

Table 8. Comparison of NME and CVE SETTINGS

		NME	CVE
Capacity	MW	530	1000
STACK BASE ELEVATION	Feet	265	436
STACK HEIGHT	Feet	213	282.5
STACK TOP ELEVATION	Feet	478	718.5
Elevation of terrain within 1/2 mile	Feet	890	530
Terrain elevation at 0.5 mi/Stacktop		1.86	0.74
Dispersion Model		PTMTPA	AERMOD
Model Type		Screening	Refined
PSD Constraining Pollutants		PM10	None
Requirement for Back up Fuel Oil		Yes	No

Table 1. Comparison of Normalized Maximum Concentrations-Emission Case 3

Pollutant	Averaging Time	Local CVE Site Surface Characteristics	KPOU Airport Surface Characteristics	Ratio KPOU/Local CVE
NOx	1 HR	22.56	30.09	1.33
NOx	Annual	0.25	0.39	1.56
CO	1 HR	13.73	18.31	1.33
CO	8 HR	5.2	6.49	1.25
SO2	3 HR	2.33	3.57	1.53
SO2	24 HR	0.72	0.91	1.26
SO2	Annual	0.051	0.08	1.57
PM	24 HR	2.83	3.58	1.27
PM	Annual	0.2	0.31	1.55
Average				1.41

Table 2 Concentrations at Selected Locations-Annual averages Case 5

Location Description	Case 5 Year 2007, 100% load. 59 degrees F, DB,plus ancilliary equipment					NOx g/s	PM2.5g/s	SO2 g/s
						2.36	1.82	0.45
	Approximate			Distance	Compass	Maximum Annual	Maximum Annual	Maximum Annual
	Elevation	Latitude N	Longitude W	From CVE	Bearing to CVE	Average	Average	Average
	Decimal	Decimal						
	Feet	Degrees	Degrees	Miles	Degrees -True	ug/m3	ug/m3	ug/m3
Elementary School at 9 School St.	401	44.3833	34.7667	4.39	180	0.0167	0.0128	0.0032
WINGDALE Elementary School	459	38.9102	33.4795	2.24	328	0.0217	0.0167	0.0041
RESIDENTIAL AREA Near Elementary School	388	44.3000	34.4167	4.31	184	0.0167	0.0129	0.0032
HIGH AND MIDDLE SCHOOL-Walkway overlooking CVE	563	41.1213	34.4858	0.70	205	0.0376	0.0290	0.0072
HIGH AND MIDDLE SCHOOL-Main BuildingT	571	41.1700	34.4233	0.78	206	0.0384	0.0296	0.0073
SAW HILL PEAK	820	40.0667	35.6833	0.93	51	0.0194	0.0150	0.0037
PEAK Northeast of SAW HILL PEAK	604	40.2333	35.5333	0.71	56	0.0096	0.0074	0.0018
HOMES ON RIDGE to Southeast of CVE	554	40.0783	34.1500	0.82	313	0.0271	0.0209	0.0052
HOMES ON RIDGE further to Southeast of CVE	578	39.9500	34.0927	0.96	317	0.0276	0.0213	0.0053
RESIDENCE further to ESE	579	39.9008	34.0295	1.04	317	0.0271	0.0209	0.0052
RESIDENCES even further to ESE	431	40.1978	33.2917	1.40	287	0.0262	0.0202	0.0050
HIGH POINT of ridge to east of Elementary School	1246	44.1580	32.5247	4.58	205	0.0724	0.0559	0.0138
Church Hill	509	39.3150	33.6830	1.75	324	0.0236	0.0182	0.0045
Knoll above Bains Corner	597	44.3320	33.0900	4.58	198	0.0181	0.0139	0.0034
Building on dead end	548	43.7070	33.0710	3.92	202	0.0205	0.0158	0.0039
Residence? on high terrain	1187	42.7310	31.9650	3.51	224	0.0845	0.0652	0.0161
High Elevation Structure	615	41.3340	33.4000	1.52	234	0.0381	0.0294	0.0073
Building Complex	352	41.1850	33.8860	1.08	228	0.0405	0.0312	0.0077
Residence above Ellis Pond	560	40.8490	33.1080	1.53	257	0.0282	0.0217	0.0054
Golf Club	486	38.4000	34.7650	2.50	358	0.0312	0.0240	0.0059
Value at Location of Predicted High Value from DEIS Table 4-21						0.5700	0.3010	0.1000
SIL						1.0000	0.3000	1.0000
NAAQS						100.0000	15.0000	80.0000

