1.02e+1 ug/g	6.43e-3 lbs/hr	CE
Barium	304C1	2.81e+3 ug/g	1.77e+0 lbs/hr	CE
Beryllium	304C1	1.84e+0 ug/g	1.16e-3 lbs/hr	CE
Cadmium	304C1	3.95e+1 ug/g	2.49e-2 lbs/hr	CE
Chromium	304C1	2.94e+3 ug/g	1.85e+0 lbs/hr	CE
Lead	304C1	8.67e+3 ug/g	5.47e+0 lbs/hr	CE
Mercury	304C1	2.25e+0 ug/g	1.42e-3 lbs/hr	CE
Silver	304C1	2.69e+1 ug/g	1.70e-2 lbs/hr	CE
Thallium	304C1	5.97e-1 ug/g	3.76e-4 lbs/hr	CE

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU EPA ID: MO981127319 REGION: 7
 4. EP ID: 303 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: QC/FF

5. Type: BLOWDOWN

6. Description:
 Group: DRY KILN Location: WS Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	303C1R1	5.60e+1	ug/g	5.60e-8 lbs/hr	CE
Chlorine	303C1R2	5.80e+1	ug/g	3.80e+0 lbs/hr	CE
Chlorine	303C1R3	5.40e+1	ug/g	3.62e+0 lbs/hr	CE
Chlorine	303C2R1	3.10e+1	ug/g	2.09e+0 lbs/hr	CE
Chlorine	303C2R2	3.30e+1	ug/g	2.23e+0 lbs/hr	CE
Chlorine	303C2R3	3.50e+1	ug/g	2.36e+0 lbs/hr	CE
Chlorine	303C3R1	3.20e+1	ug/g	2.16e+0 lbs/hr	CE
Chlorine	303C3R2	3.90e+1	ug/g	2.63e+0 lbs/hr	CE
Chlorine	303C3R3	3.60e+1	ug/g	2.43e+0 lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	303C1R4	ND	5.00e-3 ug/g	5.00e-12 lbs/hr	CE
Antimony	303C1R5	ND	5.00e-3 ug/g	3.02e-4 lbs/hr	CE
Antimony	303C1R6	ND	5.00e-3 ug/g	3.32e-4 lbs/hr	CE
Antimony	303C3R1		5.00e-3 ug/g	3.37e-4 lbs/hr	CE
Antimony	303C3R2		5.00e-3 ug/g	3.37e-4 lbs/hr	CE
Antimony	303C3R3		5.00e-3 ug/g	3.37e-4 lbs/hr	CE
Arsenic	303C1R4	ND	2.00e-3 ug/g	2.00e-12 lbs/hr	CE
Arsenic	303C1R5		3.00e-3 ug/g	1.81e-4 lbs/hr	CE
Arsenic	303C1R6		4.00e-3 ug/g	2.66e-4 lbs/hr	CE
Arsenic	303C3R1		5.00e-3 ug/g	3.37e-4 lbs/hr	CE
Arsenic	303C3R2		1.00e-3 ug/g	6.75e-5 lbs/hr	CE
Arsenic	303C3R3		2.00e-3 ug/g	1.35e-4 lbs/hr	CE
Barium	303C1R4		9.00e-2 ug/g	9.00e-11 lbs/hr	CE
Barium	303C1R5		8.70e-2 ug/g	5.26e-3 lbs/hr	CE
Barium	303C1R6		9.40e-2 ug/g	6.25e-3 lbs/hr	CE
Barium	303C3R1		1.04e-1 ug/g	7.02e-3 lbs/hr	CE
Barium	303C3R2		1.00e-1 ug/g	6.75e-3 lbs/hr	CE
Barium	303C3R3		1.09e-1 ug/g	7.35e-3 lbs/hr	CE
Beryllium	303C1R4	ND	5.00e-4 ug/g	5.00e-13 lbs/hr	CE
Beryllium	303C1R5	ND	5.00e-4 ug/g	3.02e-5 lbs/hr	CE
Beryllium	303C1R6	ND	5.00e-4 ug/g	3.32e-5 lbs/hr	CE
Beryllium	303C3R1		4.00e-3 ug/g	2.70e-4 lbs/hr	CE
Beryllium	303C3R2		4.00e-3 ug/g	2.70e-4 lbs/hr	CE
Beryllium	303C3R3		2.00e-3 ug/g	1.35e-4 lbs/hr	CE
Cadmium	303C1R4	ND	1.00e-3 ug/g	1.00e-12 lbs/hr	CE
Cadmium	303C1R5	ND	1.00e-3 ug/g	6.05e-5 lbs/hr	CE
Cadmium	303C1R6	ND	1.00e-3 ug/g	6.65e-5 lbs/hr	CE
Cadmium	303C3R1		1.00e-3 ug/g	6.75e-5 lbs/hr	CE
Cadmium	303C3R2		1.00e-3 ug/g	6.75e-5 lbs/hr	CE
Cadmium	303C3R3		1.00e-3 ug/g	6.75e-5 lbs/hr	CE
Chromium	303C1R4	ND	5.00e-3 ug/g	5.00e-12 lbs/hr	CE
Chromium	303C1R5	ND	5.00e-3 ug/g	3.02e-4 lbs/hr	CE
Chromium	303C1R6	ND	5.00e-3 ug/g	3.32e-4 lbs/hr	CE
Chromium	303C3R1		1.50e-1 ug/g	1.01e-2 lbs/hr	CE
Chromium	303C3R2		2.83e-1 ug/g	1.91e-2 lbs/hr	CE
Chromium	303C3R3		1.20e-2 ug/g	8.10e-4 lbs/hr	CE
Lead	303C1R4		4.90e-2 ug/g	4.90e-11 lbs/hr	CE
Lead	303C1R5		2.20e-2 ug/g	1.33e-3 lbs/hr	CE
Lead	303C1R6	ND	4.00e-3 ug/g	2.66e-4 lbs/hr	CE
Lead	303C3R1		8.00e-3 ug/g	5.40e-4 lbs/hr	CE
Lead	303C3R2		9.00e-3 ug/g	6.07e-4 lbs/hr	CE
Lead	303C3R3		6.00e-3 ug/g	4.05e-4 lbs/hr	CE
Mercury	303C1R4	ND	1.00e-3 ug/g	1.00e-12 lbs/hr	CE
Mercury	303C1R5		5.00e-3 ug/g	3.02e-4 lbs/hr	CE
Mercury	303C1R6		4.00e-4 ug/g	2.66e-5 lbs/hr	CE
Mercury	303C3R1		4.00e-3 ug/g	2.70e-4 lbs/hr	CE
Mercury	303C3R2		4.00e-3 ug/g	2.70e-4 lbs/hr	CE
Mercury	303C3R3		4.00e-3 ug/g	2.70e-4 lbs/hr	CE
Silver	303C1R4	ND	1.00e-3 ug/g	1.00e-12 lbs/hr	CE

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU
 4. EP ID: 303 DEVICE NAME: KILN NO. 1

EPA ID: MO981127319
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: QC/FF REGION: 7

Silver	303C1R5	ND	1.00e-3	ug/g	6.05e-5	lbs/hr	CE
Silver	303C1R6	ND	1.00e-3	ug/g	6.65e-5	lbs/hr	CE
Silver	303C3R1		7.00e-3	ug/g	4.72e-4	lbs/hr	CE
Silver	303C3R2		7.00e-3	ug/g	4.72e-4	lbs/hr	CE
Silver	303C3R3		7.00e-3	ug/g	4.72e-4	lbs/hr	CE
Thallium	303C1R4	ND	2.00e-3	ug/g	2.00e-12	lbs/hr	CE
Thallium	303C1R5	ND	2.00e-3	ug/g	1.21e-4	lbs/hr	CE
Thallium	303C1R6	ND	2.00e-3	ug/g	1.33e-4	lbs/hr	CE
Thallium	303C3R1		2.00e-3	ug/g	1.35e-4	lbs/hr	CE
Thallium	303C3R2		2.00e-3	ug/g	1.35e-4	lbs/hr	CE
Thallium	303C3R3		2.00e-3	ug/g	1.35e-4	lbs/hr	CE

5. Type: CLINKER

6. Description: PRODUCT
 Group: DRY KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc	
Chlorine	303C1R1	6.30e+1	ug/g	2.04e+1	lbs/hr	CE
Chlorine	303C1R2	5.00e+1	ug/g	1.61e+1	lbs/hr	CE
Chlorine	303C1R3	6.30e+1	ug/g	2.04e+1	lbs/hr	CE
Chlorine	303C2R1	2.00e+3	ug/g	5.98e+2	lbs/hr	CE
Chlorine	303C2R2	9.30e+2	ug/g	2.87e+2	lbs/hr	CE
Chlorine	303C2R3	1.40e+3	ug/g	4.30e+2	lbs/hr	CE
Chlorine	303C3R1	1.10e+3	ug/g	3.51e+2	lbs/hr	CE
Chlorine	303C3R2	4.70e+2	ug/g	1.50e+2	lbs/hr	CE
Chlorine	303C3R3	5.00e+2	ug/g	1.60e+2	lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc		
Antimony	303C1R4	ND	4.42e-1	ug/g	1.46e-1	lbs/hr	CE
Antimony	303C1R5	ND	2.75e-1	ug/g	9.02e-2	lbs/hr	CE
Antimony	303C1R6	ND	2.98e-1	ug/g	9.71e-2	lbs/hr	CE
Antimony	303C3R1		3.89e-1	ug/g	1.24e-1	lbs/hr	CE
Antimony	303C3R2		3.68e-1	ug/g	1.18e-1	lbs/hr	CE
Antimony	303C3R3		7.54e-1	ug/g	2.41e-1	lbs/hr	CE
Arsenic	303C1R4		1.95e+0	ug/g	6.43e-1	lbs/hr	CE
Arsenic	303C1R5		2.58e+0	ug/g	8.46e-1	lbs/hr	CE
Arsenic	303C1R6		1.73e+0	ug/g	5.64e-1	lbs/hr	CE
Arsenic	303C3R1		1.55e+1	ug/g	4.95e+0	lbs/hr	CE
Arsenic	303C3R2		1.65e+1	ug/g	5.28e+0	lbs/hr	CE
Arsenic	303C3R3		1.79e+1	ug/g	5.73e+0	lbs/hr	CE
Barium	303C1R4		5.13e+1	ug/g	1.69e+1	lbs/hr	CE
Barium	303C1R5		4.94e+1	ug/g	1.62e+1	lbs/hr	CE
Barium	303C1R6		4.88e+1	ug/g	1.59e+1	lbs/hr	CE
Barium	303C3R1		5.64e+1	ug/g	1.80e+1	lbs/hr	CE
Barium	303C3R2		6.02e+1	ug/g	1.93e+1	lbs/hr	CE
Barium	303C3R3		6.39e+1	ug/g	2.04e+1	lbs/hr	CE
Beryllium	303C1R4		4.68e-1	ug/g	1.54e-1	lbs/hr	CE
Beryllium	303C1R5		4.67e-1	ug/g	1.53e-1	lbs/hr	CE
Beryllium	303C1R6		5.24e-1	ug/g	1.71e-1	lbs/hr	CE
Beryllium	303C3R1		8.30e-1	ug/g	2.65e-1	lbs/hr	CE
Beryllium	303C3R2		7.71e-1	ug/g	2.47e-1	lbs/hr	CE
Beryllium	303C3R3		8.94e-1	ug/g	2.86e-1	lbs/hr	CE
Cadmium	303C1R4		1.40e+0	ug/g	4.62e-1	lbs/hr	CE
Cadmium	303C1R5		1.35e+0	ug/g	4.43e-1	lbs/hr	CE
Cadmium	303C1R6		1.40e+0	ug/g	4.56e-1	lbs/hr	CE
Cadmium	303C3R1		3.27e+0	ug/g	1.04e+0	lbs/hr	CE
Cadmium	303C3R2		4.48e+0	ug/g	1.43e+0	lbs/hr	CE
Cadmium	303C3R3		4.09e+0	ug/g	1.31e+0	lbs/hr	CE
Chromium	303C1R4		4.57e+1	ug/g	1.51e+1	lbs/hr	CE
Chromium	303C1R5		5.03e+1	ug/g	1.65e+1	lbs/hr	CE
Chromium	303C1R6		4.81e+1	ug/g	1.57e+1	lbs/hr	CE
Chromium	303C3R1		3.97e+1	ug/g	1.27e+1	lbs/hr	CE
Chromium	303C3R2		3.30e+1	ug/g	1.06e+1	lbs/hr	CE
Chromium	303C3R3		3.22e+1	ug/g	1.03e+1	lbs/hr	CE

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.

2. STATE: MO

3. CITY: CAPE GIRARDEAU

EPA ID: MO981127319

REGION: 7

4. EP ID: 303 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: QC/FF

Lead	303C1R4	1.23e+1	ug/g	4.06e+0	lbs/hr	CE	
Lead	303C1R5	1.40e+1	ug/g	4.59e+0	lbs/hr	CE	
Lead	303C1R6	1.57e+1	ug/g	5.12e+0	lbs/hr	CE	
Lead	303C3R1	2.38e+1	ug/g	7.60e+0	lbs/hr	CE	
Lead	303C3R2	1.49e+1	ug/g	4.77e+0	lbs/hr	CE	
Lead	303C3R3	3.02e+1	ug/g	9.66e+0	lbs/hr	CE	
Mercury	303C1R4	ND	9.00e-2	ug/g	2.97e-2	lbs/hr	CE
Mercury	303C1R5	ND	8.60e-2	ug/g	2.82e-2	lbs/hr	CE
Mercury	303C1R6	ND	8.30e-2	ug/g	2.71e-2	lbs/hr	CE
Mercury	303C3R1		8.80e-2	ug/g	2.81e-2	lbs/hr	CE
Mercury	303C3R2		8.30e-2	ug/g	2.65e-2	lbs/hr	CE
Mercury	303C3R3		7.80e-2	ug/g	2.50e-2	lbs/hr	CE
Silver	303C1R4	ND	8.80e-2	ug/g	2.90e-2	lbs/hr	CE
Silver	303C1R5	ND	5.50e-2	ug/g	1.80e-2	lbs/hr	CE
Silver	303C1R6		7.70e-2	ug/g	2.51e-2	lbs/hr	CE
Silver	303C3R1		5.40e-1	ug/g	1.73e-1	lbs/hr	CE
Silver	303C3R2		4.44e-1	ug/g	1.42e-1	lbs/hr	CE
Silver	303C3R3		4.40e-1	ug/g	1.41e-1	lbs/hr	CE
Thallium	303C1R4		1.77e-1	ug/g	5.84e-2	lbs/hr	CE
Thallium	303C1R5	ND	1.10e-1	ug/g	3.61e-2	lbs/hr	CE
Thallium	303C1R6	ND	1.19e-1	ug/g	3.88e-2	lbs/hr	CE
Thallium	303C3R1		1.79e-1	ug/g	5.72e-2	lbs/hr	CE
Thallium	303C3R2		1.47e-1	ug/g	4.70e-2	lbs/hr	CE
Thallium	303C3R3		1.49e-1	ug/g	4.77e-2	lbs/hr	CE

5. Type: FF ASH

6. Description: RECYCLE

Group: DRY KILN

Location: FF-MAIN

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	303C1R1	4.70e+3	ug/g	2.39e+2	lbs/hr	CE
Chlorine	303C1R2	2.70e+3	ug/g	1.37e+2	lbs/hr	CE
Chlorine	303C1R3	2.60e+3	ug/g	1.32e+2	lbs/hr	CE
Chlorine	303C2R1	3.10e+3	ug/g	1.45e+2	lbs/hr	CE
Chlorine	303C2R2	2.90e+3	ug/g	1.41e+2	lbs/hr	CE
Chlorine	303C2R3	3.00e+3	ug/g	1.45e+2	lbs/hr	CE
Chlorine	303C3R1	3.30e+3	ug/g	1.66e+2	lbs/hr	CE
Chlorine	303C3R2	2.90e+3	ug/g	1.46e+2	lbs/hr	CE
Chlorine	303C3R3	2.70e+3	ug/g	1.36e+2	lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc	
Antimony	303C1R4	ND	3.61e-1	ug/g	1.87e-2	lbs/hr	CE
Antimony	303C1R5	ND	4.54e-1	ug/g	2.33e-2	lbs/hr	CE
Antimony	303C3R1		2.74e-1	ug/g	1.37e-2	lbs/hr	CE
Antimony	303C3R2		2.94e-1	ug/g	1.48e-2	lbs/hr	CE
Antimony	303C3R3		3.99e-1	ug/g	2.00e-2	lbs/hr	CE
Arsenic	303C1R4		2.19e+0	ug/g	1.13e-1	lbs/hr	CE
Arsenic	303C1R5		1.31e+0	ug/g	6.73e-2	lbs/hr	CE
Arsenic	303C3R1		2.22e+0	ug/g	1.11e-1	lbs/hr	CE
Arsenic	303C3R2		2.48e+0	ug/g	1.25e-1	lbs/hr	CE
Arsenic	303C3R3		3.12e+0	ug/g	1.57e-1	lbs/hr	CE
Barium	303C1R4		2.33e+1	ug/g	1.21e+0	lbs/hr	CE
Barium	303C1R5		2.12e+1	ug/g	1.09e+0	lbs/hr	CE
Barium	303C3R1		1.47e+1	ug/g	7.37e-1	lbs/hr	CE
Barium	303C3R2		1.53e+1	ug/g	7.68e-1	lbs/hr	CE
Barium	303C3R3		1.67e+1	ug/g	8.39e-1	lbs/hr	CE
Beryllium	303C1R4		1.59e-1	ug/g	8.24e-3	lbs/hr	CE
Beryllium	303C1R5		2.45e-1	ug/g	1.26e-2	lbs/hr	CE
Beryllium	303C3R1		2.10e-1	ug/g	1.05e-2	lbs/hr	CE
Beryllium	303C3R2		2.19e-1	ug/g	1.10e-2	lbs/hr	CE
Beryllium	303C3R3		2.96e-1	ug/g	1.49e-2	lbs/hr	CE
Cadmium	303C1R4		6.58e-1	ug/g	3.41e-2	lbs/hr	CE
Cadmium	303C1R5		5.16e-1	ug/g	2.65e-2	lbs/hr	CE
Cadmium	303C3R1		3.64e+0	ug/g	1.83e-1	lbs/hr	CE

