

El Camino Project
Appendix H3.4: LST Analysis Results
August 2025

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Sheet 1: LST Analysis Summary

Construction

Pollutant		C/NAAQS		2024 Peak		LST	Model Results	Exceeds?
PM10	24-hours	50	ug/m^3	--		10.4 ug/m3	0.351 ug/m3	No
PM2.5	24-Hour	35	ug/m^3	--		10.4 ug/m3	0.351 ug/m3	No
NO2	1-Hour	0.18	ppm	0.08	ppm	0.1 ppm	0.03 ppm	No
CO	1-Hour	20	ppm	1.6	ppm	18.4 ppm	0.19 ppm	No
CO	8-Hour	9	ppm	1.1	ppm	7.9 ppm	0.09 ppm	No

Operation

Pollutant		C/NAAQS		2024 Peak		LST	Model Results	Exceeds?
PM10	24-hours	50	ug/m^3	--		2.5 ug/m3	ug/m3	No
PM2.5	24-Hour	35	ug/m^3	--		2.5 ug/m3	ug/m3	No
NO2	1-Hour	0.18	ppm	0.08	ppm	0.1 ppm	0.01 ppm	No
CO	1-Hour	20	ppm	1.6	ppm	18.4 ppm	0.05 ppm	No
CO	8-Hour	9	ppm	1.1	ppm	7.9 ppm	0.02 ppm	No

Sheet 2: CO and PM10 Construction Results

Source	CO Emission Rates (g/(s·m ²))	PM 10 Emission Rates (g/(s·m ²))
PAREA9	4.0295E-06	1.6147E-07
PAREA10	4.0295E-06	1.6147E-07
PAREA11	4.0295E-06	1.6147E-07
PAREA12	4.0295E-06	1.6147E-07
PAREA13	6.4072E-06	2.4349E-07
PAREA14	3.4292E-07	3.4292E-07
PAREA15	2.7963E-06	9.7425E-08
PAREA17	5.4406E-06	1.7452E-07
PAREA18	5.1170E-06	1.6414E-07
PAREA21	1.1059E-05	3.5157E-07
Area01	--	1.0814E-07
Area02	--	1.0814E-07

Sum:

CO Concentrations at PMI (1-hour)	CO Concentrations at PMI (8-hour)	PM10 Concentrations at PMI (24-hour)
16.19009551	14.00658901	0.079163875
26.05064939	6.949561095	0.13899023
22.32473014	21.84650885	0.13104234
59.05033604	8.004605585	0.574214167
8.624114627	19.49054647	0.047803482
0.673780015	0.883463104	0.105601117
39.95956069	12.63355077	0.298922115
5.389419268	14.61561496	0.024103488
22.65281864	4.780779491	0.100182384
60.75123307	2.174759198	0.484497288
--	--	0.168209295
--	--	0.555285649

261.6667374

105.3859785

2.708015431

CO Concentrations at Commercial Receptor (1-hour)	CO Concentrations at Commercial Receptor (8-hour)	PM10 Concentrations at Residential Receptor (24-hour)
31.00230284	14.00658901	0.024177592
14.55129708	6.949561095	0.027775795
41.24436996	21.84650885	0.029190921
17.13956705	8.004605585	0.040417143
36.73839129	19.49054647	0.012229215
1.73248998	0.883463104	0.023100015
25.05886466	12.63355077	0.023704364
32.40038843	14.61561496	0.008900336
13.58898941	4.780779491	0.018162186
4.19562723	2.174759198	0.020577212
--	--	0.045289198
--	--	0.077657178

