

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: AR
 3. CITY: FOREMAN EPA ARD981512270 REGION: 6
 4. EP ID: 228 DEVICE NAME: KILN NO. 2 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

5. Type: FUEL

6. Description: COAL/SPIKED METALS (PB)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
228C1R1	3990 lbs/hr		12505 Btu/lb			
228C1R2	4012 lbs/hr		12212 Btu/lb			
228C1R3	3990 lbs/hr		12505 Btu/lb			
228C2R1	5996 lbs/hr		11990 Btu/lb			
228C2R2	4409 lbs/hr		12360 Btu/lb			
228C2R3	3990 lbs/hr		12429 Btu/lb			
228C3R1	4850 lbs/hr		12391 Btu/lb			
228C3R2	4409 lbs/hr		12496 Btu/lb			
228C3R3	3990 lbs/hr		12404 Btu/lb			
228C4R1	7539 lbs/hr		12997 Btu/lb			
228C4R2	7120 lbs/hr		13116 Btu/lb			
228C4R3	6327 lbs/hr		13118 Btu/lb			

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
228C1R1	117066 lbs/hr					
228C1R2	113979 lbs/hr					
228C1R3	116404 lbs/hr					
228C2R1	129412 lbs/hr					
228C2R2	119711 lbs/hr					
228C2R3	120373 lbs/hr					
228C3R1	111774 lbs/hr					
228C3R2	104940 lbs/hr					
228C3R3	106042 lbs/hr					
228C4R1	113756 lbs/hr					
228C4R2	112654 lbs/hr					
228C4R3	112654 lbs/hr					

5. Type: TIER I

6. Description: METALS FEED LIMIT

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: Feed Location:
 Manufacturer: Number of Burners:

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
228C1R1						
228C1R2						
228C1R3						
228C1R4						

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1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: AR
 3. CITY: FOREMAN EPA ARD981512270 REGION: 6
 4. EP ID: 228 DEVICE NAME: KILN NO. 2 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

228C2R1						
228C2R2						
228C2R3						
228C2R4						
228C3R1						
228C3R2						
228C3R3						
228C3R4						
228C4R1						
228C4R2						
228C4R3						

5. Type: WASTE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
228C1R1	14594 lbs/hr		14388 Btu/lb			
228C1R2	15608 lbs/hr		11596 Btu/lb			
228C1R3	13404 lbs/hr		13503 Btu/lb			
228C2R1	15608 lbs/hr		13710 Btu/lb			
228C2R2	15410 lbs/hr		149 Btu/lb			
228C2R3	15410 lbs/hr		15509 Btu/lb			
228C3R1	16005 lbs/hr		13120 Btu/lb			
228C3R2	16005 lbs/hr		13120 Btu/lb			
228C3R3	16204 lbs/hr		13021 Btu/lb			
228C4R1	12345 lbs/hr		12879 Btu/lb			
228C4R2	12279 lbs/hr		14658 Btu/lb			
228C4R3	12500 lbs/hr		15600 Btu/lb			

6. Description: SPIKED ORGANICS/METALS (AS,CR)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
228C1R1	4607 lbs/hr		6901 Btu/lb			
228C1R2	4585 lbs/hr		6782 Btu/lb			
228C1R3	4673 lbs/hr		7317 Btu/lb			
228C2R1	5004 lbs/hr		6014 Btu/lb			
228C2R2	5004 lbs/hr		5475 Btu/lb			
228C2R3	5401 lbs/hr		14848 Btu/lb			
228C3R1	5599 lbs/hr		6714 Btu/lb			
228C3R2	5401 lbs/hr		6498 Btu/lb			
228C3R3	3791 lbs/hr					
228C4R1	3549 lbs/hr		7268 Btu/lb			
228C4R2	4012 lbs/hr		9495 Btu/lb			
228C4R3	3461 lbs/hr		10892 Btu/lb			

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SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: AR
 3. CITY: FOREMAN EPA ARD981512270 REGION: 6
 4. EP ID: 403 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
403C1R1	72660 lbs/hr					
403C1R2	72660 lbs/hr					
403C1R3	68400 lbs/hr					
403C1R4	68400 lbs/hr					
403C2R1	71140 lbs/hr					
403C2R2	71140 lbs/hr					
403C2R3	69840 lbs/hr					
403C2R4	69840 lbs/hr					

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: WET KILN Location: ESP Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
403C1R1	9940 lbs/hr					
403C1R2	9960 lbs/hr					
403C1R3	9960 lbs/hr					
403C1R4	9960 lbs/hr					
403C2R1	9880 lbs/hr					
403C2R2	9960 lbs/hr					
403C2R3	9960 lbs/hr					
403C2R4	10020 lbs/hr					

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
403C1R1	8680 lbs/hr		13594 Btu/lb			
403C1R2	8280 lbs/hr		13647 Btu/lb			
403C1R3	7780 lbs/hr		13624 Btu/lb			
403C1R4	6640 lbs/hr		13614 Btu/lb			
403C2R1	15920 lbs/hr		6846 Btu/lb			
403C2R2	9940 lbs/hr		10865 Btu/lb			
403C2R3	8560 lbs/hr		11530 Btu/lb			
403C2R4	7900 lbs/hr		12050 Btu/lb			

5. Type: RAW MATERIAL

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SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: AR
 3. CITY: FOREMAN EPA ARD981512270 REGION: 6
 4. EP ID: 403 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

6. Description: CHALK/SAND/IRON

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
403C1R1	117920 lbs/hr					
403C1R2	117880 lbs/hr					
403C1R3	117160 lbs/hr					
403C1R4	117420 lbs/hr					
403C2R1	118140 lbs/hr					
403C2R2	118100 lbs/hr					
403C2R3	117560 lbs/hr					
403C2R4	118020 lbs/hr					

5. Type: SPIKE

6. Description: ORGANICS (TCE,TCB,TETRACHLOROETHENE)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
403C2R1	148 lbs/hr					
403C2R2	173 lbs/hr					
403C2R3	201 lbs/hr					
403C2R4	281 lbs/hr					

5. Type: WASTE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
403C1R1	12280 lbs/hr		14006 Btu/lb			
403C1R2	12280 lbs/hr		15472 Btu/lb			
403C1R3	12280 lbs/hr		16938 Btu/lb			
403C1R4	12300 lbs/hr		16991 Btu/lb			
403C2R1	12280 lbs/hr		1913 Btu/lb			
403C2R2	12240 lbs/hr		2017 Btu/lb			
403C2R3	11940 lbs/hr		1959 Btu/lb			
403C2R4	12220 lbs/hr		16039 Btu/lb			

6. Description: SPIKED METALS (AS,CR)

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 2. STATE: AR
 3. CITY: FOREMAN EPA ARD981512270 REGION: 6
 4. EP ID: 403 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: MIDDLE OF CHAMBER
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
403C1R1	3420 lbs/hr		8304 Btu/lb			
403C1R2	3280 lbs/hr		8628 Btu/lb			
403C1R3	3300 lbs/hr		8090 Btu/lb			
403C1R4	3260 lbs/hr		8159 Btu/lb			
403C2R1	2840 lbs/hr		65845 Btu/lb			
403C2R2	3300 lbs/hr		48484 Btu/lb			
403C2R3	3320 lbs/hr		52409 Btu/lb			
403C2R4	3320 lbs/hr		54216 Btu/lb			

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1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: AR
 3. CITY: FOREMAN EPA ARD981512270 REGION: 6
 4. EP ID: 404 DEVICE NAME: KILN NO. 3 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C1R1	104000 lbs/hr					
404C1R2	104000 lbs/hr					
404C1R3	96000 lbs/hr					
404C1R4	94000 lbs/hr					
404C1R5	94000 lbs/hr					
404C1R6	94000 lbs/hr					
404C2R1	102000 lbs/hr					
404C2R2	106000 lbs/hr					
404C2R3	106000 lbs/hr					
404C2R4	106000 lbs/hr					

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: WET KILN Location: ESP Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C1R1	12760 lbs/hr					
404C1R2	12840 lbs/hr					
404C1R3	12820 lbs/hr					
404C1R4	11500 lbs/hr					
404C1R5	11480 lbs/hr					
404C1R6	11560 lbs/hr					
404C2R1	12960 lbs/hr					
404C2R2	12580 lbs/hr					
404C2R3	12940 lbs/hr					
404C2R4	12220 lbs/hr					

5. Type: FUEL

6. Description: COAL/COKE

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C1R1	12080 lbs/hr					
404C1R2	13260 lbs/hr					
404C1R3	15140 lbs/hr					
404C1R4	15080 lbs/hr					
404C1R5	14840 lbs/hr					
404C1R6	14620 lbs/hr					
404C2R1	14300 lbs/hr					
404C2R2	21160 lbs/hr					

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1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: AR
 3. CITY: FOREMAN
 4. EP ID: 404 DEVICE NAME: KILN NO. 3

EPA ID: ARD981512270
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP

REGION: 6

404C2R3	11120 lbs/hr					
404C2R4	18960 lbs/hr					

5. Type: RAW MATERIAL

6. Description: CHALK/SAND/IRON

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C1R1	178280 lbs/hr					
404C1R2	177240 lbs/hr					
404C1R3	176720 lbs/hr					
404C1R4	158500 lbs/hr					
404C1R5	158260 lbs/hr					
404C1R6	159380 lbs/hr					
404C2R1	179380 lbs/hr					
404C2R2	179220 lbs/hr					
404C2R3	178400 lbs/hr					
404C2R4	178800 lbs/hr					

5. Type: SPIKE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C1R1						
404C1R2						
404C1R3						
404C1R4						
404C1R5						
404C1R6						

6. Description: ORGANICS (1,1,1-TCE)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C2R1	96 lbs/hr					
404C2R2	113 lbs/hr					
404C2R3	109 lbs/hr					
404C2R4	101 lbs/hr					

6. Description: ORGANICS (1,2,4-TCB)

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SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: AR
 3. CITY: FOREMAN
 4. EP ID: 404 DEVICE NAME: KILN NO. 3

EPA ARD981512270
 SYSTEM TYPE: CEMENT KILN

REGION: 6

APC SYSTEM: ESP

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C2R1	134 lbs/hr					
404C2R2	127 lbs/hr					
404C2R3	147 lbs/hr					
404C2R4	136 lbs/hr					

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C1R1	14380 lbs/hr					
404C1R2	14400 lbs/hr					
404C1R3	14400 lbs/hr					
404C1R4	14620 lbs/hr					
404C1R5	14600 lbs/hr					
404C1R6	14620 lbs/hr					
404C2R1	16880 lbs/hr					
404C2R2	19140 lbs/hr					
404C2R3	14980 lbs/hr					
404C2R4	14440 lbs/hr					

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: ?