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU
 4. EP ID: 303 DEVICE NAME: KILN NO. 1

EPA ID: MO981127319
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: QC/FF
 REGION: 7

Cadmium	303C3R2	5.03e+0	ug/g	2.53e-1	lbs/hr	CE
Cadmium	303C3R3	4.32e+0	ug/g	2.17e-1	lbs/hr	CE
Chromium	303C1R4	7.01e+0	ug/g	3.63e-1	lbs/hr	CE
Chromium	303C1R5	6.96e+0	ug/g	3.58e-1	lbs/hr	CE
Chromium	303C3R1	8.55e+0	ug/g	4.29e-1	lbs/hr	CE
Chromium	303C3R2	1.04e+1	ug/g	5.22e-1	lbs/hr	CE
Chromium	303C3R3	6.19e+0	ug/g	3.11e-1	lbs/hr	CE
Lead	303C1R4	2.13e+1	ug/g	1.10e+0	lbs/hr	CE
Lead	303C1R5	2.15e+1	ug/g	1.11e+0	lbs/hr	CE
Lead	303C3R1	1.94e+1	ug/g	9.73e-1	lbs/hr	CE
Lead	303C3R2	2.07e+1	ug/g	1.04e+0	lbs/hr	CE
Lead	303C3R3	3.34e+1	ug/g	1.68e+0	lbs/hr	CE
Mercury	303C1R4	4.15e-1	ug/g	2.15e-2	lbs/hr	CE
Mercury	303C1R5	2.75e-1	ug/g	1.41e-2	lbs/hr	CE
Mercury	303C3R1	6.24e-1	ug/g	3.13e-2	lbs/hr	CE
Mercury	303C3R2	7.98e-1	ug/g	4.01e-2	lbs/hr	CE
Mercury	303C3R3	8.25e-1	ug/g	4.14e-2	lbs/hr	CE
Silver	303C1R4	1.16e-1	ug/g	6.01e-3	lbs/hr	CE
Silver	303C1R5	1.18e-1	ug/g	6.07e-3	lbs/hr	CE
Silver	303C3R1	3.64e-1	ug/g	1.83e-2	lbs/hr	CE
Silver	303C3R2	4.75e-1	ug/g	2.39e-2	lbs/hr	CE
Silver	303C3R3	5.59e-1	ug/g	2.81e-2	lbs/hr	CE
Thallium	303C1R4	4.54e+1	ug/g	2.35e+0	lbs/hr	CE
Thallium	303C1R5	5.89e+1	ug/g	3.03e+0	lbs/hr	CE
Thallium	303C3R1	4.92e+1	ug/g	2.47e+0	lbs/hr	CE
Thallium	303C3R2	5.65e+1	ug/g	2.84e+0	lbs/hr	CE
Thallium	303C3R3	8.88e+1	ug/g	4.46e+0	lbs/hr	CE

6. Description: NONRECYCLE
 Group: DRY KILN

Location: FF-BYPASS

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	303C1R1	9.90e+3	ug/g	1.94e+1	lbs/hr	CE
Chlorine	303C1R2	3.00e+4	ug/g	5.88e+1	lbs/hr	CE
Chlorine	303C1R3	1.60e+4	ug/g	3.14e+1	lbs/hr	CE
Chlorine	303C2R1	7.40e+4	ug/g	4.44e+2	lbs/hr	CE
Chlorine	303C2R2	1.00e+5	ug/g	6.00e+2	lbs/hr	CE
Chlorine	303C2R3	9.30e+4	ug/g	5.58e+2	lbs/hr	CE
Chlorine	303C3R1	1.40e+5	ug/g	8.40e+2	lbs/hr	CE
Chlorine	303C3R2	1.80e+5	ug/g	1.08e+3	lbs/hr	CE
Chlorine	303C3R3	1.70e+5	ug/g	1.02e+3	lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc	
Antimony	303C1R4	ND	3.88e-1	ug/g	7.60e-4	lbs/hr	CE
Antimony	303C1R5	ND	3.05e-1	ug/g	5.98e-4	lbs/hr	CE
Antimony	303C1R6	ND	3.64e-1	ug/g	7.13e-4	lbs/hr	CE
Antimony	303C3R1		7.67e-1	ug/g	4.60e-3	lbs/hr	CE
Antimony	303C3R2		5.88e-1	ug/g	3.53e-3	lbs/hr	CE
Antimony	303C3R3		2.55e+0	ug/g	1.53e-2	lbs/hr	CE
Arsenic	303C1R4		1.60e+0	ug/g	3.14e-3	lbs/hr	CE
Arsenic	303C1R5		1.79e+0	ug/g	3.51e-3	lbs/hr	CE
Arsenic	303C1R6		1.86e+0	ug/g	3.65e-3	lbs/hr	CE
Arsenic	303C3R1		1.81e+1	ug/g	1.09e-1	lbs/hr	CE
Arsenic	303C3R2		1.68e+1	ug/g	1.01e-1	lbs/hr	CE
Arsenic	303C3R3		1.78e+1	ug/g	1.07e-1	lbs/hr	CE
Barium	303C1R4		4.03e+1	ug/g	7.90e-2	lbs/hr	CE
Barium	303C1R5		4.04e+1	ug/g	7.92e-2	lbs/hr	CE
Barium	303C1R6		3.77e+1	ug/g	7.39e-2	lbs/hr	CE
Barium	303C3R1		5.53e+1	ug/g	3.32e-1	lbs/hr	CE
Barium	303C3R2		8.08e+1	ug/g	4.85e-1	lbs/hr	CE
Barium	303C3R3		8.22e+1	ug/g	4.93e-1	lbs/hr	CE
Beryllium	303C1R4		3.88e-1	ug/g	7.60e-4	lbs/hr	CE
Beryllium	303C1R5		3.96e-1	ug/g	7.76e-4	lbs/hr	CE
Beryllium	303C1R6		4.80e-1	ug/g	9.41e-4	lbs/hr	CE

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU
 4. EP ID: 303 DEVICE NAME: KILN NO. 1

EPA ID: MO981127319
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: QC/FF
 REGION: 7

Beryllium	303C3R1		5.28e-1	ug/g	3.17e-3	lbs/hr	CE
Beryllium	303C3R2		4.49e-1	ug/g	2.69e-3	lbs/hr	CE
Beryllium	303C3R3		5.51e-1	ug/g	3.31e-3	lbs/hr	CE
Cadmium	303C1R4		2.12e+0	ug/g	4.16e-3	lbs/hr	CE
Cadmium	303C1R5		2.81e+0	ug/g	5.51e-3	lbs/hr	CE
Cadmium	303C1R6		2.72e+0	ug/g	5.33e-3	lbs/hr	CE
Cadmium	303C3R1		3.46e+2	ug/g	2.08e+0	lbs/hr	CE
Cadmium	303C3R2		5.01e+2	ug/g	3.01e+0	lbs/hr	CE
Cadmium	303C3R3		4.67e+2	ug/g	2.80e+0	lbs/hr	CE
Chromium	303C1R4		1.94e+1	ug/g	3.80e-2	lbs/hr	CE
Chromium	303C1R5		1.81e+1	ug/g	3.55e-2	lbs/hr	CE
Chromium	303C1R6		1.82e+1	ug/g	3.57e-2	lbs/hr	CE
Chromium	303C3R1		3.22e+1	ug/g	1.93e-1	lbs/hr	CE
Chromium	303C3R2		3.85e+1	ug/g	2.31e-1	lbs/hr	CE
Chromium	303C3R3		3.29e+1	ug/g	1.97e-1	lbs/hr	CE
Lead	303C1R4		6.79e+1	ug/g	1.33e-1	lbs/hr	CE
Lead	303C1R5		1.09e+2	ug/g	2.14e-1	lbs/hr	CE
Lead	303C1R6		1.05e+2	ug/g	2.06e-1	lbs/hr	CE
Lead	303C3R1		6.85e+2	ug/g	4.11e+0	lbs/hr	CE
Lead	303C3R2		1.06e+3	ug/g	6.36e+0	lbs/hr	CE
Lead	303C3R3		1.00e+3	ug/g	6.00e+0	lbs/hr	CE
Mercury	303C1R4		1.00e-1	ug/g	1.96e-4	lbs/hr	CE
Mercury	303C1R5	ND	7.80e-2	ug/g	1.53e-4	lbs/hr	CE
Mercury	303C1R6	ND	7.90e-2	ug/g	1.55e-4	lbs/hr	CE
Mercury	303C3R1		9.30e-2	ug/g	5.58e-4	lbs/hr	CE
Mercury	303C3R2		9.40e-2	ug/g	5.64e-4	lbs/hr	CE
Mercury	303C3R3		1.54e-1	ug/g	9.24e-4	lbs/hr	CE
Silver	303C1R4		4.65e-1	ug/g	9.11e-4	lbs/hr	CE
Silver	303C1R5		6.46e-1	ug/g	1.27e-3	lbs/hr	CE
Silver	303C1R6		8.37e-1	ug/g	1.64e-3	lbs/hr	CE
Silver	303C3R1		2.52e+0	ug/g	1.51e-2	lbs/hr	CE
Silver	303C3R2		4.27e+0	ug/g	2.56e-2	lbs/hr	CE
Silver	303C3R3		4.23e+0	ug/g	2.54e-2	lbs/hr	CE
Thallium	303C1R4		3.72e-1	ug/g	7.29e-4	lbs/hr	CE
Thallium	303C1R5		4.57e-1	ug/g	8.96e-4	lbs/hr	CE
Thallium	303C1R6		5.82e-1	ug/g	1.14e-3	lbs/hr	CE
Thallium	303C3R1		1.69e+0	ug/g	1.01e-2	lbs/hr	CE
Thallium	303C3R2		2.26e+0	ug/g	1.36e-2	lbs/hr	CE
Thallium	303C3R3		5.23e+0	ug/g	3.14e-2	lbs/hr	CE

5. Type: FUEL

6. Description: COAL
 Group: DRY KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	303C1R1	1.10e+3 ug/g	1.85e+1 lbs/hr	CE
Chlorine	303C1R2	1.10e+3 ug/g	1.85e+1 lbs/hr	CE
Chlorine	303C1R3	1.10e+3 ug/g	1.85e+1 lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	303C1R4	ND 2.77e-1 ug/g	4.71e-3 lbs/hr	
Antimony	303C1R5	ND 3.27e-1 ug/g	5.43e-3 lbs/hr	
Antimony	303C1R6	ND 3.35e-1 ug/g	5.43e-3 lbs/hr	
Arsenic	303C1R4	2.07e+0 ug/g	3.52e-2 lbs/hr	
Arsenic	303C1R5	1.02e+0 ug/g	1.69e-2 lbs/hr	
Arsenic	303C1R6	2.74e+0 ug/g	4.44e-2 lbs/hr	
Barium	303C1R4	2.33e+1 ug/g	3.96e-1 lbs/hr	
Barium	303C1R5	1.53e+1 ug/g	2.54e-1 lbs/hr	
Barium	303C1R6	2.29e+1 ug/g	3.71e-1 lbs/hr	
Beryllium	303C1R4	6.03e-1 ug/g	1.00e-2 lbs/hr	
Beryllium	303C1R5	3.21e-1 ug/g	5.33e-3 lbs/hr	
Beryllium	303C1R6	8.17e-1 ug/g	1.32e-2 lbs/hr	
Cadmium	303C1R4	1.93e+0 ug/g	3.28e-2 lbs/hr	

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU
 4. EP ID: 303 DEVICE NAME: KILN NO. 1

EPA ID: MO981127319
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: QC/FF REGION: 7

Cadmium	303C1R5	1.62e+0	ug/g	2.69e-2	lbs/hr	
Cadmium	303C1R6	1.87e+0	ug/g	3.03e-2	lbs/hr	
Chromium	303C1R4	9.65e+0	ug/g	1.64e-1	lbs/hr	
Chromium	303C1R5	9.69e+0	ug/g	1.61e-1	lbs/hr	
Chromium	303C1R6	9.19e+0	ug/g	1.49e-1	lbs/hr	
Lead	303C1R4	9.03e+0	ug/g	1.54e-1	lbs/hr	
Lead	303C1R5	4.54e+0	ug/g	7.54e-2	lbs/hr	
Lead	303C1R6	8.25e+0	ug/g	1.34e-1	lbs/hr	
Mercury	303C1R4	1.67e-1	ug/g	2.84e-3	lbs/hr	
Mercury	303C1R5	1.27e-1	ug/g	2.11e-3	lbs/hr	
Mercury	303C1R6	1.19e-1	ug/g	1.93e-3	lbs/hr	
Silver	303C1R4	1.05e-1	ug/g	1.79e-3	lbs/hr	
Silver	303C1R5	1.31e-1	ug/g	2.18e-3	lbs/hr	
Silver	303C1R6	8.00e-2	ug/g	1.30e-3	lbs/hr	
Thallium	303C1R4	ND 1.10e-1	ug/g	1.89e-3	lbs/hr	
Thallium	303C1R5	ND 1.31e-1	ug/g	2.18e-3	lbs/hr	
Thallium	303C1R6	ND 1.34e-1	ug/g	2.17e-3	lbs/hr	

6. Description: COAL
 Group: DRY KILN Location: PRECALCINER Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	303C1R1	9.00e+2	ug/g	2.18e+1	lbs/hr	CE
Chlorine	303C1R2	9.00e+2	ug/g	2.14e+1	lbs/hr	CE
Chlorine	303C1R3	9.00e+2	ug/g	2.12e+1	lbs/hr	CE
Chlorine	303C1R4	9.00e+2	ug/g	2.16e+1	lbs/hr	CE
Chlorine	303C2R1	1.10e+3	ug/g	2.60e+1	lbs/hr	CE
Chlorine	303C2R2	9.00e+2	ug/g	2.17e+1	lbs/hr	CE
Chlorine	303C2R3	8.00e+2	ug/g	1.86e+1	lbs/hr	CE
Chlorine	303C3R1	1.10e+3	ug/g	2.69e+1	lbs/hr	CE
Chlorine	303C3R2	1.00e+3	ug/g	2.51e+1	lbs/hr	CE
Chlorine	303C3R3	1.10e+3	ug/g	2.60e+1	lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	303C1R4	ND 3.53e-1	ug/g	8.48e-3	lbs/hr	
Antimony	303C1R5	ND 3.96e-1	ug/g	9.43e-3	lbs/hr	
Antimony	303C1R6	ND 3.96e-1	ug/g	9.67e-3	lbs/hr	
Antimony	303C3R1	3.83e-1	ug/g	9.39e-3	lbs/hr	
Antimony	303C3R2	3.02e-1	ug/g	7.58e-3	lbs/hr	
Antimony	303C3R3	3.03e-1	ug/g	7.19e-3	lbs/hr	
Arsenic	303C1R4	3.45e+0	ug/g	8.29e-2	lbs/hr	
Arsenic	303C1R5	4.29e+0	ug/g	1.02e-1	lbs/hr	
Arsenic	303C1R6	3.82e+0	ug/g	9.33e-2	lbs/hr	
Arsenic	303C3R1	5.46e+0	ug/g	1.34e-1	lbs/hr	
Arsenic	303C3R2	3.95e+0	ug/g	9.91e-2	lbs/hr	
Arsenic	303C3R3	3.19e+0	ug/g	7.56e-2	lbs/hr	
Barium	303C1R4	4.67e+1	ug/g	1.12e+0	lbs/hr	
Barium	303C1R5	4.62e+1	ug/g	1.10e+0	lbs/hr	
Barium	303C1R6	4.81e+1	ug/g	1.17e+0	lbs/hr	
Barium	303C3R1	6.07e+1	ug/g	1.49e+0	lbs/hr	
Barium	303C3R2	5.15e+1	ug/g	1.29e+0	lbs/hr	
Barium	303C3R3	7.08e+1	ug/g	1.68e+0	lbs/hr	
Beryllium	303C1R4	5.08e-1	ug/g	1.22e-2	lbs/hr	
Beryllium	303C1R5	4.60e-1	ug/g	1.10e-2	lbs/hr	
Beryllium	303C1R6	7.36e-1	ug/g	1.80e-2	lbs/hr	
Beryllium	303C3R1	3.31e-1	ug/g	8.11e-3	lbs/hr	
Beryllium	303C3R2	5.80e-1	ug/g	1.46e-2	lbs/hr	
Beryllium	303C3R3	2.54e-1	ug/g	6.02e-3	lbs/hr	
Cadmium	303C1R4	2.79e+0	ug/g	6.70e-2	lbs/hr	
Cadmium	303C1R5	2.61e+0	ug/g	6.22e-2	lbs/hr	
Cadmium	303C1R6	2.66e+0	ug/g	6.50e-2	lbs/hr	
Cadmium	303C3R1	2.37e-1	ug/g	5.80e-3	lbs/hr	
Cadmium	303C3R2	1.75e-1	ug/g	4.39e-3	lbs/hr	
Cadmium	303C3R3	2.42e-1	ug/g	5.73e-3	lbs/hr	

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU EPA MO981127319 REGION: 7
 4. EP ID: 303 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: QC/FF

