EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 8166

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.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)		Emission Rates * lb/hr	TPY
Existing sources with name change					
R10/GDCX01	R-10 Gantry Drop to Conveyor-Bauxite/Spar (4)	PM		1.48	3.28
		PM_{10}		0.70	1.55
R10/ATBS11	R-10-A Tower Bauxite/Spar (4)	PM		0.10	0.05
		PM_{10}	0.05	0.02	
R10/BOSX10	R-10-Bauxite from Outside Storage (4)	PM		29.57	16.10
		PM_{10}		4.44	2.41
R10/BHXX11	R-10-Bauxite Handling (4)	PM		0.05	<0.01
		PM_{10}	0.03	<0.01	
R10/BHNX11	R-10-Bauxite Hopper-North (4)	PM		0.03	0.03
		PM_{10}	0.01	0.02	
R10/BHSX11	R-10-Bauxite Hopper-South (4)	PM		0.03	0.03
		PM_{10}	0.01	0.02	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R21/BTTX11	R-21-Transfer Tower-Bauxite (4)	PM	0.38	0.40
		PM_{10}	0.19	0.18
R25/BFCX11	R-25-Building Bauxite Conveyor (4)	PM	0.80	<0.01
		PM_{10}	0.38	<0.01
R30/DVXX01	R-30-Digestion Vacuum Vent	Hg	0.0017	0.007
		VOC	5.95	22.62
R35/LTTX01	R-35-Low Temp Thickeners Vent	Hg	0.27	0.07
		VOC	1.18	4.48
R35V/FEA01	R-35V-Flocculent Tank-North No. 2 Vent	VOC	3.59	0.37
R35V/FWB01	R-35V-Flocculent Tank - South No. 1 Vent	VOC	3.59	0.37
R35V/FCX01	R-35V-Flocculent Tank - North No. 1 Vent	VOC	3.59	0.37
R35/HTTX01	R-35-High Temp Thickeners Vent	Hg	0.001	0.0004
		VOC	0.16	0.62
R35J1/CN01	R-35J1-Causticizer Vent - North	PM_{10}	1.20	0.27
		NaOH	0.27	1.20
R35J1/CS01	R-35J1-Causticizer Vent - South	PM_{10}	1.20	0.27
		NaOH	0.27	1.20

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R42/HI7A01	R-42-Heat Interchange Vacuum	Hg		0.0031
		0.012		
	No. 7 A Vent	VOC	0.32	1.20
R42/03EV01	R-42-No. 3 Evaporation	Hg	0.0006	0.002
	Vacuum Vent	VOC	0.02	0.05
R42/01EV01	R-42-No. 1 Evaporation	Hg	0.0006	0.002
	Vacuum Vent	VOC	0.02	0.05
R42/02EV01	R-42-No. 2 Evaporation	Hg	0.0006	0.002
	Vacuum Vent	VOC	0.02	0.05
R42/04EV01	R-42-No. 4 Evaporation	Hg	0.0006	0.002
	Vacuum Vent	VOC	0.02	0.05
R42/06EV01	R-42-No. 6 Evaporation	Hg	0.0006	0.002
	Vacuum Vent	VOC	0.02	0.05
R110/CVA01	R-110-Condensate	Hg	<0.0001	<0.001
	Vessel A Vent	VOC	<0.01	<0.01
R110/CVD01	R-110-Condensate	Hg	<0.0001	<0.001
	Vessel D Vent	VOC	<0.01	<0.01
R110/40X01	R-110-40 lbs Deaerator	Hg	0.0032	0.01
	Vent A	VOC	2.00	7.59
R110/40X02	R-110-40 lbs Deaerator	Hg	0.0032	0.01
		VOC	2.00	7.59
R110/40X03	R-110-40 lbs Deaerator Vent C	Hg	0.0032	0.01
		VOC	2.00	7.59
R51/02TL11	R-51-Track No. 2 Loading-Al_2O_3	PM_{10}		1.42
		6.20		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
	Bag Collector	Al_2O_3	1.42	6.20
R51/03TL11	R-51-Track No. 3 Loading-Al_2O_3	PM_{10}		1.42
		6.20		
	Bag Collector	Al_2O_3	1.42	6.20
R53C/40B11	R-53C-Al_2O_3 Conveyor No. 40	PM	0.39	0.84
	Belt to R-53C Bag Collector	PM_{10}	0.19	0.42
R53C/ATS11	R-53C-Transfer and Storage	PM	0.39	0.84
	Bag Collector	PM_{10}	0.19	0.42
R52/BLCX31	R-52-Bulk Loading Chute-South	PM_{10}		1.35
		0.46		
	Bag Collector	Al_2O_3	1.35	0.46
R52/BLCX41	R-52-Loading Chute-Top	PM_{10}	0.34	0.46
	Bag Collector	Al_2O_3	0.34	0.46
R52/BLCX11	R-52-LoadingChute-Choke	PM_{10}	0.20	0.27
	Feeder-North Bag Collector	Al_2O_3	0.20	0.27
R52/DOCK00	R-52 Dock Upset reporting (4)	PM	30.40	16.77
		PM_{10} 16.72	9.22	
		Al_2O_3 30.40	16.77	
R56/AHC211	R-56 Alumina Handling	PM_{10}	0.15	0.66
	Conveyor No. 2 Head Pulley Bag Collector	Al_2O_3	0.15	0.66
R56-4/CT01	R-56-4-Cooling Tower (4)	PM_{10}	0.0019	0.0083
		NaOH 0.0019	0.0083	
R55/ESPD11	R-55-ESP Dust Redigest	PM	0.06	0.24
	(Tank No. 1) Wet Scrubber	PM_{10}	0.03	0.12