Feed Location: MIDDLE OF CHAMBER

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
404C1R1	5320 lbs/hr					
404C1R2	5220 lbs/hr					
404C1R3	4980 lbs/hr					
404C1R4	4780 lbs/hr					
404C1R5	4680 lbs/hr					
404C1R6	4680 lbs/hr					
404C2R1	4760 lbs/hr					
404C2R2	5140 lbs/hr					
404C2R3	4340 lbs/hr					
404C2R4	4300 lbs/hr					

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SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: KS
 3. CITY: CHANUTE
 4. EP ID: 401 DEVICE NAME: KILN NO. 1

EPA ID: KSD031203318
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
401C1R1	68200 lbs/hr					
401C1R2	68200 lbs/hr					
401C1R3	64000 lbs/hr					
401C1R4	64000 lbs/hr					
401C2R1	63400 lbs/hr					
401C2R2	63400 lbs/hr					
401C2R3	73400 lbs/hr					
401C2R4	73400 lbs/hr					
401C3R1	77200 lbs/hr					
401C3R2	77200 lbs/hr					
401C3R3	77200 lbs/hr					
401C4R1	58000 lbs/hr					
401C4R2	58000 lbs/hr					
401C4R3	58000 lbs/hr					
401C4R4	58000 lbs/hr					
401C5R1	72100 lbs/hr					
401C5R2	72100 lbs/hr					
401C5R3	72100 lbs/hr					
401C5R4	72100 lbs/hr					

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: WET KILN

Location: ESP

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
401C1R1	18200 lbs/hr					
401C1R2	18200 lbs/hr					
401C1R3	20460 lbs/hr					
401C1R4	20460 lbs/hr					
401C2R1	18260 lbs/hr					
401C2R2	18260 lbs/hr					
401C2R3	19340 lbs/hr					
401C2R4	19340 lbs/hr					
401C3R1	12940 lbs/hr					
401C3R2	12940 lbs/hr					
401C3R3	12940 lbs/hr					
401C4R1	7020 lbs/hr					
401C4R2	7020 lbs/hr					
401C4R3	7020 lbs/hr					
401C4R4	7020 lbs/hr					
401C5R1	14870 lbs/hr					
401C5R2	14870 lbs/hr					
401C5R3	14870 lbs/hr					
401C5R4	14870 lbs/hr					

5. Type: FUEL

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SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: KS
 3. CITY: CHANUTE
 4. EP ID: 401 DEVICE NAME: KILN NO. 1
 EPA ID: KSD031203318
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP
 REGION: 7

6. Description: COAL

Additional ID Information

Process Group: WET KILN Location: LOWEND Phase: SOLID

Feed Stream Information

Feed Mechanism: MULT-FUEL BURNER Feed Location: CLINKER EXIT
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
401C3R1	5920 lbs/hr		12394 Btu/lb			
401C3R2	5400 lbs/hr		12269 Btu/lb			
401C3R3	5740 lbs/hr		12515 Btu/lb			
401C4R1	7520 lbs/hr		12481 Btu/lb			
401C4R2	6220 lbs/hr		11963 Btu/lb			
401C4R3	6160 lbs/hr		12469 Btu/lb			
401C4R4	6080 lbs/hr		11891 Btu/lb			
401C5R1	5940 lbs/hr		12683 Btu/lb			
401C5R2	5940 lbs/hr		12678 Btu/lb			
401C5R3	6900 lbs/hr		12135 Btu/lb			
401C5R4	6640 lbs/hr		12337 Btu/lb			

5. Type: RAW MATERIAL

6. Description: LIME/SHALE/SAND/IRON

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: PUMPED SLURRY Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
401C1R1	123560 lbs/hr					
401C1R2	123560 lbs/hr					
401C1R3	118800 lbs/hr					
401C1R4	118860 lbs/hr					
401C2R1	122260 lbs/hr					
401C2R2	124240 lbs/hr					
401C2R3	128380 lbs/hr					
401C2R4	128380 lbs/hr					
401C3R1	122800 lbs/hr					
401C3R2	122000 lbs/hr					
401C3R3	121000 lbs/hr					
401C4R1	117600 lbs/hr					
401C4R2	109600 lbs/hr					
401C4R3	98600 lbs/hr					
401C4R4	92200 lbs/hr					
401C5R1	117300 lbs/hr					
401C5R2	116400 lbs/hr					
401C5R3	116200 lbs/hr					
401C5R4	116400 lbs/hr					

5. Type: SPIKE

6. Description: ORGANICS (TCE,TCB,TETRACHLOROETHENE)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: BED FIRED Feed Location: MIDDLE OF CHAMBER
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)

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SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY

2. STATE: KS

3. CITY: CHANUTE

EPA ID: KSD031203318

REGION: 7

4. EP ID: 401 DEVICE NAME: KILN NO. 1

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

401C5R3	5420 lbs/hr		8346	Btu/lb			
401C5R4	3860 lbs/hr		8911	Btu/lb			

6. Description: SPIKED METALS (CR6)

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ATOMIZED LIQUID

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value		Viscosity, cSt	Density, lb/ft3	Ash (%)
401C1R1	15000 lbs/hr		14066	Btu/lb			
401C1R2	14300 lbs/hr		16993	Btu/lb			
401C1R3	14620 lbs/hr		15389	Btu/lb			
401C1R4	14140 lbs/hr		14710	Btu/lb			
401C2R1	14560 lbs/hr		15384	Btu/lb			
401C2R2	14480 lbs/hr		15331	Btu/lb			
401C2R3	16380 lbs/hr		13247	Btu/lb			
401C2R4	16160 lbs/hr		13366	Btu/lb			

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: KS
 3. CITY: CHANUTE
 4. EP ID: 402 DEVICE NAME: KILN NO. 2

EPA ID: KSD031203318
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
402C1R1	68200 lbs/hr					
402C1R2	68200 lbs/hr					
402C1R3	60400 lbs/hr					
402C1R4	69600 lbs/hr					
402C2R1	71000 lbs/hr					
402C2R2	71000 lbs/hr					
402C2R3	66600 lbs/hr					
402C2R4	62200 lbs/hr					
402C3R1	66800 lbs/hr					
402C3R2	66800 lbs/hr					
402C3R3	66800 lbs/hr					
402C3R4	66800 lbs/hr					
402C4R1	79200 lbs/hr					
402C4R2	79200 lbs/hr					
402C4R3	79200 lbs/hr					
402C4R4	79200 lbs/hr					

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: WET KILN

Location: ESP

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
402C1R1	26080 lbs/hr					
402C1R2	26080 lbs/hr					
402C1R3	23840 lbs/hr					
402C1R4	33340 lbs/hr					
402C2R1	24720 lbs/hr					
402C2R2	24720 lbs/hr					
402C2R3	19720 lbs/hr					
402C2R4	18780 lbs/hr					
402C3R1	3960 lbs/hr					
402C3R2	3960 lbs/hr					
402C3R3	3960 lbs/hr					
402C3R4	3960 lbs/hr					
402C4R1	7380 lbs/hr					
402C4R2	7380 lbs/hr					
402C4R3	7380 lbs/hr					
402C4R4	7380 lbs/hr					

5. Type: FUEL

6. Description: COAL

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: KS
 3. CITY: CHANUTE
 4. EP ID: 402 DEVICE NAME: KILN NO. 2
 EPA ID: KSD031203318
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP
 REGION: 7

Additional ID Information

Process Group: WET KILN Location: PRIMARY CHAMBER Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
402C3R1	5020 lbs/hr		12962 Btu/lb			
402C3R2	6500 lbs/hr		12252 Btu/lb			
402C3R3	2160 lbs/hr		12900 Btu/lb			
402C3R4	6520 lbs/hr		12795 Btu/lb			
402C4R1	5000 lbs/hr		12744 Btu/lb			
402C4R2	4820 lbs/hr		12668 Btu/lb			
402C4R3	3860 lbs/hr		12620 Btu/lb			
402C4R4	4000 lbs/hr		12484 Btu/lb			

5. Type: RAW MATERIAL

6. Description: LIME/SHALE/SAND/IRON

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: PUMPED SLURRY Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
402C1R1	124700 lbs/hr					
402C1R2	128160 lbs/hr					
402C1R3	124900 lbs/hr					
402C1R4	123560 lbs/hr					
402C2R1	128380 lbs/hr					
402C2R2	128520 lbs/hr					
402C2R3	128380 lbs/hr					
402C2R4	126260 lbs/hr					
402C3R1	103800 lbs/hr					
402C3R2	109600 lbs/hr					
402C3R3	107400 lbs/hr					
402C3R4	98000 lbs/hr					
402C4R1	123820 lbs/hr					
402C4R2	250040 lbs/hr					
402C4R3	126000 lbs/hr					
402C4R4	125800 lbs/hr					

5. Type: SPIKE

6. Description: ORGANIC(TCE,TeCE,DCB,TCB)

Additional ID Information

Process Group: WET KILN Location: PRIMARY CHAMBER Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: ?
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
402C3R1	723 lbs/hr					
402C3R2	671 lbs/hr					
402C3R3	713 lbs/hr					
402C3R4	710 lbs/hr					
402C4R1	709 lbs/hr					
402C4R2	732 lbs/hr					
402C4R3	767 lbs/hr					
402C4R4	699 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: KS
 3. CITY: CHANUTE
 4. EP ID: 402 DEVICE NAME: KILN NO. 2 EPA ID: KSD031203318 REGION: 7
 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

402C5R1						
402C5R2	259 lbs/hr					
402C5R3	269 lbs/hr					
402C5R4	310 lbs/hr					

6. Description: ORGANICS (TCE,TCB)/METALS (CD,CR,PB)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: BED FIRED Feed Location: MIDDLE OF CHAMBER
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
402C2R1	161 lbs/hr					
402C2R2	143 lbs/hr					
402C2R3	143 lbs/hr					
402C2R4	143 lbs/hr					

5. Type: WASTE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ATOMIZED LIQUID Feed Location: LOW END
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
402C1R1	14160 lbs/hr		17019 Btu/lb			
402C1R2	14160 lbs/hr		16878 Btu/lb			
402C1R3	13460 lbs/hr		17087 Btu/lb			
402C1R4	13340 lbs/hr		18590 Btu/lb			
402C2R1	13020 lbs/hr		3202 Btu/lb			
402C2R2	11980 lbs/hr		2545 Btu/lb			
402C2R3	12000 lbs/hr		2508 Btu/lb			
402C2R4	12760 lbs/hr		2727 Btu/lb			
402C3R1	7960 lbs/hr		15276 Btu/lb			
402C3R2	7100 lbs/hr		15186 Btu/lb			
402C3R3	7840 lbs/hr		15093 Btu/lb			
402C3R4	5660 lbs/hr		14888 Btu/lb			
402C4R1	9340 lbs/hr		15023 Btu/lb			
402C4R2	9640 lbs/hr		15879 Btu/lb			
402C4R3	10700 lbs/hr		16098 Btu/lb			
402C4R4	10180 lbs/hr		16075 Btu/lb			
402C5R1	7960 lbs/hr					
402C5R2	7980 lbs/hr					
402C5R3	7960 lbs/hr					
402C5R4	7980 lbs/hr					