Table 3 Concentrations at Selected Locations- HSH 24 hour averages Case 5

Location Description	Approximate Elevation Feet	Latitude N cimal Degre	Longitude W cimal Degree	Distance From CVE Miles	Compass Bearing to CVE Degrees -True	PM2.5 g/s	SO2 g/s
						High Second High 24 hour Average Concentration ug/m3	High Second High 24 hour Average Concentration ug/m3
Case 5 Year 2007, 100% load. 59 degrees F, DB,plus ancilliary equipment						1.82	0.45
Elementary School at 9 School St.	401	44.38333	34.7666667	4.39	180	0.0917	0.0227
WINGDALE Elementary School	459	38.91017	33.4795	2.24	328	0.1463	0.0362
RESIDENTIAL AREA Near Elementary School	388	44.3	34.4166667	4.31	184	0.0933	0.0231
HIGH AND MIDDLE SCHOOL-Walkway overlooking CVE	563	41.12133	34.4858333	0.70	205	0.2286	0.0565
HIGH AND MIDDLE SCHOOL-Main BuildingT	571	41.17	34.4233333	0.78	206	0.2375	0.0587
SAW HILL PEAK	820	40.06667	35.6833333	0.93	51	0.1118	0.0276
PEAK Northeast of SAW HILL PEAK	604	40.23333	35.5333333	0.71	56	0.0987	0.0244
HOMES ON RIDGE to Southeast of CVE	554	40.07833	34.15	0.82	313	0.2735	0.0676
HOMES ON RIDGE further to Southeast of CVE	578	39.95	34.0926667	0.96	317	0.2706	0.0669
RESIDENCE further to ESE	579	39.90083	34.0295	1.04	317	0.2570	0.0635
RESIDENCES even further to ESE	431	40.19783	33.2916667	1.40	287	0.1746	0.0432
HIGH POINT of ridge to east of Elementary School	1246	44.158	32.5246667	4.58	205	0.5647	0.1396
Church Hill	509	39.315	33.683	1.75	324	0.1924	0.0476
Knoll above Bains Corner	597	44.332	33.09	4.58	198	0.1270	0.0314
Building on dead end	548	43.707	33.071	3.92	202	0.1399	0.0346
Residence? on high terrain	1187	42.731	31.965	3.51	224	0.7412	0.1833
High Elevation Structure	615	41.334	33.4	1.52	234	0.2173	0.0537
Building Complex	352	41.185	33.886	1.08	228	0.2585	0.0639
Residence above Ellis Pond	560	40.849	33.108	1.53	257	0.1646	0.0407
Golf Club	486	38.4	34.765	2.50	358	0.1604	0.0397
Value at Location of Predicted High Value from DEIS Table 4-21						3	0.98
SIL						1.2	5
NAAQS						35	365

Table 4. Concentrations at Selected Locations-1- hour averages Case 5

Location Description	Approximate Elevation Feet	Latitude N Decimal Degree	Longitude W Decimal Degree	Distance From CVE Miles	Compass Bearing to CVE Degrees -True	NOx g/s	SO2 g/s
						Maximum 1 hour Average Concentration ug/m3	Maximum 1 hour Average Concentration ug/m3
Case 5 Year 2007, 100% load. 59 degrees F, DB,plus ancilliary equipment						2.36	0.45
Elementary School at 9 School St.	401	44.3833	34.7667	4.39	180	1.6830	0.3209
WINGDALE Elementary School	459	38.9102	33.4795	2.24	328	2.7823	0.5305
RESIDENTIAL AREA Near Elementary School	388	44.3000	34.4167	4.31	184	1.6934	0.3229
HIGH AND MIDDLE SCHOOL-Walkway overlooking CVE	563	41.1213	34.4858	0.70	205	1.7991	0.3431
HIGH AND MIDDLE SCHOOL-Main BuildingT	571	41.1700	34.4233	0.78	206	1.6736	0.3191
SAW HILL PEAK	820	40.0667	35.6833	0.93	51	1.3042	0.2487
PEAK Northeast of SAW HILL PEAK	604	40.2333	35.5333	0.71	56	1.1420	0.2178
HOMES ON RIDGE to Southeast of CVE	554	40.0783	34.1500	0.82	313	1.7948	0.3422
HOMES ON RIDGE further to Southeast of CVE	578	39.9500	34.0927	0.96	317	2.1497	0.4099
RESIDENCE further to ESE	579	39.9008	34.0295	1.04	317	2.1804	0.4157
RESIDENCES even further to ESE	431	40.1978	33.2917	1.40	287	2.0254	0.3862
HIGH POINT of ridge to east of Elementary School	1246	44.1580	32.5247	4.58	205	9.1649	1.7475
Church Hill	509	39.3150	33.6830	1.75	324	3.0095	0.5738
Knoll above Bains Corner	597	44.3320	33.0900	4.58	198	1.3439	0.2563
Building on dead end	548	43.7070	33.0710	3.92	202	1.5777	0.3008
Residence? on high terrain	1187	42.7310	31.9650	3.51	224	16.1014	3.0702
High Elevation Structure	615	41.3340	33.4000	1.52	234	2.7451	0.5234
Building Complex	352	41.1850	33.8860	1.08	228	2.2031	0.4201
Residence above Ellis Pond	560	40.8490	33.1080	1.53	257	2.2338	0.4259
Golf Club	486	38.4000	34.7650	2.50	358	1.9963	0.3807
Value at Location of Predicted High Value from DEIS Table 4-21						68.6	6.8
SIL						7.5	7.8
NAAQS						35	196