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
1995 Permit Sources with more than one physical source				
R10/B33A10	R-10-Bauxite Transfer No. 3 Conveyor to No. 3A Belt (4)	PM PM_{10}	0.23 0.11	0.24 0.11
R10/B33B10	R-10-Bauxite Transfer No. 3 Conveyor to No. 3B Belt (4)	PM PM_{10}	0.23 0.11	0.24 0.11
R10/B39A10	R-10-Bauxite Transfer No. 3 Conveyor to No. 9A Belt (4)	PM PM_{10}	0.23 0.11	0.24 0.11
R10/B31610	R-10-Bauxite Transfer No. 3 Conveyor to No. 16 Belt (4)	PM PM_{10}	0.23 0.11	0.24 0.11
R10/B31510	R-10-Bauxite Transfer No. 3 Conveyor to No. 15 Belt (4)	PM PM_{10}	0.23 0.11	0.24 0.11
R10/BDS111	R-10-Bauxite Drop To Outside Storage No. 1 (4)	PM PM_{10}	0.23 0.11	0.22 0.11
R10/BDS211	R-10-Bauxite Drop To Outside Storage No. 2 (4)	PM PM_{10}	0.23 0.11	0.22 0.11
R10/BDS311	R-10-Bauxite Drop To Outside Storage No. 3 (4)	PM PM_{10}	0.23 0.11	0.22 0.11
R16/BDXX11	R-16-Bauxite Drop-Inside Building(4)	PM PM_{10}	0.23 0.11	0.22 0.11
R15/BDXX11	R-15-Bauxite Drop-Inside Building(4)	PM PM_{10}	0.23 0.11	0.22 0.11
R25/RM0102	R-25-Rod Mill Feed No. 1 Vent	Hg VOC 0.14	0.005 0.44	0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)		Emission Rates lb/hr	TPY
R25/RM0202	R-25-Rod Mill Feed No. 2 Vent	Hg		0.005	0.02
		VOC	0.14	0.44	
R25/RM0302	R-25-Rod Mill Feed No. 3 Vent	Hg		0.005	0.02
		VOC	0.14	0.44	
R25/RM0402	R-25-Rod Mill Feed No. 4 Vent	Hg		0.005	0.02
		VOC	0.14	0.44	
R25/RM0502	R-25-Rod Mill Feed No. 5 Vent	Hg		0.005	0.02
		VOC	0.14	0.44	
R25/RM0602	R-25-Rod Mill Feed No. 6 Vent	Hg		0.005	0.02
		VOC	0.14	0.44	
R25/RM0702	R-25-Rod Mill Feed No. 7 Vent	Hg		0.005	0.02
		VOC	0.14	0.44	
R25/RM0802	R-25-Rod Mill Feed No. 8 Vent	Hg		0.005	0.02
		VOC	0.14	0.44	
R25A/S0101	R-25A-Vessel No. 1 Vent	Hg		0.001	0.003
		VOC	0.32	1.19	
R25A/S0201	R-25A-Vessel No. 2 Vent	Hg		0.001	0.003
		VOC	0.32	1.19	
R25A/S0301	R-25A-Vessel No. 3 Vent	Hg		0.001	0.003
		VOC	0.32	1.19	
R25A/S0401	R-25A-Vessel No. 4 Vent	Hg		0.001	0.003
		VOC	0.32	1.19	
R25A/S0501	R-25A-Vessel No. 5 Vent	Hg		0.001	0.003
		VOC	0.32	1.19	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)		Emission Rates lb/hr	TPY
R25A/S0601	R-25A-Vessel No. 6 Vent	Hg		0.001	0.003
		VOC	0.32	1.19	
R25A/S0701	R-25A-Vessel No. 7 Vent	Hg		0.001	0.003
		VOC	0.32	1.19	
R25A/S0801	R-25A-Vessel No. 8 Vent	Hg		0.001	0.003
		VOC	0.32	1.19	
R30/L11X01	R-30-Low Temperature 1 Blow-Off No. 1 Stack A	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L11X02	R-30-Low Temperature 1 Blow Off No. 1 Stack B	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L12X01	R-30-Low temperatire 1 Blow Off No. 2 Stack A	Hg	0.002		0.0006
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L12X02	R-30-Low Temperature 1 Blow Off No. 2 Stack B	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L23X01	R-30-Low Temperature 2 Blow Off No. 3 Stack A	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)		Emission Rates lb/hr	TPY
		VOC	0.04	0.11	
R30/L23X02	R-30-Low Temperature 2 Blow Off No. 3 Stack B	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L24X01	R-30-Low Temperature 2 Blow Off No. 4 Stack A	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L24X02	R-30-Low Temperature 2 Blow Off No. 4 Stack B	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L35X01	R-30-Low Temperature 3 Blow Off No. 5 Stack A	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L35X02	R-30-Low temp 3 Blow Off No. 5 Stack B	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L36X01	R-30-Low Temperature 3 Blow Off No. 6 Stack A	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L36X02	R-30-Low Temperature 3 Blow Off No. 6 Stack B	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)		Emission Rates lb/hr	TPY
R30/L47X01	R-30-Low Temperature 4 Blow Off No. 7 Stack A	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L47X02	R-30-Low Temperature 4 Blow Off No. 7 Stack B	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L48X01	R-30-Low Temperature 4 Blow Off No. 8 Stack A	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R30/L48X02	R-30-Low Temperature 4 Blow Off No. 8 Stack B	Hg		0.0006	0.002
		PM_{10}		0.05	0.17
		NaOH	0.05	0.17	
		VOC	0.04	0.11	
R40/HI0101	R-40-Heat Interchange Vacuum No. 1 Vent	Hg		0.0005	0.001
		VOC		0.05	0.15
R40/HI0201	R-40-Heat Interchange Vacuum No. 2 Vent	Hg		0.0005	0.001
		VOC		0.05	0.15
R40/HI0301	R-40-Heat Interchange Vacuum No. 3 Vent	Hg		0.0005	0.001
		VOC		0.05	0.15
R40/HI0401	R-40-Heat Interchange Vacuum No. 4 Vent	Hg		0.0005	0.001
		VOC		0.05	0.15
R40/HI0501	R-40-Heat Interchange Vacuum No. 5 Vent	Hg		0.0005	0.001
		VOC		0.05	0.15