6. Description: WASTE-DERIVED FUEL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: BED FIRED Feed Location: MIDDLE OF CHAMBER
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
402C1R1	4340 lbs/hr		7373 Btu/lb			
402C1R2	5880 lbs/hr		6836 Btu/lb			
402C1R3	3940 lbs/hr		10862 Btu/lb			
402C1R4	4940 lbs/hr		5040 Btu/lb			

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: KS
 3. CITY: CHANUTE
 4. EP ID: 402 DEVICE NAME: KILN NO. 2

EPA ID: KSD031203318
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

402C2R1	5700 lbs/hr		40701	Btu/lb			
402C2R2	5100 lbs/hr		41960	Btu/lb			
402C2R3	4380 lbs/hr		48858	Btu/lb			
402C2R4	4680 lbs/hr		47649	Btu/lb			
402C3R1	1860 lbs/hr		8676	Btu/lb			
402C3R2	1700 lbs/hr		7221	Btu/lb			
402C3R3	2160 lbs/hr		6969	Btu/lb			
402C3R4	1720 lbs/hr		7547	Btu/lb			
402C4R1	3300 lbs/hr		6585	Btu/lb			
402C4R2	3780 lbs/hr		6084	Btu/lb			
402C4R3	3160 lbs/hr		8076	Btu/lb			
402C4R4	2940 lbs/hr		8881	Btu/lb			
402C5R1	2280 lbs/hr						
402C5R2	2980 lbs/hr						
402C5R3	3060 lbs/hr						
402C5R4	3860 lbs/hr						

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: NE
 3. CITY: LOUISVILLE
 4. EP ID: 405 DEVICE NAME: KILN NO. 1 EPA ID: NED007260672 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP REGION: 7

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: DRY KILN (SEMI) Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
405C1R1	88000 lbs/hr					
405C1R2	88000 lbs/hr					
405C1R3	88000 lbs/hr					
405C1R4	88000 lbs/hr					
405C1R5	88000 lbs/hr					
405C2R1	92000 lbs/hr					
405C2R2	92000 lbs/hr					
405C2R3	92000 lbs/hr					
405C2R4	92000 lbs/hr					
405C2R5	90000 lbs/hr					
405C2R6	90000 lbs/hr					

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: DRY KILN (SEMI) Location: ESP Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
405C1R1	9520 lbs/hr					
405C1R2	6960 lbs/hr					
405C1R3	720 lbs/hr					
405C1R4	4980 lbs/hr					
405C1R5	4980 lbs/hr					
405C2R1	7520 lbs/hr					
405C2R2	17620 lbs/hr					
405C2R3	8900 lbs/hr					
405C2R4	6160 lbs/hr					
405C2R5	8360 lbs/hr					
405C2R6	3540 lbs/hr					

5. Type: RAW MATERIAL

6. Description: LIMESTONE/SAND/CLAY

Additional ID Information

Process Group: DRY KILN (SEMI) Location: PREHEATER Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: HIGH END
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
405C1R1	156680 lbs/hr					
405C1R2	164400 lbs/hr					
405C1R3	150120 lbs/hr					
405C1R4	163000 lbs/hr					
405C1R5	159660 lbs/hr					
405C2R1	172140 lbs/hr					

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: NE
 3. CITY: LOUISVILLE
 4. EP ID: 405 DEVICE NAME: KILN NO. 1

EPA ID: NED007260672
 SYSTEM TYPE: CEMENT KILN

REGION: 7

APC SYSTEM: ESP

405C2R2	171280 lbs/hr					
405C2R3	170380 lbs/hr					
405C2R4	169960 lbs/hr					
405C2R5	170060 lbs/hr					
405C2R6	170160 lbs/hr					

5. Type: SPIKE

6. Description: METALS (AS,CR)

Additional ID Information

Process Group: DRY KILN (SEMI)

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTICHANNEL PIPE

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
405C1R1						
405C1R2						
405C1R3						
405C1R4						
405C1R5						

6. Description: ORGANICS (1,1,1-TCE)

Additional ID Information

Process Group: DRY KILN (SEMI)

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: GRAVITY

Feed Location: HIGHEND

Manufacturer: ?

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
405C2R1	78 lbs/hr					
405C2R2	103 lbs/hr					
405C2R3	96 lbs/hr					
405C2R4	79 lbs/hr					
405C2R5	83 lbs/hr					

6. Description: ORGANICS (1,2,4-TCB)

Additional ID Information

Process Group: DRY KILN (SEMI)

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: GRAVITY

Feed Location: HIGHEND

Manufacturer: ?

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
405C2R1	99 lbs/hr					
405C2R2	135 lbs/hr					
405C2R3	129 lbs/hr					
405C2R4	115 lbs/hr					
405C2R5	107 lbs/hr					

5. Type: WASTE

6. Description:

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: NE
 3. CITY: LOUISVILLE
 4. EP ID: 405 DEVICE NAME: KILN NO. 1

EPA ID: NED007260672
 SYSTEM TYPE: CEMENT KILN

REGION: 7

APC SYSTEM: ESP

Additional ID Information

Process Group: DRY KILN (SEMI)

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTICHANNEL PIPE

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
405C1R1	8820 lbs/hr					
405C1R2	8800 lbs/hr					
405C1R3	8680 lbs/hr					
405C1R4	6040 lbs/hr					
405C1R5	6040 lbs/hr					
405C2R1	8780 lbs/hr					
405C2R2	8820 lbs/hr					
405C2R3	9120 lbs/hr					
405C2R4	8960 lbs/hr					
405C2R5	7440 lbs/hr					
405C2R6	5980 lbs/hr					

Additional ID Information

Process Group: DRY KILN (SEMI)

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: GRAVITY

Feed Location: HIGHEND

Manufacturer: ?

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
405C1R1	2960 lbs/hr					
405C1R2	2980 lbs/hr					
405C1R3	2020 lbs/hr					
405C1R4	1980 lbs/hr					
405C1R5	1620 lbs/hr					
405C2R1	2960 lbs/hr					
405C2R2	2980 lbs/hr					
405C2R3	2960 lbs/hr					
405C2R4	2980 lbs/hr					
405C2R5	2900 lbs/hr					
405C2R6	2020 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

EPA ID: NED007260672
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 7

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: DRY KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C1R1	118000 lbs/hr					
406C1R2	118000 lbs/hr					
406C1R3	124000 lbs/hr					
406C1R4	124000 lbs/hr					
406C1R5	128000 lbs/hr					
406C1R6	128000 lbs/hr					
406C1R7	122000 lbs/hr					
406C1R8	122000 lbs/hr					
406C2R1	124000 lbs/hr					
406C2R2	124000 lbs/hr					
406C2R3	140000 lbs/hr					
406C2R4	140000 lbs/hr					

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: DRY KILN

Location: ESP

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C1R1	2380 lbs/hr					
406C1R2	2260 lbs/hr					
406C1R3	3020 lbs/hr					
406C1R4	3540 lbs/hr					
406C1R5	7760 lbs/hr					
406C1R6	8600 lbs/hr					
406C1R7	7080 lbs/hr					
406C1R8	7080 lbs/hr					
406C2R1	2240 lbs/hr					
406C2R2	2260 lbs/hr					
406C2R3	2340 lbs/hr					
406C2R4	1940 lbs/hr					

5. Type: FUEL

6. Description: COAL/COKE

Additional ID Information

Process Group: DRY KILN

Location: KILN/PRECALCINER

Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTICHANNEL BRNR

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C1R1	10440 lbs/hr					
406C1R2	13280 lbs/hr					
406C1R3	11860 lbs/hr					
406C1R4	11680 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: NE
 3. CITY: LOUISVILLE
 4. EP ID: 406 DEVICE NAME: KILN NO. 2
 EPA ID: NED007260672
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP
 REGION: 7

406C1R5	14940 lbs/hr					
406C1R6	19100 lbs/hr					
406C1R7	19380 lbs/hr					
406C1R8	20640 lbs/hr					
406C2R1	11760 lbs/hr					
406C2R2	11940 lbs/hr					
406C2R3	9520 lbs/hr					
406C2R4	10680 lbs/hr					

5. Type: RAW MATERIAL

6. Description: LIMESTONE/SAND/CLAY

Additional ID Information

Process Group: DRY KILN Location: PRECALCINER/KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: GRAVITY Feed Location: HIGH END
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C1R1	208260 lbs/hr					
406C1R2	219100 lbs/hr					
406C1R3	229980 lbs/hr					
406C1R4	239860 lbs/hr					
406C1R5	231860 lbs/hr					
406C1R6	222720 lbs/hr					
406C1R7	211200 lbs/hr					
406C1R8	212760 lbs/hr					
406C2R1	233460 lbs/hr					
406C2R2	237600 lbs/hr					
406C2R3	239940 lbs/hr					
406C2R4	238800 lbs/hr					

5. Type: SPIKE

6. Description: METALS (AS,CR)

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTICHANNEL BRBR Feed Location: LOW END
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C1R5						
406C1R6						
406C1R7						
406C1R8						

6. Description: ORGANICS (1,1,1-TCE)

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTICHANNEL BRNR Feed Location: LOW END
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C2R1	93 lbs/hr					
406C2R2	80 lbs/hr					
406C2R3	93 lbs/hr					
406C2R4	85 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ASH GROVE CEMENT COMPANY
 2. STATE: NE
 3. CITY: LOUISVILLE EPA NED007260672 REGION: 7
 4. EP ID: 406 DEVICE NAME: KILN NO. 2 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

6. Description: ORGANICS (1,2,4-TCB)

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTICHANNEL BRNR Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C2R1	103 lbs/hr					
406C2R2	95 lbs/hr					
406C2R3	108 lbs/hr					
406C2R4	108 lbs/hr					

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: GRAVITY Feed Location: HIGHEND
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C1R1	3980 lbs/hr					
406C1R2	3980 lbs/hr					
406C1R3	3960 lbs/hr					
406C1R4	3900 lbs/hr					
406C1R5	3980 lbs/hr					
406C1R6	4000 lbs/hr					
406C1R7	3980 lbs/hr					
406C1R8	4000 lbs/hr					
406C2R1	3980 lbs/hr					
406C2R2	3980 lbs/hr					
406C2R3	3980 lbs/hr					
406C2R4	3980 lbs/hr					

