

Input Data for : Base Case - Peak		Temperature	Stack Diameter	Discharge Velocity	Stack Flow - Dry	NOx	CO	SO2	Dust	Arsenic	Selenium	Manganese	Cadmium	Chromium	Nickel	Mercury	Ammonia	BaP	Acetone	Acetaldehyde	Formaldehyde	2-Butanone	Benzene	Toluene	Xylenes	Acrolein	Ethylbenzene	Methylene Chloride	Styrene	1,2,4	1,3,5	Odour						
		*K	m	m/s	Dry Nm3/hr	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	OU/sec		
Sum																																						
% Change Relative to BASE AVERAGE																																						
Combustion Equipment Point Sources:																																						
Liquor Burning	338	0.93	28.7	52446	4.20E+00	2.11E+01	4.33E-01	5.33E-01	1.46E-04	8.74E-04	7.28E-05			3.17E-07	3.80E-04			2.68E-06	1.39E-01	6.37E-02	2.83E-03	1.27E-02	5.24E-02	4.25E-03	9.49E-04		4.08E-04		5.39E-04		2.33E-04		5.83E-05		74051			
Calciner 1	432	1.90	24.7	87305	3.18E+00	1.11E+01	9.94E-01	3.42E+00						1.82E-06	7.25E-05			5.82E-07	9.11E-02	8.90E-02	9.90E-02	8.48E-03	8.48E-03	2.12E-03	1.06E-03	9.70E-03		2.43E-04		1.07E-02		3.64E-04		6.06E-05		107524		
Calciner 2	433	1.90	24.3	84672	4.47E+00	2.42E+01	9.17E-01	2.40E+00						1.82E-06	7.25E-05			5.64E-07	8.68E-02	8.68E-02	9.89E-02	8.07E-03	8.07E-03	2.02E-03	1.01E-03	9.41E-03		2.35E-04		1.03E-02		3.53E-04		5.88E-05		103169		
Calciner 3	469	2.15	23.8	103799	6.93E+00	3.69E+00	1.24E+00	1.24E+00						1.82E-06	7.25E-05			6.92E-07	7.61E-02	1.09E-01	6.42E-01	4.04E-02	2.38E-03	2.38E-03	1.19E-03	1.15E-02		2.88E-04		1.27E-02		4.32E-04		7.21E-05		205057		
Calciner 4	430	2.35	23.8	128326	4.28E+00	4.28E+00	3.32E-01	7.97E-01						1.82E-06	7.25E-05			7.97E-07	1.06E-01	1.30E-01	1.30E-01	1.81E-02	9.05E-03	3.02E-03	1.51E-03	1.33E-02		3.32E-04		1.46E-02		4.98E-04		8.30E-05		115454		
Calciner 5																																						
Boiler 1	374	2.40	20.0	189149	1.77E+01	2.31E+00	9.46E-01		3.03E-03		1.41E-03			4.44E-06					3.82E-02	7.64E-03	7.64E-03	7.64E-03	5.73E-03	3.82E-03				2.10E-02							11051			
Boiler 2	397	2.00	25.0	159681	1.65E+01	2.69E+00	1.38E+00		1.52E-04	5.47E-05	8.97E-04			4.44E-06	1.55E-04	1.84E-01			2.59E-02	1.15E-02	5.75E-03	5.75E-03	4.31E-03	2.87E-03				1.77E-02							11523			
Boiler 3	404	2.00	20.6	131003	4.37E+00	8.37E-01	4.73E-01		1.25E-04	4.49E-05	7.36E-04			4.44E-06	1.27E-04	1.51E-01			2.65E-02	4.82E-03	4.82E-03	4.82E-03	4.82E-03	3.62E-03	2.41E-03			1.46E-02							17305			
Boiler 2/3 (Non-condensables)																																						
Gas Turbine 1	371	3.03	30.7	541791	1.36E+01	7.83E+00	2.56E+00									4.19E-03																						
Gas Turbine 2																																						
Non-Combustion Equipment Point Sources:																																						
CBF Vac Pump Stack	333	0.90	10.5	13190																																		
Calciner 1,2,3 Vac Pump, 50B and Dorco	345	1.10	12.6	24300															4.05E-06	2.29E-01	4.02E-02	3.22E-03	7.65E-03	6.04E-04	4.02E-02	9.26E-03		6.75E-02								57566		