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R40/HI0601	R-40-Heat Interchange Vacuum No. 6 Vent	Hg	0.0005	0.001
		VOC	0.05	0.15
R45A/C0101	R-45A-Barometric Condenser Vent No. 1	Hg	<0.0001	0.0003
		VOC	0.01	0.013
R45A/C0201	R-45A-Barometric Condenser Vent No. 2	Hg	<0.0001	0.0003
		VOC	0.01	0.013
R45A/C0301	R-45A-Barometric Condenser Vent No. 3	Hg	<0.0001	0.0003
		VOC	0.01	0.013
R45A/C0401	R-45A-Barometric Condenser Vent No. 4	Hg	<0.0001	0.0003
		VOC	0.01	0.013
R42/04EV01	R-42-No. 4 Evaporation Vacuum Vent	Hg	0.0006	0.002
		VOC	0.02	0.05
R56/HF1201	R-56-Horizontal Filter No. 1 Vent	Hg	0.0019	0.0078
		VOC	2.90	12.08
1995 Permit sources with changes				
R110/HP101	R-110-High Pressure Boiler No. 1	VOC	0.44	
		PM	4.43	
		PM_{10}	4.43	
		NO_x	65.86	
		CO	37.54	
		SO_2	2.32	
R110/HP201	R-110-High Pressure Boiler No. 2	VOC	0.35	
		PM	3.54	
		PM_{10}	3.54	
		NO_x	38.77	
		CO	27.57	
		SO_2	1.86	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R110/HP301	R-110-High Pressure Boiler No. 3	VOC	0.35	
		PM	3.54	
		PM_{10}	3.54	
		NO_x	34.40	
		CO	15.02	
		SO_2	1.86	
R110/HP411	R-110-High Pressure Boiler No. 4	VOC	0.35	
		PM	3.54	
		PM_{10}	3.54	
		NO_x	38.77	
		CO	27.57	
		SO_2	1.86	
R110/HP501	R-110-High Pressure Boiler No. 5	VOC	0.44	
		PM	4.43	
		PM_{10}	4.43	
		NO_x	51.87	
		CO	38.22	
		SO_2	2.32	
R110/HP611	R-110-High Pressure Boiler No. 6	VOC	0.50	
		PM	4.95	
		PM_{10}	4.95	
		NO_x	22.87	
		CO	14.10	
		SO_2	2.59	
R110/LP101	R-110-Low Pressure Boiler No. 1	VOC	0.25	
		PM	2.84	
		PM_{10}	2.84	
		NO_x	20.29	
		CO	22.22	
		SO_2	1.31	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R110/LP201	R-110-Low Pressure Boiler No. 2	VOC	0.25	
		PM	2.84	
		PM_{10}	2.84	
		NO_x	26.47	
		CO	76.70	
		SO_2	1.31	
	Total of all boilers	VOC		10.27
		PM	99.83	
		PM_{10}	99.83	
		NO_x	942.19	
		CO	737.88	
		SO_2	50.21	
R45/PAVX00	R-45 Precipitation Area Vessels (4)	Hg		0.0027
		0.01		
		PM	10.69	47.45
		PM_{10}	10.69	47.45
		NaOH	10.69	47.45
		VOC	0.95	3.59
R50/K04711	R-50 Kilns Electrostatic Precipitator East Stack	VOC	12.68	
		PM	60.00	
		PM_{10}	60.00	
		NO_x	421.08	
		CO	16.16	
		SO_2	1.00	
		Hg	0.0181	
R50/K04712	R-50 Kilns Electrostatic Precipitator West Stack	VOC	12.68	
		PM	60.00	
		PM_{10}	60.00	
		NO_x	421.08	
		CO	16.16	
		SO_2	1.00	
		Hg	0.0181	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY	*
R55-1/FC11	R-55-1 Flash Calciner (SGA) Electrostatic Precipitator	VOC	14.75		
		PM	33.94		
		PM_{10}	33.94		
		NO_x	12.60		
		CO	151.20		
		SO_2	1.43		
		Hg	0.0181		
R55-2/FC11	R-55-2 Flash Calciner (SGA) Electrostatic Precipitator	VOC	14.75		
		PM	18.86		
		PM_{10}	18.86		
		NO_x	13.50		
		CO	162.00		
		SO_2	1.57		
		Hg	0.0181		
R55-3/FC11	R-55-3 Flash Calciner (SGA) Electrostatic Precipitator	VOC	14.75		
		PM	18.86		
		PM_{10}	18.86		
		NO_x	25.56		
		CO	162.00		
		SO_2	1.57		
		Hg	0.0181		
R55-1/FC11 R55-2/FC11 R55-3/FC11	R-55 Units - Hard Burn Production(all three calciners) Electrostatic Precipitator	VOC	3.69		
		PM	33.94		
		PM_{10}	33.94		
		NO_x	55.38		
		CO	36.00		
		SO_2	1.57		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
		Hg	0.0181	
R56-4/FC11	R-56-4 Flash Calciner	VOC	29.40	
	Electrostatic Precipitator	PM	8.04	
		PM_{10}	8.04	
		NO_x	31.60	
		CO	78.12	
		SO_2	2.95	
		Hg	0.036	
	Total of calcination department	VOC		175.79
		PM	246.87	
		PM_{10}	246.87	
		NO_x	266.39	
		CO	1469.07	
		SO_2	31.17	
		Hg	0.44	
R50/07AG11	R-50 No. 7 Air Gravity Conveyor	PM		0.12
		0.38		
	Bag Collector	PM_{10}	0.06	0.19
R50/09AG11	R-50 No. 9 Air Gravity Conveyor	PM		0.15
		0.66		
	Bag Collector	PM_{10}	0.15	0.66
R51/ASVX11	R-51-Alumina Storage Vessel	PM	0.22	0.94
	Bag Collector	PM_{10}	0.22	0.94
R53C/SVX11	R-53C Alumina Storage Vessel	PM	0.29	0.50
	Bag Collector	PM_{10}	0.29	0.50
R52/BLCD11	R-52 Bulk Conveyor Transfer	PM	0.67	1.18