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

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTICHANNEL BRNR Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
406C1R1	10100 lbs/hr					
406C1R2	8600 lbs/hr					
406C1R3	10040 lbs/hr					
406C1R4	9840 lbs/hr					
406C1R5	7900 lbs/hr					
406C1R6	7960 lbs/hr					
406C1R7	7200 lbs/hr					
406C1R8	7240 lbs/hr					
406C2R1	9800 lbs/hr					
406C2R2	9980 lbs/hr					
406C2R3	9600 lbs/hr					
406C2R4	8820 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

EPA ID: MOD054018288
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP

REGION: 7

319C6R1	22800 lbs/hr					
319C6R2	23200 lbs/hr					
319C6R3	23800 lbs/hr					
319C7R1	23600 lbs/hr					
319C7R2	26200 lbs/hr					
319C8	17400 lbs/hr					

6. Description: DIESEL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: ?
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
319C7R1	9800 lbs/hr					
319C7R2	7600 lbs/hr					

5. Type: RAW MATERIAL

6. Description: LIMESTONE/SHALE

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: PUMPED SLURRY Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
319C1						
319C2						
319C3						
319C4						
319C5	190000 lbs/hr					
319C5	190000 lbs/hr					
319C6R1	258000 lbs/hr					
319C6R1	258000 lbs/hr					
319C6R2	264000 lbs/hr					
319C6R2	264000 lbs/hr					
319C6R3	264000 lbs/hr					
319C6R3	264000 lbs/hr					
319C7R1	252000 lbs/hr					
319C7R1	252000 lbs/hr					
319C7R2	254000 lbs/hr					
319C7R2	254000 lbs/hr					
319C8	220000 lbs/hr					
319C8	220000 lbs/hr					

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLUDGE

Feed Stream Information

Feed Mechanism: CONVENTIONAL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
319C1	26000 lbs/hr		12600 Btu/lb		53.5	3.5
319C2	24000 lbs/hr		11500 Btu/lb		54.9	5.2
319C3	22000 lbs/hr		11900 Btu/lb		55.2	8

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

EPA MOD054018288
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP

REGION: 7

319C4	25000 lbs/hr		14500	Btu/lb		56.3	1.3
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Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ROTARY AIR LOCK Feed Location: INTO COAL FEED LINE
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
319C1			5850 Btu/lb			32.3
319C2			5580 Btu/lb			42.9
319C3			5400 Btu/lb			42.1
319C4			6080 Btu/lb			13.7

6. Description: CONTAINERIZED

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: AIR CANNON Feed Location: MIDDLE OF CHAMBER
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
319C1						82
319C2						82.2
319C3						30
319C4						93.6

6. Description: H.W LIQ

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: CONVENTIONAL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
319C6R1	15800 lbs/hr		10498 Btu/lb			
319C6R2	18400 lbs/hr		9837 Btu/lb			
319C6R3	20000 lbs/hr		10554 Btu/lb			
319C8	12400 lbs/hr		12630 Btu/lb			

6. Description: POWDERED

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ROATY AIR LOCK Feed Location: INTO COAL FEED LINE
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
319C6R1	9200 lbs/hr		7828 Btu/lb			
319C6R2	8000 lbs/hr		8158 Btu/lb			
319C6R3	7800 lbs/hr		8820 Btu/lb			

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ESSROC CORPORATION
 2. STATE: IN
 3. CITY: LOGANSPORT
 4. EP ID: 300 DEVICE NAME: KILN NO. 1 EPA ID: IND005081542 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP REGION: 5

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
300C2R1	58600 lbs/hr					
300C2R2	60600 lbs/hr					
300C2R3	59600 lbs/hr					
300C2R4	59200 lbs/hr					

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: WET KILN Location: ESP Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
300C2R1	10720 lbs/hr					
300C2R2	8740 lbs/hr					
300C2R3	8740 lbs/hr					
300C2R4	8740 lbs/hr					

6. Description: RECYCLE

Additional ID Information

Process Group: WET KILN Location: ESP Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
300C2R1	5760 lbs/hr					
300C2R2	2680 lbs/hr					
300C2R3	1880 lbs/hr					
300C2R4	5400 lbs/hr					

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
300C1R1	2880 lbs/hr					
300C1R2	2880 lbs/hr					
300C1R3	2860 lbs/hr					
300C1R4	3600 lbs/hr					
300C2R1	660 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ESSROC CORPORATION
 2. STATE: IN
 3. CITY: LOGANSPORT EPA IND005081542 REGION: 5
 4. EP ID: 300 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

300C2R2	420 lbs/hr					
300C2R3	1760 lbs/hr					
300C2R4	400 lbs/hr					

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: PUMPED SLURRY Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
300C1R1	101410 lbs/hr					
300C1R2	101410 lbs/hr					
300C1R3	104056 lbs/hr					
300C1R4	107804 lbs/hr					
300C2R1	102600 lbs/hr					
300C2R2	99000 lbs/hr					
300C2R3	104400 lbs/hr					
300C2R4	103800 lbs/hr					

5. Type: SPIKE

6. Description: METALS (CR6)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: CONCENTRIC BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
300C2R1	59 lbs/hr					
300C2R2	46 lbs/hr					
300C2R3	50 lbs/hr					
300C2R4	61 lbs/hr					

5. Type: WASTE

6. Description: SPIKED METALS (AS,BE,CR6,CD,SB,PB)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: CONCENTRIC BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
300C1R1	9413 lbs/hr					
300C1R2	9700 lbs/hr					
300C1R3	9303 lbs/hr					
300C1R4	8399 lbs/hr					
300C2R1	13020 lbs/hr					
300C2R2	14100 lbs/hr					
300C2R3	12000 lbs/hr					
300C2R4	13020 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ESSROC CORPORATION
 2. STATE: IN
 3. CITY: LOGANSPORT EPA IND005081542 REGION: 5
 4. EP ID: 300 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: LEVER ARM FEED Feed Location: MIDDLE OF CHAMBER
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft ³	Ash (%)
300C1R1	2248 lbs/hr					
300C1R2	1873 lbs/hr					
300C1R3	1688 lbs/hr					
300C1R4	1706 lbs/hr					
300C2R1	2125 lbs/hr					
300C2R2	1908 lbs/hr					
300C2R3	2158 lbs/hr					
300C2R4	2221 lbs/hr					

SECTION 6: OTHER STREAM RATES

1. COMPANY: ESSROC CORPORATION
 2. STATE: PR
 3. CITY: DORADO EPA PRD980526115 REGION: 2
 4. EP ID: 301 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: FF

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
301C1R1	15900 lbs/hr					
301C1R2	15780 lbs/hr					
301C1R3	17540 lbs/hr					
301C2R1	15540 lbs/hr					
301C2R2	15880 lbs/hr					
301C2R3	15440 lbs/hr					

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
301C1R1	357200 lbs/hr					
301C1R2	357400 lbs/hr					
301C1R3	357600 lbs/hr					
301C2R1	320600 lbs/hr					
301C2R2	321200 lbs/hr					
301C2R3	320600 lbs/hr					

5. Type: SPIKE

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

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
301C1R1	427 lbs/hr					
301C1R2	428 lbs/hr					
301C1R3	421 lbs/hr					
301C2R1	398 lbs/hr					
301C2R2	412 lbs/hr					
301C2R3	397 lbs/hr					

5. Type: WASTE

6. Description:

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: ESSROC CORPORATION

2. STATE: PR

3. CITY: DORADO

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

EPA ID: PRD980526115

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: FF

REGION: 2

Additional ID Information

Process Group: DRY KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value		Viscosity, cSt	Density, lb/ft ³	Ash (%)
301C1R1	12480 lbs/hr						
301C1R2	12510 lbs/hr						
301C1R3	12396 lbs/hr						
301C2R1	10824 lbs/hr		13300	Btu/lb		55.1	.3
301C2R2	11082 lbs/hr		13200	Btu/lb		55	.2
301C2R3	10806 lbs/hr		13700	Btu/lb		55	.4

SECTION 6: OTHER STREAM RATES

1. COMPANY: GIANT CEMENT COMPANY
 2. STATE: SC
 3. CITY: HARLEYVILLE EPA SCD003351699 REGION: 4
 4. EP ID: 200 DEVICE NAME: KILN NO. 4 SYSTEM TYPE: CEMENT KILN APC SYSTEM: FF

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
200C1R1	1600 lbs/hr		9625 Btu/lb			
200C1R2	600 lbs/hr		43333 Btu/lb			
200C1R3	400 lbs/hr		13000 Btu/lb			
200C1R4	1000 lbs/hr		13000 Btu/lb			

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
200C1R1	77600 lbs/hr					
200C1R2	77800 lbs/hr					
200C1R3	75200 lbs/hr					
200C1R4	74800 lbs/hr					

5. Type: SPIKE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
200C1R1	492 lbs/hr					
200C1R2	506 lbs/hr					
200C1R3	332 lbs/hr					
200C1R4	392 lbs/hr					

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
200C1R1	627 lbs/hr					
200C1R2	502 lbs/hr					
200C1R3	455 lbs/hr					
200C1R4	588 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: GIANT CEMENT COMPANY
 2. STATE: SC
 3. CITY: HARLEYVILLE EPA SCD003351699 REGION: 4
 4. EP ID: 200 DEVICE NAME: KILN NO. 4 SYSTEM TYPE: CEMENT KILN APC SYSTEM: FF

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULT-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
200C1R1	493 lbs/hr					
200C1R2	455 lbs/hr					
200C1R3	412 lbs/hr					
200C1R4	404 lbs/hr					

5. Type: TIER I

6. Description: METALS FEED LIMIT

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: Feed Location:
 Manufacturer: Number of Burners:

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
200C1R1						
200C1R2						
200C1R3						
200C1R4						

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
200C1R1	10200 lbs/hr		11784 Btu/lb			
200C1R2	8400 lbs/hr		12047 Btu/lb			
200C1R3	9000 lbs/hr		10266 Btu/lb			
200C1R4	8400 lbs/hr		12309 Btu/lb			

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: GIANT CEMENT COMPANY
 2. STATE: SC
 3. CITY: HARLEYVILLE EPA ID: SCD003351699 REGION: 4
 4. EP ID: 201 DEVICE NAME: KILN NO. 5 SYSTEM TYPE: CEMENT KILN APC SYSTEM: FF

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
201C1R1	2400 lbs/hr		19791 Btu/lb			
201C1R2	5800 lbs/hr		8206 Btu/lb			
201C1R3	1400 lbs/hr		13000 Btu/lb			
201C1R4	600 lbs/hr		13000 Btu/lb			

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
201C1R1	98600 lbs/hr					
201C1R2	86200 lbs/hr					
201C1R3	81600 lbs/hr					
201C1R4	82800 lbs/hr	20				