217.6522879

105.3859785

0.351181155

Mission Rates (g/s)				1A) AERMOD Results at PMI				1B) Concentrations at PMI					
Source	PM10	NOx	CO		PM10 (24-h)	NOx (1-h)	CO (1-hour)	CO (8-hour)		PM10 (24-h)	NOx (1-h)	CO (1-hour)	CO (8-hour)
VOL01	2.05E-06	0.003843	0.004738	VOL01	58.68574	105.3163	105.3163	54.78963	VOL01	0.00012	0.404684	0.498965	0.259581
VOL02	2.05E-06	0.003843	0.004738	VOL02	30.71803	111.746	111.746	58.21977	VOL02	6.3E-05	0.42939	0.529427	0.275832
VOL03	2.74E-06	0.005123	0.006317	VOL03	33.87482	122.329	122.329	63.72293	VOL03	9.27E-05	0.626742	0.772756	0.40254
VOL04	2.05E-06	0.003843	0.004738	VOL04	37.14451	131.7741	131.7741	68.76295	VOL04	7.62E-05	0.506349	0.624316	0.325783
VOL05	2.74E-06	0.005123	0.006317	VOL05	41.29453	144.6934	144.6934	75.3154	VOL05	0.000113	0.741324	0.914033	0.47577
VOL06	2.74E-06	0.005123	0.006317	VOL06	49.88184	185.844	185.844	87.37442	VOL06	0.000136	0.952155	1.173983	0.551947
VOL07	2.74E-06	0.005123	0.006317	VOL07	56.37525	218.1093	218.1093	94.89034	VOL07	0.000154	1.171463	1.377803	0.599425
VOL08	1.37E-06	0.002562	0.003159	VOL08	65.65037	254.4892	254.4892	107.1025	VOL08	8.98E-05	0.651926	0.803808	0.338285
VOL09	2.05E-06	0.003843	0.004738	VOL09	54.44292	217.7713	217.7713	80.81422	VOL09	0.000112	0.836799	1.031751	0.38288
VOL10	1.37E-06	0.002562	0.003159	VOL10	59.43287	238.3302	238.3302	85.50025	VOL10	8.13E-05	0.610531	0.75277	0.270054
VOL11	2.05E-06	0.003843	0.004738	VOL11	66.27755	265.5721	265.5721	89.34432	VOL11	0.000136	1.020476	1.258221	0.423293
VOL12	2.74E-06	0.005123	0.006317	VOL12	73.81555	281.8147	281.8147	95.24929	VOL12	0.000202	1.434852	1.780233	0.601693
VOL13	2.74E-06	0.005123	0.006317	VOL13	89.94634	297.7064	297.7064	115.1798	VOL13	0.000246	1.525272	1.880621	0.727594
VOL14	6.84E-07	0.001281	0.001579	VOL14	66.56241	180.4688	180.4688	123.0145	VOL14	4.55E-05	0.231154	0.285007	0.194272
VOL15	2.05E-06	0.003843	0.004738	VOL15	43.98444	142.5512	142.5512	67.81245	VOL15	9.02E-05	0.547761	0.675375	0.32128
VOL16	1.37E-06	0.002562	0.003159	VOL16	36.0043	122.0627	122.0627	54.00291	VOL16	4.92E-05	0.312689	0.385537	0.170569
VOL17	6.84E-07	0.001281	0.001579	VOL17	29.48062	105.0257	105.0257	44.46912	VOL17	2.02E-05	0.134522	0.165863	0.070228
VOL18	2.74E-06	0.005123	0.006317	VOL18	84.68907	211.3379	211.3379	158.1529	VOL18	0.000232	1.08277	1.335028	0.999057
VOL19	2.74E-06	0.005123	0.006317	VOL19	55.51208	153.0173	153.0173	110.1365	VOL19	0.000152	0.78397	0.966615	0.695736
VOL20	1.58E-06	0.000802	7.09E-05	VOL20	23.50143	96.62304	96.62304	45.1587	VOL20	3.71E-05	0.077454	0.068652	0.003202
VOL21	1.58E-06	0.000802	7.09E-05	VOL21	25.86951	101.1246	101.1246	46.73896	VOL21	4.09E-05	0.081062	0.007171	0.003314
VOL22	1.58E-06	0.000802	7.09E-05	VOL22	28.29394	113.1627	113.1627	50.7307	VOL22	4.47E-05	0.090712	0.008025	0.003597
VOL23	1.58E-06	0.000802	7.09E-05	VOL23	30.49119	121.8052	121.8052	54.00653	VOL23	4.82E-05	0.09764	0.008637	0.00383
VOL24	1.												