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
	Bag Collector	PM_{10}	0.67	1.18
R52/BLCX21	R-52 Bulk Loading Chute -North	PM		1.08
		1.89		
	Bag Collector	PM_{10}	1.08	1.89
R56/AHC221	R-56 Alumina Handling	PM	0.15	0.66
	Conveyor No. 2	PM_{10}	0.15	0.66
	Tail No. 1 Bag Collector			
R56/AHC231	R-56 Alumina Handling	PM	0.15	0.66
	Conveyor No. 2	PM_{10}	0.15	0.66
	Tail No. 2 Bag Collector			
Sources Previously Under Permit Number 1475				
R51C/AVX11	R-51C- Al_2O_3 Storage Vessel	PM	6.00	26.00
	Bag Collector	PM_{10}	6.00	26.00
R51E/05L11	R-51E-No. 5 Track Loading- Al_2O_3	PM		0.59
		2.60		
	Bag Collector	PM_{10}	0.59	2.60
R51E/06L11	R-51E-No. 6 Track Loading- Al_2O_3	PM		0.64
		2.80		
	Bag Collector	PM_{10}	0.64	2.80
R51E/SPV11	R-51E- Al_2O_3 Special Products	PM	0.74	3.20
	Vessel Bag Collector	PM_{10}	0.74	3.20
R51E/SVX11	R-51E- Al_2O_3 Storage Vessel	PM	1.10	4.80
	Bag Collector	PM_{10}	1.10	4.80
Previously Grandfathered Sources From the C30 Hydrate Production Process				