5. Type: SPIKE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
201C1R1	313 lbs/hr					
201C1R2	403 lbs/hr					
201C1R3	415 lbs/hr					
201C1R4	548 lbs/hr					

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
201C1R1	365 lbs/hr					
201C1R2	420 lbs/hr					
201C1R3	343 lbs/hr					
201C1R4	525 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: GIANT CEMENT COMPANY
 2. STATE: SC
 3. CITY: HARLEYVILLE
 4. EP ID: 201 DEVICE NAME: KILN NO. 5 EPA ID: SCD003351699 REGION: 4
 SYSTEM TYPE: CEMENT KILN APC SYSTEM: FF

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
201C1R1	421 lbs/hr					
201C1R2	435 lbs/hr					
201C1R3	384 lbs/hr					
201C1R4	770 lbs/hr					

5. Type: TIER I

6. Description: METALS FEED LIMIT

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: ? Feed Location:
 Manufacturer: ? Number of Burners:

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
201C1R1						
201C1R2						
201C1R3						
201C1R4						

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
201C1R1	17800 lbs/hr		9516 Btu/lb			
201C1R2	7800 lbs/hr		10115 Btu/lb			
201C1R3	9600 lbs/hr		13000 Btu/lb			
201C1R4	10200 lbs/hr		10392 Btu/lb			

SECTION 6: OTHER STREAM RATES

1. COMPANY: HEARTLAND CEMENT COMPANY
 2. STATE: KS
 3. CITY: INDEPENDENCE EPA KSD980739999 REGION: 7
 4. EP ID: 202 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: FF

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
202C2R1						
202C2R2						
202C2R3						

5. Type: FUEL

6. Description: COKE

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTIFUEL BRNR PIPE Feed Location: LOWEND
 Manufacturer: PILLARD (TAKE OFF) Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
202C1R1	2702 lbs/hr		14900 Btu/lb			2.2
202C1R2	2342 lbs/hr		14700 Btu/lb			3
202C1R3	2426 lbs/hr		14600 Btu/lb			3.3

5. Type: RAW MATERIAL

6. Description: ROCK/SAND/CLAY/SHALE

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: CONVEYER Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
202C1R1	135840 lbs/hr					
202C1R2	143046 lbs/hr					
202C1R3	140344 lbs/hr					
202C2R1	122568 lbs/hr					
202C2R2	134099 lbs/hr					
202C2R3	130916 lbs/hr					

5. Type: SPIKE

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

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: PUMP Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
202C2R1	75 lbs/hr					
202C2R2	74 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: HEARTLAND CEMENT COMPANY
 2. STATE: KS
 3. CITY: INDEPENDENCE EPA KSD980739999 REGION: 7
 4. EP ID: 202 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: FF

202C2R3	74 lbs/hr					
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5. Type: WASTE

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: PNUMATIC PIPE/LANCE Feed Location: ?
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value		Viscosity, cSt	Density, lb/ft3	Ash (%)
202C1R1	8827 lbs/hr		10000	Btu/lb			
202C1R2	7566 lbs/hr		10200	Btu/lb			
202C1R3	7686 lbs/hr		9670	Btu/lb			

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: LANCE / BURNER TIP Feed Location: UNDERSHOT
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value		Viscosity, cSt	Density, lb/ft3	Ash (%)
202C1R1	4323 lbs/hr		17100	Btu/lb	1.3		1.9
202C1R2	5464 lbs/hr		16600	Btu/lb	.6		.8
202C1R3	5825 lbs/hr		16900	Btu/lb	1.5		.3
202C2R1	14532 lbs/hr		13100	Btu/lb	1.3		2.7
202C2R2	15854 lbs/hr		11000	Btu/lb	14.8		.9
202C2R3	16214 lbs/hr		15200	Btu/lb	12.3		.8

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: HOLNAM INC.
 2. STATE: MO
 3. CITY: CLARKSVILLE
 4. EP ID: 204 DEVICE NAME: KILN NO. 1 EPA ID: MOD029729688 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP REGION: 7

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
204C1R1						
204C1R2						
204C1R3						

5. Type: FUEL

6. Description: COAL/COKE

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: BURNER PIPE Feed Location: LOW END
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
204C1R1	40000 lbs/hr		12600 Btu/lb			4.1
204C1R2	40000 lbs/hr		11900 Btu/lb			4
204C1R3	40000 lbs/hr		12500 Btu/lb			4.2
204C2R1	40000 lbs/hr		14100 Btu/lb			2.7
204C2R2	40000 lbs/hr		13100 Btu/lb			2.6
204C2R3	40000 lbs/hr		12000 Btu/lb			6.1
204C3R1	76000 lbs/hr		12900 Btu/lb			3.8
204C3R2	76000 lbs/hr		13200 Btu/lb			3.3
204C3R3	76000 lbs/hr		13100 Btu/lb			3.5
204C4R1	34000 lbs/hr		13200 Btu/lb			4.3
204C4R2	2040000 lbs/hr		12500 Btu/lb			6
204C4R3	34000 lbs/hr		13000 Btu/lb			4.6

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: ? Feed Location: ?
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
204C1R1	880000 lbs/hr					
204C1R2	880000 lbs/hr					
204C1R3	880000 lbs/hr					
204C2R1	882000 lbs/hr					
204C2R2	882000 lbs/hr					
204C2R3	882000 lbs/hr					
204C3R1	890000 lbs/hr					
204C3R2	890000 lbs/hr					
204C3R3	890000 lbs/hr					
204C4R1	864000 lbs/hr					
204C4R2	864000 lbs/hr					
204C4R3	864000 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: HOLNAM INC.
 2. STATE: MO
 3. CITY: CLARKSVILLE EPA MOD029729688 REGION: 7
 4. EP ID: 204 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

5. Type: SPIKE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
204C1R1	1002 lbs/hr					
204C1R2	708 lbs/hr					
204C1R3	750 lbs/hr					

6. Description: ORGANICS (SF6,TCB)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
204C4R1	1002 lbs/hr					
204C4R2	708 lbs/hr					
204C4R3	750 lbs/hr					

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: CIRCULAR BURNER Feed Location: LOWEND
 Manufacturer: CUSTOM Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
204C1R1	42800 lbs/hr		15800 Btu/lb	45		.7
204C1R2	42800 lbs/hr		16300 Btu/lb	39		1.1
204C1R3	42800 lbs/hr		14600 Btu/lb	41		.5
204C2R1	42000 lbs/hr		16200 Btu/lb	47		.9
204C2R2	42000 lbs/hr		16200 Btu/lb	69		.7
204C2R3	42000 lbs/hr		15600 Btu/lb	<		.9
204C4R1	42000 lbs/hr		9140 Btu/lb	66		1.3
204C4R2	42000 lbs/hr		15700 Btu/lb	73		1
204C4R3	42000 lbs/hr		15500 Btu/lb	68		.9

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: HOLNAM INC.
 2. STATE: MS
 3. CITY: ARTESIA EPA MSD077655876 REGION: 4
 4. EP ID: 203 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
203C1R1	9200 lbs/hr					
203C1R2	11000 lbs/hr					
203C1R3	7300 lbs/hr					

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
203C1R1	197000 lbs/hr					
203C1R2	183800 lbs/hr					
203C1R3	197600 lbs/hr					

5. Type: SPIKE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
203C1R1						
203C1R2						
203C1R3						

5. Type: WASTE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
203C1R1	14000 lbs/hr					
203C1R2	14400 lbs/hr					
203C1R3	14000 lbs/hr					

SECTION 6: OTHER STREAM RATES

1. COMPANY: HOLNAM INC.
 2. STATE: SC
 3. CITY: HOLLY HILL

EPA ID: SCD003368891
 SYSTEM TYPE: CEMENT KILN

REGION: 4

4. EP ID: 205 DEVICE NAME: KILN NO. 1 APC SYSTEM: ESP

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
205C1R1						
205C1R2						
205C1R3						

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: WET KILN Location: ESP Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
205C1R1						
205C1R2						
205C1R3						
205C3R1						
205C3R2						
205C3R3						
205C4R1						
205C4R2						
205C4R3						

5. Type: FUEL

6. Description: COAL/COKE

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: PILLARD Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
205C1R1	6000 lbs/hr		12700 Btu/lb			11.1
205C1R2	6000 lbs/hr		12300 Btu/lb			7.5
205C1R3	6000 lbs/hr		12100 Btu/lb			8.2
205C2R1	16000 lbs/hr		11000 Btu/lb			10.4
205C2R2	16000 lbs/hr		11100 Btu/lb			12.7
205C2R3	16000 lbs/hr		10600 Btu/lb			11.7
205C3R1	20000 lbs/hr					
205C3R2	20000 lbs/hr					
205C3R3	20000 lbs/hr					
205C4R1	10000 lbs/hr					
205C4R2	10000 lbs/hr					
205C4R3	10000 lbs/hr					

5. Type: RAW MATERIAL

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: HOLNAM INC.

2. STATE: SC

3. CITY: HOLLY HILL

4. EP ID: 205 DEVICE NAME: KILN NO. 1

EPA ID: SCD003368891

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 4

6. Description:

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SLURRY

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER

Feed Location: LOWEND

Manufacturer: PILLARD

Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
205C1R1	166000 lbs/hr					
205C1R2	166000 lbs/hr					
205C1R3	166000 lbs/hr					
205C2R1	166000 lbs/hr					
205C2R2	166000 lbs/hr					
205C2R3	166000 lbs/hr					
205C3R1	158000 lbs/hr					
205C3R2	158000 lbs/hr					
205C3R3	158000 lbs/hr					
205C4R1	162000 lbs/hr					
205C4R2	162000 lbs/hr					
205C4R3	162000 lbs/hr					

5. Type: SPIKE

6. Description: METALS (AS,BE,CR,CR,SB,PB,CR6)

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER

Feed Location: LOWEND

Manufacturer: PILLARD

Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
205C1R1	840 lbs/hr					
205C1R2	882 lbs/hr					
205C1R3	960 lbs/hr					

6. Description: ORGANICS (TCB)

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER

Feed Location: LOWEND

Manufacturer: PILLARD

Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
205C2R1	840 lbs/hr					
205C2R2	882 lbs/hr					
205C2R3	960 lbs/hr					

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER

Feed Location: LOWEND

Manufacturer: PILLARD

Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
205C1R1	15400 lbs/hr		11300 Btu/lb			2.9

SECTION 6: OTHER STREAM RATES

1. COMPANY: HOLNAM INC.
 2. STATE: SC
 3. CITY: HOLLY HILL
 4. EP ID: 205 DEVICE NAME: KILN NO. 1

EPA ID: SCD003368891
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 4

205C1R2	15400 lbs/hr		11300	Btu/lb			2.3
205C1R3	15400 lbs/hr		11100	Btu/lb			4.4
205C2R1	4800 lbs/hr		8970	Btu/lb			2.8
205C2R2	4800 lbs/hr		10900	Btu/lb			2.7
205C2R3	4800 lbs/hr		9220	Btu/lb			2.6
205C4R1	12000 lbs/hr						
205C4R2	12000 lbs/hr						
205C4R3	12000 lbs/hr						