Calciner 4 Vac Pump and Dorco (combined emission)	345	0.91	12.6	24300															4.05E-06	2.29E-01	4.02E-02	3.22E-03	7.65E-03	6.04E-04	4.02E-02	9.26E-03		6.75E-02								57566		
45K Cooling Tower 2 and 3	323	8.00	15.3	3286308															9.17E-01	1.15E-01	1.15E-01	1.15E-01	5.73E-02	5.73E-02				3.65E-03							1183371			
45K Cooling Tower 1	323			1134649															3.16E-01	3.96E-02	3.96E-02	3.96E-02	1.98E-02	1.98E-02				1.26E-03							811793			
50 Cooling Tower 1 and 2	322			147938															8.79E-02	1.10E-02	1.10E-02	3.96E-02	1.98E-02	2.20E-04				1.64E-04							181199			
Grouped Sources:																																						
Milling Vents	343	0.44	2.3	2067							5.74E-06	1.15E-05																									5567	
25A Tank Vents	371	0.50	12.9	595						4.12E-05	1.44E-04	1.35E-02			4.25E-04	2.90E-04			1.60E-06	7.01E-02	2.00E-02	4.88E-04	5.29E-03	3.31E-04	3.19E-03	4.79E-04		2.29E-04	6.21E-03	3.27E-05		9.47E-04	2.94E-04			181464		
626 Stacks	333	0.60	9.0	138																																		
35F & D Vents	371	0.26	6.9	1397																																	47671	
35A Vents (Non cons)	370	0.60	1.8	354																																	116777	
35C Washer Area Vents - Banks 1-3	370	0.26	15.0	817																																	6794	
35C Washer Area Vents - Banks 4-6	370	0.26	15.0	1225																																		
35J Tank Vents (Non cons)	357	0.49	2.0	3276																																		
Grouped Sources to Water (ultimately to air):																																						
Cooling Lake (excess in water)																																						
Blidg 30 Condensate to Lower Dam																																						
Total - g/s						7.52E+01	7.80E+01	9.27E+00	8.39E+00	3.49E-03	1.15E-03	1.73E-02	2.23E-07	2.09E-05	8.23E-04	6.90E-03	4.96E-01		2.73E-05	2.64E+00	8.06E-01	1.15E+00	3.14E-01	1.73E-01	1.85E-01	2.47E-02	4.39E-02	1.73E-03	2.43E-01	7.30E-03		1.18E-03	6.27E-04	2.75E-04	3.33E+06			
Total - kg/year						2.37E+06	2.46E+06	2.92E+05	2.65E+05	1.10E+02	3.63E+01	5.46E+02	7.02E-03	6.60E-01	2.60E+01	2.18E+02	1.56E+04		8.60E-01	8.34E+04	2.54E+04	3.63E+04	9.90E+03	5.45E+03	5.82E+03	7.79E+02	1.39E+03	5.47E+01	7.66E+03	2.30E+02	3.72E+01	1.98E+01	8.66E+00					

Input Data for : Case 6 - Average		Temperature *K	Stack Diameter m	Discharge Velocity m/s	Stack Flow - Dry Dry Nm3/hr	NOx g/sec	CO g/sec	SO2 g/sec	Dust g/sec	Arsenic g/sec	Selenium g/sec	Manganese g/sec	Cadmium g/sec	Chromium (vi) g/sec	Nickel g/sec	Mercury g/sec	Ammonia g/sec	BaP Equivalents g/sec	Acetone	Acetaldehyde	Formaldehyde	2-Butanone	Benzene	Toluene	Xylenes	Acrolein	Ethylbenzene	Methylene Chloride	Styrene	1,2,4 Trimethylbenzene	1,3,5 Trimethylbenzene	Vinyl chloride	Odour OU/sec		
Sum																																			
% Change Relative to BASE AVERAGE																																			
Combustion Equipment Point Sources:																																			