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)		Emission Rates lb/hr	TPY
R85/HD0111	R-85-No. 1 Hydrate Dryer	PM		3.00	13.14
	Wet Scrubber	PM_{10}		3.00	13.14
R85/HD0211	R-85-No. 2 Hydrate Dryer	PM		3.00	13.14
	Wet Scrubber	PM_{10}		3.00	13.14
R85/OSLX00	R 85 On Shore Lagoon (4)	PM		1.00	1.00
		PM_{10}	1.00	1.00	
Previously Grandfathered Sources from the AlF_3 Process					
R10/SDOS00	R-10-Spar Drop to Outside	PM		0.01	0.01
	Storage (4)	PM_{10}		0.01	0.01
R10/ST3D00	R-10-Spar Transfer No. 3	PM		0.01	0.01
	Conveyor to Drop (4)	PM_{10}		0.01	0.01
R73C/RCL11	R-73C-Railcar Loading	PM		0.19	0.83
	Bag Collector	PM_{10}		0.19	0.83
R8/SATXX01	R-8-Sulfuric Acid Tank Vent	H_2SO_4		1.00	1.00
R81/SULX11	R-81-Spar Unloading	PM		0.19	0.83
	Bag Collector	PM_{10}		0.19	0.83
R81/SV0101	R-81-Spar Vessel Vent No. 1	PM		0.32	1.37
		PM_{10}	0.32	1.37	
R81/SV0201	R-81-Spar Vessel Vent No. 2	PM		0.32	1.37
		PM_{10}	0.32	1.37	
R81/SV0301	R-81-Spar Vessel Vent No. 3	PM		0.32	1.37
		PM_{10}	0.32	1.37	
R82/SHXX11	R-82-Spar Handling Bag Collector		PM 4.12		0.94
		PM_{10}	0.94	4.12	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R83A/SAT01	R-83A-Sulfuric Acid Tank Vent	H_2SO_4	1.00	1.00
R83B/SAT01	R-83B-Sulfuric Acid Tank Vent	H_2SO_4	1.00	1.00
R83C/SAL01	R-83C-Sulfuric Acid Lift Tank Vent	H_2SO_4	1.00	1.00
R83D/SAL01	R-83D-Sulfuric Acid Lift Tank Vent	H_2SO_4	1.00	1.00
R84/AFC111	R-84-AlF3 -Converter No. 1 Wet Scrubber	PM	0.2	
		PM_{10}	0.2	
		HF 0.001		
		H_2SO_4 0.05		
		VOC 0.33		
R84/AFC211	R-84-AlF3 -Converter No. 2 Wet Scrubber	PM	0.2	
		PM_{10}	0.2	
		HF 0.001		
		H_2SO_4 0.05		
		VOC 0.33		
R84/AFC311	R-84-AlF3 -Converter No. 3 Wet Scrubber	PM	0.2	
		PM_{10}	0.2	
		HF 0.001		
		H_2SO_4 0.05		
		VOC 0.33		
R84/AFC411	R-84-AlF3 -Converter No. 4 Wet Scrubber	PM	0.2	
		PM_{10}	0.2	
		HF 0.001		
		H_2SO_4 0.05		
		VOC 0.33		
R84/AFC511	R-84-AlF3 -Converter No. 5 Wet Scrubber	PM	0.2	
		PM_{10}	0.2	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)		Emission Rates lb/hr	TPY
		HF	0.001		
		H_2SO_4	0.05		
		VOC	0.33		
R84/AFC611	R-84-AlF3 -Converter No. 6 Wet Scrubber	PM		0.2	
		PM_{10}		0.2	
		HF	0.001		
		H_2SO_4	0.05		
		VOC	0.33		
	Total for all converters	PM			5.26
		PM_{10}		5.26	
		HF		0.10	
		H_2SO_4		1.31	
		VOC		8.67	
R84/AFEX11	R-84-AlF3 Elevator Bag Collector	PM	1.49		0.34
		PM_{10}	0.34	1.49	
R84/HFF101	R-84-HF Furnace No. 1 Vent	PM		0.02	
		PM_{10}	0.02		
		SO_2	1.00		
		CO	0.02		
		NO_x	0.12		
		VOC	0.01		
		HF	0.01		
R84/HFF201	R-84-HF Furnace No. 2 Vent	PM		0.02	
		PM_{10}	0.02		
		SO_2	1.00		
		CO	0.02		
		NO_x	0.12		
		VOC	0.01		
		HF	0.01		
R84/HFF301	R-84-HF Furnace No. 3 Vent	PM		0.02	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
		PM_{10} 0.02		
		SO_2 1.00		
		CO 0.02		
		NO_x 0.12		
		VOC 0.01		
		HF 0.01		
R84/HFF401	R-84-HF Furnace No. 4 Vent	PM	0.02	
		PM_{10} 0.02		
		SO_2 1.00		
		CO 0.02		
		NO_x 0.12		
		VOC 0.01		
		HF 0.01		
R84/HFF501	R-84-HF Furnace No. 5 Vent	PM	0.02	
		PM_{10} 0.02		
		SO_2 1.00		
		CO 0.02		
		NO_x 0.12		
		VOC 0.01		
		HF 0.01		
R84/HFF601	R-84-HF Furnace No. 6 Vent	PM	0.02	
		PM_{10} 0.02		
		SO_2 1.00		
		CO 0.02		
		NO_x 0.12		
		VOC 0.01		
		HF 0.01		
	Total of all furnaces	PM		0.53
		PM_{10}	0.53	
		SO_2	26.28	
		CO	0.53	
		NO_x	3.15	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)		Emission Rates lb/hr	TPY
		VOC		0.27	
		HF		0.27	
R84/HFK111	R-84-HF Kiln No. 1-Gypsum Box Wet Scrubber	PM		0.04	
		PM_{10}		0.04	
		HF	0.86		
		H_2SO_4	1.33		
		VOC	0.01		
R84/HFK211	R-84-HF Kiln No. 2-Gypsum Box Wet Scrubber	PM		0.04	
		PM_{10}		0.04	
		HF	0.86		
		H_2SO_4	1.33		
		VOC	0.01		
R84/HFK311	R-84-HF Kiln No. 3-Gypsum Box Wet Scrubber	PM		0.04	
		PM_{10}		0.04	
		HF	0.86		
		H_2SO_4	1.33		
		VOC	0.01		
R84/HFK411	R-84-HF Kiln No. 4-Gypsum Box Wet Scrubber	PM		0.04	
		PM_{10}		0.04	
		HF	0.86		
		H_2SO_4	1.33		
		VOC	0.01		
R84/HFK511	R-84-HF Kiln No. 5-Gypsum Box Wet Scrubber	PM		0.04	
		PM_{10}		0.04	
		HF	0.86		
		H_2SO_4	1.33		
		VOC	0.01		
R84/HFK611	R-84-HF Kiln No. 6-Gypsum Box Wet Scrubber	PM		0.04	
		PM_{10}		0.04	
		HF	0.86		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
		H_2SO_4 1.33		
		VOC 0.01		
	Total for gypsum boxes	PM		1.05
		PM_{10}	1.05	
		HF	22.60	
		H_2SO_4	34.95	
		VOC	0.26	
R84NZ/HS11	R-84 Hydrate Vessels Common Stack(North) Bag Collector	PM	0.03	0.03
		PM_{10}	0.03	0.03
R84NA/HS01	R-84-Hydrate Vessel Vent No. 4	PM 0.03		0.03
		PM_{10} 0.03	0.03	
R84NB/HS01	R-84-Hydrate Vessel Vent No. 5	PM 0.03		0.03
		PM_{10} 0.03	0.03	
R84NC/HS01	R-84-Hydrate Vessel Vent No. 6	PM 0.03		0.03
		PM_{10} 0.03	0.03	
R84SZ/HS11	R-84-Hydrate Storage Common Stack(South) Bag Collector	PM	0.03	0.03
		PM_{10}	0.03	0.03
R84SA/HS01	R-84-Hydrate Vessel Vent No. 1	PM 0.03		0.03
		PM_{10} 0.03	0.03	
R84SB/HS01	R-84-Hydrate Vessel Vent No. 2	PM 0.03		0.03
		PM_{10} 0.03	0.03	
R84SC/HS01	R-84-Hydrate Vessel Vent No. 3	PM		0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
			0.03	
		PM_{10}	0.03	0.03
R86Z/AFS11	R-86A and R-86B AlF_3 Storage	PM	0.08	0.08
	Common Stack Bag Collector	PM_{10}	0.08	0.08
Sources Previously Under Standard Exemptions or Permits by Rule				
B37/UOTX01	B-37-Used Oil Storage Tank Vent		VOC	1.00
			1.00	
R10/DSTX01	R-10-Diesel Storage Tank Vent	VOC	0.50	0.12
R10/UOTX01	R-10-Used Oil Storage Tank Vent		VOC	1.00
			1.00	
R110/SBX01	R-110-Substitute Boiler	NO_x	11.18	11.26
		CO	11.35	11.49
		VOC	0.16	0.16
		SO_2	0.00	0.00
		PM_{10}	1.31	1.32
R111/UOT01	R-111-Used Oil Storage Tank Vent		VOC	1.00
			1.00	
R148/SBN11	R-148-Sand Blasting-Machine	PM	0.50	0.30
	Shop-North Bag Collector	PM_{10}	0.50	0.30
R148/SBS11	R-148-Sand Blasting-Machine	PM	0.50	0.30
	Shop-South Bag Collector	PM_{10}	0.50	0.30
R15/DSTX01	R-15-Diesel Storage Tank Vent	VOC	0.50	0.12
R25/PCL101	R-25 Pre Coat Lime Slaker	PM	0.20	0.80
	No. 1 Vent	PM_{10}	0.20	0.80
R25/PLS201	R-25 Process Lime Slaker No. 2		PM	0.20
			0.80	
	(spare) Vent	PM_{10}	0.20	0.80