Chromium	303C1R4	8.34e+0	ug/g	2.00e-1	lbs/hr	
Chromium	303C1R5	7.52e+0	ug/g	1.79e-1	lbs/hr	
Chromium	303C1R6	8.25e+0	ug/g	2.01e-1	lbs/hr	
Chromium	303C3R1	1.66e+1	ug/g	4.07e-1	lbs/hr	
Chromium	303C3R2	1.57e+1	ug/g	3.94e-1	lbs/hr	
Chromium	303C3R3	2.04e+1	ug/g	4.83e-1	lbs/hr	
Lead	303C1R4	1.12e+1	ug/g	2.69e-1	lbs/hr	
Lead	303C1R5	1.37e+1	ug/g	3.26e-1	lbs/hr	
Lead	303C1R6	1.24e+0	ug/g	3.03e-2	lbs/hr	
Lead	303C3R1	6.30e+0	ug/g	1.54e-1	lbs/hr	
Lead	303C3R2	5.59e+0	ug/g	1.40e-1	lbs/hr	
Lead	303C3R3	3.96e+0	ug/g	9.39e-2	lbs/hr	
Mercury	303C1R4	2.30e-1	ug/g	5.52e-3	lbs/hr	
Mercury	303C1R5	1.21e-1	ug/g	2.88e-3	lbs/hr	
Mercury	303C1R6	1.36e-1	ug/g	3.32e-3	lbs/hr	
Mercury	303C3R1	2.05e-1	ug/g	5.03e-3	lbs/hr	
Mercury	303C3R2	7.80e-2	ug/g	1.96e-3	lbs/hr	
Mercury	303C3R3	1.35e-1	ug/g	3.20e-3	lbs/hr	
Silver	303C1R4	ND	7.10e-2	ug/g	1.71e-3	lbs/hr
Silver	303C1R5	ND	7.90e-2	ug/g	1.88e-3	lbs/hr
Silver	303C1R6	ND	7.90e-2	ug/g	1.93e-3	lbs/hr
Silver	303C3R1		4.89e-1	ug/g	1.20e-2	lbs/hr
Silver	303C3R2		5.46e-1	ug/g	1.37e-2	lbs/hr
Silver	303C3R3		5.35e-1	ug/g	1.27e-2	lbs/hr
Thallium	303C1R4	ND	1.41e-1	ug/g	3.39e-3	lbs/hr
Thallium	303C1R5	ND	1.58e-1	ug/g	3.76e-3	lbs/hr
Thallium	303C1R6	ND	1.58e-1	ug/g	3.86e-3	lbs/hr
Thallium	303C3R1		7.27e-1	ug/g	1.78e-2	lbs/hr
Thallium	303C3R2		6.71e-1	ug/g	1.68e-2	lbs/hr
Thallium	303C3R3		4.18e-1	ug/g	9.90e-3	lbs/hr

5. Type: RAW MATERIAL

6. Description:

Group: DRY KILN

Location: KILN

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc	
Chlorine	303C1R1	3.50e+2	ug/g	1.78e+2	lbs/hr	CE
Chlorine	303C1R2	3.50e+2	ug/g	1.77e+2	lbs/hr	CE
Chlorine	303C1R3	3.40e+2	ug/g	1.73e+2	lbs/hr	CE
Chlorine	303C2R1	4.50e+2	ug/g	2.11e+2	lbs/hr	CC
Chlorine	303C2R2	4.90e+2	ug/g	2.38e+2	lbs/hr	CC
Chlorine	303C2R3	5.10e+2	ug/g	2.46e+2	lbs/hr	CC
Chlorine	303C3R1	5.20e+2	ug/g	2.61e+2	lbs/hr	CC
Chlorine	303C3R2	5.80e+2	ug/g	2.91e+2	lbs/hr	CC
Chlorine	303C3R3	5.20e+2	ug/g	2.61e+2	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc	
Antimony	303C1R4	4.58e-1	ug/g	2.37e-1	lbs/hr	
Antimony	303C1R5	4.10e-1	ug/g	2.11e-1	lbs/hr	
Antimony	303C1R6	ND	3.71e-1	ug/g	1.91e-1	lbs/hr
Antimony	303C3R1		2.95e-1	ug/g	1.48e-1	lbs/hr
Antimony	303C3R2		2.81e-1	ug/g	1.41e-1	lbs/hr
Antimony	303C3R3		3.50e-1	ug/g	1.76e-1	lbs/hr
Arsenic	303C1R4	1.22e+0	ug/g	6.32e-1	lbs/hr	
Arsenic	303C1R5	1.34e+0	ug/g	6.90e-1	lbs/hr	
Arsenic	303C1R6	1.21e+0	ug/g	6.23e-1	lbs/hr	
Arsenic	303C3R1		7.64e-1	ug/g	3.84e-1	lbs/hr
Arsenic	303C3R2		1.43e+0	ug/g	7.19e-1	lbs/hr
Arsenic	303C3R3		7.54e-1	ug/g	3.79e-1	lbs/hr
Barium	303C1R4	1.94e+1	ug/g	1.00e+1	lbs/hr	
Barium	303C1R5	1.95e+1	ug/g	1.00e+1	lbs/hr	
Barium	303C1R6	1.84e+1	ug/g	9.48e+0	lbs/hr	
Barium	303C3R1	1.41e+1	ug/g	7.08e+0	lbs/hr	
Barium	303C3R2	1.24e+1	ug/g	6.23e+0	lbs/hr	

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU
 4. EP ID: 303 DEVICE NAME: KILN NO. 1

EPA ID: MO981127319
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: QC/FF
 REGION: 7

Barium	303C3R3	1.14e+1	ug/g	5.73e+0	lbs/hr	
Beryllium	303C1R4	8.00e-2	ug/g	4.14e-2	lbs/hr	
Beryllium	303C1R5	1.04e-1	ug/g	5.36e-2	lbs/hr	
Beryllium	303C1R6	1.26e-1	ug/g	6.49e-2	lbs/hr	
Beryllium	303C3R1	5.17e-1	ug/g	2.60e-1	lbs/hr	
Beryllium	303C3R2	6.08e-1	ug/g	3.06e-1	lbs/hr	
Beryllium	303C3R3	5.36e-1	ug/g	2.69e-1	lbs/hr	
Cadmium	303C1R4	6.06e-1	ug/g	3.14e-1	lbs/hr	
Cadmium	303C1R5	6.32e-1	ug/g	3.26e-1	lbs/hr	
Cadmium	303C1R6	4.76e-1	ug/g	2.45e-1	lbs/hr	
Cadmium	303C3R1	3.51e+0	ug/g	1.76e+0	lbs/hr	
Cadmium	303C3R2	1.59e+0	ug/g	7.99e-1	lbs/hr	
Cadmium	303C3R3	1.33e+0	ug/g	6.69e-1	lbs/hr	
Chromium	303C1R4	5.54e+0	ug/g	2.87e+0	lbs/hr	
Chromium	303C1R5	5.90e+0	ug/g	3.04e+0	lbs/hr	
Chromium	303C1R6	5.87e+0	ug/g	3.02e+0	lbs/hr	
Chromium	303C3R1	1.87e+1	ug/g	9.39e+0	lbs/hr	
Chromium	303C3R2	2.04e+1	ug/g	1.03e+1	lbs/hr	
Chromium	303C3R3	1.69e+1	ug/g	8.49e+0	lbs/hr	
Lead	303C1R4	1.05e+1	ug/g	5.43e+0	lbs/hr	CE
Lead	303C1R5	3.03e+1	ug/g	1.56e+1	lbs/hr	
Lead	303C1R6	1.47e+1	ug/g	7.57e+0	lbs/hr	
Lead	303C3R1	8.89e+0	ug/g	4.46e+0	lbs/hr	
Lead	303C3R2	1.46e+1	ug/g	7.34e+0	lbs/hr	
Lead	303C3R3	1.15e+1	ug/g	5.78e+0	lbs/hr	
Mercury	303C1R4	2.60e-1	ug/g	1.35e-1	lbs/hr	
Mercury	303C1R5	2.28e-1	ug/g	1.17e-1	lbs/hr	
Mercury	303C1R6	4.73e-1	ug/g	2.44e-1	lbs/hr	
Mercury	303C3R1	4.14e-1	ug/g	2.08e-1	lbs/hr	
Mercury	303C3R2	5.10e-1	ug/g	2.56e-1	lbs/hr	
Mercury	303C3R3	4.95e-1	ug/g	2.49e-1	lbs/hr	
Silver	303C1R4	ND	6.60e-2	ug/g	3.42e-2	lbs/hr
Silver	303C1R5	ND	7.50e-2	ug/g	3.86e-2	lbs/hr
Silver	303C1R6		4.01e+1	ug/g	2.07e+1	lbs/hr
Silver	303C3R1		6.65e-1	ug/g	3.34e-1	lbs/hr
Silver	303C3R2		4.11e-1	ug/g	2.07e-1	lbs/hr
Silver	303C3R3		4.08e-1	ug/g	2.05e-1	lbs/hr
Thallium	303C1R4	7.56e-1	ug/g	3.91e-1	lbs/hr	
Thallium	303C1R5	1.20e+0	ug/g	6.18e-1	lbs/hr	
Thallium	303C1R6	2.21e+0	ug/g	1.14e+0	lbs/hr	
Thallium	303C3R1	4.76e+0	ug/g	2.39e+0	lbs/hr	
Thallium	303C3R2	3.94e+0	ug/g	1.98e+0	lbs/hr	
Thallium	303C3R3	4.44e+0	ug/g	2.23e+0	lbs/hr	

5. Type: SPIKE

6. Description: METALS (CD,CR,PB)
 Group: DRY KILN

Location: KILN

Phase: LIQUID

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Cadmium	303C3R2	2.20e+4	ug/g	4.85e-1 lbs/hr
Cadmium	303C3R3	2.19e+4	ug/g	4.82e-1 lbs/hr
Chromium	303C3R1	8.67e+4	ug/g	1.82e+0 lbs/hr
Chromium	303C3R2	8.27e+4	ug/g	1.82e+0 lbs/hr
Chromium	303C3R3	8.27e+4	ug/g	1.82e+0 lbs/hr
Lead	303C3R2	3.04e+4	ug/g	6.68e-1 lbs/hr
Lead	303C3R3	3.01e+4	ug/g	6.63e-1 lbs/hr

5. Type: WASTE

6. Description:
 Group: DRY KILN

Location: KILN

Phase: SOLID

7. Category: Halogens

Analysis:

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

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU EPA MO981127319 REGION: 7
 4. EP ID: 303 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: QC/FF

Chlorine	303C2R1	1.20e+3	ug/g	1.03e+0	lbs/hr	CC
Chlorine	303C2R2	2.00e+3	ug/g	2.00e+0	lbs/hr	CC
Chlorine	303C2R3	2.40e+3	ug/g	2.18e+0	lbs/hr	CC
Chlorine	303C3R1	1.70e+3	ug/g	4.64e-1	lbs/hr	CC
Chlorine	303C3R2	1.40e+3	ug/g	3.82e-1	lbs/hr	CC
Chlorine	303C3R3	2.80e+3	ug/g	1.11e+0	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	303C3R1	2.43e+0	ug/g	6.61e-4	lbs/hr	
Antimony	303C3R2	1.75e+0	ug/g	4.85e-4	lbs/hr	
Antimony	303C3R3	3.41e+0	ug/g	1.37e-3	lbs/hr	
Arsenic	303C3R1	8.26e+0	ug/g	2.25e-3	lbs/hr	
Arsenic	303C3R2	6.66e+0	ug/g	1.83e-3	lbs/hr	
Arsenic	303C3R3	1.52e+1	ug/g	6.06e-3	lbs/hr	
Barium	303C3R1	3.09e+2	ug/g	8.44e-2	lbs/hr	
Barium	303C3R2	3.68e+2	ug/g	1.01e-1	lbs/hr	
Barium	303C3R3	3.56e+2	ug/g	1.42e-1	lbs/hr	
Beryllium	303C3R1	1.96e-1	ug/g	4.41e-5	lbs/hr	
Beryllium	303C3R2	2.37e-1	ug/g	6.61e-5	lbs/hr	
Beryllium	303C3R3	2.69e-1	ug/g	1.10e-4	lbs/hr	
Cadmium	303C3R1	1.28e+0	ug/g	3.53e-4	lbs/hr	
Cadmium	303C3R2	2.06e+0	ug/g	5.73e-4	lbs/hr	
Cadmium	303C3R3	2.47e+0	ug/g	9.92e-4	lbs/hr	
Chromium	303C3R1	2.04e+2	ug/g	5.57e-2	lbs/hr	
Chromium	303C3R2	1.87e+2	ug/g	5.11e-2	lbs/hr	
Chromium	303C3R3	2.77e+2	ug/g	1.10e-1	lbs/hr	
Lead	303C3R1	6.55e+1	ug/g	1.79e-2	lbs/hr	
Lead	303C3R2	5.46e+1	ug/g	1.49e-2	lbs/hr	
Lead	303C3R3	6.07e+1	ug/g	2.42e-2	lbs/hr	
Mercury	303C3R1	9.71e+0	ug/g	2.65e-3	lbs/hr	
Mercury	303C3R2	9.84e+0	ug/g	2.69e-3	lbs/hr	
Mercury	303C3R3	1.15e+1	ug/g	4.59e-3	lbs/hr	
Silver	303C3R1	6.19e+0	ug/g	1.70e-3	lbs/hr	
Silver	303C3R2	5.03e-1	ug/g	1.32e-4	lbs/hr	
Silver	303C3R3	4.95e-1	ug/g	1.98e-4	lbs/hr	
Thallium	303C3R1	2.70e-1	ug/g	6.61e-5	lbs/hr	
Thallium	303C3R2	5.25e-1	ug/g	1.54e-4	lbs/hr	
Thallium	303C3R3	7.74e-1	ug/g	3.09e-4	lbs/hr	

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
1,1,1-Trichloroethane	303C2R1	4.54e+0	ug/g	3.90e-3	lbs/hr	CE
1,1,1-Trichloroethane	303C2R2	7.46e+0	ug/g	7.45e-3	lbs/hr	CE
1,1,1-Trichloroethane	303C2R3	1.43e+2	ug/g	1.30e-1	lbs/hr	CE
1,1,2-Trichloroethane	303C2R1	1.99e+0	ug/g	1.71e-3	lbs/hr	CE
1,1,2-Trichloroethane	303C2R2	1.25e-1	ug/g	1.25e-4	lbs/hr	CE
1,1,2-Trichloroethane	303C2R3	1.25e-1	ug/g	1.13e-4	lbs/hr	CE
Tetrachloroethene	303C2R1	5.88e+0	ug/g	5.05e-3	lbs/hr	CE
Tetrachloroethene	303C2R2	1.25e-1	ug/g	1.25e-4	lbs/hr	CE
Tetrachloroethene	303C2R3	1.25e-1	ug/g	1.13e-4	lbs/hr	CE
Trichlorotrifluoromethane	303C2R1	1.25e-1	ug/g	1.07e-4	lbs/hr	CE
Trichlorotrifluoromethane	303C2R2	1.25e-1	ug/g	1.25e-4	lbs/hr	CE
Trichlorotrifluoromethane	303C2R3	2.06e+1	ug/g	1.87e-2	lbs/hr	CE

6. Description: TIRES
 Group: DRY KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	303C2R1	1.10e+3	ug/g	3.30e+0	lbs/hr	CC
Chlorine	303C2R2	1.00e+3	ug/g	3.00e+0	lbs/hr	CC

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU
 4. EP ID: 303 DEVICE NAME: KILN NO. 1

EPA ID: MO981127319
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: QC/FF REGION: 7

Chlorine	303C2R3	1.40e+3	ug/g	4.20e+0	lbs/hr	CC
Chlorine	303C3R1	1.20e+3	ug/g	3.60e+0	lbs/hr	CC
Chlorine	303C3R2	1.90e+3	ug/g	5.70e+0	lbs/hr	CC
Chlorine	303C3R3	2.70e+3	ug/g	8.10e+0	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	303C3R1	7.90e+0	ug/g	2.37e-2	lbs/hr	
Antimony	303C3R2	6.53e+0	ug/g	1.96e-2	lbs/hr	
Antimony	303C3R3	1.24e+0	ug/g	3.73e-3	lbs/hr	
Arsenic	303C3R1	9.59e-1	ug/g	2.89e-3	lbs/hr	
Arsenic	303C3R2	3.66e+0	ug/g	1.10e-2	lbs/hr	
Arsenic	303C3R3	1.07e+0	ug/g	3.22e-3	lbs/hr	
Barium	303C3R1	1.32e+1	ug/g	3.96e-2	lbs/hr	
Barium	303C3R2	2.02e+1	ug/g	6.06e-2	lbs/hr	
Barium	303C3R3	6.43e+0	ug/g	1.93e-2	lbs/hr	
Beryllium	303C3R1	5.30e-2	ug/g	1.54e-4	lbs/hr	
Beryllium	303C3R2	8.10e-2	ug/g	2.43e-4	lbs/hr	
Beryllium	303C3R3	9.90e-2	ug/g	2.87e-4	lbs/hr	
Cadmium	303C3R1	1.82e+0	ug/g	5.47e-3	lbs/hr	
Cadmium	303C3R2	1.66e+1	ug/g	4.98e-2	lbs/hr	
Cadmium	303C3R3	3.51e+1	ug/g	1.05e-1	lbs/hr	
Chromium	303C3R1	4.83e+0	ug/g	1.45e-2	lbs/hr	
Chromium	303C3R2	5.68e+1	ug/g	1.71e-1	lbs/hr	
Chromium	303C3R3	9.98e+1	ug/g	3.00e-1	lbs/hr	
Lead	303C3R1	1.08e+1	ug/g	3.24e-2	lbs/hr	
Lead	303C3R2	3.12e+1	ug/g	9.37e-2	lbs/hr	
Lead	303C3R3	2.58e+1	ug/g	7.75e-2	lbs/hr	
Mercury	303C3R1	9.40e-2	ug/g	2.87e-4	lbs/hr	
Mercury	303C3R2	9.60e-2	ug/g	2.87e-4	lbs/hr	
Mercury	303C3R3	8.50e-2	ug/g	2.65e-4	lbs/hr	
Silver	303C3R1	4.60e-1	ug/g	1.39e-3	lbs/hr	
Silver	303C3R2	6.85e-1	ug/g	2.05e-3	lbs/hr	
Silver	303C3R3	6.84e-1	ug/g	2.05e-3	lbs/hr	
Thallium	303C3R1	1.05e-1	ug/g	3.09e-4	lbs/hr	
Thallium	303C3R2	1.62e-1	ug/g	4.85e-4	lbs/hr	
Thallium	303C3R3	1.79e-1	ug/g	5.29e-4	lbs/hr	

6. Description:

Group: DRY KILN

Location: KILN

Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	303C2R1	4.82e+4	ug/g	9.86e+2	lbs/hr	CC
Chlorine	303C2R2	4.65e+4	ug/g	9.31e+2	lbs/hr	CC
Chlorine	303C2R3	4.58e+4	ug/g	9.19e+2	lbs/hr	CC
Chlorine	303C3R1	4.55e+4	ug/g	9.29e+2	lbs/hr	CC
Chlorine	303C3R2	4.50e+4	ug/g	9.35e+2	lbs/hr	CC
Chlorine	303C3R3	5.07e+4	ug/g	1.05e+3	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	303C3R1	1.90e+1	ug/g	3.89e-1	lbs/hr	
Antimony	303C3R2	1.17e+1	ug/g	2.42e-1	lbs/hr	
Antimony	303C3R3	1.08e+1	ug/g	2.25e-1	lbs/hr	
Arsenic	303C3R1	2.00e+2	ug/g	4.09e+0	lbs/hr	
Arsenic	303C3R2	1.85e+2	ug/g	3.85e+0	lbs/hr	
Arsenic	303C3R3	1.68e+2	ug/g	3.49e+0	lbs/hr	
Barium	303C3R1	9.12e+2	ug/g	1.86e+1	lbs/hr	
Barium	303C3R2	8.26e+2	ug/g	1.72e+1	lbs/hr	
Barium	303C3R3	4.90e+2	ug/g	1.02e+1	lbs/hr	
Beryllium	303C3R1	2.40e+0	ug/g	4.91e-2	lbs/hr	

