#### Permit No. 1360A

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
E1-2	Cement Truck,	PM	1.34	2.78
	Road Emissions (4)	PM <sub>10</sub>	0.49	1.02
E1-7	Gypsum Pile,	PM	0.08	0.07
	Drop Fugitive (4)	PM <sub>10</sub>	0.04	0.03
E1-8	Anhydrite Pile,	PM	0.08	0.05
	Drop Fugitive (4)	PM <sub>10</sub>	0.04	0.02
E1-11	Sand Pile,	PM	0.05	0.03
	Drop Fugitive (4)	PM <sub>10</sub>	0.02	0.02
E1-12	Quarry Operations (4)	PM PM <sub>10</sub>	41.76 20.59	11.38 2.53
E1-13	Quarry Loader,	PM	0.78	2.59
	Road Emissions (4)	PM <sub>10</sub>	0.35	1.17
E1-16	Raw Materials Transfer	PM	0.13	0.10
	Tower	PM <sub>10</sub>	0.06	0.05
E1-20	Pile Material Loader,	PM	9.17	3.93
	Road Emissions (4)	PM <sub>10</sub>	4.13	1.77
E1-21	Sand Delivery Truck,	PM	21.59	13.47
	Road Emissions (4)	PM <sub>10</sub>	7.75	4.83
E1-22	CKD Truck	PM	3.23	3.02
	Road Emissions (4)	PM <sub>10</sub>	0.98	0.78

Emission *	Source	Air Contaminant	<u>Emissi</u>	on Rates
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
E1-23	Raw Material Drops	PM	0.13	0.10
	to Storage Area (4)	PM <sub>10</sub>	0.06	0.05
E1-24	Primary Crusher (4)	PM PM <sub>10</sub>	<0.01 <0.01	0.01 <0.01
E1-25	Transfer Point	PM	0.08	0.10
	No. 1 (4)	PM <sub>10</sub>	0.04	0.05
E1-26	Transfer Point	PM	0.08	0.10
	No. 2 (4)	PM <sub>10</sub>	0.04	0.05
E1-27	Secondary Crusher (4)	PM PM <sub>10</sub>	0.26 0.09	0.32 0.12
E1-28	Overland Conveyor	PM	0.08	0.10
	Diverter Drop (4)	PM <sub>10</sub>	0.04	0.05
E1-29	Limestone Storage	PM	0.08	0.10
	Dome Drops (4)	PM <sub>10</sub>	0.04	0.05
E1-30	Underground Belt	PM	0.04	0.08
	Feeder Drop (4)	PM <sub>10</sub>	0.02	0.04
E1-31	Raw Bins Baghouse	PM PM <sub>10</sub>	1.03 1.03	4.51 4.51
E1-32	Sand, Drop to Hopper (4)	PM PM <sub>10</sub>	0.02 0.01	0.01 <0.01
E1-32a	Sand Hopper Drop	PM	0.01	<0.01
	to Belt (4)	PM <sub>10</sub>	<0.01	<0.01
E2-2	Kiln No. 1	PM (5)	77.70	340.00

Emission *	Source	Air Contaminant	<u>Emiss</u>	ion Rates
Point No. (1)	Name (2)	Name (3)	1b/hr	TPY
		$PM_{10}$ $NO_X$	66.05 500.00	289.30 2190.00
		CO	213.00	933.00
		THC	7.73	33.86
		HCI	9.30	38.60
E2-4	Kiln No. 2	PM (5)	77.70	340.00
		$PM_{10}$	66.05	289.30
		$NO_X$	500.00	2190.00
		CO	213.00	933.00
		THC	7.73	33.86
		HCl	9.30	38.60
E2-6	Kiln No. 3	PM (5)	77.70	340.00
		$PM_{10}$	66.05	289.30
		$NO_X$	500.00	2190.00
		CO	213.00	933.00
		THC	7.73	33.86
		HCl	9.30	38.60
E2-8	Kiln No. 4	PM (5)	77.70	340.00
		$PM_{10}$	66.05	289.30
		$NO_X$	500.00	2190.00
		CO	213.00	933.00
	THC	7.73	33.86	
		HCl	9.30	38.60
E2-2, 4, 6, and 8	Bubble Limit, Kiln Nos. 1, 2, 3, and 4	SO <sub>2</sub>	3080.00	13490.40
E2-2 and 8	Bubble Limit Kiln Nos. 1 and 4	SO <sub>2</sub>	1540.00	6745.20