Oxalate Kiln Stack	363		1.30		19.6	70355	4.81E+01	7.34E+00	3.83E-01	1.12E-01	9.14E-06	5.49E-05	4.57E-06	2.97E-08				9.36E-08								6.20E-05	2.56E-05		3.38E-05	1.46E-05	3.66E-06		5		
Liquor Burning	338		0.93		27.9	50989	1.24E+00	7.65E+00	1.04E-01	7.01E-02	1.42E-04	8.50E-04	7.08E-05	2.67E-07		3.20E-04		2.61E-06	1.66E-02	3.15E-03		5.44E-04	1.22E-03	6.99E-03	5.71E-04	1.37E-04	0.00E+00	3.97E-04	5.24E-04	2.27E-04	5.67E-05	8123			
Calciner 1	432		1.90		23.7	76812	2.37E+00	5.61E+00	3.54E-01	4.51E-01				1.50E-06		9.50E-05		5.12E-07	6.79E-02	6.49E-02		5.91E-02	5.87E-03	5.12E-03	2.03E-03	6.93E-04	8.53E-03	2.13E-04	9.39E-03	3.20E-04	5.33E-05	5.33E-05	75088		
Calciner 2	433		1.90		24.0	76812	1.44E+00	1.02E+01	4.67E-01	3.31E-01				1.50E-06		9.50E-05		5.12E-07	8.01E-02	6.40E-02		5.79E-02	6.40E-03	5.26E-03	2.03E-03	6.93E-04	8.53E-03	2.13E-04	9.39E-03	3.20E-04	5.33E-05	5.33E-05	77657		
Calciner 3	469		2.15		26.9	120377	4.92E+00	1.74E+00	3.20E-01	4.50E-01				1.68E-06		9.50E-05		8.03E-07	4.51E-02	4.41E-02		1.90E-01	8.56E-03	1.34E-03	1.27E-03	4.35E-04	1.34E-02	3.34E-04	1.47E-02	5.02E-04	8.36E-05	8.36E-05	72947		
Calciner 4	430		2.35		23.8	131841	2.86E+00	2.70E+00	1.47E-01	4.93E-01				1.68E-06		9.50E-05		8.79E-07	1.24E-01	1.16E-01		1.09E-01	1.28E-02	7.78E-03	3.48E-03	1.19E-03	1.46E-02	3.66E-04	1.61E-02	5.49E-04	9.16E-05	9.16E-05	109874		
Calciner 5	430		2.35		23.8	131841	2.86E+00	2.70E+00	1.47E-01	7.32E-02				1.68E-06		9.50E-05		8.79E-07	1.24E-01	1.16E-01		1.09E-01	1.28E-02	7.78E-03	3.48E-03	1.19E-03	1.46E-02	3.66E-04	1.61E-02	5.49E-04	9.16E-05	9.16E-05	109874		
Calciner 6	430		2.35		23.8	131841	2.86E+00	2.70E+00	1.47E-01	7.32E-02				1.68E-06		9.50E-05		8.79E-07	1.24E-01	1.16E-01		1.09E-01	1.28E-02	7.78E-03	3.48E-03	1.19E-03	1.46E-02	3.66E-04	1.61E-02	5.49E-04	9.16E-05	9.16E-05	109874		
Boiler 1	374		2.40		14.1	132858	4.04E+00	2.87E-01	1.89E-01		2.13E-03		9.87E-04	4.10E-06					2.95E-02	7.38E-03		7.38E-03	7.38E-03	4.61E-03	1.85E-03	3.69E-11	1.48E-02					8784			
Boiler 2	397		2.00		15.7	100677	3.07E+00	2.41E-01	2.06E-01		9.58E-05	3.45E-05	5.66E-04	4.26E-06					3.73E-02	8.39E-03		8.39E-03	5.59E-03	3.50E-03	1.40E-03	2.80E-11	1.12E-02					11394			
Boiler 3	404		2.00		13.5	85527	2.60E+00	1.19E-01	1.76E-01		8.14E-05	2.93E-05	4.80E-04	4.26E-06					9.86E-02	2.76E-02		4.75E-03	4.75E-03	4.75E-03	2.97E-03	1.19E-03	2.38E-11	9.50E-03				15606			
Boiler 2/3 (Non-condensables)															2.31E-04	1.78E-03																			
Gas Turbine 1	371		3.03		22.4	392754	3.00E+00	2.99E+00	4.27E-01																										
Gas Turbine 2	444		6.20		18.0	1081672	1.54E+01	3.76E+00	2.61E-01											5.83E-03		2.01E-02		7.84E-04	2.67E-03	1.69E-03									
Gas Turbine 3	444		6.20		18.0	1081672	1.54E+01	3.76E+00	2.61E-01											5.83E-03		2.01E-02		7.84E-04	2.67E-03	1.69E-03									
Non-Combustion Equipment Point Sources:																																			