Table 5 Concentrations at Selected Locations-Annual averages - Case 8

Location Description	Approximate Elevation Feet	Latitude N Decimal Degrees	Longitude W Decimal Degrees	Distance From CVE Miles	Compass Bearing to CVE Degrees -True	NOx g/s	PM2.5g/s	SO2 g/s
						1.26	1.22	0.24
						Maximum Annual Average Concentration	Maximum Annual Average Concentration	Maximum Annual Average Concentration
						ug/m3	ug/m3	ug/m3
Elementary School at 9 School St.	401	44.3833	34.7667	4.39	180	0.0106	0.0103	0.0020
WINGDALE Elementary School	459	38.9102	33.4795	2.24	328	0.0146	0.0141	0.0028
RESIDENTIAL AREA Near Elementary School	388	44.3000	34.4167	4.31	184	0.0106	0.0103	0.0020
HIGH AND MIDDLE SCHOOL-Walkway overlooking CVE	563	41.1213	34.4858	0.70	205	0.0313	0.0303	0.0060
HIGH AND MIDDLE SCHOOL-Main BuildingT	571	41.1700	34.4233	0.78	206	0.0314	0.0304	0.0060
SAW HILL PEAK	820	40.0667	35.6833	0.93	51	0.0154	0.0149	0.0029
PEAK Northeast of SAW HILL PEAK	604	40.2333	35.5333	0.71	56	0.0077	0.0075	0.0015
HOMES ON RIDGE to Southeast of CVE	554	40.0783	34.1500	0.82	313	0.0219	0.0212	0.0042
HOMES ON RIDGE further to Southeast of CVE	578	39.9500	34.0927	0.96	317	0.0216	0.0209	0.0041
RESIDENCE further to ESE	579	39.9008	34.0295	1.04	317	0.0209	0.0203	0.0040
RESIDENCES even further to ESE	431	40.1978	33.2917	1.40	287	0.0195	0.0188	0.0037
HIGH POINT of ridge to east of Elementary School	1246	44.1580	32.5247	4.58	205	0.0476	0.0461	0.0091
Church Hill	509	39.3150	33.6830	1.75	324	0.0166	0.0161	0.0032
Knoll above Bains Corner	597	44.3320	33.0900	4.58	198	0.0113	0.0109	0.0021
Building on dead end	548	43.7070	33.0710	3.92	202	0.0131	0.0127	0.0025
Residence? on high terrain	1187	42.7310	31.9650	3.51	224	0.0610	0.0591	0.0116
High Elevation Structure	615	41.3340	33.4000	1.52	234	0.0275	0.0267	0.0052
Building Complex	352	41.1850	33.8860	1.08	228	0.0318	0.0308	0.0061
Residence above Ellis Pond	560	40.8490	33.1080	1.53	257	0.0203	0.0196	0.0039
Golf Club	486	38.4000	34.7650	2.50	358	0.0219	0.0212	0.0042
Value at Location of Predicted High Value from DEIS Table 4-21						0.5700	0.3010	0.1000
SIL						1.0000	0.3000	1.0000
NAAQS						100.0000	15.0000	80.0000