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)		Emission Rates lb/hr	TPY
R25/PLSX01	R-25 New Product Lime Slaker Vent	PM		0.20	0.80
		PM_{10}		0.20	0.80
R35/HClX11	R-35-HCl Acid Storage Tank Wet Scrubber	HCl		0.12	0.54
R35M/D0100	R-35M-Dredge Lake No. 1 (4)	PM		0.40	0.18
		PM_{10}	0.30	0.15	
R35M/D0200	R-35M-Dredge Lake No. 2 (4)	PM		0.40	0.18
		PM_{10}	0.30	0.15	
R35M/L0400	R-35M-Lake No. 4 (4)	PM		11.80	5.20
		PM_{10}	10.00	4.49	
R35M/LF300	R-35M-Landfill Site III (4)	PM		0.40	0.18
		PM_{10}	0.30	0.15	
R35M/RLX00	R-35M-Recycle Lake (4)	PM		0.40	0.18
		PM_{10}	0.30	0.15	
R35V/DFV11	R-35-V Flocculent vessel No. 1 Bag Collector	PM		0.14	0.61
		PM_{10}		0.14	0.61
R35V/DFV21	R-35-V Flocculent vessel No. 2 Bag Collector	PM		0.14	0.61
		PM_{10}		0.14	0.61
R38M/SBX11	R-38M-Sand Blasting Bag Collector	PM		1.00	1.00
		PM_{10}		1.00	1.00
R38M/UOT01	R-38M-Used Oil Storage Tank Vent	VOC		1.00	1.00
R45/DSTX01	R-45-Diesel Storage Tank Vent	VOC		0.50	0.12
R45/EXXX00	R-45-Ethanol Containers (4)	VOC		0.50	0.10
R45/OSVX11	R-45-Oxalate System Vessel Bag Collector	PM		0.05	0.22
		PM_{10}		0.05	0.22

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R42/HECV01	R42-High Efficiency Causticization Relief Vessel Vent	PM	0.09	0.40
		PM_{10}	0.09	0.40
		VOC	0.07	0.31
		Hg 0.0011	0.005	
R42/HECP01	R42-High Efficiency Causticization Vacuum Pump Vent	VOC	0.02	0.09
		Hg	0.0006	0.003
R50/#05LP11	R-50-No. 5 Low Lift Pot- Al_2O_3 Bag Collector	PM	0.26	1.16
		PM_{10}	0.26	1.16
R50/#07LP11	R-50-No. 7 Low Lift Pot- Al_2O_3 Bag Collector	PM	0.26	1.16
		PM_{10}	0.26	1.16
R50/01AG11	R-50-No. 1 Air Gravity Conveyor- Al_2O_3 Bag Collector	PM	0.26	1.16
		PM_{10}	0.26	1.16
R50/02AG21	R-50-No. 2 Air Gravity Conveyor - Al_2O_3 Bag Collector	PM	0.12	0.38
		PM_{10} 0.19		0.06
R50/03AG21	R-50-No. 3 Air Gravity Conveyor - Al_2O_3 Bag Collector	PM	0.12	0.38
		PM_{10} 0.19		0.06
R50/04AG21	R-50-No. 4 Air Gravity Conveyor - Al_2O_3 Bag Collector	PM	0.26	1.16
		PM_{10} 1.16		0.26
R50/08AG11	R-50-No. 8 Air Gravity Conveyor - Al_2O_3 Bag Collector	PM	0.12	0.38
		PM_{10} 0.19		0.06
R50/10AG11	R-50-No. 10 Air Gravity Conveyor - Al_2O_3 Bag Collector	PM	0.30	1.30
		PM_{10} 1.30		0.30

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R50/1AAG11	R-50-No. 1A Air Gravity	PM	0.34	1.50
	Conveyor - Al_2O_3 Bag Collector	PM_{10}		0.34
		1.50		
R50/2EAG11	R-50-No. 2E Air Gravity	PM	0.26	1.16
	Conveyor - Al_2O_3 Bag Collector	PM_{10}		0.26
		1.16		
R50/3EAG11	R-50-No. 3E Air Gravity	PM	0.26	1.16
	Conveyor - Al_2O_3 Bag Collector	PM_{10}		0.26
		1.16		
R50/4EAG11	R-50-No. 4E Air Gravity	PM	0.26	1.16
	Conveyor - Al_2O_3 Bag Collector	PM_{10}		0.26
		1.16		
R50/56LP11	R-50-No. 5/6 Low Lift Pot - Al_2O_3	PM		0.26
		1.16		
	Bag Collector	PM_{10}	0.26	1.16
R50/67LP11	R-50-No. 6/7 Low Lift Pot - Al_2O_3	PM		0.26
		1.16		
	Bag Collector	PM_{10}	0.26	1.16
R50/ASPV11	R-50-Al_2O_3 Special Products Vessel	PM	6.00	25.00
	Bag Collector	PM_{10}	6.00	25.00
R53/RCUX11	R-53-Railcar Unloading	PM	1.37	6.01
	Bag Collector	PM_{10}	1.37	6.01
R55-2/DB11	R-55-2-Flash Calciner Disengaging	PM		0.08
		0.30		
	Box Bag Collector	PM_{10}	0.04	0.15