QBF Vac Pump Stack	333		0.90		10.5	10744																													
Calciner 1,2,3 Vac Pump, 50B and Dorcco	345		1.10		7.5	14486													3.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-06							
Calciner 4 Vac Pump and Dorcco (combined emission)	345		0.91		7.5	7243													3.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.03E-06							
45K Cooling Tower 2 and 3	323		8.00		15.3	2062390														3.55E-01	4.01E-02	4.01E-02	4.01E-02	2.01E-02	2.01E-02	0.00E+00	0.00E+00	2.29E-03					157819		
45K Cooling Tower 1	323		n/a																	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00								
50 Cooling Tower 1 and 2	322		5.00		3.7	197840													4.87E-02	5.50E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	9.70E-05						32181		
Grouped Sources:																																			
Milling Vents	343		0.44		2.3	2756					7.20E-06	1.44E-05					4.46E-02	8.64E-08	1.35E-02	1.07E-02	1.53E-04	1.22E-03	1.03E-04	1.37E-04	0.00E+00								7422		
25A Tank Vents	371		0.50		3.2	149					1.82E-05	1.71E-03			5.38E-05	5.70E-04	1.59E-02	2.03E-07	5.08E-03	1.25E-03	3.05E-05	3.31E-04	2.07E-05	1.51E-04	2.22E-05	2.89E-05	7.86E-04	4.13E-06	1.20E-04	3.72E-05			82204		
B26 Stacks	333		0.60		0.0	118																													
35F & D Vents	371		0.26		6.9	1397																													66739
35A Vents (Non cons)	370		0.60		1.3	390																													6568
35C Washer Area Vents - Banks 1-3	370		0.26		15.0	817														4.48E-06	8.61E-02	1.28E-02	7.46E-05	1.49E-02	3.25E-05	6.79E-04								13588	
35C Washer Area Vents - Banks 4-6	370		0.26		15.0	1225																													
35J Tank Vents (Non cons)	357		0.49		1.5	2751																													
Grouped Sources to Water (ultimately to air):																																			
Cooling Lake (excess in water)																																			
Bldg 30 Condensate to Lower Dam																				1.53E-05															
Total - g/s						6.26E+01	5.18E+01	3.59E+00	2.05E+00	2.45E-03	9.94E-04	3.84E-03	0.00E+00	2.26E-05	2.84E-04	3.28E-03	2.75E-01	1.19E-05	1.18E+00	6.26E-01	7.32E-01	1.35E-01	7.49E-02	4.72E-02	8.94E-03	7.45E-02	2.31E-03	1.18E-01	5.74E-03	3.61E-04	5.62E-04	4.65E-04	965748		
Total - kg/year						1.97E+06	1.63E+06	1.13E+05	6.47E+04	7.74E+01	3.13E+01	1.21E+02	0.00E+00	7.13E-01	8.97E+00	1.03E+02	8.68E+03	3.76E-01	3.73E+04	1.97E+04	2.31E+04	4.25E+03	2.36E+03	1.49E+03	2.82E+02	2.35E+03	7.29E+01	3.72E+03	1.81E+02	1.14E+01	1.77E+01	1.47E+01			
Expansion/Base Relativity						196%	180%	163%	108%	96%	97%	40%	0%	108%	55%	56%	86%	61%	105%	163%	135%	121%	115%	45%	39%	195%	168%	73%	81%	51%	127%	195%			

Input Data for : Case 7 - Average		Temperature °K	Stack Diameter m	Discharge Velocity m/s	Stack Flow - Dry Dry Nm3/hr	NOx g/sec	CO g/sec	SO2 g/sec	Dust g/sec	Arsenic g/sec	Selenium g/sec	Manganese g/sec	Cadmium g/sec	Chromium (vi) g/sec	Nickel g/sec	Mercury g/sec	Ammonia g/sec	BaP Equivalents g/sec	Acetone	Acetaldehyde	Formaldehyde	2-Butanone	Benzene	Toluene	Xylenes	Acrolein	Ethylbenzene	Methylene Chloride	Styrene	1,2,4 Trimethylbenzene	1,3,5 Trimethylbenzene	Vinyl chloride	Odour OU/sec			