Sum				
5.783756	43.06368	56.10758	26.38343	

2A) AERMOD Results at Commercial					2B) Concentrations at Commercial					3A) AERMOD Results at Residential				
	N/A	(24-hr NOx	(1 hour CO	(1 hour CO (8-hour)		N/A	(24-hr NOx	(1 hour CO	(1 hour CO (8-hour)		PM10 (24-hr	N/A	N/A	N/A
VOL01	--	98.21893	98.21893	53.1256	VOL01	--	0.377412	0.465339	0.251697	VOL01	5.44156	--	--	--
VOL02	--	104.1005	104.1005	56.8662	VOL02	--	0.400012	0.493205	0.269419	VOL02	5.59628	--	--	--
VOL03	--	114.6066	114.6066	63.64792	VOL03	--	0.587176	0.723973	0.402066	VOL03	5.83524	--	--	--
VOL04	--	123.0039	123.0039	68.84199	VOL04	--	0.472649	0.582765	0.326158	VOL04	6.0146	--	--	--
VOL05	--	136.0738	136.0738	77.58386	VOL05	--	0.697162	0.859583	0.4901	VOL05	6.25226	--	--	--
VOL06	--	159.5827	159.5827	93.31601	VOL06	--	0.817607	1.008089	0.58948	VOL06	6.61388	--	--	--
VOL07	--	176.9781	176.9781	104.4794	VOL07	--	0.906731	1.117977	0.66	VOL07	6.81793	--	--	--
VOL08	--	201.2941	201.2941	118.2174	VOL08	--	0.515656	0.635791	0.373392	VOL08	7.06184	--	--	--
VOL09	--	181.5523	181.5523	181.5523	VOL09	--	0.697625	0.860154	0.860154	VOL09	6.67643	--	--	--
VOL10	--	198.2971	198.2971	99.53418	VOL10	--	0.507978	0.626325	0.31438	VOL10	6.80615	--	--	--
VOL11	--	235.0581	235.0581	109.7928	VOL11	--	0.903224	1.113652	0.520174	VOL11	6.94775	--	--	--
VOL12	--	270.2852	270.2852	119.8347	VOL12	--	1.384782	1.7074	0.756999	VOL12	7.0757	--	--	--
VOL13	--	326.9543	326.9543	138.8041	VOL13	--	1.675121	2.065381	0.87683	VOL13	7.29434	--	--	--
VOL14	--	162.9928	162.9928	81.10254	VOL14	--	0.20877	0.257408	0.128082	VOL14	8.85491	--	--	--
VOL15	--	120.3699	120.3699	52.90093	VOL15	--	0.462528	0.570286	0.250633	VOL15	9.03504	--	--	--
VOL16	--	106.4606	106.4606	44.36557	VOL16	--	0.27272	0.336257	0.140129	VOL16	8.70004	--	--	--
VOL17	--	96.53121	96.53121	37.48738	VOL17	--	0.123642	0.152448	0.059202	VOL17	9.55628	--	--	--
VOL18	--	188.5241	188.5241	100.2767	VOL18	--	0.965886	1.190913	0.633451	VOL18	9.29028	--	--	--
VOL19	--	138.8819	138.8819	69.91838	VOL19	--	0.711549	0.877322	0.441677	VOL19	9.31946	--	--	--
VOL20	--	93.78006	93.78006	48.57154	VOL20	--	0.075175	0.00665	0.003444	VOL20	4.72893	--	--	--
VOL21	--	104.5337	104.5337	52.35205	VOL21	--	0.083795	0.007413	0.003712	VOL21	4.98676	--	--	--
VOL22	--	122.441	122.441	55.28115	VOL22	--	0.09815	0.008683	0.00392	VOL22	5.24058	--	--	--
VOL23	--	117.5364	117.5364	56.9163	VOL23	--	0.094218	0.008335	0.004036	VOL23	5.48352	--	--	--