Emission *	Source	Air Contaminant	<u>Emissio</u>	n Rates
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
	Contribution From Wastew	<u> Waste-Derived Fuel And</u> r <u>ater</u>	Clinker Qu	ench_
E2-2, 4, 6, and 8	Combined Total Emissions Limits for Kilns No. 1-4	HCI HF As Ag Ba Be Cd Cr Hg Sb Se Pb TI Zn	13.30 3.30 0.006 0.0123 0.414 0.0061 0.0341 0.227 0.0031 2.268 0.0121 0.69 0.648 0.52	49.90 2.90 0.026 0.054 1.81 0.0008 0.149 0.53 0.013 9.93 0.053 0.99 2.83 2.28
E2-7	Blending Silo Baghouse	PM PM <sub>10</sub>	0.56 0.56	2.44 2.44
E2-7a	Blending Silo Discharge Baghouse	PM PM <sub>10</sub>	1.03 1.03	4.51 4.51
E2-7b	Preheater Tower Pneumat Feed Baghouse	ic PM PM <sub>10</sub>	0.73 0.73	3.19 3.19
E2-10a	CKD Drop to Landfill (4)	PM PM <sub>10</sub>	<0.01 <0.01	0.01 <0.01
E2-10b	Quarry CKD Bin Baghouse	PM PM <sub>10</sub>	0.06 0.06	0.14 0.14
E2-11	Lime Delivery Truck, Road Emissions (4)	PM PM <sub>10</sub>	5.69 0.59	0.47 0.05

Emission	Source	Air Contaminant	<u>Emissi</u> lb/hr	on Rates *
Point No. (1)	Name (2)	Name (3)	ID/III	<u>TPY</u>
E2-11b	Lime Silo Baghouse	PM	0.06	0.07
	-	$PM_{10}$	0.06	0.07
E2-12	Iron Component Truck,	PM	17.67	8.84
	Road Emission (4)	$PM_{10}$	5.99	2.99
E2-13	Iron Additive Drop	PM	0.37	0.18
	to Piles (4)	$PM_{10}$	0.17	0.09
E2-14	Iron Component Loader,	PM	9.17	5.68
	Road Emissions (4)	$PM_{10}$	4.13	2.55
E2-15	Loader Drop to	PM	0.08	0.05
	Iron Additive Hopper (4)	$PM_{10}$	0.04	0.02
E2-16	Iron Additive Feed	PM	0.26	1.13
	System Baghouse	$PM_{10}$	0.26	1.13
E2-22	Kiln No. 5	$PM/PM_{10}$ (front-half)	29.24	128.10
	Main Stack	$PM/PM_{10}$ (back-half)		160.00
		NO <sub>X</sub>	681.25	2725.00
		SO <sub>2</sub>	332.25	1329.00
		THC	6.40	25.60
		CO	92.44 6.64	369.74 29.08
		H₂SO₄ TRS (including H₂S)		0.13
		TR3 (Including H23)	0.03	0.13
E2-101	No. 1 Cooler	PM	2.35	10.29
	Baghouse	$PM_{10}$	1.79	7.84
E2-103	No. 2 Cooler	PM	8.78	38.46
	Baghouse	$PM_{10}$	6.67	29.23
E2-105	No. 3 Cooler	PM	8.78	38.46
	Baghouse	$PM_{10}$	6.67	29.23

Emission	Source	Air Contaminant	Emissior lb/hr	
Point No. (1)	Name (2)	Name (3)	ID/III	<u>TPY</u>
E2-107	No. 4 Cooler	PM	2.35	10.29
	Baghouse	PM <sub>10</sub>	1.79	7.84
E3-6	700 and 703 Pan	PM	0.86	1.88
	from Surge Bin (4)	PM <sub>10</sub>	0.86	1.88
E3-10	Clinker Silos 15-18 (4)	PM PM <sub>10</sub>	0.43 0.43	1.88 1.88
E3-11	Belt Transfer 707	PM	0.64	1.41
	Tail Pulley (4)	PM <sub>10</sub>	0.64	1.41
E3-12	Belt Trans. Head	PM	0.26	0.56
	Wheel 703, 704, 721 (4)	PM <sub>10</sub>	0.26	0.56
E3-15	Trans Head Pull	PM	0.43	0.94
	702 Pan; 748 Drag (4)	PM <sub>10</sub>	0.43	0.94
E3-23	Lower Reclaim Belt	PM	0.26	0.38
	Baghouse	PM <sub>10</sub>	0.26	0.38
E3-24	Belt Transfer 707,	PM	0.43	0.94
	708, 780 (4)	PM <sub>10</sub>	0.43	0.94
E3-26	Belt Transfer 742, 703,	PM	0.64	2.82
	740, 741	PM <sub>10</sub>	0.64	2.82
E3-29	No. 2 Cooler Tunnel	PM PM <sub>10</sub>	0.27 0.27	1.20 1.20
E3-30	No. 1 Cooler Tunnel	PM PM <sub>10</sub>	0.27 0.27	1.20 1.20
E3-33	Clinker Barn	PM	0.64	2.82
	West Baghouse	PM <sub>10</sub>	0.64	2.82
E3-34	Surge Bin Transfer 713,	PM	0.64	0.84
	715, 717, 718	PM <sub>10</sub>	0.64	0.84