Sum																																				
% Change Relative to BASE AVERAGE																																				
Combustion Equipment Point Sources:																																				
Oxalate Kiln Stack	363	1.30	19.6	70355	4.81E-01	7.34E+00	3.83E-01	1.12E-01	9.14E-06	5.49E-05	4.57E-06	2.97E-08						9.36E-08								6.20E-05	2.56E-05		3.38E-05	1.46E-05	3.66E-06		5			
Liquor Burning	338	0.93	27.9	50989	1.24E+00	7.65E+00	1.04E-01	7.01E-02	1.42E-04	8.50E-04	7.08E-05	2.67E-07			3.20E-04			2.61E-06	1.66E-02	3.15E-03	5.44E-04	1.22E-03	6.99E-03	5.71E-04	1.37E-04	0.00E+00	3.97E-04		5.24E-04	2.27E-04	5.67E-05		8123			
Calciner 1	432	1.90	23.7	76812	2.37E+00	5.61E+00	3.54E-01	4.51E-01				1.50E-06			9.50E-05			5.12E-07	6.79E-02	6.49E-02	5.91E-02	5.87E-03	5.12E-03	2.03E-03	6.93E-04	8.53E-03	2.13E-04	9.39E-03	3.20E-04		5.33E-05		75088			
Calciner 2	433	1.90	24.0	76812	1.44E+00	1.02E+01	4.67E-01	3.31E-01				1.50E-06			9.50E-05			5.12E-07	8.01E-02	6.40E-02	5.79E-02	6.40E-03	5.26E-03	2.03E-03	6.93E-04	8.53E-03	2.13E-04	9.39E-03	3.20E-04		5.33E-05		77657			
Calciner 3	469	2.15	26.9	120377	4.92E+00	1.74E+00	3.20E-01	4.50E-01				1.68E-06			9.50E-05			8.03E-07	4.51E-02	4.41E-02	1.90E-01	8.56E-03	1.34E-03	1.27E-03	4.35E-04	1.34E-02	3.34E-04	1.47E-02	5.02E-04		8.36E-05		72947			
Calciner 4	430	2.35	23.8	131841	2.86E+00	2.70E+00	1.47E-01	4.93E-01				1.68E-06			9.50E-05			8.79E-07	1.24E-01	1.16E-01	1.09E-01	1.28E-02	7.78E-03	3.48E-03	1.19E-03	1.46E-02	3.66E-04	1.61E-02	5.49E-04		9.16E-05		109874			
Calciner 5	430	2.35	23.8	131841	2.86E+00	2.70E+00	1.47E-01	7.32E-02				1.68E-06			9.50E-05			8.79E-07	1.24E-01	1.16E-01	1.09E-01	1.28E-02	7.78E-03	3.48E-03	1.19E-03	1.46E-02	3.66E-04	1.61E-02	5.49E-04		9.16E-05		109874			
Calciner 6	430	2.35	23.8	131841	2.86E+00	2.70E+00	1.47E-01	7.32E-02				1.68E-06			9.50E-05			8.79E-07	1.24E-01	1.16E-01	1.09E-01	1.28E-02	7.78E-03	3.48E-03	1.19E-03	1.46E-02	3.66E-04	1.61E-02	5.49E-04		9.16E-05		109874			
Boiler 1	374	2.40	14.1	132858	4.04E+00	2.87E-01	1.89E-01		2.13E-03		9.87E-04	4.10E-06								2.95E-02	7.38E-03	7.38E-03	7.38E-03	4.61E-03	1.85E-03	3.69E-11						8784				
Boiler 2	397	2.00	15.7	100677	3.07E+00	2.41E-01	2.06E-01		9.58E-05	3.45E-05	5.66E-04	4.26E-06					1.16E-01			3.73E-02	8.39E-03	5.59E-03	3.50E-03	1.40E-03	2.80E-11							11394				
Boiler 3	404	2.00	13.5	85527	2.60E+00	1.19E-01	1.76E-01		8.14E-05	2.93E-05	4.80E-04	4.26E-06					9.86E-02			2.76E-02	4.75E-03	4.75E-03	2.97E-03	1.19E-03	2.38E-11							15606				
Boiler 2/3 (Non-condensables)																																				
Boiler 4	374	2.40	14.1	132858	4.04E+00	2.87E-01	1.89E-01		2.13E-03		9.87E-04	4.10E-06								2.95E-02	7.38E-03	7.38E-03	7.38E-03	4.61E-03	1.85E-03	3.69E-11							15606			