VOL24	--	121.9016	121.9016	60.8736	VOL24	--	0.097717	0.008644	0.004317	VOL24	5.7032	--	--	--
VOL25	--	126.802	126.802	65.61819	VOL25	--	0.101645	0.008992	0.004653	VOL25	5.90138	--	--	--
VOL26	--	133.4835	133.4835	73.2998	VOL26	--	0.107001	0.009466	0.005198	VOL26	6.06744	--	--	--
VOL27	--	105.5771	105.5771	59.47688	VOL27	--	0.009957	0.000881	0.000496	VOL27	5.59443	--	--	--
VOL28	--	114.054	114.054	65.18157	VOL28	--	0.023305	0.002062	0.001178	VOL28	5.79166	--	--	--
VOL29	--	123.7173	123.7173	71.82947	VOL29	--	0.025279	0.002236	0.001298	VOL29	5.99467	--	--	--
VOL30	--	135.6284	135.6284	79.32456	VOL30	--	0.108721	0.009618	0.005625	VOL30	6.1946	--	--	--
VOL31	--	154.8994	154.8994	87.79481	VOL31	--	0.082779	0.007323	0.00415	VOL31	6.39042	--	--	--
VOL32	--	179.3579	179.3579	97.58083	VOL32	--	0.09585	0.008479	0.004613	VOL32	6.58627	--	--	--
VOL33	--	207.969	207.969	108.7752	VOL33	--	0.11114	0.009832	0.005142	VOL33	6.77941	--	--	--
VOL34	--	240.499	240.499	121.6332	VOL34	--	0.090723	0.008026	0.004059	VOL34	6.97131	--	--	--
VOL35	--	476.2392	476.2392	136.3326	VOL35	--	0.142223	0.012581	0.003602	VOL35	7.16215	--	--	--
VOL36	--	312.4572	312.4572	157.758	VOL36	--	0.058934	0.005213	0.002632	VOL36	7.35328	--	--	--
VOL37	--	340.7504	340.7504	185.4247	VOL37	--	0.06427	0.005685	0.003094	VOL37	7.53866	--	--	--
VOL38	--	383.7258	383.7258	213.6049	VOL38	--	0.048251	0.004268	0.002376	VOL38	7.70288	--	--	--
VOL39	--	431.3663	431.3663	267.3005	VOL39	--	0.054241	0.004798	0.002973	VOL39	7.86939	--	--	--
VOL40	--	604.1468	604.1468	335.3661	VOL40	--	0.075967	0.00672	0.000766	VOL40	8.0375	--	--	--
VOL41	--	900.2267	900.2267	475.7067	VOL41	--	0.075464	0.006676	0.003528	VOL41	8.57618	--	--	--
VOL42	--	1309.308	1309.308	561.878	VOL42	--	0.109757	0.009709	0.004167	VOL42	8.94033	--	--	--
VOL43	--	1826.851	1826.851	750.1054	VOL43	--	0.153142	0.013547	0.005563	VOL43	9.31244	--	--	--
VOL44	--	1574.02	1574.02	750.5303	VOL44	--	0.131947	0.011672	0.005566	VOL44	9.62799	--	--	--
VOL45	--	1507.298	1507.298	684.9785	VOL45	--	0.126354	0.011178	0.00508	VOL45	9.89627	--	--	--
VOL46	--	984.7737	984.7737	609.8755	VOL46	--	0.082552	0.007303	0.004523	VOL46	10.12137	--	--	--
VOL47	--	857.2255	857.2255	449.5727	VOL47	--	0.07186	0.006357	0.003334	VOL47	10.29495	--	--	--
VOL48	--	567.4969	567.4969	312.391	VOL48	--	0.047572	0.004208	0.002317	VOL48	10.4187	--	--	--