Table 6 Concentrations at Selected Locations- 24 Hour Averages Case 8

Location Description	Approximate Elevation Feet	Latitude N Decimal Degrees	Longitude W Decimal Degrees	Distance From CVE Miles	Compass Bearing to CVE Degrees -True	PM2.5g/s	SO2 g/s
						1.22	0.24
						High Second High 24 hour Average Concentration	High Second High 24 hour Average Concentration
						ug/m3	ug/m3
Elementary School at 9 School St.	401	44.3833	34.7667	4.39	180	0.0738	0.0145
WINGDALE Elementary School	459	38.9102	33.4795	2.24	328	0.1159	0.0228
RESIDENTIAL AREA Near Elementary School	388	44.3000	34.4167	4.31	184	0.0752	0.0148
HIGH AND MIDDLE SCHOOL-Walkway overlooking CVE	563	41.1213	34.4858	0.70	205	0.2255	0.0444
HIGH AND MIDDLE SCHOOL-Main BuildingT	571	41.1700	34.4233	0.78	206	0.2290	0.0451
SAW HILL PEAK	820	40.0667	35.6833	0.93	51	0.1086	0.0214
PEAK Northeast of SAW HILL PEAK	604	40.2333	35.5333	0.71	56	0.1012	0.0199
HOMES ON RIDGE to Southeast of CVE	554	40.0783	34.1500	0.82	313	0.2602	0.0512
HOMES ON RIDGE further to Southeast of CVE	578	39.9500	34.0927	0.96	317	0.2486	0.0489
RESIDENCE further to ESE	579	39.9008	34.0295	1.04	317	0.2325	0.0457
RESIDENCES even further to ESE	431	40.1978	33.2917	1.40	287	0.1498	0.0295
HIGH POINT of ridge to east of Elementary School	1246	44.1580	32.5247	4.58	205	0.3605	0.0709
Church Hill	509	39.3150	33.6830	1.75	324	0.1564	0.0308
Knoll above Bains Corner	597	44.3320	33.0900	4.58	198	0.0956	0.0188
Building on dead end	548	43.7070	33.0710	3.92	202	0.1070	0.0211
Residence? on high terrain	1187	42.7310	31.9650	3.51	224	0.7246	0.1425
High Elevation Structure	615	41.3340	33.4000	1.52	234	0.1870	0.0368
Building Complex	352	41.1850	33.8860	1.08	228	0.2415	0.0475
Residence above Ellis Pond	560	40.8490	33.1080	1.53	257	0.1332	0.0262
Golf Club	486	38.4000	34.7650	2.50	358	0.1362	0.0268
Value at Location of Predicted High Value from DEIS Table 4-21						3.0000	0.9800
SIL						1.2000	5.0000
NAAQS						35.0000	365.0000

Table 7 Concentrations at Selected Locations- 1 Hour Averages Case 8

Location Description	Approximate Elevation Feet	Latitude N Decimal De	Longitude W Decimal Degr	Distance From CVE Miles	Compass Bearing to CVE Degrees -True	NOx g/s	SO2 g/s
						Maximum 1 hour Average Concentration ug/m3	Maximum 1 hour Average Concentration ug/m3
Case 8:Year 2007, 49% load. 59 degrees F						1.26	0.24
Elementary School at 9 School St.	401	44.38333	34.766667	4.38657617	179.8478686	1.0050	0.1914
WINGDALE Elementary School	459	38.91017	33.4795	2.23977325	327.5279541	1.8502	0.3524
RESIDENTIAL AREA Near Elementary School	388	44.3	34.416667	4.30558179	183.8811007	1.0107	0.1925
HIGH AND MIDDLE SCHOOL-Walkway overlooking CVE	563	41.12133	34.4858333	0.70269585	204.5863839	1.2963	0.2469
HIGH AND MIDDLE SCHOOL-Main BuildingT	571	41.17	34.4233333	0.77682377	206.3936658	1.2996	0.2475
SAW HILL PEAK	820	40.06667	35.6833333	0.93162791	50.6320087	1.2603	0.2401
PEAK Northeast of SAW HILL PEAK	604	40.23333	35.5333333	0.71453551	56.23446295	0.8784	0.1673
HOMES ON RIDGE to Southeast of CVE	554	40.07833	34.15	0.81917489	312.7210613	1.2684	0.2416
HOMES ON RIDGE further to Southeast of CVE	578	39.95	34.0926667	0.9596268	317.0610392	1.6771	0.3194
RESIDENCE further to ESE	579	39.90083	34.0295	1.03811097	316.9138958	1.8311	0.3488
RESIDENCES even further to ESE	431	40.19783	33.2916667	1.3998581	286.8580594	1.8947	0.3609
HIGH POINT of ridge to east of Elementary School	1246	44.158	32.5246667	4.58311535	204.8218971	7.0346	1.3399
Church Hill	509	39.315	33.683	1.7535392	324.4636206	2.1874	0.4166
Knoll above Bains Corner	597	44.332	33.09	4.58166665	198.2341933	0.9654	0.1839
Building on dead end	548	43.707	33.071	3.91623637	201.9216829	0.9842	0.1875
Residence? on high terrain	1187	42.731	31.965	3.50843377	223.9301265	10.3235	1.9664
High Elevation Structure	615	41.334	33.4	1.51907633	233.7075356	2.0916	0.3984
Building Complex	352	41.185	33.886	1.08297975	228.2745734	1.6952	0.3229
Residence above Ellis Pond	560	40.849	33.108	1.52516037	256.9033206	1.6314	0.3107
Golf Club	486	38.4	34.765	2.49686808	357.6291308	1.2617	0.2403
Value at Location of Predicted High Value from DEIS Table 4-21						68.6	6.8
SIL						7.5	7.8
NAAQS						35	196