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R55-3/DB11	R-55-3-Flash Calciner Disengaging	PM		0.08
				0.30
	Box Bag Collector	PM_{10}	0.04	0.15
R55/01DB12	R-55-(1-2-3)Disengaging Box-Spare	PM		3.00
				13.14
	Bag Collector	PM_{10}	3.00	13.14
R55/ESP211	R-55 ESP Dust Redigest Tank No. 2	PM		0.06
				0.24
	Wet Scrubber	PM_{10}	0.03	0.12
R56/ESP11	R-56 ESP Dust Redigest Tank No. 1	PM		6.00
				1.00
	Wet Scrubber	PM_{10}	6.00	1.00
R56/ESP211	R-56 ESP Dust Redigest tank No. 2	PM	6.00	1.00
	Wet Scrubber	PM_{10}	6.00	1.00
R56/HSRX01	R-56-Hydrate Storage drop	PM	2.20	1.19
	to conveyor (4)	PM_{10}	2.20	1.19
R56/HSRX02	R-56-Hydrate Storage drop to	PM	2.20	1.19
	stockpile (4)	PM_{10}	2.20	1.19
R56/HSRX03	R-56-Hydrate Storage	PM	2.20	1.19
	stockpile (4)	PM_{10}	2.20	1.19
R56/HSRX14	R-56-Hydrate Storage drop	PM	0.60	0.32
	into hopper (4)	PM_{10}	0.60	0.32
R56/HSRX15	R-56-Hydrate Storage- drop to	PM	0.60	0.32
	reclaim conveyor (4)	PM_{10}	0.60	0.32
R56/HSRX16	R-56-Hydrate Storage- drop to	PM	0.60	0.32
	slurry tank (4)	PM_{10}	0.60	0.32

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R56/HRCX21	R-56 Hydrate Railcar Loading Drop from Loader Bucket Into Conveyor Hopper (4)	PM	1.1	1.19
		PM_{10}	0.55	0.59
R56/HRCX22	R-56 Hydrate Railcar Loading Drop from Hopper to Conveyor (4)	PM	1.1	1.19
		PM_{10}	0.55	0.59
R56/HRCX23	R-56 Hydrate Railcar Loading Conveyor Drop into Railcar (4)	PM	1.1	1.19
		PM_{10}	0.55	0.59

Note: Hydrate Railcar Loading (EPNs R56/HRCX21, R56/HRCX22, and R56/HRCX23) will not operate at the same time as R56 Hydrate Reclaim (EPNs R56/HSRX14, R56/HSRX15, and R56/HSRX16), or R56 Hydrate Truck Loading (EPN) R56/HTLX31.

R56/HTLX31	R-56 Hydrate Truck Loading Drop from Loader Bucket into Truck (4)	PM	1.1	1.19
		PM_{10}	0.55	0.59

Note: R56 Hydrate Truck Loading (EPN R56/HTLX31) will not operate at the same time as R-56 Hydrate Reclaim (EPNs R56/HSRX14, R56/HSRX15, and R56/HSRX16) or R56 Hydrate Railcar Loading (EPNs R56/HRCX21, R56/HRCX22, and R56/HRCX23).

R8/SHTXX01	R-8-Starch Vessel Vent	PM		6.00	10.00
		PM_{10}	6.00	10.00	
R80/SPAR01	R80 Spar Stockpile Transfer (4)	PM		6.00	1.00
		PM_{10}	6.00	1.00	
R81/SDXX11	R-81-Spar Drying Bag Collector	PM		0.87	3.83
		PM_{10}	0.87	3.83	
R81/SGXX11	R-81-Spar Grinding Bag Collector	PM	0.83		0.19
		PM_{10}	0.19	0.83	
R85/HH0211	R-85-Hydrate Handling No. 2 Bag Collector	PM		0.03	1.18
		PM_{10}		0.03	1.18

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R85/HH0111	R-85-Hydrate Handling No. 1 Bag Collector	PM	0.03	1.18
		PM_{10}	0.03	1.18
R85B/HSV11	R-85B-Hydrate Storage Bag Collector	PM	0.06	0.60
		PM_{10}	0.06	0.60
Sources Previously Under A Standard Permit				
R84/SF1X11	R-84-WT Spar Feed No. 1 Bag Collector	PM	0.36	1.11
		PM_{10}	0.36	1.11
R84/SF1611	R-84-WT Spar Feed Nos. 2, 3, 4, and 5 Bag Collector	PM	1.44	4.42
		PM_{10}	1.44	4.42
R84/SF6X11	R-84-WT Spar Feed No. 6 Bag Collector	PM	0.36	1.11
		PM_{10}	0.36	1.11
Previously Grandfathered Sources from the Bayer Process				
B37/GXXX00	B-37-Garage (4)	VOC	1.00	1.00
B60/S00600	B-60-Smelting Lagoon (4)	VOC	1.00	1.00
R10/SADX00	R-10 Sulfuric Acid Unloading Dock (4)	H_2SO_4	1.00	1.00
R110/05D01	R-110 5 lb Deaerator Vent	VOC	0.0002	0.0006
		Hg 0.0005	0.002	
R110/95D01	R-110 95 lb Deaerator Vent	VOC	0.07	0.29
		Hg 0.0003	0.002	
R110/CTX01	R-110 Cooling Tower (4)	PM	0.10	0.50
		PM_{10} 0.10	0.50	
R111/GXX00	R-111-Garage (4)	VOC	1.00	1.00