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: LONE STAR INDUSTRIES, INC.
 2. STATE: MO
 3. CITY: CAPE GIRARDEAU
 4. EP ID: 303 DEVICE NAME: KILN NO. 1

EPA MO981127319
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: QC/FF REGION: 7

Beryllium	303C3R2	2.42e+0	ug/g	5.03e-2	lbs/hr	
Beryllium	303C3R3	2.59e+0	ug/g	5.39e-2	lbs/hr	
Cadmium	303C3R1	2.89e+2	ug/g	5.91e+0	lbs/hr	
Cadmium	303C3R2	2.80e+2	ug/g	5.82e+0	lbs/hr	
Cadmium	303C3R3	2.77e+2	ug/g	5.76e+0	lbs/hr	
Chromium	303C3R1	6.12e+2	ug/g	1.25e+1	lbs/hr	
Chromium	303C3R2	6.05e+2	ug/g	1.26e+1	lbs/hr	
Chromium	303C3R3	5.89e+2	ug/g	1.22e+1	lbs/hr	
Lead	303C3R1	5.95e+2	ug/g	1.22e+1	lbs/hr	
Lead	303C3R2	6.11e+2	ug/g	1.27e+1	lbs/hr	
Lead	303C3R3	6.21e+2	ug/g	1.29e+1	lbs/hr	
Mercury	303C3R1	1.84e+0	ug/g	3.76e-2	lbs/hr	
Mercury	303C3R2	1.42e+0	ug/g	2.95e-2	lbs/hr	
Mercury	303C3R3	1.86e+0	ug/g	3.87e-2	lbs/hr	
Silver	303C3R1	3.67e+0	ug/g	7.50e-2	lbs/hr	
Silver	303C3R2	3.94e+0	ug/g	8.19e-2	lbs/hr	
Silver	303C3R3	3.13e+0	ug/g	6.51e-2	lbs/hr	
Thallium	303C3R1	1.09e-1	ug/g	2.23e-3	lbs/hr	
Thallium	303C3R2	1.23e-1	ug/g	2.56e-3	lbs/hr	
Thallium	303C3R3	1.55e-1	ug/g	3.22e-3	lbs/hr	

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
1,1,1-Trichloroethane	303C2R1	1.53e+4	ug/g	3.13e+2	lbs/hr	CE
1,1,1-Trichloroethane	303C2R2	1.34e+4	ug/g	2.68e+2	lbs/hr	CE
1,1,1-Trichloroethane	303C2R3	9.03e+3	ug/g	1.81e+2	lbs/hr	CE
1,1,2-Trichloroethane	303C2R1	4.23e+3	ug/g	8.65e+1	lbs/hr	CE
1,1,2-Trichloroethane	303C2R2	5.49e+3	ug/g	1.10e+2	lbs/hr	CE
1,1,2-Trichloroethane	303C2R3	4.72e+3	ug/g	9.47e+1	lbs/hr	CE
Tetrachloroethene	303C2R1	2.88e+4	ug/g	5.90e+2	lbs/hr	CE
Tetrachloroethene	303C2R2	7.19e+3	ug/g	1.44e+2	lbs/hr	CE
Tetrachloroethene	303C2R3	1.56e+4	ug/g	3.12e+2	lbs/hr	CE
Trichlorotrifluoromethane	303C2R1	1.35e+3	ug/g	2.76e+1	lbs/hr	CE
Trichlorotrifluoromethane	303C2R2	1.40e+3	ug/g	2.81e+1	lbs/hr	CE
Trichlorotrifluoromethane	303C2R3	1.60e+3	ug/g	3.20e+1	lbs/hr	CE

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA PAD083965897

REGION: 3

4. EP ID: 305 DEVICE NAME: KILN NO. 1,2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

5. Type: CLINKER

6. Description: PRODUCT

Group: DRY KILN

Location: KILN 1

Phase: SOLID

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	305C3R1	1.02e+1	ug/g	5.85e-1 lbs/hr	CE
Antimony	305C3R2	9.70e+0	ug/g	5.01e-1 lbs/hr	CE
Antimony	305C3R3	1.03e+1	ug/g	5.75e-1 lbs/hr	CE
Arsenic	305C3R1	4.28e+1	ug/g	2.46e+0 lbs/hr	CE
Arsenic	305C3R2	2.31e+1	ug/g	1.19e+0 lbs/hr	CE
Arsenic	305C3R3	1.59e+1	ug/g	8.87e-1 lbs/hr	CE
Barium	305C3R1	6.03e+2	ug/g	3.46e+1 lbs/hr	CE
Barium	305C3R2	7.21e+2	ug/g	3.72e+1 lbs/hr	CE
Barium	305C3R3	7.39e+2	ug/g	4.12e+1 lbs/hr	CE
Beryllium	305C3R1	ND	1.00e+0 ug/g	5.74e-2 lbs/hr	CE
Beryllium	305C3R2	ND	5.00e-1 ug/g	2.58e-2 lbs/hr	CE
Beryllium	305C3R3	ND	1.00e+0 ug/g	5.58e-2 lbs/hr	CE
Cadmium	305C3R1	1.55e+0	ug/g	8.90e-2 lbs/hr	CE
Cadmium	305C3R2	1.48e+0	ug/g	7.64e-2 lbs/hr	CE
Cadmium	305C3R3	1.58e+0	ug/g	8.82e-2 lbs/hr	CE
Chromium	305C3R1	9.26e+1	ug/g	5.32e+0 lbs/hr	CE
Chromium	305C3R2	9.45e+1	ug/g	4.88e+0 lbs/hr	CE
Chromium	305C3R3	8.73e+1	ug/g	4.87e+0 lbs/hr	CE
Lead	305C3R1	1.56e+1	ug/g	8.95e-1 lbs/hr	CE
Lead	305C3R2	ND	2.50e+0 ug/g	1.29e-1 lbs/hr	CE
Lead	305C3R3	ND	2.50e+0 ug/g	1.40e-1 lbs/hr	CE
Mercury	305C3R1	1.90e-2	ug/g	1.09e-3 lbs/hr	CE
Mercury	305C3R2	3.30e-2	ug/g	1.70e-3 lbs/hr	CE
Mercury	305C3R3	2.30e-2	ug/g	1.28e-3 lbs/hr	CE
Silver	305C3R1	ND	5.00e+0 ug/g	2.87e-1 lbs/hr	CE
Silver	305C3R2	ND	5.00e+0 ug/g	2.58e-1 lbs/hr	CE
Silver	305C3R3	ND	5.00e+0 ug/g	2.79e-1 lbs/hr	CE
Thallium	305C3R1	ND	5.00e-1 ug/g	2.87e-2 lbs/hr	CE
Thallium	305C3R2	ND	5.00e-1 ug/g	2.58e-2 lbs/hr	CE
Thallium	305C3R3	ND	5.00e-1 ug/g	2.79e-2 lbs/hr	CE

6. Description: PRODUCT

Group: DRY KILN

Location: KILN 2

Phase: SOLID

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	305C3R1	6.47e+0	ug/g	3.56e-1 lbs/hr	CE
Antimony	305C3R2	7.41e+0	ug/g	4.16e-1 lbs/hr	CE
Antimony	305C3R3	7.79e+0	ug/g	4.38e-1 lbs/hr	CE
Arsenic	305C3R1	6.62e+1	ug/g	3.64e+0 lbs/hr	CE
Arsenic	305C3R2	4.74e+1	ug/g	2.66e+0 lbs/hr	CE
Arsenic	305C3R3	1.34e+1	ug/g	7.53e-1 lbs/hr	CE
Barium	305C3R1	5.86e+2	ug/g	3.22e+1 lbs/hr	CE
Barium	305C3R2	7.02e+2	ug/g	3.95e+1 lbs/hr	CE
Barium	305C3R3	7.27e+2	ug/g	4.09e+1 lbs/hr	CE
Beryllium	305C3R1	ND	1.00e+0 ug/g	5.50e-2 lbs/hr	CE
Beryllium	305C3R2	ND	5.00e-1 ug/g	2.81e-2 lbs/hr	CE
Beryllium	305C3R3	9.70e-1	ug/g	5.45e-2 lbs/hr	CE
Cadmium	305C3R1	1.10e+0	ug/g	6.05e-2 lbs/hr	CE
Cadmium	305C3R2	1.00e+0	ug/g	5.62e-2 lbs/hr	CE
Cadmium	305C3R3	ND	1.00e+0 ug/g	5.62e-2 lbs/hr	CE
Chromium	305C3R1	9.20e+1	ug/g	5.06e+0 lbs/hr	CE
Chromium	305C3R2	1.02e+2	ug/g	5.73e+0 lbs/hr	CE
Chromium	305C3R3	1.01e+2	ug/g	5.68e+0 lbs/hr	CE
Lead	305C3R1	ND	2.50e+0 ug/g	1.38e-1 lbs/hr	CE
Lead	305C3R2	ND	2.50e+0 ug/g	1.41e-1 lbs/hr	CE
Lead	305C3R3	ND	2.50e+0 ug/g	1.41e-1 lbs/hr	CE

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA ID: PAD083965897

REGION: 3

4. EP ID: 305 DEVICE NAME: KILN NO. 1,2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Mercury	305C3R1	ND	2.70e-2	ug/g	1.48e-3	lbs/hr	CE
Mercury	305C3R2	ND	1.90e-2	ug/g	1.07e-3	lbs/hr	CE
Mercury	305C3R3	ND	1.90e-2	ug/g	1.07e-3	lbs/hr	CE
Silver	305C3R1	ND	5.00e+0	ug/g	2.75e-1	lbs/hr	CE
Silver	305C3R2	ND	5.00e+0	ug/g	2.81e-1	lbs/hr	CE
Silver	305C3R3	ND	5.00e+0	ug/g	2.81e-1	lbs/hr	CE
Thallium	305C3R1	ND	5.00e-1	ug/g	2.75e-2	lbs/hr	CE
Thallium	305C3R2	ND	5.00e-1	ug/g	2.81e-2	lbs/hr	CE
Thallium	305C3R3	ND	5.00e-1	ug/g	2.81e-2	lbs/hr	CE

5. Type: FUEL

6. Description: COAL

Group: DRY KILN

Location: KILN 2

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc	
Chlorine	305C1R1	2.00e+3	ug/g	7.44e+0	lbs/hr	CC
Chlorine	305C1R2	9.00e+2	ug/g	2.97e+0	lbs/hr	CC
Chlorine	305C1R3	9.00e+2	ug/g	2.23e+0	lbs/hr	CC
Chlorine	305C3R1	1.00e+3	ug/g	7.42e+0	lbs/hr	CC
Chlorine	305C3R2	1.10e+3	ug/g	7.33e+0	lbs/hr	CC
Chlorine	305C3R3	1.10e+3	ug/g	8.32e+0	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc		
Antimony	305C3R1	ND	1.21e+1	ug/g	9.00e-2	lbs/hr	CC
Antimony	305C3R2	ND	1.20e+1	ug/g	8.00e-2	lbs/hr	CC
Antimony	305C3R3	ND	1.19e+1	ug/g	9.00e-2	lbs/hr	CC
Arsenic	305C1R1		5.29e+1	ug/g	1.97e-1	lbs/hr	CC
Arsenic	305C1R2		6.29e+1	ug/g	2.07e-1	lbs/hr	CC
Arsenic	305C1R3		5.93e+1	ug/g	1.47e-1	lbs/hr	CC
Arsenic	305C3R1	ND	6.74e+0	ug/g	5.00e-2	lbs/hr	CC
Arsenic	305C3R2		6.01e+0	ug/g	4.00e-2	lbs/hr	CC
Arsenic	305C3R3	ND	6.61e+0	ug/g	5.00e-2	lbs/hr	CC
Barium	305C1R1		2.09e+1	ug/g	7.78e-2	lbs/hr	CC
Barium	305C1R2		2.05e+1	ug/g	6.77e-2	lbs/hr	CC
Barium	305C1R3		1.86e+1	ug/g	4.61e-2	lbs/hr	CC
Barium	305C3R1		7.01e+1	ug/g	5.20e-1	lbs/hr	CC
Barium	305C3R2		6.46e+1	ug/g	4.30e-1	lbs/hr	CC
Barium	305C3R3		9.13e+1	ug/g	6.90e-1	lbs/hr	CC
Beryllium	305C1R1		1.66e+0	ug/g	6.17e-3	lbs/hr	CC
Beryllium	305C1R2		1.54e+0	ug/g	5.07e-3	lbs/hr	CC
Beryllium	305C1R3		1.60e+0	ug/g	3.97e-3	lbs/hr	CC
Beryllium	305C3R1		2.70e+0	ug/g	2.00e-2	lbs/hr	CC
Beryllium	305C3R2		3.00e+0	ug/g	2.00e-2	lbs/hr	CC
Beryllium	305C3R3		2.65e+0	ug/g	2.00e-2	lbs/hr	CC
Cadmium	305C1R1		1.72e+0	ug/g	6.39e-3	lbs/hr	CC
Cadmium	305C1R2		1.40e+0	ug/g	4.63e-3	lbs/hr	CC
Cadmium	305C1R3		1.33e+0	ug/g	3.31e-3	lbs/hr	CC
Cadmium	305C3R1	ND	2.70e+0	ug/g	2.00e-2	lbs/hr	CC
Cadmium	305C3R2	ND	3.00e+0	ug/g	2.00e-2	lbs/hr	CC
Cadmium	305C3R3	ND	2.65e+0	ug/g	2.00e-2	lbs/hr	CC
Chromium	305C1R1		8.89e+0	ug/g	3.31e-2	lbs/hr	CC
Chromium	305C1R2		8.68e+0	ug/g	2.87e-2	lbs/hr	CC
Chromium	305C1R3		5.87e+0	ug/g	1.46e-2	lbs/hr	CC
Chromium	305C3R1		1.21e+1	ug/g	9.00e-2	lbs/hr	CC
Chromium	305C3R2		1.20e+1	ug/g	8.00e-2	lbs/hr	CC
Chromium	305C3R3		1.98e+1	ug/g	1.50e-1	lbs/hr	CC
Lead	305C1R1		1.54e+1	ug/g	5.73e-2	lbs/hr	CC
Lead	305C1R2		1.80e+1	ug/g	5.95e-2	lbs/hr	CC
Lead	305C1R3		1.33e+1	ug/g	3.31e-2	lbs/hr	CC
Lead	305C3R1		2.70e+1	ug/g	2.00e-1	lbs/hr	CC
Lead	305C3R2		4.95e+1	ug/g	3.30e-1	lbs/hr	CC
Lead	305C3R3		3.97e+0	ug/g	3.00e-2	lbs/hr	CC
Mercury	305C1R1		2.96e-1	ug/g	1.10e-3	lbs/hr	CC

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA PAD083965897

REGION: 3

4. EP ID: 305 DEVICE NAME: KILN NO. 1,2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Mercury	305C1R2		2.00e-1	ug/g	6.61e-4	lbs/hr	CC
Mercury	305C1R3		1.78e-1	ug/g	4.41e-4	lbs/hr	CC
Mercury	305C3R1	ND	1.35e+0	ug/g	1.00e-2	lbs/hr	CC
Mercury	305C3R2	ND	1.50e+0	ug/g	1.00e-2	lbs/hr	CC
Mercury	305C3R3		1.32e+0	ug/g	1.00e-2	lbs/hr	CC
Silver	305C3R1	ND	5.39e+0	ug/g	4.00e-2	lbs/hr	CC
Silver	305C3R2	ND	4.50e+0	ug/g	3.00e-2	lbs/hr	CC
Silver	305C3R3	ND	5.29e+0	ug/g	4.00e-2	lbs/hr	CC
Thallium	305C3R1		1.35e+0	ug/g	1.00e-2	lbs/hr	CC
Thallium	305C3R2		3.00e+0	ug/g	2.00e-2	lbs/hr	CC
Thallium	305C3R3		1.72e+0	ug/g	1.30e-2	lbs/hr	CC

6. Description: COAL

Group: DRY KILN

Location: KILN 1

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	305C3R1	1.30e+3	ug/g	5.25e+0 lbs/hr	CC
Chlorine	305C3R2	9.00e+2	ug/g	3.69e+0 lbs/hr	CC
Chlorine	305C3R3	1.40e+3	ug/g	7.84e+0 lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	305C3R1	ND	1.24e+1 ug/g	5.00e-2 lbs/hr	CC
Antimony	305C3R2	ND	1.22e+1 ug/g	5.00e-2 lbs/hr	CC
Antimony	305C3R3	ND	1.25e+1 ug/g	7.00e-2 lbs/hr	CC
Arsenic	305C3R1		7.43e+0 ug/g	3.00e-2 lbs/hr	CC
Arsenic	305C3R2	ND	7.32e+0 ug/g	3.00e-2 lbs/hr	CC
Arsenic	305C3R3	ND	7.14e+0 ug/g	4.00e-2 lbs/hr	CC
Barium	305C3R1		6.44e+1 ug/g	2.60e-1 lbs/hr	CC
Barium	305C3R2		8.29e+1 ug/g	3.40e-1 lbs/hr	CC
Barium	305C3R3		5.54e+1 ug/g	3.10e-1 lbs/hr	CC
Beryllium	305C3R1		2.48e+0 ug/g	1.00e-2 lbs/hr	CC
Beryllium	305C3R2		2.44e+0 ug/g	1.00e-2 lbs/hr	CC
Beryllium	305C3R3		1.79e+0 ug/g	1.00e-2 lbs/hr	CC
Cadmium	305C3R1	ND	2.48e+0 ug/g	1.00e-2 lbs/hr	CC
Cadmium	305C3R2	ND	2.44e+0 ug/g	1.00e-2 lbs/hr	CC
Cadmium	305C3R3	ND	1.79e+0 ug/g	1.00e-2 lbs/hr	CC
Chromium	305C3R1		9.90e+0 ug/g	4.00e-2 lbs/hr	CC
Chromium	305C3R2		1.22e+1 ug/g	5.00e-2 lbs/hr	CC
Chromium	305C3R3		1.25e+1 ug/g	7.00e-2 lbs/hr	CC
Lead	305C3R1		1.24e+1 ug/g	5.00e-2 lbs/hr	CC
Lead	305C3R2		2.44e+1 ug/g	1.00e-1 lbs/hr	CC
Lead	305C3R3		1.43e+1 ug/g	8.00e-2 lbs/hr	CC
Mercury	305C3R1	ND	2.48e+0 ug/g	1.00e-2 lbs/hr	CC
Mercury	305C3R2	ND	2.44e+0 ug/g	1.00e-2 lbs/hr	CC
Mercury	305C3R3	ND	1.79e+0 ug/g	1.00e-2 lbs/hr	CC
Silver	305C3R1	ND	4.95e+0 ug/g	2.00e-2 lbs/hr	CC
Silver	305C3R2	ND	4.88e+0 ug/g	2.00e-2 lbs/hr	CC
Silver	305C3R3	ND	5.36e+0 ug/g	3.00e-2 lbs/hr	CC
Thallium	305C3R1	ND	2.48e+0 ug/g	1.00e-2 lbs/hr	CC
Thallium	305C3R2		2.44e+0 ug/g	1.00e-2 lbs/hr	CC
Thallium	305C3R3	ND	1.79e+0 ug/g	1.00e-2 lbs/hr	CC