SECTION 6: OTHER STREAM RATES

1. COMPANY: HOLNAM INC.

2. STATE: SC

3. CITY: HOLLY HILL

EPA ID: SCD003368891

REGION: 4

4. EP ID: 206 DEVICE NAME: KILN NO. 2

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
206C1R1						
206C1R2						
206C1R3						

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: WET KILN

Location: ESP

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
206C1R1						
206C1R2						
206C1R3						
206C3R1						
206C3R2						
206C3R3						

6. Description: RECYCLE

Additional ID Information

Process Group: WET KILN

Location: ESP

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
206C1R1						
206C1R2						
206C1R3						

5. Type: FUEL

6. Description: COAL/COKE

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER

Feed Location: LOWEND

Manufacturer: PILLARD

Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
206C1R1	16800 lbs/hr		11600 Btu/lb			11
206C1R2	16800 lbs/hr		13400 Btu/lb			6.2
206C1R3	16800 lbs/hr		11900 Btu/lb			6.9
206C2R1	22000 lbs/hr		11100 Btu/lb			8.7
206C2R2	22000 lbs/hr		11000 Btu/lb			8

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: HOLNAM INC.
 2. STATE: SC
 3. CITY: HOLLY HILL
 4. EP ID: 206 DEVICE NAME: KILN NO. 2 EPA SCD003368891 REGION: 4
 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

206C2R3	22000 lbs/hr		11900	Btu/lb			4.3
206C3R1	20000 lbs/hr						
206C3R2	20000 lbs/hr						
206C3R3	20000 lbs/hr						
206C4R1	36000 lbs/hr						
206C4R2	36000 lbs/hr						
206C4R3	36000 lbs/hr						

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
206C1R1	328000 lbs/hr					
206C1R2	328000 lbs/hr					
206C1R3	328000 lbs/hr					
206C2R1	262000 lbs/hr					
206C2R2	262000 lbs/hr					
206C2R3	262000 lbs/hr					
206C3R1	328000 lbs/hr					
206C3R2	328000 lbs/hr					
206C3R3	328000 lbs/hr					
206C4R1	334000 lbs/hr					
206C4R2	334000 lbs/hr					
206C4R3	334000 lbs/hr					

5. Type: SPIKE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: PILLARD Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
206C1R1						
206C1R2						
206C1R3						

6. Description: ORGANICS (TCB)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: PILLARD Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
206C2R1						
206C2R2						
206C2R3						

5. Type: WASTE

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: KEYSTONE CEMENT COMPANY
 2. STATE: PA
 3. CITY: BATH EPA PAD002389559 REGION: 3
 4. EP ID: 207 DEVICE NAME: KILN NO. 1 SYSTEM TYPE: CEMENT KILN APC SYSTEM: MC/ESP

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: PNEUMATIC CONVEYED Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
207C1R1	3108 lbs/hr					
207C1R2	4470 lbs/hr					
207C1R3	4050 lbs/hr					
207C1R4	5250 lbs/hr					
207C2R1	5052 lbs/hr					
207C2R2	6396 lbs/hr					
207C2R3	5100 lbs/hr					
207C2R4	5250 lbs/hr					
207C2R5	9558 lbs/hr					
207C2R6	8418 lbs/hr					

5. Type: MC ASH

6. Description: RECYCLE

Additional ID Information

Process Group: WET KILN Location: MC Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
207C1R1						
207C1R2						
207C1R3						
207C1R4						
207C2R1						
207C2R2						
207C2R3						
207C2R4						
207C2R5						
207C2R6						

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
207C1R1	88972 lbs/hr					
207C1R2	88902 lbs/hr					
207C1R3	88902 lbs/hr					
207C1R4	88712 lbs/hr					
207C2R1	88890 lbs/hr					
207C2R2	88712 lbs/hr					
207C2R3	88902 lbs/hr					
207C2R4	88902 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: KEYSTONE CEMENT COMPANY

2. STATE: PA

3. CITY: BATH

4. EP ID: 207 DEVICE NAME: KILN NO. 1

EPA ID: PAD002389559

SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/ESP

REGION: 3

207C2R5	88324 lbs/hr					
207C2R6	88324 lbs/hr					

5. Type: SPIKE

6. Description: METALS (AS,CD)

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
207C1R1	208 lbs/hr					
207C1R2	166 lbs/hr					
207C1R3	179 lbs/hr					
207C1R4	177 lbs/hr					
207C2R1	113 lbs/hr					
207C2R2	67 lbs/hr					
207C2R3	116 lbs/hr					
207C2R4	175 lbs/hr					
207C2R5	72 lbs/hr					
207C2R6	150 lbs/hr					

6. Description: METALS (BE)

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
207C1R1	lbs/hr					
207C1R2	lbs/hr					
207C1R3	lbs/hr					
207C1R4	lbs/hr					
207C2R1	lbs/hr					
207C2R2	lbs/hr					
207C2R3	lbs/hr					
207C2R4	lbs/hr					
207C2R5	lbs/hr					
207C2R6	lbs/hr					

6. Description: METALS (CR)

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
207C1R1	246 lbs/hr					
207C1R2	303 lbs/hr					
207C1R3	286 lbs/hr					
207C1R4	243 lbs/hr					
207C2R1	146 lbs/hr					
207C2R2	64 lbs/hr					
207C2R3	96 lbs/hr					
207C2R4	114 lbs/hr					
207C2R5	113 lbs/hr					
207C2R6	109 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: KEYSTONE CEMENT COMPANY
 2. STATE: PA
 3. CITY: BATH
 4. EP ID: 207 DEVICE NAME: KILN NO. 1

EPA PAD002389559
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: MC/ESP
 REGION: 3

6. Description: METALS (PB)

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
207C1R1	577 lbs/hr					
207C1R2	434 lbs/hr					
207C1R3	490 lbs/hr					
207C1R4	292 lbs/hr					
207C2R1	246 lbs/hr					
207C2R2	38 lbs/hr					
207C2R3	200 lbs/hr					
207C2R4	177 lbs/hr					
207C2R5	84 lbs/hr					
207C2R6	112 lbs/hr					

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: AIR-ATOMIZED BURNER

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
207C1R1	4584 lbs/hr					
207C1R2	4461 lbs/hr					
207C1R3	4506 lbs/hr					
207C1R4	4776 lbs/hr					
207C2R1	4584 lbs/hr					
207C2R2	3305 lbs/hr					
207C2R3	3778 lbs/hr					
207C2R4	3683 lbs/hr					
207C2R5	1858 lbs/hr					
207C2R6	2647 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: KEYSTONE CEMENT COMPANY
 2. STATE: PA
 3. CITY: BATH
 4. EP ID: 208 DEVICE NAME: KILN NO. 2

EPA ID: PAD002389559
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 3

5. Type: ESP ASH

6. Description: RECYCLE

Additional ID Information

Process Group: WET KILN

Location: ESP

Phase: SOLID

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1						
208C1R2						
208C1R3						
208C1R4						
208C2R1						
208C2R2						
208C2R3						
208C2R4						
208C2R5						
208C2R6						

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: PNEUMATIC CONVEYED

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1	9144 lbs/hr		14009 Btu/lb			
208C1R2	8370 lbs/hr		13010 Btu/lb			
208C1R3	10170 lbs/hr		12989 Btu/lb			
208C1R4	10992 lbs/hr		12936 Btu/lb			
208C2R1	18288 lbs/hr		13008 Btu/lb			
208C2R2	14286 lbs/hr		12998 Btu/lb			
208C2R3	14490 lbs/hr		12995 Btu/lb			
208C2R4	14292 lbs/hr		12993 Btu/lb			
208C2R5	15618 lbs/hr		12991 Btu/lb			
208C2R6	12870 lbs/hr		13006 Btu/lb			

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: SLURRY

Feed Stream Information

Feed Mechanism: NA

Feed Location: NA

Manufacturer: NA

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1	322628 lbs/hr					
208C1R2	325042 lbs/hr					
208C1R3	325125 lbs/hr					
208C1R4	328052 lbs/hr					
208C2R1	328052 lbs/hr					
208C2R2	311439 lbs/hr					
208C2R3	324039 lbs/hr					
208C2R4	324122 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: KEYSTONE CEMENT COMPANY
 2. STATE: PA
 3. CITY: BATH
 4. EP ID: 208 DEVICE NAME: KILN NO. 2 EPA ID: PAD002389559 REGION: 3
 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

208C2R5	324122 lbs/hr					
208C2R6	324122 lbs/hr					

5. Type: SPIKE

6. Description: METALS (AS,CD)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1	585 lbs/hr					
208C1R2	762 lbs/hr					
208C1R3	305 lbs/hr					
208C1R4	341 lbs/hr					
208C2R1	80 lbs/hr					
208C2R2	107 lbs/hr					
208C2R3	81 lbs/hr					
208C2R4	73 lbs/hr					
208C2R5	92 lbs/hr					
208C2R6	90 lbs/hr					

6. Description: METALS (BE)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1	lbs/hr					
208C1R2	lbs/hr					
208C1R3	lbs/hr					
208C1R4	lbs/hr					
208C2R1	lbs/hr					
208C2R2	lbs/hr					
208C2R3	lbs/hr					
208C2R4	lbs/hr					
208C2R5	lbs/hr					
208C2R6	lbs/hr					

6. Description: METALS (CR)

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1	475 lbs/hr					
208C1R2	788 lbs/hr					
208C1R3	417 lbs/hr					
208C1R4	394 lbs/hr					
208C2R1	114 lbs/hr					
208C2R2	115 lbs/hr					
208C2R3	101 lbs/hr					
208C2R4	92 lbs/hr					
208C2R5	116 lbs/hr					
208C2R6	90 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: KEYSTONE CEMENT COMPANY
 2. STATE: PA
 3. CITY: BATH
 4. EP ID: 208 DEVICE NAME: KILN NO. 2

EPA ID: PAD002389559
 SYSTEM TYPE: CEMENT KILN

APC SYSTEM: ESP

REGION: 3

6. Description: METALS (PB)

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1	1083 lbs/hr					
208C1R2	1260 lbs/hr					
208C1R3	872 lbs/hr					
208C1R4	527 lbs/hr					
208C2R1	130 lbs/hr					
208C2R2	161 lbs/hr					
208C2R3	116 lbs/hr					
208C2R4	119 lbs/hr					
208C2R5	154 lbs/hr					
208C2R6	131 lbs/hr					

