Solvay Minerals, Inc.
Dispersion Model Information

AQD #	Name	Stack Height		Inside Diameter		Exit Temperature		Exit Velocity		Cal ACFM	DSCFM	Cld DSCFM	ACFM	Emissions Rate (g/s) PM10		Emissions Rate (g/s) NOx		Emissions Rate (lb/hr) PM10		
		feet	meters	feet	meters	F	K	Ft/sec	m/s					Short	Long	Short	Long	Short	Long	
														526	502.2					
														15.148	14.462					
2a	ore crusher	23	7.01	3.48	1.06	68	293.2	52.00	15.85	29688		23253.10092	29490	0.202	0.202			1.600	1.600	
2b	ore reclaim	38	11.58	1.08	0.33	68	293.2	91.00	27.74	5004		3934.65492	4990							
6a	top silos	133	40.54	1.75x2.0	0.64	96	308.7	82.00	24.99	17220		12957.21727	17304	0.038	0.038			0.300	0.300	
6b	silo reclaim	15.5	4.72	2.15x1.78	0.67	75	297.0	33.00	10.06	7577		5859.778779	7530	0.064	0.064			0.510	0.510	
7	PLO	82	24.99	2.4x1.99	0.75	68	293.2	64.00	19.51	18340		14508.5472	18400	0.151	0.151			1.200	1.200	
8	coal unloading	AREA SOURCE?								#VALUE!		0		0.806	0.121			~~6.400~~	~~0.959~~	
9	coal storage	AREA SOURCE?								#VALUE!		0		0.050	0.050			~~0.400~~	~~0.400~~	
10	coal crushing	13.3	4.05	1.63x1.88	0.60	68	293.2	18.00	5.49	3310		2562.651	3250	0.076	0.076			~~0.600~~	~~0.600~~	0.3
11	Coal transfer	35.3	10.76	1.44x1.75	0.55	68	293.2	21.00	6.40	3175		2523.2256	3200	0.026	0.026			0.210	0.210	
14	boiler coal bunker	125	38.10	1.42	0.43	68	293.2	57.00	17.37	5418		4257.9432	5400	0.047	0.047			0.370	0.370	
15	DR 1&2	180	54.86	6	1.83	165	347.0	49.00	14.94	83160			83100	0.857	0.857	0.151	0.151	~~6.800~~	~~6.800~~	5
16	product classifier	126	38.40	3.5	1.07	205	369.3	42.00	12.80	24255		15493.49053	24500	0.113	0.113			0.900	0.900	
17	CA 1&2	180.5	55.02	12	3.66	375	463.7	44.00	13.41	298697			300000	2.810	2.810	3.780	3.780	22.300	22.300	
18	BO-1	180.5	55.02	7.25	2.21	125	324.8	58.00	17.68	143721			142,800	1.260	1.260	30.870	30.870	~~10.000~~	~~10.000~~	6.0
19	BO-2	180.5	55.02	7.25	2.21	120	322.0	60.00	18.29	148677			149,000	1.260	1.260	30.870	30.870	~~10.000~~	~~10.000~~	6.0
24	boiler fly ash silo	25	7.62	1	0.30	83	301.5	41.00	12.50	1933		1483.111425	1915	0.038	0.038			0.300	0.300	
25	AT crush and screen	76	23.16	3.0x1.5	0.73	68	293.2	48.00	14.63	12960		10234.67455	12850	0.126	0.126			1.000	1.000	
26	AT Dryer	67	20.42	3.0x1.5	0.73	100	310.9	58.00	17.68	15660		11714.976	15600	0.139	0.139	0.006	0.006	1.100	1.100	0.55
27	AT Bagging & Loadout	60	18.29	1.3x1.5	0.48	68	293.2	62.00	18.90	7254		5734.603636	7200	0.063	0.063			0.500	0.500	
28	Fluid Bed Dryer	140	42.67	4	1.22	165	347.0	40.00	12.19	30171			30146	0.365	0.365			2.900	2.900	
30	Lime Bin #1	88	26.82	0.66	0.20	43	279.3	59.00	17.98	1212		1003.270616	1200	0.025	0.025			0.200	0.200	
31	Lime Bin #2	88	26.82	0.66	0.20	43	279.3	59.00	17.98	1212		1003.270616	1200	0.025	0.025			0.200	0.200	