5. Type: RAW MATERIAL

6. Description: LIME/SILICA/IRON

Group: DRY KILN

Location: KILN 2

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	305C1R1	1.40e+4	ug/g	1.49e+3 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA ID: PAD083965897

REGION: 3

4. EP ID: 305 DEVICE NAME: KILN NO. 1,2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Chlorine	305C1R2	2.00e+2	ug/g	2.09e+1	lbs/hr	CC
Chlorine	305C1R3	1.40e+2	ug/g	1.47e+1	lbs/hr	CC
Chlorine	305C3R1	1.20e+2	ug/g	1.08e+1	lbs/hr	CC
Chlorine	305C3R2	1.10e+2	ug/g	1.01e+1	lbs/hr	CC
Chlorine	305C3R3	1.20e+2	ug/g	1.11e+1	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	305C3R1	ND	5.00e+0 ug/g	4.50e-1	lbs/hr	CC
Antimony	305C3R2	ND	4.99e+0 ug/g	4.60e-1	lbs/hr	CC
Antimony	305C3R3	ND	4.99e+0 ug/g	4.60e-1	lbs/hr	CC
Arsenic	305C1R1		5.91e+0 ug/g	6.29e-1	lbs/hr	CC
Arsenic	305C1R2		5.61e+0 ug/g	5.87e-1	lbs/hr	CC
Arsenic	305C1R3		4.95e+0 ug/g	5.18e-1	lbs/hr	CC
Arsenic	305C3R1		1.99e+1 ug/g	1.79e+0	lbs/hr	CC
Arsenic	305C3R2		3.52e+1 ug/g	3.25e+0	lbs/hr	CC
Arsenic	305C3R3	ND	2.49e+0 ug/g	2.30e-1	lbs/hr	CC
Barium	305C1R1		8.48e+1 ug/g	9.02e+0	lbs/hr	CC
Barium	305C1R2		9.16e+1 ug/g	9.59e+0	lbs/hr	CC
Barium	305C1R3		9.15e+1 ug/g	9.58e+0	lbs/hr	CC
Barium	305C3R1		2.04e+2 ug/g	1.84e+1	lbs/hr	CC
Barium	305C3R2		2.35e+2 ug/g	2.17e+1	lbs/hr	CC
Barium	305C3R3		6.44e+2 ug/g	5.94e+1	lbs/hr	CC
Beryllium	305C1R1		1.41e-1 ug/g	1.50e-2	lbs/hr	CC
Beryllium	305C1R2		1.41e-1 ug/g	1.48e-2	lbs/hr	CC
Beryllium	305C1R3		1.33e-1 ug/g	1.39e-2	lbs/hr	CC
Beryllium	305C3R1	ND	1.00e+0 ug/g	9.00e-2	lbs/hr	CC
Beryllium	305C3R2	ND	9.76e-1 ug/g	9.00e-2	lbs/hr	CC
Beryllium	305C3R3		6.51e-1 ug/g	6.00e-2	lbs/hr	CC
Cadmium	305C1R1		1.00e+0 ug/g	1.06e-1	lbs/hr	CC
Cadmium	305C1R2		1.20e+0 ug/g	1.26e-1	lbs/hr	CC
Cadmium	305C1R3		1.24e+0 ug/g	1.29e-1	lbs/hr	CC
Cadmium	305C3R1		1.56e+0 ug/g	1.40e-1	lbs/hr	CC
Cadmium	305C3R2		1.30e+0 ug/g	1.20e-1	lbs/hr	CC
Cadmium	305C3R3		2.49e+0 ug/g	2.30e-1	lbs/hr	CC
Chromium	305C1R1		5.10e+0 ug/g	5.43e-1	lbs/hr	CC
Chromium	305C1R2		6.21e+0 ug/g	6.50e-1	lbs/hr	CC
Chromium	305C1R3		5.03e+0 ug/g	5.26e-1	lbs/hr	CC
Chromium	305C3R1		5.33e+0 ug/g	4.80e-1	lbs/hr	CC
Chromium	305C3R2		5.53e+0 ug/g	5.10e-1	lbs/hr	CC
Chromium	305C3R3		1.81e+1 ug/g	1.67e+0	lbs/hr	CC
Lead	305C1R1		7.91e+0 ug/g	8.42e-1	lbs/hr	CC
Lead	305C1R2		1.18e+1 ug/g	1.24e+0	lbs/hr	CC
Lead	305C1R3		1.62e+1 ug/g	1.70e+0	lbs/hr	CC
Lead	305C3R1		5.78e+0 ug/g	5.20e-1	lbs/hr	CC
Lead	305C3R2		3.47e+0 ug/g	3.20e-1	lbs/hr	CC
Lead	305C3R3		7.81e+0 ug/g	7.20e-1	lbs/hr	CC
Mercury	305C1R1		3.21e-1 ug/g	3.42e-2	lbs/hr	CC
Mercury	305C1R2		3.20e-1 ug/g	3.35e-2	lbs/hr	CC
Mercury	305C1R3		2.63e-1 ug/g	2.76e-2	lbs/hr	CC
Mercury	305C3R1	ND	1.11e-1 ug/g	1.00e-2	lbs/hr	CC
Mercury	305C3R2		1.08e-1 ug/g	1.00e-2	lbs/hr	CC
Mercury	305C3R3	ND	1.08e-1 ug/g	1.00e-2	lbs/hr	CC
Silver	305C3R1	ND	5.00e+0 ug/g	4.50e-1	lbs/hr	CC
Silver	305C3R2	ND	4.99e+0 ug/g	4.60e-1	lbs/hr	CC
Silver	305C3R3	ND	4.99e+0 ug/g	4.60e-1	lbs/hr	CC
Thallium	305C3R1	ND	5.56e-1 ug/g	5.00e-2	lbs/hr	CC
Thallium	305C3R2	ND	5.42e-1 ug/g	5.00e-2	lbs/hr	CC
Thallium	305C3R3		8.68e-1 ug/g	8.00e-2	lbs/hr	CC

6. Description: LIME/SILICA/IRON

Group: DRY KILN

Location: KILN 1

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	305C3R1		7.00e+1 ug/g	6.58e+0	lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA ID: PAD083965897

REGION: 3

4. EP ID: 305 DEVICE NAME: KILN NO. 1,2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Chlorine	305C3R2	7.00e+1	ug/g	5.92e+0	lbs/hr	CC
Chlorine	305C3R3	1.88e+2	ug/g	1.72e+1	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	305C3R1	ND	5.00e+0 ug/g	4.70e-1	lbs/hr	CC
Antimony	305C3R2	ND	4.96e+0 ug/g	4.20e-1	lbs/hr	CC
Antimony	305C3R3	ND	5.03e+0 ug/g	4.60e-1	lbs/hr	CC
Arsenic	305C3R1		1.94e+1 ug/g	1.82e+0	lbs/hr	CC
Arsenic	305C3R2		3.53e+1 ug/g	2.99e+0	lbs/hr	CC
Arsenic	305C3R3		2.51e+1 ug/g	2.29e+0	lbs/hr	CC
Barium	305C3R1		2.03e+2 ug/g	1.91e+1	lbs/hr	CC
Barium	305C3R2		2.35e+2 ug/g	1.99e+1	lbs/hr	CC
Barium	305C3R3		2.27e+2 ug/g	2.08e+1	lbs/hr	CC
Beryllium	305C3R1	ND	9.57e-1 ug/g	9.00e-2	lbs/hr	CC
Beryllium	305C3R2	ND	9.46e-1 ug/g	8.00e-2	lbs/hr	CC
Beryllium	305C3R3	ND	9.85e-1 ug/g	9.00e-2	lbs/hr	CC
Cadmium	305C3R1		1.49e+0 ug/g	1.40e-1	lbs/hr	CC
Cadmium	305C3R2		1.30e+0 ug/g	1.10e-1	lbs/hr	CC
Cadmium	305C3R3		1.42e+0 ug/g	1.30e-1	lbs/hr	CC
Chromium	305C3R1		4.68e+0 ug/g	4.40e-1	lbs/hr	CC
Chromium	305C3R2		5.56e+0 ug/g	4.70e-1	lbs/hr	CC
Chromium	305C3R3		5.80e+0 ug/g	5.30e-1	lbs/hr	CC
Lead	305C3R1		5.53e+0 ug/g	5.20e-1	lbs/hr	CC
Lead	305C3R2		3.43e+0 ug/g	2.90e-1	lbs/hr	CC
Lead	305C3R3		4.70e+0 ug/g	4.30e-1	lbs/hr	CC
Mercury	305C3R1	ND	1.06e-1 ug/g	1.00e-2	lbs/hr	CC
Mercury	305C3R2	ND	1.18e-1 ug/g	1.00e-2	lbs/hr	CC
Mercury	305C3R3	ND	1.09e-1 ug/g	1.00e-2	lbs/hr	CC
Silver	305C3R1	ND	5.00e+0 ug/g	4.70e-1	lbs/hr	CC
Silver	305C3R2	ND	4.96e+0 ug/g	4.20e-1	lbs/hr	CC
Silver	305C3R3	ND	5.03e+0 ug/g	4.60e-1	lbs/hr	CC
Thallium	305C3R1	ND	5.32e-1 ug/g	5.00e-2	lbs/hr	CC
Thallium	305C3R2	ND	4.73e-1 ug/g	4.00e-2	lbs/hr	CC
Thallium	305C3R3		6.56e-1 ug/g	6.00e-2	lbs/hr	CC

5. Type: SPIKE

6. Description: METALS (AS,BE,CD,CR,PB)

Group: DRY KILN

Location: KILN 2

Phase: LIQUID

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Arsenic	305C1R1		0.00e+0	1.75e+0	lbs/hr	
Arsenic	305C1R2		0.00e+0	1.75e+0	lbs/hr	
Arsenic	305C1R3		0.00e+0	1.75e+0	lbs/hr	
Beryllium	305C1R1		0.00e+0	8.40e-2	lbs/hr	
Beryllium	305C1R2		0.00e+0	6.48e-2	lbs/hr	
Beryllium	305C1R3		0.00e+0	2.80e-2	lbs/hr	
Cadmium	305C1R1		0.00e+0	6.44e-1	lbs/hr	
Cadmium	305C1R2		0.00e+0	6.44e-1	lbs/hr	
Cadmium	305C1R3		0.00e+0	6.44e-1	lbs/hr	

5. Type: WASTE

6. Description: SPIKED METALS (AS,BE,CD,CR,PB)

Group: DRY KILN

Location: KILN 2

Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	305C1R1		3.45e+4 ug/g	1.95e+2	lbs/hr	CC
Chlorine	305C1R2		3.40e+4 ug/g	1.93e+2	lbs/hr	CC

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA PAD083965897

REGION: 3

4. EP ID: 305 DEVICE NAME: KILN NO. 1,2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Chlorine	305C1R3	4.10e+4	ug/g	2.10e+2	lbs/hr	CC
Chlorine	305C3R1	1.29e+4	ug/g	6.03e+1	lbs/hr	CC
Chlorine	305C3R2	2.70e+3	ug/g	1.14e+1	lbs/hr	CC
Chlorine	305C3R3	1.05e+4	ug/g	5.05e+1	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	305C3R1	ND	1.07e+1 ug/g	5.00e-2	lbs/hr	CC
Antimony	305C3R2	ND	1.18e+1 ug/g	5.00e-2	lbs/hr	CC
Antimony	305C3R3	ND	1.25e+1 ug/g	6.00e-2	lbs/hr	CC
Arsenic	305C1R1		2.82e+1 ug/g	1.60e-1	lbs/hr	CC
Arsenic	305C1R2		4.42e+1 ug/g	2.51e-1	lbs/hr	CC
Arsenic	305C1R3		3.89e+1 ug/g	1.99e-1	lbs/hr	CC
Arsenic	305C3R1		1.60e+1 ug/g	7.50e-2	lbs/hr	CC
Arsenic	305C3R2		2.01e+1 ug/g	8.50e-2	lbs/hr	CC
Arsenic	305C3R3		2.08e+1 ug/g	1.00e-1	lbs/hr	CC
Barium	305C1R1		5.69e+1 ug/g	3.22e-1	lbs/hr	CC
Barium	305C1R2		8.08e+1 ug/g	4.59e-1	lbs/hr	CC
Barium	305C1R3		5.96e+1 ug/g	3.05e-1	lbs/hr	CC
Barium	305C3R1		2.22e+2 ug/g	1.04e+0	lbs/hr	CC
Barium	305C3R2		9.91e+2 ug/g	4.20e+0	lbs/hr	CC
Barium	305C3R3		1.69e+3 ug/g	8.12e+0	lbs/hr	CC
Beryllium	305C1R1		1.13e+1 ug/g	6.39e-2	lbs/hr	CC
Beryllium	305C1R2		5.32e+0 ug/g	3.02e-2	lbs/hr	CC
Beryllium	305C1R3		1.07e+1 ug/g	5.49e-2	lbs/hr	CC
Beryllium	305C3R1		9.61e+0 ug/g	4.50e-2	lbs/hr	CC
Beryllium	305C3R2		1.30e+1 ug/g	5.50e-2	lbs/hr	CC
Beryllium	305C3R3		1.25e+1 ug/g	6.00e-2	lbs/hr	CC
Cadmium	305C1R1		1.48e+2 ug/g	8.38e-1	lbs/hr	CC
Cadmium	305C1R2		1.79e+2 ug/g	1.02e+0	lbs/hr	CC
Cadmium	305C1R3		1.41e+2 ug/g	7.23e-1	lbs/hr	CC
Cadmium	305C3R1		1.11e+2 ug/g	5.20e-1	lbs/hr	CC
Cadmium	305C3R2		1.37e+2 ug/g	5.80e-1	lbs/hr	CC
Cadmium	305C3R3		9.79e+1 ug/g	4.70e-1	lbs/hr	CC
Chromium	305C1R1		2.50e+3 ug/g	1.41e+1	lbs/hr	CC
Chromium	305C1R2		2.57e+3 ug/g	1.46e+1	lbs/hr	CC
Chromium	305C1R3		1.45e+3 ug/g	7.40e+0	lbs/hr	CC
Chromium	305C3R1		1.08e+3 ug/g	5.08e+0	lbs/hr	CC
Chromium	305C3R2		1.19e+3 ug/g	5.05e+0	lbs/hr	CC
Chromium	305C3R3		1.12e+3 ug/g	5.37e+0	lbs/hr	CC
Lead	305C1R1		4.72e+3 ug/g	2.67e+1	lbs/hr	CC
Lead	305C1R2		4.02e+3 ug/g	2.28e+1	lbs/hr	CC
Lead	305C1R3		3.94e+3 ug/g	2.02e+1	lbs/hr	CC
Lead	305C3R1		8.05e+2 ug/g	3.77e+0	lbs/hr	CC
Lead	305C3R2		3.21e+3 ug/g	1.36e+1	lbs/hr	CC
Lead	305C3R3		2.65e+3 ug/g	1.27e+1	lbs/hr	CC
Mercury	305C1R1		8.96e-1 ug/g	5.07e-3	lbs/hr	CC
Mercury	305C1R2		9.70e-1 ug/g	5.51e-3	lbs/hr	CC
Mercury	305C1R3		7.32e-1 ug/g	3.75e-3	lbs/hr	CC
Mercury	305C3R1		4.38e+3 ug/g	2.05e+1	lbs/hr	CC
Mercury	305C3R2		3.06e+3 ug/g	1.30e+1	lbs/hr	CC
Mercury	305C3R3		4.49e+3 ug/g	2.16e+1	lbs/hr	CC
Silver	305C3R1	ND	4.27e+0 ug/g	2.00e-2	lbs/hr	CC
Silver	305C3R2	ND	4.72e+0 ug/g	2.00e-2	lbs/hr	CC
Silver	305C3R3	ND	4.17e+0 ug/g	2.00e-2	lbs/hr	CC
Thallium	305C3R1	ND	2.13e+0 ug/g	1.00e-2	lbs/hr	CC
Thallium	305C3R2	ND	2.36e+0 ug/g	1.00e-2	lbs/hr	CC
Thallium	305C3R3	ND	2.08e+0 ug/g	1.00e-2	lbs/hr	CC

6. Description: SPIKED METALS (AS,BE,CD,CR,PB)

Group: DRY KILN

Location: KILN 1

Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Chlorine	305C3R1	2.03e+4	ug/g	1.01e+2	lbs/hr	CC
Chlorine	305C3R2	1.31e+4	ug/g	5.72e+1	lbs/hr	CC