Boiler 5	374	2.40	14.1	132858	4.04E+00	2.87E-01	1.89E-01		2.13E-03		9.87E-04	4.10E-06								2.95E-02	7.38E-03	7.38E-03	7.38E-03	4.61E-03	1.85E-03	3.69E-11							15606			
Gas Turbine 1	371	3.03	22.4	392754	3.00E+00	2.99E+00	4.27E-01																													
Non-Combustion Equipment Point Sources:																																				
OBV Vac Pump Stack	333	0.90	10.5	10744																																
Calciner 1,2,3 Vac Pump, 50B and Dorco	345	1.10	7.5	14486															3.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
Calciner 4 Vac Pump and Dorco (combined emission)	345	0.91	7.5	7243															3.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
45K Cooling Tower 2 and 3	323	8.00	15.3	1031195																3.55E-01	4.01E-02	4.01E-02	4.01E-02	2.01E-02	2.01E-02	0.00E+00						1.15E-03		157819		
45K Cooling Tower 1	323		n/a																	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00										
50 Cooling Tower 1 and 2	322	5.00	3.7	197840																4.87E-02	5.50E-03	0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00							32181			
Grouped Sources:																																				
Milling Vents	343	0.44	2.3	2756																																
25A Tank Vents	371	0.50	3.2	149																																
B26 Stacks	333	0.60	0.0	118																																
35F & D Vents	371	0.26	6.9	1397																																
35A Vents (Non cons)	370	0.60	1.3	390																																
35C Washer Area Vents - Banks 1-3	370	0.26	15.0	817																																
35C Washer Area Vents - Banks 4-6	370	0.26	15.0	1225																																
35J Tank Vents (Non cons)	357	0.49	1.5	2751																																
Grouped Sources to Water (ultimately to air):																																				
Cooling Lake (excess in water)																																				
Bldg 30 Condensate to Lower Dam																																				
Total - g/s					3.98E+01	4.49E+01	3.45E+00	2.05E+00	6.71E-03	9.94E-04	5.81E-03	0.00E+00	3.08E-05	2.84E-04	3.26E-03	2.75E-01	1.19E-05	1.24E+00	6.29E-01	7.07E-01	1.50E-01	8.26E-02	4.56E-02	5.55E-03	7.45E-02	2.31E-03	1.48E-01	4.59E-03	3.61E-04	5.62E-04	4.65E-04	996961				
Total - kg/year					1.28E+06	1.42E+06	1.09E+05	6.47E+04	2.12E+02	3.13E+01	1.83E+02	0.00E+00	9.72E-01	8.97E+00	1.03E+02	8.88E+03	3.76E-01	3.92E+04	1.98E+04	2.23E+04	4.71E+03	2.60E+03	1.44E+03	1.75E+02	2.35E+03	7.29E+01	4.65E+03	1.45E+02	1.14E+01	1.77E+01	1.47E+01					

Input Data for : Case 7 - Peak		Temperature	Stack Diameter	Discharge Velocity	Stack Flow - Dry	NOx	CO	SO2	Dust	Arsenic	Selenium	Manganese	Cadmium	Chromium	Nickel	Mercury	Ammonia	BaP	Equivalents	Acetone	Acetaldehyde	Formaldehyde	2-Butanone	Benzene	Toluene	Xylenes	Acrolein	Ethylbenzene	Methylene Chloride	Styrene	1,2,4 Trimethylbenzene	1,3,5 Trimethylbenzene	Vinyl chloride	Odour		