33	Sulfur Burner	100	30.48	2	0.61	150	338.7	35.00	10.67	6600			6508			0.189	0.189			
35	Sulfite Dryer	103	31.39	2.29	0.70	129	327.0	48.00	14.63	11867			11993	0.176	0.176			1.400	1.400	
36	Sulfite Bin #1	60	18.29	0.49	0.15	149	338.2	84.90	25.88					0.013	0.013			0.100	0.100	
37	Sulfite Bin #2	60	18.29	0.49	0.15	149	338.2	84.90	25.88	961				0.013	0.013			0.100	0.100	
38	Sulfite Bin #3	60	18.29	0.49	0.15	149	338.2	84.90	25.88	961				0.013	0.013			0.100	0.100	
39	Sulfite Bin #4	60	18.29	0.49	0.15	149	338.2	84.90	25.88	961				0.013	0.013			0.100	0.100	
40	Sulfite Bagging	60	18.29	1	0.30	149	338.2	51.00	15.54	2404			1825/1500							
41	Sulfite Loadout	70	21.34	1	0.30	149	338.2	70.00	21.34	3300		1733.250207	2510	0.024	0.024			0.190	0.190	
43	Sulfur Storage Tank	AREA SOURCE?								#VALUE!										
44	Lime Unloading	30	9.14	1.51	0.46	43	279.3	61.00	18.59	6557			5880	0.113	0.113			0.900	0.900	
45	AT Transloading	17.8	5.43	0.9	0.27	68	293.2	29.00	8.84	1107		896.0318182	1125	0.025	0.025			0.200	0.200	
46	Trona Transfer	12.5	3.81	2.2	0.67	68	293.2	46.00	14.02	10496	9520	8362.963636	10500	0.089	0.089			0.710	0.710	
47	Exp Crusher	125	38.10	4.5	1.37	68	293.2	45.00	13.72	42959	45532	34323.19571	43094	0.365	0.365			2.900	2.900	
48	CA-3	180	54.86	10.5	3.20	350	449.8	32.00	9.75	166320	54507		165000	1.172	1.172	1.890	1.890	9.300	9.300	
50	Dryer Area	180	54.86	4.5	1.37	200	366.5	27.00	8.23	25775	21282	16566.63273	26000	0.175	0.175			1.390	1.390	0.7
51	DR-5	180	54.86	8	2.44	300	422.0	33.00	10.06	99566	34953		100000	0.605	0.605	2.268	2.268	4.800	4.800	2.4
52	Silo Top #2	141	42.98	1.5	0.46	68	293.2	50.00	15.24	5304	3898	4221.305455	5300	0.063	0.063			0.500	0.500	
53	Silo Bottom #2	30	9.14	2.8	0.85	68	293.2	36.00	10.97	13306	10168	10493.52818	13175	0.113	0.113			0.900	0.900	0.45
54	T-200 Silo	64.2	19.57	0.59	0.18	68	293.2	79.00	24.08	1296		1035.414545	1300	0.024	0.024			0.190	0.190	
55	Ore recycle/reclaim	64	19.51	1.3	0.40	68	293.2	50.00	15.24	3984		3185.890909	4000	0.050	0.050			0.400	0.400	
62	Carbon Silo	91	27.74	0.5	0.15	68	293.2	85.00	25.91	1002		796.4727273	1000	0.016	0.016			0.130	0.130	
63	Perlite Silo	58	17.68	0.5	0.15	68	293.2	102.00	31.09	1202		955.7672727	1200	0.021	0.021			0.170	0.170	
64	Sulfite Blending #2	15	4.57	0.5	0.15	68	293.2	96.00	29.26	1131		900.0141818	1130	0.019	0.019			0.150	0.150	
65	Sulfite Blending #1	35	10.67	0.75	0.23	68	293.2	15.00	4.57			318.5890909	400	0.025	0.025			0.200	0.200	0.06
66	Carbon/Perlite Scrubber	125	38.10	1	0.30	68	293.2	75.00	22.86	3536		3345.185455	4200	0.113	0.113			0.900	0.900	0.58
67	Bottom Ash	125	38.10	1.5	0.46	100	310.9	33.00	10.06	3500		2590.812	3450	0.038	0.038			0.300	0.300	0.47

12 hr/operd

PM_{10} 5.4 5.4

12 hr/dy

base case

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