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA ID: PAD083965897

REGION: 3

4. EP ID: 305 DEVICE NAME: KILN NO. 1,2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Chlorine	305C3R3	2.24e+4	ug/g	1.01e+2	lbs/hr	CC
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7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc
Antimony	305C3R1	ND	1.21e+1 ug/g	6.00e-2	lbs/hr	CC
Antimony	305C3R2	ND	1.15e+1 ug/g	5.00e-2	lbs/hr	CC
Antimony	305C3R3	ND	1.11e+1 ug/g	5.00e-2	lbs/hr	CC
Arsenic	305C3R1		1.51e+1 ug/g	7.50e-2	lbs/hr	CC
Arsenic	305C3R2		1.95e+1 ug/g	8.50e-2	lbs/hr	CC
Arsenic	305C3R3		2.22e+1 ug/g	1.00e-1	lbs/hr	CC
Barium	305C3R1		1.04e+2 ug/g	5.20e-1	lbs/hr	CC
Barium	305C3R2		1.97e+2 ug/g	8.60e-1	lbs/hr	CC
Barium	305C3R3		1.50e+3 ug/g	6.77e+0	lbs/hr	CC
Beryllium	305C3R1		9.04e+0 ug/g	4.50e-2	lbs/hr	CC
Beryllium	305C3R2		1.26e+1 ug/g	5.50e-2	lbs/hr	CC
Beryllium	305C3R3		1.33e+1 ug/g	6.00e-2	lbs/hr	CC
Cadmium	305C3R1		1.04e+2 ug/g	5.20e-1	lbs/hr	CC
Cadmium	305C3R2		1.19e+2 ug/g	5.20e-1	lbs/hr	CC
Cadmium	305C3R3		1.09e+2 ug/g	4.90e-1	lbs/hr	CC
Chromium	305C3R1		9.32e+2 ug/g	4.64e+0	lbs/hr	CC
Chromium	305C3R2		2.04e+3 ug/g	8.88e+0	lbs/hr	CC
Chromium	305C3R3		1.18e+3 ug/g	5.32e+0	lbs/hr	CC
Lead	305C3R1		4.30e+2 ug/g	2.14e+0	lbs/hr	CC
Lead	305C3R2		1.54e+3 ug/g	6.70e+0	lbs/hr	CC
Lead	305C3R3		2.61e+3 ug/g	1.17e+1	lbs/hr	CC
Mercury	305C3R1		3.75e+3 ug/g	1.87e+1	lbs/hr	CC
Mercury	305C3R2		3.89e+3 ug/g	1.70e+1	lbs/hr	CC
Mercury	305C3R3		3.15e+3 ug/g	1.42e+1	lbs/hr	CC
Silver	305C3R1	ND	4.02e+0 ug/g	2.00e-2	lbs/hr	CC
Silver	305C3R2	ND	4.59e+0 ug/g	2.00e-2	lbs/hr	CC
Silver	305C3R3	ND	4.44e+0 ug/g	2.00e-2	lbs/hr	CC
Thallium	305C3R1	ND	2.01e+0 ug/g	1.00e-2	lbs/hr	CC
Thallium	305C3R2	ND	2.29e+0 ug/g	1.00e-2	lbs/hr	CC
Thallium	305C3R3	ND	2.22e+0 ug/g	1.00e-2	lbs/hr	CC

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA ID: PAD083965897

REGION: 3

4. EP ID: 335 DEVICE NAME: KILN NO. 3

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

5. Type: CLINKER

6. Description: PRODUCT

Group: DRY KILN

Location: KILN

Phase: SOLID

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	335C1R1	ND	5.00e+0 ug/g	3.36e-1 lbs/hr	CE
Antimony	335C1R2	ND	5.00e+0 ug/g	3.44e-1 lbs/hr	CE
Antimony	335C1R3	ND	5.00e+0 ug/g	3.44e-1 lbs/hr	CE
Arsenic	335C1R1		3.50e+1 ug/g	2.35e+0 lbs/hr	CE
Arsenic	335C1R2		8.46e+0 ug/g	5.82e-1 lbs/hr	CE
Arsenic	335C1R3		9.45e+0 ug/g	6.50e-1 lbs/hr	CE
Barium	335C1R1		7.23e+2 ug/g	4.86e+1 lbs/hr	CE
Barium	335C1R2		7.56e+2 ug/g	5.20e+1 lbs/hr	CE
Barium	335C1R3		7.30e+2 ug/g	5.02e+1 lbs/hr	CE
Beryllium	335C1R1	ND	1.00e+0 ug/g	6.72e-2 lbs/hr	CE
Beryllium	335C1R2		1.17e+0 ug/g	8.05e-2 lbs/hr	CE
Beryllium	335C1R3	ND	1.00e+0 ug/g	6.88e-2 lbs/hr	CE
Cadmium	335C1R1		2.18e+0 ug/g	1.46e-1 lbs/hr	CE
Cadmium	335C1R2		1.54e+0 ug/g	1.06e-1 lbs/hr	CE
Cadmium	335C1R3		1.57e+0 ug/g	1.08e-1 lbs/hr	CE
Chromium	335C1R1		9.35e+1 ug/g	6.28e+0 lbs/hr	CE
Chromium	335C1R2		9.63e+1 ug/g	6.63e+0 lbs/hr	CE
Chromium	335C1R3		8.32e+1 ug/g	5.72e+0 lbs/hr	CE
Lead	335C1R1	ND	2.85e+1 ug/g	1.92e+0 lbs/hr	CE
Lead	335C1R2	ND	2.50e+0 ug/g	1.72e-1 lbs/hr	CE
Lead	335C1R3		1.23e+1 ug/g	8.46e-1 lbs/hr	CE
Mercury	335C1R1	ND	1.60e-2 ug/g	1.08e-3 lbs/hr	CE
Mercury	335C1R2	ND	1.60e-2 ug/g	1.10e-3 lbs/hr	CE
Mercury	335C1R3	ND	1.60e-2 ug/g	1.10e-3 lbs/hr	CE
Silver	335C1R1	ND	5.00e+0 ug/g	3.36e-1 lbs/hr	CE
Silver	335C1R2	ND	5.00e+0 ug/g	3.44e-1 lbs/hr	CE
Silver	335C1R3	ND	5.00e+0 ug/g	3.44e-1 lbs/hr	CE
Thallium	335C1R1	ND	5.00e-1 ug/g	3.36e-2 lbs/hr	CE
Thallium	335C1R2	ND	5.00e-1 ug/g	3.44e-2 lbs/hr	CE
Thallium	335C1R3	ND	5.00e-1 ug/g	3.44e-2 lbs/hr	CE

5. Type: FUEL

6. Description: COAL

Group: DRY KILN

Location: KILN

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	335C1R1		1.80e+3 ug/g	1.38e+1 lbs/hr	CC
Chlorine	335C1R2		2.40e+3 ug/g	1.77e+1 lbs/hr	CC
Chlorine	335C1R3		3.00e+3 ug/g	2.20e+1 lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	335C1R1	ND	1.30e+1 ug/g	1.00e-1 lbs/hr	CC
Antimony	335C1R2	ND	1.22e+1 ug/g	9.00e-2 lbs/hr	CC
Antimony	335C1R3	ND	1.23e+1 ug/g	9.00e-2 lbs/hr	CC
Arsenic	335C1R1		5.34e+1 ug/g	4.10e-1 lbs/hr	CC
Arsenic	335C1R2		2.31e+1 ug/g	1.70e-1 lbs/hr	CC
Arsenic	335C1R3		6.83e+0 ug/g	5.00e-2 lbs/hr	CC
Barium	335C1R1		3.20e+2 ug/g	2.46e+0 lbs/hr	CC
Barium	335C1R2		7.47e+1 ug/g	5.50e-1 lbs/hr	CC
Barium	335C1R3		3.14e+1 ug/g	2.30e-1 lbs/hr	CC
Beryllium	335C1R1	ND	2.60e+0 ug/g	2.00e-2 lbs/hr	CC
Beryllium	335C1R2	ND	2.72e+0 ug/g	2.00e-2 lbs/hr	CC
Beryllium	335C1R3	ND	2.73e+0 ug/g	2.00e-2 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA ID: PAD083965897

REGION: 3

4. EP ID: 335 DEVICE NAME: KILN NO. 3

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

Cadmium	335C1R1		3.91e+0	ug/g	3.00e-2	lbs/hr	CC
Cadmium	335C1R2		2.72e+0	ug/g	2.00e-2	lbs/hr	CC
Cadmium	335C1R3		5.46e+0	ug/g	4.00e-2	lbs/hr	CC
Chromium	335C1R1	ND	2.60e+0	ug/g	2.00e-2	lbs/hr	CC
Chromium	335C1R2	ND	2.72e+0	ug/g	2.00e-2	lbs/hr	CC
Chromium	335C1R3	ND	2.73e+0	ug/g	2.00e-2	lbs/hr	CC
Lead	335C1R1		2.21e+1	ug/g	1.70e-1	lbs/hr	CC
Lead	335C1R2		2.04e+1	ug/g	1.50e-1	lbs/hr	CC
Lead	335C1R3		3.42e+1	ug/g	2.50e-1	lbs/hr	CC
Mercury	335C1R1	ND	1.30e+0	ug/g	1.00e-2	lbs/hr	CC
Mercury	335C1R2	ND	1.36e+0	ug/g	1.00e-2	lbs/hr	CC
Mercury	335C1R3		1.37e+0	ug/g	1.00e-2	lbs/hr	CC
Silver	335C1R1	ND	1.30e+1	ug/g	1.00e-1	lbs/hr	CC
Silver	335C1R2	ND	1.22e+1	ug/g	9.00e-2	lbs/hr	CC
Silver	335C1R3	ND	1.23e+1	ug/g	9.00e-2	lbs/hr	CC
Thallium	335C1R1		1.30e+0	ug/g	1.00e-2	lbs/hr	CC
Thallium	335C1R2	ND	1.36e+0	ug/g	1.00e-2	lbs/hr	CC
Thallium	335C1R3	ND	1.37e+0	ug/g	1.00e-2	lbs/hr	CC

5. Type: RAW MATERIAL

6. Description:

Group: DRY KILN

Location: KILN

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID		Concentration		Mass Rate	Calc	
Chlorine	335C1R1		4.00e+1	ug/g	4.56e+0	lbs/hr	CC
Chlorine	335C1R2		1.40e+2	ug/g	1.63e+1	lbs/hr	CC
Chlorine	335C1R3		8.00e+1	ug/g	9.33e+0	lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID		Concentration		Mass Rate	Calc	
Antimony	335C1R1	ND	5.00e+0	ug/g	5.70e-1	lbs/hr	CC
Antimony	335C1R2	ND	4.97e+0	ug/g	5.80e-1	lbs/hr	CC
Antimony	335C1R3	ND	4.97e+0	ug/g	5.80e-1	lbs/hr	CC
Arsenic	335C1R1		4.21e+0	ug/g	4.80e-1	lbs/hr	CC
Arsenic	335C1R2	ND	2.49e+0	ug/g	2.90e-1	lbs/hr	CC
Arsenic	335C1R3		7.72e+0	ug/g	9.00e-1	lbs/hr	CC
Barium	335C1R1		3.55e+2	ug/g	4.05e+1	lbs/hr	CC
Barium	335C1R2		3.56e+2	ug/g	4.15e+1	lbs/hr	CC
Barium	335C1R3		3.66e+2	ug/g	4.27e+1	lbs/hr	CC
Beryllium	335C1R1	ND	9.65e-1	ug/g	1.10e-1	lbs/hr	CC
Beryllium	335C1R2	ND	1.03e+0	ug/g	1.20e-1	lbs/hr	CC
Beryllium	335C1R3	ND	1.03e+0	ug/g	1.20e-1	lbs/hr	CC
Cadmium	335C1R1		1.49e+0	ug/g	1.70e-1	lbs/hr	CC
Cadmium	335C1R2		1.29e+0	ug/g	1.50e-1	lbs/hr	CC
Cadmium	335C1R3		1.03e+0	ug/g	1.20e-1	lbs/hr	CC
Chromium	335C1R1		3.33e+0	ug/g	3.80e-1	lbs/hr	CC
Chromium	335C1R2		3.52e+0	ug/g	4.10e-1	lbs/hr	CC
Chromium	335C1R3		7.80e+0	ug/g	9.10e-1	lbs/hr	CC
Lead	335C1R1		5.44e+0	ug/g	6.20e-1	lbs/hr	CC
Lead	335C1R2		4.97e+0	ug/g	5.80e-1	lbs/hr	CC
Lead	335C1R3		2.57e+0	ug/g	3.00e-1	lbs/hr	CC
Mercury	335C1R1	ND	8.77e-2	ug/g	1.00e-2	lbs/hr	CC
Mercury	335C1R2	ND	8.58e-2	ug/g	1.00e-2	lbs/hr	CC
Mercury	335C1R3	ND	8.58e-2	ug/g	1.00e-2	lbs/hr	CC
Silver	335C1R1	ND	5.00e+0	ug/g	5.70e-1	lbs/hr	CC
Silver	335C1R2	ND	4.97e+0	ug/g	5.80e-1	lbs/hr	CC
Silver	335C1R3	ND	4.97e+0	ug/g	5.80e-1	lbs/hr	CC
Thallium	335C1R1	ND	5.26e-1	ug/g	6.00e-2	lbs/hr	CC
Thallium	335C1R2	ND	5.15e-1	ug/g	6.00e-2	lbs/hr	CC
Thallium	335C1R3	ND	5.15e-1	ug/g	6.00e-2	lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: MEDUSA CEMENT COMPANY

2. STATE: PA

3. CITY: WAMPUM

EPA ID: PAD083965897

REGION: 3

4. EP ID: 335 DEVICE NAME: KILN NO. 3

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

5. Type: WASTE

6. Description: SPIKED METALS (AS,BE,CD,CR,PB)

Group: DRY KILN

Location: KILN

Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Chlorine	335C1R1	3.28e+4	ug/g	1.88e+2 lbs/hr	CC
Chlorine	335C1R2	1.12e+4	ug/g	6.40e+1 lbs/hr	CC
Chlorine	335C1R3	1.53e+4	ug/g	8.68e+1 lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	335C1R1	ND	1.22e+1 ug/g	7.00e-2 lbs/hr	CC
Antimony	335C1R2	ND	1.22e+1 ug/g	7.00e-2 lbs/hr	CC
Antimony	335C1R3	ND	1.23e+1 ug/g	7.00e-2 lbs/hr	CC
Arsenic	335C1R1	2.62e+1	ug/g	1.50e-1 lbs/hr	CC
Arsenic	335C1R2	2.44e+1	ug/g	1.40e-1 lbs/hr	CC
Arsenic	335C1R3	2.47e+1	ug/g	1.40e-1 lbs/hr	CC
Barium	335C1R1	1.12e+3	ug/g	6.44e+0 lbs/hr	CC
Barium	335C1R2	8.73e+2	ug/g	5.01e+0 lbs/hr	CC
Barium	335C1R3	1.09e+3	ug/g	6.21e+0 lbs/hr	CC
Beryllium	335C1R1	3.49e+0	ug/g	2.00e-2 lbs/hr	CC
Beryllium	335C1R2	1.22e+1	ug/g	7.00e-2 lbs/hr	CC
Beryllium	335C1R3	3.35e+1	ug/g	1.90e-1 lbs/hr	CC
Cadmium	335C1R1	1.10e+2	ug/g	6.30e-1 lbs/hr	CC
Cadmium	335C1R2	1.24e+2	ug/g	7.10e-1 lbs/hr	CC
Cadmium	335C1R3	1.34e+2	ug/g	7.60e-1 lbs/hr	CC
Chromium	335C1R1	1.16e+3	ug/g	6.67e+0 lbs/hr	CC
Chromium	335C1R2	1.14e+3	ug/g	6.54e+0 lbs/hr	CC
Chromium	335C1R3	1.12e+3	ug/g	6.38e+0 lbs/hr	CC
Lead	335C1R1	2.31e+3	ug/g	1.33e+1 lbs/hr	CC
Lead	335C1R2	2.22e+3	ug/g	1.27e+1 lbs/hr	CC
Lead	335C1R3	1.98e+3	ug/g	1.12e+1 lbs/hr	CC
Mercury	335C1R1	2.17e+3	ug/g	1.24e+1 lbs/hr	CC
Mercury	335C1R2	7.84e+1	ug/g	4.50e-1 lbs/hr	CC
Mercury	335C1R3	1.37e+2	ug/g	7.80e-1 lbs/hr	CC
Silver	335C1R1	ND	1.22e+1 ug/g	7.00e-2 lbs/hr	CC
Silver	335C1R2	ND	1.22e+1 ug/g	7.00e-2 lbs/hr	CC
Silver	335C1R3	ND	1.23e+1 ug/g	7.00e-2 lbs/hr	CC
Thallium	335C1R1	ND	1.74e+0 ug/g	1.00e-2 lbs/hr	CC
Thallium	335C1R2	ND	1.74e+0 ug/g	1.00e-2 lbs/hr	CC
Thallium	335C1R3	ND	1.76e+0 ug/g	1.00e-2 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: NATIONAL CEMENT PLANT