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		<del>-</del>		
E3-35	706 Drag Conveyor	PM PM <sub>10</sub>	0.09 0.09	0.19 0.19
E3-37	Transfer 700, 704, 701	PM PM <sub>10</sub>	0.86 0.86	3.75 3.75
E3-38	712 Tunnel at Clinker	PM	0.64	1.41
	Building	PM <sub>10</sub>	0.64	1.41
E3-41	East Clinker Door	PM	0.64	2.82
	Baghouse	PM <sub>10</sub>	0.64	2.82
E3-42	West Clinker Door	PM	0.64	2.82
	Baghouse	PM <sub>10</sub>	0.64	2.82
E3-50	Mill Additives	PM	0.04	0.03
	Drop to Rail Hopper (4)	PM <sub>10</sub>	0.02	0.02
E3-51	Hopper Drop to Belt (4)	PM PM <sub>10</sub>	0.04 0.02	0.03 0.02
E3-52	Pan Conveyor	PM	0.51	2.25
	Baghouse	PM <sub>10</sub>	0.51	2.25
E3-53	Clinker Belt Transfer	PM	0.51	2.25
	Baghouse	PM <sub>10</sub>	0.51	2.25
E3-54	FM No. 6 Bins	PM	0.86	3.75
	Baghouse	PM <sub>10</sub>	0.86	3.75
E3-55	Finish Mill No. 6	PM	4.48	19.62
	Separator Baghouse	PM <sub>10</sub>	2.24	9.81
E3-56	Finish Mill No. 6 Baghouse	PM PM PM <sub>10</sub>	1.28 0.64	5.61 2.80
E4-1	Finish Silo Group No. 4	PM	0.43	1.88

Emission	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	<u>TPY</u>
	Baghouse	PM <sub>10</sub>	0.43	1.88
E4-3	Finish Silo Group No. 4	PM	0.43	1.88
	Baghouse	PM <sub>10</sub>	0.43	1.88
E4-5	Finish Silo Group No. 2	PM	0.05	0.23
	Baghouse	PM <sub>10</sub>	0.05	0.23
E4-6	Finish Silo Group No. 1	PM	0.13	0.56
	Baghouse	PM <sub>10</sub>	0.13	0.56
E4-7	Finish Silo Group No. 1	PM	0.13	0.56
	Baghouse	PM <sub>10</sub>	0.13	0.56
E4-8	Finish Silo Group No. 1	PM	0.08	0.34
	Baghouse	PM <sub>10</sub>	0.08	0.34
E4-9	Finish Silo Group No. 2	PM	0.04	0.17
	Baghouse (6)	PM <sub>10</sub>	0.04	0.17
E4-10	Finish Silo Group No. 2	PM	0.21	0.32
	Baghouse (6),(8)	PM <sub>10</sub>	0.21	0.32
E4-11	Rail Loading No. 3	PM	0.14	0.62
	Baghouse (6)	PM <sub>10</sub>	0.14	0.62
E4-12	FM No. 6 Transfer	PM	0.43	0.64
	Baghouse (6),(8)	PM <sub>10</sub>	0.43	0.64
E4-13	Truck Load-out	PM	0.06	0.09
	Baghouse (6),(8)	PM <sub>10</sub>	0.06	0.09
E4-16	Truck Load-out Baghouse (6),(8)	PM PM <sub>10</sub>	0.21 0.21	0.32 0.32
E4-17	Truck Load-out	PM	0.21	0.32
	Baghouse (6),(8)	PM <sub>10</sub>	0.21	0.32