5. Type: WASTE

6. Description: WASTE 1

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ATOMIZED LIQUID

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1	6097 lbs/hr		27078 Btu/lb			
208C1R2	6804 lbs/hr					
208C1R3	5936 lbs/hr					
208C1R4	5479 lbs/hr					
208C2R1	5479 lbs/hr					
208C2R2	9589 lbs/hr					
208C2R3	9589 lbs/hr					
208C2R4	9084 lbs/hr					
208C2R5	9084 lbs/hr					
208C2R6	9084 lbs/hr					

6. Description: WASTE 2

Additional ID Information

Process Group: WET KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ATOMIZED LIQUID

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
208C1R1	7655 lbs/hr					
208C1R2	6895 lbs/hr					
208C1R3	7660 lbs/hr					
208C1R4	8499 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: LAFARGE
 2. STATE: AL
 3. CITY: DEMOPOLIS
 4. EP ID: 321 DEVICE NAME: KILN NO. 1 EPA ID: ALD067119966 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP REGION: 4

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: DUAL FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
321C1R1	13888 lbs/hr		13679 Btu/lb			
321C1R2	14550 lbs/hr		13745 Btu/lb			
321C1R3	14550 lbs/hr		13745 Btu/lb			
321C1R4	15873 lbs/hr		13229 Btu/lb			
321C1R5	15432 lbs/hr		13607 Btu/lb			
321C1R6	15211 lbs/hr		13805 Btu/lb			

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: PNEUMATIC Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
321C1R1	396828 lbs/hr					
321C1R2	396828 lbs/hr					
321C1R3	374782 lbs/hr					
321C1R4	418874 lbs/hr					
321C1R5	396828 lbs/hr					
321C1R6	418874 lbs/hr					

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: DUAL FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
321C1R1	13227 lbs/hr		12095 Btu/lb	27		
321C1R2	13888 lbs/hr		12239 Btu/lb	28		
321C1R3	13448 lbs/hr		11897 Btu/lb	27		
321C1R4	14550 lbs/hr		12370 Btu/lb	27		
321C1R5	14550 lbs/hr		11683 Btu/lb	27		
321C1R6	14550 lbs/hr		11683 Btu/lb	24		

SECTION 6: OTHER STREAM RATES

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:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: PUMPED SLURRY Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
322C1R1	102000 lbs/hr	37.2				
322C1R2	100800 lbs/hr	38				
322C1R3	100800 lbs/hr	38				
322C1R4	102600 lbs/hr	37				
322C1R5	102600 lbs/hr	37				
322C1R6	102600 lbs/hr	36.8				

5. Type: WASTE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: AIR CANNON Feed Location: ?
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
322C1R1	1000 lbs/hr	.5	6080 Btu/lb			
322C1R2	800 lbs/hr	.5	6100 Btu/lb			
322C1R3	800 lbs/hr	.6	6600 Btu/lb			
322C1R4	600 lbs/hr	.7	7050 Btu/lb			
322C1R5	600 lbs/hr	.7	6800 Btu/lb			
322C1R6	600 lbs/hr	.8	6500 Btu/lb			

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ATOMIZING BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
322C1R1	10800 lbs/hr	.9	14814 Btu/lb	4.7		
322C1R2	9600 lbs/hr	7.1	14687 Btu/lb	4.7		
322C1R3	9800 lbs/hr	17.3	12244 Btu/lb	4.7		
322C1R4	10800 lbs/hr	16.8	11666 Btu/lb	4.2		
322C1R5	10600 lbs/hr	14.8	12075 Btu/lb	4.7		
322C1R6	10800 lbs/hr	16.3	12314 Btu/lb	3.5		

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: LAFARGE
 2. STATE: KS
 3. CITY: FREDONIA
 4. EP ID: 323 DEVICE NAME: KILN NO. 2
 EPA KSD007148034
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP
 REGION: 7

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: PUMPED SLURRY Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
323C1R1	152400 lbs/hr	40				
323C1R2	153200 lbs/hr	39.6				
323C1R3	154800 lbs/hr	37.3				
323C1R4	162000 lbs/hr	37				
323C1R5	162000 lbs/hr	37				
323C1R6	162000 lbs/hr	36.2				
323C1R7	161400 lbs/hr	36.2				

5. Type: WASTE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: AIR CANNON Feed Location: MIDDLE OF CHAMBER
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
323C1R1	1200 lbs/hr	.9	6025 Btu/lb			
323C1R2	600 lbs/hr	1	7300 Btu/lb			
323C1R3	1000 lbs/hr	1.3	6470 Btu/lb			
323C1R4	1000 lbs/hr	1.8	7280 Btu/lb			
323C1R5	600 lbs/hr	1.4	7133 Btu/lb			
323C1R6	1000 lbs/hr	1.3	6930 Btu/lb			
323C1R7	1000 lbs/hr	1.2				

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
323C1R1	15800 lbs/hr	9.4	13544 Btu/lb	7.4		
323C1R2	15400 lbs/hr	16	11558 Btu/lb	7.8		
323C1R3	16200 lbs/hr	16.6	11975 Btu/lb	7.6		
323C1R4	16200 lbs/hr	15.2	12098 Btu/lb	7.4		
323C1R5	16200 lbs/hr	19.4	13148 Btu/lb	7.4		
323C1R6	15800 lbs/hr	16.6	12088 Btu/lb	6.5		
323C1R7	15600 lbs/hr	17.1		6.7		

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: DUAL FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: 1

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
320C1R1	16800 lbs/hr		13400 Btu/lb			
320C1R2	16800 lbs/hr		13400 Btu/lb			
320C1R3	16800 lbs/hr		13400 Btu/lb			
320C1R4	16000 lbs/hr		13300 Btu/lb			
320C1R5	16200 lbs/hr		13400 Btu/lb			
320C1R6	16000 lbs/hr	.4	13300 Btu/lb			

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: PNEUMATIC Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
320C1R1	292400 lbs/hr				182.9	
320C1R2	288600 lbs/hr				186	
320C1R3	294600 lbs/hr				178	
320C1R4	287800 lbs/hr				166	
320C1R5	282400 lbs/hr				182	
320C1R6	278600 lbs/hr				164	

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: DUAL FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
320C1R1	11800 lbs/hr	15.7	12100 Btu/lb	3.9	56.2	
320C1R2	11800 lbs/hr	15.1	12000 Btu/lb	3.9	56.2	
320C1R3	11800 lbs/hr	15.6	12500 Btu/lb	3.8	56.2	
320C1R4	11800 lbs/hr	15.6	12000 Btu/lb	3.7	55.6	
320C1R5	11600 lbs/hr	15.3	12050 Btu/lb	3.6	55.6	
320C1R6	11600 lbs/hr	15.7	12200 Btu/lb	3.5	55.6	

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: LANCED Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
302C1R1	156525 lbs/hr	34.2			106.8	
302C1R2	162698 lbs/hr	33.6			107.4	
302C1R3	161596 lbs/hr	33.2			108	
302C1R4	156525 lbs/hr	33.4			107.4	
302C1R5	163139 lbs/hr	32.4			108.6	
302C1R6	161155 lbs/hr	32.6			108	

5. Type: WASTE

6. Description: CONTAINERIZED

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: AIR CANNON Feed Location: MIDDLE OF CHAMBER
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
302C1R1	359 lbs/hr					
302C1R2	359 lbs/hr					
302C1R3	359 lbs/hr					
302C1R4	359 lbs/hr					
302C1R5	359 lbs/hr					
302C1R6	359 lbs/hr					

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: DUAL FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
302C1R1	14572 lbs/hr	12.7	12400 Btu/lb	13.5	56.2	
302C1R2	14792 lbs/hr	14.7	12300 Btu/lb	12.4	56.2	
302C1R3	14550 lbs/hr	16	11900 Btu/lb	4.6	56.2	
302C1R4	14528 lbs/hr	14.8	12100 Btu/lb	3.5	56.2	
302C1R5	15145 lbs/hr	16.3	12100 Btu/lb	3.5	56.2	
302C1R6	15057 lbs/hr	16.2	12100 Btu/lb	3.6	56.2	

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1	173617 lbs/hr					
304C2						

5. Type: ESP ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: WET KILN Location: ESP Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1	16252 lbs/hr					
304C2						

6. Description: RECYCLE

Additional ID Information

Process Group: WET KILN Location: ESP Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1						
304C2						

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: CONVENTIONAL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1	17662 lbs/hr		10200 Btu/lb			7.3
304C2			11200 Btu/lb			4.2
304C3			9060 Btu/lb			5.9
304C4			9200 Btu/lb			8

5. Type: RAW MATERIAL

6. Description:

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SLURRY

Feed Stream Information

Feed Mechanism: GRAVITY Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1	437986 lbs/hr					
304C2						

5. Type: SPIKE

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

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1						

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: WET KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ATOMIZED LIQUIDS Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1	13719 lbs/hr		17000 Btu/lb	27	58.8	1.9
304C2			16600 Btu/lb	48	58.1	1
304C4			16700 Btu/lb	37	55.3	.5

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: AIR CANNON Feed Location: LOWEND
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1	10760 lbs/hr		16600 Btu/lb	73		1.3
304C2			16700 Btu/lb	<<		1.3
304C4			12600 Btu/lb	<<		1.9

6. Description: CONTAINERIZED

Additional ID Information

Process Group: WET KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: AIR CANNON Feed Location: LOWEND
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
304C1	630 lbs/hr		3840 Btu/lb			37.9
304C2			11500 Btu/lb			2.1
304C4			3660 Btu/lb			1.7

SECTION 6: OTHER STREAM RATES

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

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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 REGION: 7
 SYSTEM TYPE: CEMENT KILN APC SYSTEM: QC/FF

5. Type: BLOWDOWN

6. Description:

Additional ID Information

Process Group: DRY KILN Location: WS Phase: LIQUID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C1R1	lbs/hr					
303C1R2	65458 lbs/hr					
303C1R3	66957 lbs/hr					
303C1R4	lbs/hr					
303C1R5	60457 lbs/hr					
303C1R6	66457 lbs/hr					
303C2R1	67480 lbs/hr					
303C2R2	67460 lbs/hr					
303C2R3	67460 lbs/hr					
303C3R1	67460 lbs/hr					
303C3R2	67460 lbs/hr					
303C3R3	67460 lbs/hr					

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C1R1	324000 lbs/hr					
303C1R2	322000 lbs/hr					
303C1R3	324000 lbs/hr					
303C1R4	330000 lbs/hr					
303C1R5	328000 lbs/hr					
303C1R6	326000 lbs/hr					
303C2R1	298854 lbs/hr					
303C2R2	308790 lbs/hr					
303C2R3	307006 lbs/hr					
303C3R1	319490 lbs/hr					
303C3R2	319873 lbs/hr					
303C3R3	319873 lbs/hr					