2. STATE: CA

3. CITY: LEBEC

4. EP ID: 306 DEVICE NAME: KILN NO. 1

EPA ID: CAD982444887

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/FF

REGION: 9

5. Type: CLINKER

6. Description: PRODUCT

Group: DRY KILN

Location: KILN

Phase: SOLID

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	306C1R4	ND	1.00e+1 ug/g	2.71e+0 lbs/hr	CE
Antimony	306C1R5	ND	1.00e+1 ug/g	2.72e+0 lbs/hr	CE
Antimony	306C1R6		1.20e+1 ug/g	3.20e+0 lbs/hr	CE
Arsenic	306C1R4		1.08e+2 ug/g	2.93e+1 lbs/hr	CE
Arsenic	306C1R5		1.80e+2 ug/g	4.90e+1 lbs/hr	CE
Arsenic	306C1R6		1.40e+2 ug/g	3.74e+1 lbs/hr	CE
Barium	306C1R4		4.50e+2 ug/g	1.22e+2 lbs/hr	CE
Barium	306C1R5		4.20e+2 ug/g	1.14e+2 lbs/hr	CE
Barium	306C1R6		4.20e+2 ug/g	1.12e+2 lbs/hr	CE
Beryllium	306C1R4		2.60e+0 ug/g	7.05e-1 lbs/hr	CE
Beryllium	306C1R5		3.10e+0 ug/g	8.44e-1 lbs/hr	CE
Beryllium	306C1R6		3.60e+0 ug/g	9.60e-1 lbs/hr	CE
Cadmium	306C1R4	ND	5.00e-1 ug/g	1.36e-1 lbs/hr	CE
Cadmium	306C1R5	ND	5.00e-1 ug/g	1.36e-1 lbs/hr	CE
Cadmium	306C1R6		5.00e-1 ug/g	1.33e-1 lbs/hr	CE
Chromium	306C1R4		7.30e+1 ug/g	1.98e+1 lbs/hr	CE
Chromium	306C1R5		7.40e+1 ug/g	2.01e+1 lbs/hr	CE
Chromium	306C1R6		8.70e+1 ug/g	2.32e+1 lbs/hr	CE
Lead	306C1R4		3.30e+0 ug/g	8.94e-1 lbs/hr	CE
Lead	306C1R5		2.70e+0 ug/g	7.35e-1 lbs/hr	CE
Lead	306C1R6	ND	5.00e-1 ug/g	1.33e-1 lbs/hr	CE
Mercury	306C1R4	ND	1.00e-1 ug/g	2.71e-2 lbs/hr	CE
Mercury	306C1R5	ND	1.00e-1 ug/g	2.72e-2 lbs/hr	CE
Mercury	306C1R6	ND	1.00e-1 ug/g	2.67e-2 lbs/hr	CE
Silver	306C1R4	ND	1.00e+0 ug/g	2.71e-1 lbs/hr	CE
Silver	306C1R5	ND	1.00e+0 ug/g	2.72e-1 lbs/hr	CE
Silver	306C1R6	ND	1.00e+0 ug/g	2.67e-1 lbs/hr	CE
Thallium	306C1R4	ND	1.00e+1 ug/g	2.71e+0 lbs/hr	CE
Thallium	306C1R5	ND	1.00e+1 ug/g	2.72e+0 lbs/hr	CE
Thallium	306C1R6	ND	1.00e+1 ug/g	2.67e+0 lbs/hr	CE

5. Type: FFASH

6. Description: RECYCLE

Group: DRY KILN

Location: FF

Phase: SOLID

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
Antimony	306C1R1	ND	2.00e-1 ug/g	0.00e+0	
Antimony	306C1R2	ND	2.00e-1 ug/g	0.00e+0	
Antimony	306C1R3	ND	2.00e-1 ug/g	0.00e+0	
Antimony	306C1R4	ND	1.00e+1 ug/g	0.00e+0	
Antimony	306C1R5	ND	1.00e+1 ug/g	0.00e+0	
Antimony	306C1R6	ND	1.00e+1 ug/g	0.00e+0	
Arsenic	306C1R1	ND	5.00e-3 ug/g	0.00e+0	
Arsenic	306C1R2	ND	5.00e-3 ug/g	0.00e+0	
Arsenic	306C1R3		5.70e-3 ug/g	0.00e+0	
Arsenic	306C1R4		1.80e+2 ug/g	0.00e+0	
Arsenic	306C1R5		1.70e+2 ug/g	0.00e+0	
Arsenic	306C1R6		1.50e+2 ug/g	0.00e+0	
Barium	306C1R1		9.10e-1 ug/g	0.00e+0	
Barium	306C1R2		9.20e-1 ug/g	0.00e+0	
Barium	306C1R3		7.10e-1 ug/g	0.00e+0	
Barium	306C1R4		4.50e+2 ug/g	0.00e+0	
Barium	306C1R5		4.70e+2 ug/g	0.00e+0	
Barium	306C1R6		5.00e+2 ug/g	0.00e+0	
Beryllium	306C1R1	ND	1.00e-2 ug/g	0.00e+0	
Beryllium	306C1R2	ND	1.00e-2 ug/g	0.00e+0	
Beryllium	306C1R3	ND	1.00e-2 ug/g	0.00e+0	

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: NATIONAL CEMENT PLANT
 2. STATE: CA
 3. CITY: LEBEC
 4. EP ID: 306 DEVICE NAME: KILN NO. 1

EPA ID: CAD982444887
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/FF
 REGION: 9

Beryllium	306C1R4	5.20e-1	ug/g	0.00e+0	
Beryllium	306C1R5	7.70e-1	ug/g	0.00e+0	
Beryllium	306C1R6	7.30e-1	ug/g	0.00e+0	
Cadmium	306C1R1	ND	1.00e-2	ug/g	0.00e+0
Cadmium	306C1R2	ND	1.00e-2	ug/g	0.00e+0
Cadmium	306C1R3	ND	1.00e-2	ug/g	0.00e+0
Cadmium	306C1R4	4.10e+1	ug/g	0.00e+0	
Cadmium	306C1R5	4.50e+1	ug/g	0.00e+0	
Cadmium	306C1R6	5.10e+1	ug/g	0.00e+0	
Chromium	306C1R1	2.10e-1	ug/g	0.00e+0	
Chromium	306C1R2	5.70e-1	ug/g	0.00e+0	
Chromium	306C1R3	6.00e-1	ug/g	0.00e+0	
Chromium	306C1R4	2.60e+1	ug/g	0.00e+0	
Chromium	306C1R5	3.70e+1	ug/g	0.00e+0	
Chromium	306C1R6	3.80e+1	ug/g	0.00e+0	
Lead	306C1R1	ND	5.00e-2	ug/g	0.00e+0
Lead	306C1R2	ND	5.00e-2	ug/g	0.00e+0
Lead	306C1R3	ND	5.00e-2	ug/g	0.00e+0
Lead	306C1R4	8.00e+2	ug/g	0.00e+0	
Lead	306C1R5	9.80e+2	ug/g	0.00e+0	
Lead	306C1R6	1.10e+3	ug/g	0.00e+0	
Mercury	306C1R1	ND	2.00e-3	ug/g	0.00e+0
Mercury	306C1R2	ND	2.00e-3	ug/g	0.00e+0
Mercury	306C1R3	ND	2.00e-3	ug/g	0.00e+0
Mercury	306C1R4	ND	1.00e-1	ug/g	0.00e+0
Mercury	306C1R5	1.90e-1	ug/g	0.00e+0	
Mercury	306C1R6	1.40e-1	ug/g	0.00e+0	
Nickel	306C1R1	ND	5.00e-2	ug/g	0.00e+0
Nickel	306C1R2	ND	5.00e-2	ug/g	0.00e+0
Nickel	306C1R3	6.60e-2	ug/g	0.00e+0	
Selenium	306C1R1	8.20e-3	ug/g	0.00e+0	
Selenium	306C1R2	1.80e-2	ug/g	0.00e+0	
Selenium	306C1R3	1.20e-2	ug/g	0.00e+0	
Silver	306C1R1	ND	2.00e-2	ug/g	0.00e+0
Silver	306C1R2	ND	2.00e-2	ug/g	0.00e+0
Silver	306C1R3	ND	2.00e-2	ug/g	0.00e+0
Silver	306C1R4	7.40e+0	ug/g	0.00e+0	
Silver	306C1R5	7.60e+0	ug/g	0.00e+0	
Silver	306C1R6	8.80e+0	ug/g	0.00e+0	
Thallium	306C1R1	ND	2.00e-1	ug/g	0.00e+0
Thallium	306C1R2	ND	2.00e-1	ug/g	0.00e+0
Thallium	306C1R3	ND	2.00e-1	ug/g	0.00e+0
Thallium	306C1R4	ND	1.00e+1	ug/g	0.00e+0
Thallium	306C1R5	ND	1.00e+1	ug/g	0.00e+0
Thallium	306C1R6	ND	1.00e+1	ug/g	0.00e+0

7. Category: PAH

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Fluoranthene	306C1R1	ND 3.30e-1 ug/g	0.00e+0	
Fluoranthene	306C1R2	ND 3.30e-1 ug/g	0.00e+0	
Fluoranthene	306C1R3	ND 3.30e-1 ug/g	0.00e+0	
Naphthalene	306C1R1	ND 3.30e-1 ug/g	0.00e+0	
Naphthalene	306C1R2	ND 3.30e-1 ug/g	0.00e+0	
Naphthalene	306C1R3	ND 3.30e-1 ug/g	0.00e+0	
Pyrene	306C1R1	ND 3.30e-1 ug/g	0.00e+0	
Pyrene	306C1R2	ND 3.30e-1 ug/g	0.00e+0	
Pyrene	306C1R3	ND 3.30e-1 ug/g	0.00e+0	

7. Category: SVOC

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
1,2,4-Trichlorobenzene	306C1R1	ND 3.30e-1 ug/g	0.00e+0	
1,2,4-Trichlorobenzene	306C1R2	ND 3.30e-1 ug/g	0.00e+0	
1,2,4-Trichlorobenzene	306C1R3	ND 3.30e-1 ug/g	0.00e+0	
2,4,6-Trichlorophenol	306C1R1	ND 3.30e-1 ug/g	0.00e+0	
2,4,6-Trichlorophenol	306C1R2	ND 3.30e-1 ug/g	0.00e+0	

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: NATIONAL CEMENT PLANT
 2. STATE: CA
 3. CITY: LEBEC
 4. EP ID: 306 DEVICE NAME: KILN NO. 1

EPA ID: CAD982444887
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/FF

REGION: 9

2,4,6-Trichlorophenol	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
2,4-Dimethylphenol	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
2,4-Dimethylphenol	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
2,4-Dimethylphenol	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
2-Chlorotoluene(Benzylchloride	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
2-Chlorotoluene(Benzylchloride	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
2-Chlorotoluene(Benzylchloride	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
2-Methylphenol (o-Cresol)	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
2-Methylphenol (o-Cresol)	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
2-Methylphenol (o-Cresol)	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
2-Nitrophenol	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
2-Nitrophenol	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
2-Nitrophenol	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
4-Methylphenol (p-Cresol)	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
4-Methylphenol (p-Cresol)	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
4-Methylphenol (p-Cresol)	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
bis(2-ethylexyl) Phthalate	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
bis(2-ethylexyl) Phthalate	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
bis(2-ethylexyl) Phthalate	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Butylbenzylphthalate	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
Butylbenzylphthalate	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
Butylbenzylphthalate	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Dibutylphthalate	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
Dibutylphthalate	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
Dibutylphthalate	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Diethylphthalate	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
Diethylphthalate	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
Diethylphthalate	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Dimethylphthalate	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
Dimethylphthalate	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
Dimethylphthalate	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Ethyl methacrylate	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Ethyl methacrylate	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Ethyl methacrylate	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
Hexachlorobenzene	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
Hexachlorobenzene	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
Hexachlorobenzene	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Methyl Methacrylate	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Methyl Methacrylate	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Methyl Methacrylate	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
Nitrobenzene	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
Nitrobenzene	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
Nitrobenzene	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
o-Chlorophenol	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
o-Chlorophenol	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
o-Chlorophenol	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
p-Dichlorobenzene	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
p-Dichlorobenzene	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
p-Dichlorobenzene	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Pentachlorophenol	306C1R1	ND	6.60e-1	ug/g	0.00e+0	
Pentachlorophenol	306C1R2	ND	6.60e-1	ug/g	0.00e+0	
Pentachlorophenol	306C1R3	ND	6.60e-1	ug/g	0.00e+0	
Phenol	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
Phenol	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
Phenol	306C1R3	ND	3.30e-1	ug/g	0.00e+0	

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
1,1,1-Trichloroethane	306C1R1	ND	5.00e-3	ug/g	0.00e+0
1,1,1-Trichloroethane	306C1R2	ND	5.00e-3	ug/g	0.00e+0
1,1,1-Trichloroethane	306C1R3	ND	5.00e-3	ug/g	0.00e+0
1,1,2-Trichloroethane	306C1R1	ND	5.00e-3	ug/g	0.00e+0
1,1,2-Trichloroethane	306C1R2	ND	5.00e-3	ug/g	0.00e+0
1,1,2-Trichloroethane	306C1R3	ND	5.00e-3	ug/g	0.00e+0
Benzene	306C1R1	ND	5.00e-3	ug/g	0.00e+0

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: NATIONAL CEMENT PLANT
 2. STATE: CA
 3. CITY: LEBEC
 4. EP ID: 306 DEVICE NAME: KILN NO. 1

EPA ID: CAD982444887
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/FF
 REGION: 9

Benzene	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Benzene	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
Carbon Tetrachloride	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Carbon Tetrachloride	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Carbon Tetrachloride	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
Chlorobenzene	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Chlorobenzene	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Chlorobenzene	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
Chloroform	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Chloroform	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Chloroform	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
cis-1,4-Dichloro-2-butene	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
cis-1,4-Dichloro-2-butene	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
cis-1,4-Dichloro-2-butene	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Isobutyl Alcohol	306C1R1	ND	1.00e-1	ug/g	0.00e+0	
Isobutyl Alcohol	306C1R2	ND	1.00e-1	ug/g	0.00e+0	
Isobutyl Alcohol	306C1R3	ND	1.00e-1	ug/g	0.00e+0	
m-Dichlorobenzene	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
m-Dichlorobenzene	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
m-Dichlorobenzene	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Methyl Ethyl Ketone	306C1R1	ND	1.00e-1	ug/g	0.00e+0	
Methyl Ethyl Ketone	306C1R2	ND	1.00e-1	ug/g	0.00e+0	
Methyl Ethyl Ketone	306C1R3	ND	1.00e-1	ug/g	0.00e+0	
Methylene Chloride	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Methylene Chloride	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Methylene Chloride	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
o-Dichlorobenzene	306C1R1	ND	3.30e-1	ug/g	0.00e+0	
o-Dichlorobenzene	306C1R2	ND	3.30e-1	ug/g	0.00e+0	
o-Dichlorobenzene	306C1R3	ND	3.30e-1	ug/g	0.00e+0	
Tetrachloroethene	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Tetrachloroethene	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Tetrachloroethene	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
Toluene	306C1R1		3.30e-2	ug/g	0.00e+0	
Toluene	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Toluene	306C1R3		8.00e-3	ug/g	0.00e+0	
Trichloroethene	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Trichloroethene	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Trichloroethene	306C1R3	ND	5.00e-3	ug/g	0.00e+0	
Trichlorofluoromethane	306C1R1	ND	5.00e-3	ug/g	0.00e+0	
Trichlorofluoromethane	306C1R2	ND	5.00e-3	ug/g	0.00e+0	
Trichlorofluoromethane	306C1R3	ND	5.00e-3	ug/g	0.00e+0	

5. Type: FUEL

6. Description: COKE
 Group: DRY KILN Location: KILN Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	306C1R1	1.70e+3 ug/g	2.35e+1 lbs/hr	CC
Chlorine	306C1R2	1.50e+3 ug/g	2.13e+1 lbs/hr	CC
Chlorine	306C1R3	1.45e+3 ug/g	2.09e+1 lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	306C1R1	5.00e+0 ug/g	6.90e-2 lbs/hr	CC
Antimony	306C1R2	5.00e+0 ug/g	7.10e-2 lbs/hr	CC
Antimony	306C1R3	5.00e+0 ug/g	7.20e-2 lbs/hr	CC
Antimony	306C1R4	ND 1.00e+1 ug/g	1.38e-1 lbs/hr	CE
Antimony	306C1R5	ND 1.00e+1 ug/g	1.42e-1 lbs/hr	CE
Antimony	306C1R6	ND 1.00e+1 ug/g	1.44e-1 lbs/hr	CE
Arsenic	306C1R1	1.45e-1 ug/g	2.01e-3 lbs/hr	CC
Arsenic	306C1R2	1.41e-1 ug/g	2.01e-3 lbs/hr	CC
Arsenic	306C1R3	2.08e-1 ug/g	3.00e-3 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: NATIONAL CEMENT PLANT
 2. STATE: CA
 3. CITY: LEBEC
 4. EP ID: 306 DEVICE NAME: KILN NO. 1

EPA ID: CAD982444887
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/FF REGION: 9

Arsenic	306C1R4	ND	2.50e-1	ug/g	3.45e-3	lbs/hr	CE
Arsenic	306C1R5	ND	2.50e-1	ug/g	3.55e-3	lbs/hr	CE
Arsenic	306C1R6	ND	2.50e-1	ug/g	3.60e-3	lbs/hr	CE
Barium	306C1R1		1.00e+1	ug/g	1.38e-1	lbs/hr	CC
Barium	306C1R2		9.02e+0	ug/g	1.28e-1	lbs/hr	CC
Barium	306C1R3		8.61e+0	ug/g	1.24e-1	lbs/hr	CC
Barium	306C1R4		1.00e+1	ug/g	1.38e-1	lbs/hr	CE
Barium	306C1R5		9.00e+0	ug/g	1.28e-1	lbs/hr	CE
Barium	306C1R6		8.20e+0	ug/g	1.18e-1	lbs/hr	CE
Beryllium	306C1R1		2.17e-1	ug/g	3.00e-3	lbs/hr	CC
Beryllium	306C1R2		2.81e-1	ug/g	3.99e-3	lbs/hr	CC
Beryllium	306C1R3		2.77e-1	ug/g	3.99e-3	lbs/hr	CC
Beryllium	306C1R4	ND	5.00e-1	ug/g	6.90e-3	lbs/hr	CE
Beryllium	306C1R5	ND	5.00e-1	ug/g	7.10e-3	lbs/hr	CE
Beryllium	306C1R6	ND	5.00e-1	ug/g	7.20e-3	lbs/hr	CE
Cadmium	306C1R1		2.17e-1	ug/g	3.00e-3	lbs/hr	CC
Cadmium	306C1R2		2.81e-1	ug/g	3.99e-3	lbs/hr	CC
Cadmium	306C1R3		2.77e-1	ug/g	3.99e-3	lbs/hr	CC
Cadmium	306C1R4	ND	5.00e-1	ug/g	6.90e-3	lbs/hr	CE
Cadmium	306C1R5	ND	5.00e-1	ug/g	7.10e-3	lbs/hr	CE
Cadmium	306C1R6	ND	5.00e-1	ug/g	7.20e-3	lbs/hr	CE
Chromium	306C1R1		5.00e+0	ug/g	6.90e-2	lbs/hr	CC
Chromium	306C1R2		3.80e+0	ug/g	5.40e-2	lbs/hr	CC
Chromium	306C1R3		4.59e+0	ug/g	6.60e-2	lbs/hr	CC
Chromium	306C1R4		5.00e+0	ug/g	6.90e-2	lbs/hr	CE
Chromium	306C1R5		3.80e+0	ug/g	5.40e-2	lbs/hr	CE
Chromium	306C1R6		4.30e+0	ug/g	6.19e-2	lbs/hr	CE
Lead	306C1R1		1.23e+0	ug/g	1.70e-2	lbs/hr	CC
Lead	306C1R2		1.27e+0	ug/g	1.80e-2	lbs/hr	CC
Lead	306C1R3		1.25e+0	ug/g	1.80e-2	lbs/hr	CC
Lead	306C1R4	ND	2.50e+0	ug/g	3.45e-2	lbs/hr	CE
Lead	306C1R5	ND	2.50e+0	ug/g	3.55e-2	lbs/hr	CE
Lead	306C1R6	ND	2.50e+0	ug/g	3.60e-2	lbs/hr	CE
Mercury	306C1R1		7.19e-2	ug/g	9.92e-4	lbs/hr	CC
Mercury	306C1R2		6.99e-2	ug/g	9.92e-4	lbs/hr	CC
Mercury	306C1R3		6.89e-2	ug/g	9.92e-4	lbs/hr	CC
Mercury	306C1R4	ND	1.00e-1	ug/g	1.38e-3	lbs/hr	CE
Mercury	306C1R5	ND	1.00e-1	ug/g	1.42e-3	lbs/hr	CE
Mercury	306C1R6	ND	1.00e-1	ug/g	1.44e-3	lbs/hr	CE
Silver	306C1R1		5.08e-1	ug/g	7.01e-3	lbs/hr	CC
Silver	306C1R2		4.94e-1	ug/g	7.01e-3	lbs/hr	CC
Silver	306C1R3		4.87e-1	ug/g	7.01e-3	lbs/hr	CC
Silver	306C1R4	ND	1.00e+0	ug/g	1.38e-2	lbs/hr	CE
Silver	306C1R5	ND	1.00e+0	ug/g	1.42e-2	lbs/hr	CE
Silver	306C1R6	ND	1.00e+0	ug/g	1.44e-2	lbs/hr	CE
Thallium	306C1R1		5.00e+0	ug/g	6.90e-2	lbs/hr	CC
Thallium	306C1R2		5.00e+0	ug/g	7.10e-2	lbs/hr	CC
Thallium	306C1R3		5.00e+0	ug/g	7.20e-2	lbs/hr	CC
Thallium	306C1R4	ND	1.00e+1	ug/g	1.38e-1	lbs/hr	CE
Thallium	306C1R5	ND	1.00e+1	ug/g	1.42e-1	lbs/hr	CE
Thallium	306C1R6	ND	1.00e+1	ug/g	1.44e-1	lbs/hr	CE