Emission	Source	Air Contaminant	Emissior	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	
E4-18	Truck Loading	PM	0.21	0.32
	Baghouse (6),(8)	PM <sub>10</sub>	0.21	0.32
E4-19	Finish Silo Group No. 2	PM	0.19	0.83
	Baghouse (6)	PM <sub>10</sub>	0.19	0.83
E4-20	Finish Silo Group No. 2	PM	0.69	3.00
	Baghouse (6)	PM <sub>10</sub>	0.69	3.00
E4-21	Finish Silo Group No. 2	PM	0.04	0.17
	Baghouse (6),(8)	PM <sub>10</sub>	0.04	0.17
E4-22	Truck Load-out	PM	0.32	0.48
	Baghouse (6),(8)	PM <sub>10</sub>	0.32	0.48
E4-25	Masonry Bagging	PM	0.21	0.19
	Baghouse (6),(9)	PM <sub>10</sub>	0.21	0.19
E6-1	Coal, Drop from Railcar (4)	PM PM <sub>10</sub>	0.12 0.06	0.09 0.04
E6-2	Solid Fuel, Rail	PM	0.12	0.09
	Hopper Drop to Belt (4)	PM <sub>10</sub>	0.06	0.04
E6-3	Solid Fuel,	PM	0.24	0.18
	Belt Drop to Piles (4)	PM <sub>10</sub>	0.11	0.08
E6-4	Coal Pile, Wind	PM	0.01	0.05
E6-5	Blown Emissions (4) Solid Fuel, Truck Road Emissions (4),(7)	PM <sub>10</sub> PM PM <sub>10</sub>	0.01 1.14 0.51	0.03 1.06 0.48
E6-6	Coal Loader Road	PM	0.41	0.37
	Emissions (4)	PM <sub>10</sub>	0.19	0.17
E6-7	Solid Fuel, Loadout to	PM	0.19	0.17
	Covered Storage (4)	PM <sub>10</sub>	0.09	0.08

Emission	Source	Air Contaminant	Emissio	n Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	<u>TPY</u>
E6-8	Coal, Truck Drops	PM	1.05	0.16
	to Pile (4)	$PM_{10}$	0.50	0.08
E6-9	Solid Fuel, Loader	PM	0.07	0.08
L0-9	Drop to Hopper (4)	PM <sub>10</sub>	0.07	0.04
		10		
E6-10	Coal Crusher (4)	PM	0.02	0.02
		$PM_{10}$	0.01	0.01
E6-11	Coal Belt to No. 4	РМ	0.04	0.04
	Coal Bin (4)	$PM_{10}$	0.02	0.02
E6-12	Coal Belt to No. 3	PM	0.03	0.03
E0-12	Coal Bin (4)	PM <sub>10</sub>	0.03	0.03
		10	0.02	0.02
E6-13	Coal Belt to No. 2	PM	0.02	0.02
	Coal Bin (4)	$PM_{10}$	0.01	0.01
E6-14	Coal Belt to No. 1	PM	0.01	0.01
	Coal Bin (4)	$PM_{10}$	<0.01	< 0.01
E6-15	Colid Fuel Drop	PM	0.03	0.03
⊏0-13	Solid Fuel, Drop to Belt (4)	PM <sub>10</sub>	0.03	0.03
	(.)	10		
E6-18	Solid Fuel, Drop to	PM	0.05	0.04
	Stacker Belt (4)	$PM_{10}$	0.02	0.02
E6-19	Coal Bin No. 4 to	PM	<0.01	0.01
	Coal Mill Feed Belt (4)	$PM_{10}$	< 0.01	<0.01
E6-20	Coal Bin No. 3 to	PM	<0.01	0.01
_3 _0	Coal Mill Feed Belt (4)	$PM_{10}$	< 0.01	<0.01
F0 04	Ocal Bio No. C.	D14	.0.04	0.04
E6-21	Coal Bin No. 2 to Coal Mill Feed Belt (4)	PM PM <sub>10</sub>	<0.01 <0.01	0.01 <0.01
	Coai wiii i Gea Deit (4)	I IAITO	~U.UI	<b>~</b> 0.01
E6-22	Coal Bin No. 1 to	PM	<0.01	0.01