		"K	m	m/s	Dry Nm3/hr	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	g/sec	OU/sec	
Sum																																				
% Change Relative to BASE AVERAGE																																				
Combustion Equipment Point Sources:																																				
Oxalate Kiln Stack	363		1.30		19.6	70355	4.81E-01	7.34E+00	3.83E-01	1.12E-01	9.14E-06	5.49E-05	4.57E-06	2.97E-08					9.36E-08																5	
Liquor Burning	338		0.93		33.2	60629	4.24E+00	2.13E+01	4.38E-01	5.39E-01	1.68E-04	1.01E-03	8.42E-05	3.17E-07		3.20E-04			3.10E-06	1.76E-02	3.35E-03	5.79E-04	1.30E-03	7.44E-03	6.07E-04	1.46E-04	6.20E-05	2.56E-05		3.38E-05	1.46E-05	3.66E-06		8682		
Calciner 1	432		1.90		25.7	83608	3.41E+00	1.06E+01	9.52E-01	1.64E+00				1.82E-06		9.50E-05			5.57E-07	7.39E-02	7.07E-02	6.44E-02	6.39E-03	5.57E-03	2.21E-03	7.55E-04	9.29E-03	2.32E-04	1.02E-02	3.48E-04		6.50E-05	8.1737			
Calciner 2	433		1.90		26.1	83608	4.94E+00	2.39E+01	9.06E-01	1.02E+00				1.82E-06		9.50E-05			5.57E-07	8.71E-02	6.97E-02	6.30E-02	6.97E-03	5.73E-03	2.21E-03	7.55E-04	9.29E-03	2.32E-04	1.02E-02	3.48E-04		6.50E-05	8.4533			
Calciner 3	469		2.15		29.3	131027	8.74E+00	4.66E+00	1.57E+00	8.74E-01				1.82E-06		9.50E-05			8.74E-07	4.91E-02	4.80E-02	2.07E-01	9.32E-03	1.46E-03	1.38E-03	4.73E-04	1.46E-02	3.64E-04	1.60E-02	5.46E-04		9.10E-05	9.10E-05	79401		
Calciner 4	430		2.35		25.9	143506	5.14E+00	5.14E+00	3.99E-01	9.57E-01				1.82E-06		9.50E-05			9.57E-07	1.34E-01	1.26E-01	1.18E-01	1.40E-02	8.47E-03	3.79E-03	1.30E-03	1.59E-02	3.99E-04	1.75E-02	5.98E-04		9.97E-05	9.97E-05	119596		
Calciner 5	430		2.35		25.9	143506	5.14E+00	5.14E+00	3.99E-01	7.97E-02				1.82E-06		9.50E-05			9.57E-07	1.34E-01	1.26E-01	1.18E-01	1.40E-02	8.47E-03	3.79E-03	1.30E-03	1.59E-02	3.99E-04	1.75E-02	5.98E-04		9.97E-05	9.97E-05	119596		
Calciner 6	430		2.35		25.9	143506	5.14E+00	5.14E+00	3.99E-01	7.97E-02				1.82E-06		9.50E-05			9.57E-07	1.34E-01	1.26E-01	1.18E-01	1.40E-02	8.47E-03	3.79E-03	1.30E-03	1.59E-02	3.99E-04	1.75E-02	5.98E-04		9.97E-05	9.97E-05	119596		
Boiler 1	374		2.40		15.2	143930	4.80E+00	1.76E+00	7.20E-01		2.30E-03		1.07E-03	4.44E-06					3.20E-02		8.00E-03	8.00E-03	8.00E-03	5.00E-03	2.00E-03	4.00E-11		1.60E-02				1.80E-02	9516			
Boiler 2	397		2.00		16.4	104872	3.50E+00	1.75E+00	9.03E-01		9.98E-05	3.59E-05	5.89E-04	4.44E-06	1.02E-04		1.21E-01		3.88E-02		8.74E-03	5.83E-03	5.83E-03	3.64E-03	1.46E-03	2.91E-11		1.17E-02				1.18E-02	11868			
Boiler 3	404		2.00		14.0	89091	2.97E+00	5.69E-01	3.22E-01		8.48E-05	3.05E-05	5.01E-04	4.44E-06	8.66E-05		1.03E-01		2.88E-02		4.95E-03	4.95E-03	3.09E-03	1.24E-03	2.47E-11		9.90E-03				1.62E-02	16256				
Boiler 2/3 (Non-condensables)											5.93E-06	5.52E-05	1.31E-03	4.45E-07	2.31E-04	1.78E-03																				
Boiler 4	374		2.40		15.2	143930	4.80E+00	1.76E+00	7.20E-01		2.30E-03		1.07E-03	4.44E-06					3.20E-02		8.00E-03	8.00E-03	8.00E-03	5.00E-03	2.00E-03	4.00E-11		1.60E-02				1.60E-02	16256			