5. Type: RAW MATERIAL

6. Description:

Group: DRY KILN

Location: KILN

Phase: SOLID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	306C1R1	2.69e+1 ug/g	7.30e+0 lbs/hr	CC
Chlorine	306C1R2	1.60e+1 ug/g	4.35e+0 lbs/hr	CC
Chlorine	306C1R3	1.09e+1 ug/g	2.92e+0 lbs/hr	CC

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Antimony	306C1R1	4.99e+0 ug/g	1.35e+0 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: NATIONAL CEMENT PLANT

2. STATE: CA

3. CITY: LEBEC

4. EP ID: 306 DEVICE NAME: KILN NO. 1

EPA ID: CAD982444887

REGION: 9

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/FF

Antimony	306C1R2		5.02e+0	ug/g	1.36e+0	lbs/hr	CC
Antimony	306C1R3		4.99e+0	ug/g	1.33e+0	lbs/hr	CC
Antimony	306C1R4	ND	1.00e+1	ug/g	2.71e+0	lbs/hr	CE
Antimony	306C1R5	ND	1.00e+1	ug/g	2.71e+0	lbs/hr	CE
Antimony	306C1R6	ND	1.00e+1	ug/g	2.67e+0	lbs/hr	CE
Arsenic	306C1R1		3.09e+1	ug/g	8.39e+0	lbs/hr	CC
Arsenic	306C1R2		2.71e+1	ug/g	7.34e+0	lbs/hr	CC
Arsenic	306C1R3		3.59e+1	ug/g	9.58e+0	lbs/hr	CC
Arsenic	306C1R4		3.10e+1	ug/g	8.41e+0	lbs/hr	CE
Arsenic	306C1R5		2.70e+1	ug/g	7.32e+0	lbs/hr	CE
Arsenic	306C1R6		3.30e+1	ug/g	8.80e+0	lbs/hr	CE
Barium	306C1R1		2.30e+1	ug/g	6.22e+0	lbs/hr	CC
Barium	306C1R2		2.31e+1	ug/g	6.26e+0	lbs/hr	CC
Barium	306C1R3		2.35e+1	ug/g	6.26e+0	lbs/hr	CC
Barium	306C1R4		2.30e+1	ug/g	6.24e+0	lbs/hr	CE
Barium	306C1R5		2.30e+1	ug/g	6.24e+0	lbs/hr	CE
Barium	306C1R6		2.30e+1	ug/g	6.14e+0	lbs/hr	CE
Beryllium	306C1R1		2.51e-1	ug/g	6.80e-2	lbs/hr	CC
Beryllium	306C1R2		2.51e-1	ug/g	6.80e-2	lbs/hr	CC
Beryllium	306C1R3		2.51e-1	ug/g	6.70e-2	lbs/hr	CC
Beryllium	306C1R4	ND	5.00e-1	ug/g	1.36e-1	lbs/hr	CE
Beryllium	306C1R5	ND	5.00e-1	ug/g	1.36e-1	lbs/hr	CE
Beryllium	306C1R6	ND	5.00e-1	ug/g	1.33e-1	lbs/hr	CE
Cadmium	306C1R1		2.51e-1	ug/g	6.80e-2	lbs/hr	CC
Cadmium	306C1R2		2.51e-1	ug/g	6.80e-2	lbs/hr	CC
Cadmium	306C1R3		2.51e-1	ug/g	6.70e-2	lbs/hr	CC
Cadmium	306C1R4	ND	5.00e-1	ug/g	1.36e-1	lbs/hr	CE
Cadmium	306C1R5	ND	5.00e-1	ug/g	1.36e-1	lbs/hr	CE
Cadmium	306C1R6	ND	5.00e-1	ug/g	1.33e-1	lbs/hr	CE
Chromium	306C1R1		9.58e+0	ug/g	2.60e+0	lbs/hr	CC
Chromium	306C1R2		8.53e+0	ug/g	2.31e+0	lbs/hr	CC
Chromium	306C1R3		9.83e+0	ug/g	2.62e+0	lbs/hr	CC
Chromium	306C1R4		9.60e+0	ug/g	2.60e+0	lbs/hr	CE
Chromium	306C1R5		8.50e+0	ug/g	2.30e+0	lbs/hr	CE
Chromium	306C1R6		8.70e+0	ug/g	2.32e+0	lbs/hr	CE
Lead	306C1R1		1.80e+1	ug/g	4.87e+0	lbs/hr	CC
Lead	306C1R2		2.01e+1	ug/g	5.44e+0	lbs/hr	CC
Lead	306C1R3		2.00e+1	ug/g	5.32e+0	lbs/hr	CC
Lead	306C1R4		1.80e+1	ug/g	4.88e+0	lbs/hr	CE
Lead	306C1R5		2.00e+1	ug/g	5.42e+0	lbs/hr	CE
Lead	306C1R6		1.80e+1	ug/g	4.80e+0	lbs/hr	CE
Mercury	306C1R1		7.19e-1	ug/g	1.95e-1	lbs/hr	CC
Mercury	306C1R2		7.71e-1	ug/g	2.09e-1	lbs/hr	CC
Mercury	306C1R3		7.42e-1	ug/g	1.98e-1	lbs/hr	CC
Mercury	306C1R4		7.20e-1	ug/g	1.95e-1	lbs/hr	CE
Mercury	306C1R5		7.70e-1	ug/g	2.09e-1	lbs/hr	CE
Mercury	306C1R6		7.10e-1	ug/g	1.89e-1	lbs/hr	CE
Silver	306C1R1		4.98e-1	ug/g	1.35e-1	lbs/hr	CC
Silver	306C1R2		5.02e-1	ug/g	1.36e-1	lbs/hr	CC
Silver	306C1R3		4.99e-1	ug/g	1.33e-1	lbs/hr	CC
Silver	306C1R4	ND	1.00e+0	ug/g	2.71e-1	lbs/hr	CE
Silver	306C1R5	ND	1.00e+0	ug/g	2.71e-1	lbs/hr	CE
Silver	306C1R6	ND	1.00e+0	ug/g	2.67e-1	lbs/hr	CE
Thallium	306C1R1		4.99e+0	ug/g	1.35e+0	lbs/hr	CC
Thallium	306C1R2		4.93e+0	ug/g	1.34e+0	lbs/hr	CC
Thallium	306C1R3		4.99e+0	ug/g	1.33e+0	lbs/hr	CC
Thallium	306C1R4	ND	1.00e+1	ug/g	2.71e+0	lbs/hr	CE
Thallium	306C1R5	ND	1.00e+1	ug/g	2.71e+0	lbs/hr	CE
Thallium	306C1R6	ND	1.00e+1	ug/g	2.67e+0	lbs/hr	CE

5. Type: WASTE

6. Description: SPIKED METALS (AS,BA,BE,CR,CR3,CR6,PB,SB,HG)

Group: DRY KILN

Location: KILN

Phase: LIQUID

7. Category: Halogens

Analysis:

8. Substance	9. Run ID	Concentration	Mass Rate	Calc
Chlorine	306C1R1	2.95e+4 ug/g	2.92e+2 lbs/hr	CC
Chlorine	306C1R2	3.14e+4 ug/g	3.26e+2 lbs/hr	CC

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: NATIONAL CEMENT PLANT

2. STATE: CA

3. CITY: LEBEC

EPA ID: CAD982444887

REGION: 9

4. EP ID: 306 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/FF

Chlorine	306C1R3	3.14e+4	ug/g	3.15e+2	lbs/hr	CC
Chlorine	306C1R4	2.61e+4	ug/g	2.59e+2	lbs/hr	CE
Chlorine	306C1R5	2.94e+4	ug/g	3.05e+2	lbs/hr	CE
Chlorine	306C1R6	2.91e+4	ug/g	2.92e+2	lbs/hr	CE

7. Category: Metals

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate		Calc	
Antimony	306C1R1	8.98e+1	ug/g	8.91e-1	lbs/hr	CC	
Antimony	306C1R2	2.65e+2	ug/g	2.75e+0	lbs/hr	CC	
Antimony	306C1R3	3.21e+2	ug/g	3.22e+0	lbs/hr	CC	
Antimony	306C1R4	6.30e+1	ug/g	6.25e-1	lbs/hr	CE	
Antimony	306C1R5	1.20e+2	ug/g	1.25e+0	lbs/hr	CE	
Antimony	306C1R6	1.50e+2	ug/g	1.50e+0	lbs/hr	CE	
Arsenic	306C1R1	3.94e+3	ug/g	3.91e+1	lbs/hr	CC	
Arsenic	306C1R2	5.59e+3	ug/g	5.80e+1	lbs/hr	CC	
Arsenic	306C1R3	3.46e+3	ug/g	3.47e+1	lbs/hr	CC	
Arsenic	306C1R4	8.40e+3	ug/g	8.33e+1	lbs/hr	CE	
Arsenic	306C1R5	2.10e+4	ug/g	2.18e+2	lbs/hr	CE	
Arsenic	306C1R6	5.40e+3	ug/g	5.42e+1	lbs/hr	CE	
Barium	306C1R1	6.01e+3	ug/g	5.96e+1	lbs/hr	CC	
Barium	306C1R2	6.32e+3	ug/g	6.56e+1	lbs/hr	CC	
Barium	306C1R3	5.58e+3	ug/g	5.60e+1	lbs/hr	CC	
Barium	306C1R4	4.80e+3	ug/g	4.76e+1	lbs/hr	CE	
Barium	306C1R5	5.20e+3	ug/g	5.40e+1	lbs/hr	CE	
Barium	306C1R6	3.50e+3	ug/g	3.51e+1	lbs/hr	CE	
Beryllium	306C1R1	4.58e+1	ug/g	4.54e-1	lbs/hr	CC	
Beryllium	306C1R2	7.47e+1	ug/g	7.76e-1	lbs/hr	CC	
Beryllium	306C1R3	6.81e+1	ug/g	6.83e-1	lbs/hr	CC	
Beryllium	306C1R4	4.20e+1	ug/g	4.17e-1	lbs/hr	CE	
Beryllium	306C1R5	7.60e+1	ug/g	7.89e-1	lbs/hr	CE	
Beryllium	306C1R6	5.00e+1	ug/g	5.02e-1	lbs/hr	CE	
Cadmium	306C1R1	1.14e+2	ug/g	1.13e+0	lbs/hr	CC	
Cadmium	306C1R2	1.14e+2	ug/g	1.18e+0	lbs/hr	CC	
Cadmium	306C1R3	1.62e+2	ug/g	1.63e+0	lbs/hr	CC	
Cadmium	306C1R4	1.10e+2	ug/g	1.09e+0	lbs/hr	CE	
Cadmium	306C1R5	1.50e+2	ug/g	1.56e+0	lbs/hr	CE	
Cadmium	306C1R6	1.30e+2	ug/g	1.30e+0	lbs/hr	CE	
Chromium	306C1R1	6.21e+2	ug/g	6.16e+0	lbs/hr	CC	
Chromium	306C1R2	1.22e+3	ug/g	1.26e+1	lbs/hr	CC	
Chromium	306C1R3	1.32e+3	ug/g	1.32e+1	lbs/hr	CC	
Chromium	306C1R4	6.00e+2	ug/g	5.95e+0	lbs/hr	CE	
Chromium	306C1R5	1.20e+3	ug/g	1.25e+1	lbs/hr	CE	
Chromium	306C1R6	8.80e+2	ug/g	8.83e+0	lbs/hr	CE	
Lead	306C1R1	1.25e+3	ug/g	1.24e+1	lbs/hr	CC	
Lead	306C1R2	3.10e+3	ug/g	3.22e+1	lbs/hr	CC	
Lead	306C1R3	1.56e+3	ug/g	1.57e+1	lbs/hr	CC	
Lead	306C1R4	1.00e+3	ug/g	9.92e+0	lbs/hr	CE	
Lead	306C1R5	3.00e+3	ug/g	3.11e+1	lbs/hr	CE	
Lead	306C1R6	8.80e+2	ug/g	8.83e+0	lbs/hr	CE	
Mercury	306C1R1	2.51e+1	ug/g	2.49e-1	lbs/hr	CC	
Mercury	306C1R2	2.31e+2	ug/g	2.40e+0	lbs/hr	CC	
Mercury	306C1R3	1.61e+2	ug/g	1.62e+0	lbs/hr	CC	
Mercury	306C1R4	1.50e+2	ug/g	1.49e+0	lbs/hr	CE	
Mercury	306C1R5	1.10e+2	ug/g	1.14e+0	lbs/hr	CE	
Mercury	306C1R6	1.20e+2	ug/g	1.20e+0	lbs/hr	CE	
Silver	306C1R1	3.11e+0	ug/g	3.09e-2	lbs/hr	CC	
Silver	306C1R2	3.18e+0	ug/g	3.31e-2	lbs/hr	CC	
Silver	306C1R3	3.52e+0	ug/g	3.53e-2	lbs/hr	CC	
Silver	306C1R4	2.80e+0	ug/g	2.78e-2	lbs/hr	CE	
Silver	306C1R5	6.60e+0	ug/g	6.85e-2	lbs/hr	CE	
Silver	306C1R6	4.20e+0	ug/g	4.21e-2	lbs/hr	CE	
Thallium	306C1R1	4.67e+0	ug/g	4.63e-2	lbs/hr	CC	
Thallium	306C1R2	4.25e+0	ug/g	4.41e-2	lbs/hr	CC	
Thallium	306C1R3	4.40e+0	ug/g	4.41e-2	lbs/hr	CC	
Thallium	306C1R4	ND	1.00e+1	ug/g	9.92e-2	lbs/hr	CE
Thallium	306C1R5	ND	1.00e+1	ug/g	1.04e-1	lbs/hr	CE
Thallium	306C1R6	ND	1.00e+1	ug/g	1.00e-1	lbs/hr	CE

US EPA ARCHIVE DOCUMENT

SECTION 8: OTHER STREAM ANALYSES

1. COMPANY: NATIONAL CEMENT PLANT

2. STATE: CA

3. CITY: LEBEC

EPA ID: CAD982444887

REGION: 9

4. EP ID: 306 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/FF

7. Category: VOC

Analysis:

8. Substance	9. Run ID	Concentration		Mass Rate	Calc
1,1,1-Trichloroethane	306C1R4	1.20e+4	ug/g	1.19e+2 lbs/hr	CE
1,1,1-Trichloroethane	306C1R5	1.30e+4	ug/g	1.35e+2 lbs/hr	CE
1,1,1-Trichloroethane	306C1R6	1.30e+4	ug/g	1.30e+2 lbs/hr	CE
Carbon Tetrachloride	306C1R4	ND	1.00e+2 ug/g	9.92e-1 lbs/hr	CE
Carbon Tetrachloride	306C1R5	ND	1.00e+2 ug/g	1.04e+0 lbs/hr	CE
Carbon Tetrachloride	306C1R6	ND	1.00e+2 ug/g	1.00e+0 lbs/hr	CE
Methylene Chloride	306C1R4	4.00e+3	ug/g	3.97e+1 lbs/hr	CE
Methylene Chloride	306C1R5	4.10e+3	ug/g	4.26e+1 lbs/hr	CE
Methylene Chloride	306C1R6	4.60e+3	ug/g	4.61e+1 lbs/hr	CE
Tetrachloroethene	306C1R4	7.20e+3	ug/g	7.14e+1 lbs/hr	CE
Tetrachloroethene	306C1R5	3.10e+3	ug/g	3.22e+1 lbs/hr	CE
Tetrachloroethene	306C1R6	1.70e+4	ug/g	1.71e+2 lbs/hr	CE
Toluene	306C1R4	7.80e+4	ug/g	7.74e+2 lbs/hr	CE
Toluene	306C1R5	1.10e+4	ug/g	1.14e+2 lbs/hr	CE
Toluene	306C1R6	8.70e+4	ug/g	8.73e+2 lbs/hr	CE