Emission	Source	Air Contaminant		n Rates *
Point No. (1)	Name (2)	Name (3)	<u>lb/hr</u>	<u>TPY</u>
	Coal Mill Feed Belt (4)	$PM_{10}$	<0.01	<0.01
E6-23	No. 4 Coal Belt to	PM	<0.01	0.01
	Coal Mill (4)	PM <sub>10</sub>	<0.01	<0.01
E6-24	No. 3 Coal Belt to	PM	<0.01	0.01
	Coal Mill (4)	PM <sub>10</sub>	<0.01	<0.01
E6-25	No. 2 Coal Belt to	PM	<0.01	0.01
	Coal Mill (4)	PM <sub>10</sub>	<0.01	<0.01
E6-26	No. 1 Coal Belt to	PM	<0.01	0.01
	Coal Mill (4)	PM <sub>10</sub>	<0.01	<0.01
E6-27	Solid Fuel, Conveyor	PM	0.03	0.03
	Diverter Drop (4)	PM <sub>10</sub>	0.01	0.02
E6-28	Solid Fuel,	PM	0.03	0.02
	Drop to Mill Bin (4)	PM <sub>10</sub>	0.01	0.01
E6-29	Solid Fuel Bin,	PM	0.01	0.02
	Drop to Weigh Feeder (4)	PM <sub>10</sub>	<0.01	0.01
E6-30	Coal Mill Exhaust	PM PM <sub>10</sub>	4.77 4.77	20.87 20.87
E6-31	Coal Fines Bin Baghouse	PM PM <sub>10</sub>	0.13 0.13	0.56 0.56
CKDL-1	CKD Landfill	PM	0.17	0.04
	Dozer Emissions (4)	PM <sub>10</sub>	0.07	0.02
CKDL-2	CKD Landfill	PM	-	0.10
	Windblown Emissions (4)	PM <sub>10</sub>	-	0.05
E-A-1	Manifold Small Tanks (4)	VOC	0.05	0.24

E-A-2	Manifold Large Tanks (4)	VOC	0.02	0.10
E-F-1	Small Storage Equipment (4)	VOC	0.05	0.21
E-F-2	Large Storage Equipment (4)	VOC	0.07	0.31
E-F-3	Pump Pit Fuel Component (4)	VOC	0.07	0.30
E-F-4	Fuel Island Fuel Lines (4)	VOC	0.08	0.34
E-F-5	Burner Floor Fuel Lines (4)	VOC	0.02	0.10
E-Q-1	Fuel Island Quench Lines (4)	VOC	<0.01	0.02
E-Q-2	Quench Tank Equipment (4)	VOC	<0.01	0.04
E-Q-3	Pump Pit Quench Water Components (4)	VOC	<0.01	0.01
E-Q-4	Burner Floor Quench Lines (4)	VOC	0.03	0.11
Fugitives	WDF/Quench Fugitives (4)	VOC	1.58	6.90

<sup>(1)</sup> Emission point identification - either specific equipment designation or emission point number from plot plan.

<sup>(2)</sup> Specific point source name. For fugitive sources use area name or fugitive source name.

<sup>(3)</sup> PM - particulate matter, suspended in the atmosphere, including  $PM_{10}$ .

 $PM_{10}$  - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.

NO<sub>x</sub> - total oxides of nitrogen

CO - carbon monoxide

THC - total hydrocarbons

HCI - hydrogen chloride

 $SO_2$  - sulfur dioxide  $H_2SO_4$  - sulfuric acid mist

TRS - total reduced sulfur H<sub>2</sub>S - hydrogen sulfide

VOC - volatile organic compounds as defined in 30 Texas Administrative Code Section 101.1

HF - hydrogen fluoride

As - arsenic
Ag - silver
Ba - barium
Be - beryllium
Cd - cadmium
Cr - chromium
Hg - mercury

Pb - lead Sb - antimony Se - selenium

Tl - thallium

Zn - zinc

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) PM allowable includes front and back half catch and is based on the 30 TAC Chapter I allowable and a stack flow rate of 150.000 acfm.
- (6) Emission rates are based on a limited annual basis with compliance demonstrated by records of cement stored or shipped through these facilities. Operations limitations are as follows:
  - 1. Operation of EPNs E4-9, 10, 11, 12, 13, 16, 17, 28, 21, 22, and 25 are limited to the hours between 4 a.m. and 8 p.m.
  - 2. Operation of EPNs E4-19 and E4-20 are limited to the hours between 8 a.m. and midnight.
- (7) EPN 6-5 is vehicle traffic emissions from E6-5A through E6-5S2 as listed in Table 6.1 on page 11 of the February, 1999 amendment application to this permit.
- (8) Annual emission rates are based on and the facilities are limited to a maximum annual operating schedule of 2,978 hours per year.

#### AIR CONTAMINANTS DATA

Dated \_\_\_\_\_

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission R lb/hr	ates * TPY
(9) Annual emission rates are based on and the facilities are limited to a maximum annual operating schedule of 1,752 hours per year.				
* Emission rates are based on and the facilities are limited by the following maximum operating schedule except where noted:				
Hrs/day Days/week Weeks/year or Hrs/year <u>8,760</u>				