5. Type: FF ASH

6. Description: NONRECYCLE

Additional ID Information

Process Group: DRY KILN Location: FF-BYPASS Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C1R1	1960 lbs/hr					
303C1R2	1960 lbs/hr					
303C1R3	1960 lbs/hr					
303C1R4	1960 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

303C1R5	1960 lbs/hr					
303C1R6	1960 lbs/hr					
303C2R1	6000 lbs/hr					
303C2R2	6000 lbs/hr					
303C2R3	6000 lbs/hr					
303C3R1	6000 lbs/hr					
303C3R2	6000 lbs/hr					
303C3R3	6000 lbs/hr					

6. Description: RECYCLE

Additional ID Information

Process Group: DRY KILN Location: FF-MAIN Phase: SOLID

Feed Stream Information

Feed Mechanism: NA Feed Location: NA
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C1R1	50800 lbs/hr					
303C1R2	50600 lbs/hr					
303C1R3	50800 lbs/hr					
303C1R4	51800 lbs/hr					
303C1R5	51400 lbs/hr					
303C1R6	51400 lbs/hr					
303C2R1	46920 lbs/hr					
303C2R2	48480 lbs/hr					
303C2R3	48200 lbs/hr					
303C3R1	50160 lbs/hr					
303C3R2	50220 lbs/hr					
303C3R3	50220 lbs/hr					

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: CONVENTIONAL BURNER Feed Location: LOW END
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C1R1	16800 lbs/hr					
303C1R2	16800 lbs/hr					
303C1R3	16800 lbs/hr					
303C1R4	17000 lbs/hr					
303C1R5	16600 lbs/hr					
303C1R6	16200 lbs/hr					

Additional ID Information

Process Group: DRY KILN Location: PRECALCINER Phase: SOLID

Feed Stream Information

Feed Mechanism: CONVENTIONAL BURNER Feed Location: MIDDLE OF CHAMBER
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C1R1	24200 lbs/hr					
303C1R2	23800 lbs/hr					
303C1R3	23600 lbs/hr					
303C1R4	24000 lbs/hr					
303C1R5	23800 lbs/hr					
303C1R6	24400 lbs/hr					
303C2R1	23680 lbs/hr					
303C2R2	24160 lbs/hr					

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

303C2R3	23280 lbs/hr					
303C3R1	24480 lbs/hr					
303C3R2	25050 lbs/hr					
303C3R3	23680 lbs/hr					

5. Type: RAW MATERIAL

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: FEED CHUTE (GRAVITY) Feed Location: HIGH END
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C1R1	507400 lbs/hr					
303C1R2	505000 lbs/hr					
303C1R3	507400 lbs/hr					
303C1R4	517200 lbs/hr					
303C1R5	514800 lbs/hr					
303C1R6	514800 lbs/hr					
303C2R1	469200 lbs/hr					
303C2R2	484800 lbs/hr					
303C2R3	482000 lbs/hr					
303C3R1	501600 lbs/hr					
303C3R2	502200 lbs/hr					
303C3R3	502200 lbs/hr					

5. Type: SPIKE

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

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOW END
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C3R1	21 lbs/hr					
303C3R2	22 lbs/hr					
303C3R3	22 lbs/hr					

5. Type: WASTE

6. Description:

Additional ID Information

Process Group: DRY KILN Location: KILN Phase: SOLID

Feed Stream Information

Feed Mechanism: PAILS Feed Location: LOW END
 Manufacturer: ? Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C2R1	859 lbs/hr					
303C2R2	998 lbs/hr		4759 Btu/lb			
303C2R3	907 lbs/hr		643 Btu/lb			
303C3R1	273 lbs/hr		6959 Btu/lb			
303C3R2	273 lbs/hr		5567 Btu/lb			
303C3R3	398 lbs/hr		5276 Btu/lb			

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

REGION: 7

APC SYSTEM: QC/FF

Additional ID Information

Process Group: DRY KILN

Location: KILN

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ?

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C2R1	20448 lbs/hr					
303C2R2	20016 lbs/hr		11141 Btu/lb			
303C2R3	20064 lbs/hr		12011 Btu/lb			
303C3R1	20424 lbs/hr		11261 Btu/lb			
303C3R2	20770 lbs/hr		11073 Btu/lb			
303C3R3	20774 lbs/hr		11408 Btu/lb			

6. Description: TIRES

Additional ID Information

Process Group: DRY KILN

Location: KILN

Phase: SOLID

Feed Stream Information

Feed Mechanism: FEED CHUTE (GRAVITY)

Feed Location: HIGHEND

Manufacturer: ?

Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
303C2R1	3000 lbs/hr		14233 Btu/lb			
303C2R2	3000 lbs/hr		15033 Btu/lb			
303C2R3	3000 lbs/hr		14033 Btu/lb			
303C3R1	3000 lbs/hr		14733 Btu/lb			
303C3R2	3000 lbs/hr		14366 Btu/lb			
303C3R3	3000 lbs/hr		14100 Btu/lb			

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: MEDUSA CEMENT COMPANY
 2. STATE: PA
 3. CITY: WAMPUM
 4. EP ID: 305 DEVICE NAME: KILN NO. 1,2 EPA ID: PAD083965897 REGION: 3
 SYSTEM TYPE: CEMENT KILN APC SYSTEM: ESP

5. Type: CLINKER

6. Description: PRODUCT

Additional ID Information

Process Group: DRY KILN Location: KILN 1 Phase: SOLID

Feed Stream Information

Feed Mechanism: BELT Feed Location: CLINKER EXIT
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
305C2R1	60800 lbs/hr					
305C2R2	61400 lbs/hr					
305C2R3	60200 lbs/hr					
305C3R1	57400 lbs/hr					
305C3R2	51600 lbs/hr					
305C3R3	55800 lbs/hr					

Additional ID Information

Process Group: DRY KILN Location: KILN 2 Phase: SOLID

Feed Stream Information

Feed Mechanism: BELT Feed Location: CLINKER EXIT
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
305C2R1	60200 lbs/hr					
305C2R2	62200 lbs/hr					
305C2R3	61800 lbs/hr					
305C3R1	55000 lbs/hr					
305C3R2	56200 lbs/hr					
305C3R3	56200 lbs/hr					

5. Type: FUEL

6. Description: COAL

Additional ID Information

Process Group: DRY KILN Location: KILN 2 Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
305C1R1	3720 lbs/hr		11827 Btu/lb			
305C1R2	3300 lbs/hr		11303 Btu/lb			
305C1R3	2480 lbs/hr		11693 Btu/lb			
305C3R1	7420 lbs/hr	5.8	10580 Btu/lb			23.2
305C3R2	6660 lbs/hr	7	10510 Btu/lb			19.6
305C3R3	7560 lbs/hr	15.3	10733 Btu/lb			15.4

Additional ID Information

Process Group: DRY KILN Location: KILN 1 Phase: SOLID

Feed Stream Information

Feed Mechanism: MULTI-FUEL BURNER Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
305C3R1	4040 lbs/hr	5.7	10580 Btu/lb			18.6
305C3R2	4100 lbs/hr	6.3	10743 Btu/lb			19.4
305C3R3	5600 lbs/hr	6.7	10733 Btu/lb			14.3

5. Type: RAW MATERIAL

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

1. COMPANY: MEDUSA CEMENT COMPANY
 2. STATE: PA
 3. CITY: WAMPUM
 4. EP ID: 305 DEVICE NAME: KILN NO. 1,2
 EPA ID: PAD083965897
 SYSTEM TYPE: CEMENT KILN
 APC SYSTEM: ESP
 REGION: 3

6. Description: LIME/SILICA/IRON

Additional ID Information

Process Group: DRY KILN Location: KILN 2 Phase: SOLID

Feed Stream Information

Feed Mechanism: BELT Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
305C1R1	106420 lbs/hr					
305C1R2	104700 lbs/hr					
305C1R3	104700 lbs/hr					
305C2R1	102200 lbs/hr					
305C2R2	105400 lbs/hr					
305C2R3	104800 lbs/hr					
305C3R1	90000 lbs/hr					
305C3R2	92200 lbs/hr					
305C3R3	92200 lbs/hr					

Additional ID Information

Process Group: DRY KILN Location: KILN 1 Phase: SOLID

Feed Stream Information

Feed Mechanism: BELT Feed Location: HIGHEND
 Manufacturer: NA Number of Burners: NA

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
305C2R1	103000 lbs/hr					
305C2R2	104000 lbs/hr					
305C2R3	102200 lbs/hr					
305C3R1	94000 lbs/hr					
305C3R2	84600 lbs/hr					
305C3R3	91400 lbs/hr					

5. Type: SPIKE

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

Additional ID Information

Process Group: DRY KILN Location: KILN 2 Phase: LIQUID

Feed Stream Information

Feed Mechanism: ATOMIZED LIQUIDS Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
305C1R1						
305C1R2						
305C1R3						

5. Type: WASTE

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

Additional ID Information

Process Group: DRY KILN Location: KILN 2 Phase: LIQUID

Feed Stream Information

Feed Mechanism: ? Feed Location: LOWEND
 Manufacturer: ? Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value	Viscosity, cSt	Density, lb/ft3	Ash (%)
305C1R1	5660 lbs/hr		15706 Btu/lb			
305C1R2	5680 lbs/hr		15827 Btu/lb			
305C1R3	5120 lbs/hr		14921 Btu/lb			

US EPA ARCHIVE DOCUMENT

SECTION 6: OTHER STREAM RATES

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

305C2R1	5058 lbs/hr					
305C2R2	5580 lbs/hr					
305C2R3	5580 lbs/hr					
305C3R1	4684 lbs/hr		15541	Btu/lb	55.5	.2
305C3R2	4238 lbs/hr		15000	Btu/lb	56.6	1
305C3R3	4800 lbs/hr		13585	Btu/lb	57.6	3.1

Additional ID Information

Process Group: DRY KILN

Location: KILN 1

Phase: LIQUID

Feed Stream Information

Feed Mechanism: ATOMIZED LIQUIDS

Feed Location: LOWEND

Manufacturer: ?

Number of Burners: ?

Stream Rates and Properties

7. Run ID	Process Rate	Moisture (%)	Heating Value		Viscosity, cSt	Density, lb/ft3	Ash (%)
305C2R1	5532 lbs/hr						
305C2R2	5760 lbs/hr						
305C2R3	5718 lbs/hr						
305C3R1	4977 lbs/hr		15541	Btu/lb	54.2	.9	
305C3R2	4358 lbs/hr		15000	Btu/lb	56.2	1	
305C3R3	4502 lbs/hr		13585	Btu/lb	58.4	4.7	

US EPA ARCHIVE DOCUMENT