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY	*
R115/STP01	R-115 Sanitary Treatment Plant (4)	Cl		1.00	
		0.10			
R148/MSX11	R-148 Machine Shop Sand Blasting	PM		1.00	
		1.00			
	Bag Collector	PM_{10}	1.00	1.00	
R25/RM0101	R-25-Rod Mill No. 1 Vent	VOC	0.14	0.44	
		Hg 0.005	0.02		
R25/RM0201	R-25-Rod Mill No. 2 Vent	VOC	0.14	0.44	
		Hg 0.005	0.02		
R25/RM0301	R-25-Rod Mill No. 3 Vent	VOC	0.14	0.44	
		Hg 0.005	0.02		
R25/RM0401	R-25-Rod Mill No. 4 Vent	VOC	0.14	0.44	
		Hg 0.005	0.02		
R25/RM0501	R-25-Rod Mill No. 5 Vent	VOC	0.14	0.44	
		Hg 0.005	0.02		
R25/RM0601	R-25-Rod Mill No. 6 Vent	VOC	0.14	0.44	
		Hg 0.005	0.02		
R25/RM0701	R-25-Rod Mill No. 7 Vent	VOC	0.14	0.44	
		Hg 0.005	0.02		
R25/RM0801	R-25-Rod Mill No. 8 Vent	VOC	0.14	0.44	
		Hg 0.005	0.02		
R31/RTXX01	R-31 Relief Tank (Unit 6) (4)	VOC		0.80	
		3.50			
R33/RTXX01	R-33 Relief Tank (Unit 5) (4)	VOC		0.80	
		3.50			

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY	*
R35/STXX00	R-35-Secondary Thickeners Vent	VOC	2.00	5.00	
		Hg	0.001	0.004	
R35/PSBX00	R-35 Painting and Sand Blasting (4)	PM	0.06	0.24	
		PM_{10}	0.03	.12	
		VOC	1.50	5.91	
R35/WTAX00	R-35-Washer Train A Vents	VOC	2.00	5.00	
		Hg	0.20	0.90	
R35/WTBX00	R-35-Washer Train B Vents	VOC	2.00	5.00	
		Hg	0.20	0.90	
R35M/CLX00	R-35M-Clear Lake (4)	PM	0.40	0.18	
		PM_{10}	0.30	0.15	
R35M/L1X00	R-35M-Lake No. 1 (4)	PM	0.40	0.18	
		PM_{10}	0.30	0.15	
R35M/L2X00	R-35M-Lake No. 2 (4)	PM	11.80	5.20	
		PM_{10}	10.00	4.40	
R35M/L3X00	R-35M-Lake No. 3 (4)	PM	0.40	0.18	
		PM_{10}	0.30	0.15	
R35M/RWX00	R-35M Raw Water Lake (4)	PM	0.40	0.18	
		PM_{10}	0.30	0.15	
R35M/SLX00	R-35M Storm Lake (4)	PM	5.70	2.50	
		PM_{10}	5.00	1.10	
R35V/FS201	R-35V Flocculent Tank - South No. 2 Vent	VOC	3.59	0.37	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
R45/GSTX01	R-45 Gasoline Storage Tank Vent	VOC	1.00	1.00
R50/A1XX11	R-50 Alumina Handling (A) Collector	PM	0.43	1.88
		PM_{10}	0.43	1.88
R50/A2XX11	R-50 Alumina Handling (B) Collector	PM	0.43	1.88
		PM_{10}	0.43	1.88
R50/KVAX01	R-50 Kiln Vacuum Pump A Vent	VOC	3.00	11.83
R50/KVBX01	R-50 Kiln Vacuum Pump B Vent	VOC	3.00	11.83
R50/K04X03	R-50-Kiln Vent No. 4	PM	92.90	4.65
		PM_{10}	92.90	4.65
R50/K05X03	R-50-Kiln Vent No. 5	PM	92.90	4.65
		PM_{10}	92.90	4.65
R50/K06X03	R-50-Kiln Vent No. 6	PM	92.90	4.65
		PM_{10}	92.90	4.65
R50/K07X03	R-50-Kiln Vent No. 7	PM	92.90	4.65
		PM_{10}	92.90	4.65
R55/HF1401	R-55-Horizontal Filter Nos. 1, 2, 3, and 4 Vent	VOC	6.48	6.4
		Hg	0.004	0.016
R55-1/DB11	R-55-1 Flash Calciner Disengaging Box Bag Collector	PM	0.08	0.30
		PM_{10}	0.04	0.15

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
R60/LCDX11	R-60 Lime Conveyor Discharge	PM	8.26	36.18
	Bag Collector	PM_{10}	8.26	36.18
R60/LTXX11	R-60-Lime Transfer/Storage/Transfer	PM	2.47	10.80
	Bag Collector	PM_{10}	2.47	10.80
Maintenance Startup/Shutdown				
R55-1/FC11	R-55-1 Flash Calciner (SGA) Electrostatic Precipitator			
R55-2/FC11	R-55-2 Flash Calciner (SGA) Electrostatic Precipitator			
R55-3/FC11	R-55-3 Flash Calciner (SGA) Electrostatic Precipitator			
R56-4/FC11	R-55-4 Flash Calciner (SGA) Electrostatic Precipitator			

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources use area name or fugitive source name.
(3) 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.
Hg - mercury

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
*				

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NaOH - sodium hydroxide
Al_2O_3 - alumina
NO_x - nitrogen oxide
CO - carbon monoxide
SO_2 - sulfur dioxide
H_2SO_4 - sulfuric acid
HF - hydrogen fluoride
HCl - hydrochloric acid
Cl - chlorine

(4) Fugitive emissions are an estimate only.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule and the throughput and production rates as listed in Special Condition No. 1:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

Dated April 15, 2004