Boiler 5	374		2.40		15.2	143930	4.80E+00	1.76E+00	7.20E-01		2.30E-03		1.07E-03	4.44E-06					3.20E-02		8.00E-03	8.00E-03	8.00E-03	5.00E-03	2.00E-03	4.00E-11		1.60E-02				1.60E-02	16256			
Gas Turbine 1	371		3.03		22.4	392754	1.36E+01	7.83E+00	2.56E+00										0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
Non-Combustion Equipment Point Sources:																																				
OBF Vac Pump Stack	333		0.90		10.5	13190														0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00									
Calciner 1,2,3 Vac Pump, 50B and Dorco	345		1.10		8.4	16200													6.75E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.13E-04								
Calciner 4 Vac Pump and Dorco (combined emission)	345		0.91		12.6	8100													6.75E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		1.13E-04								
45K Cooling Tower 2 and 3	323		8.00		15.3	1031195														3.55E-01	4.01E-02	4.01E-02	4.01E-02	2.01E-02	2.01E-02	0.00E+00								157470		
45K Cooling Tower 1	323		n/a																	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00										
50 Cooling Tower 1 and 2	322		5.00		3.7	448302														4.87E-02	5.50E-03	0.00E+00	0.00E+00	2.75E-11	1.10E-04	0.00E+00								32254		
Grouped Sources:																																				
Milling Vents	343		0.44		2.3	2932														1.62E-04	1.44E-02	1.14E-02	1.30E-03	1.10E-04	1.46E-04	0.00E+00								7896		
25A Tank Vents	371		0.50		3.2	149														2.03E-07	5.08E-03	1.25E-03	3.05E-05	3.31E-04	2.07E-05	1.51E-04	2.22E-05		2.89E-05	7.85E-04	4.13E-06	1.20E-04	3.72E-05		82200	
B26 Stacks	333		0.60		9.0	138																														
35F & D Vents	371		0.26		6.9	1397																														
35A Vents (Non cons)	370		0.60		1.3	260																														66739
35C Washer Area Vents - Banks 1-3	370		0.26		15.0	817																														6572
35C Washer Area Vents - Banks 4-6	370		0.26		15.0	1225																														13588
35J Tank Vents (Non cons)	357		0.49		1.5	2751																														
Grouped Sources to Water (ultimately to air):																																				
Cooling Lake (excess in water)																																				
Bldg 30 Condensate to Lower Dam																																				
Total - g/s						7.17E+01	9.87E+01	1.14E+01	5.30E+00	7.29E-03	1.21E-03	7.42E-03	4.45E-07	3.35E-05	4.73E-04	3.26E-03	2.87E-01	1.28E-05	1.30E+00	6.78E-01	7.65E-01	7.65E-01	1.57E-01	8.76E-02	4.78E-02	6.04E-03	8.10E-02	2.55E-03	1.60E-01	5.06E-03	4.04E-04	6.28E-04	5.20E-04	1050016		
Total - kg/year						2.26E+06	3.11E+06	3.59E+05	1.67E+05	2.30E+02	3.82E+01	2.34E+02	1.40E-02	1.08E+00	1.49E+01	1.03E+02	9.05E+03	4.05E-01	4.11E+04	2.14E+04	2.14E+04	2.41E+04	4.98E+03	2.76E+03	1.50E+03	1.90E+02	2.56E+03	8.04E+01	5.03E+03	1.60E+02	1.27E+01	1.88E+01	1.64E+01			