VOL49	--	372.6856	372.6856	212.5787	VOL49	--	0.031242	0.002764	0.001576	VOL49	10.47914	--	--	--
VOL50	--	315.2394	315.2394	159.276	VOL50	--	0.026426	0.002338	0.001181	VOL50	10.48426	--	--	--
VOL51	--	289.8572	289.8572	125.185	VOL51	--	0.024298	0.002149	0.000928	VOL51	10.61154	--	--	--
VOL52	--	223.5044	223.5044	102.0512	VOL52	--	0.018736	0.001657	0.000757	VOL52	10.36792	--	--	--
VOL53	--	199.0248	199.0248	105.042	VOL53	--	0.016684	0.001476	0.000779	VOL53	9.9555	--	--	--
VOL54	--	172.4439	172.4439	86.24924	VOL54	--	0.014456	0.001279	0.00064	VOL54	10.01114	--	--	--
VOL55	--	550.4388	550.4388	293.6841	VOL55	--	0.060562	0.005357	0.002858	VOL55	11.11934	--	--	--
VOL56	--	402.4277	402.4277	202.1685	VOL56	--	0.044277	0.003917	0.001968	VOL56	10.8337	--	--	--
VOL57	--	314.0415	314.0415	155.3297	VOL57	--	0.034552	0.003057	0.001512	VOL57	10.48365	--	--	--
VOL58	--	240.8221	240.8221	125.7337	VOL58	--	0.026496	0.002344	0.001224	VOL58	10.2781	--	--	--
VOL59	--	186.5402	186.5402	100.2707	VOL59	--	0.020524	0.001816	0.000976	VOL59	10.06749	--	--	--
VOL60	--	177.2571	177.2571	77.63279	VOL60	--	0.016717	0.001479	0.000778	VOL60	10.14516	--	--	--
VOL61	--	158.5935	158.5935	65.89373	VOL61	--	0.014956	0.001323	0.000648	VOL61	10.08963	--	--	--
VOL62	--	137.3864	137.3864	56.12735	VOL62	--	0.012956	0.001146	0.000468	VOL62	9.945	--	--	--
VOL63	--	116.0622	116.0622	48.16951	VOL63	--	0.001824	0.000161	6.7E-05	VOL63	10.37658	--	--	--
STCK01	--	73.50663	73.50663	49.66597	STCK01	--	1.938944	0.253562	0.171323	STCK01	3.39003	--	--	--
STCK02	--	61.3948	61.3948	49.07343	STCK02	--	1.61946	0.211782	0.169279	STCK02	3.22215	--	--	--
STCK03	--	51.67593	51.67593	35.83709	STCK03	--	1.363098	0.178256	0.12362	STCK03	3.57577	--	--	--
STCK04	--	39.26972	39.26972	27.79648	STCK04	--	1.035849	0.135461	0.095884	STCK04	3.79218	--	--	--
AREA1	--	264.3712	264.3712	40.14636	AREA1	--	0.419133	--	--	AREA1	4.66669	--	--	--
AREA2	--	264.3712	264.3712	40.14636	AREA2	--	0.419133	--	--	AREA2	4.66669	--	--	--
STCK5	--	157.5602	157.5602	91.81403	STCK5	--	1.070731	3.059232	1.782686	STCK5	6.46033	--	--	--
STCK6	--	149.0387	149.0387	87.90151	STCK6	--	1.012822	2.893777	1.70672	STCK6	6.2985	--	--	--
STCK7	--	82.54316	82.54316	53.80352	STCK7	--	0.560938	1.602681	1.044664	STCK7	4.08752	--	--	--
STCK8	--	91.59665	91.59665	65.58563	STCK8	--	0.622463	1.778466	1.273429	STCK8	3.98475	--	--	--
STCK9	--	370.8167	370.8167	145.8758	STCK9	--	6.713194	12.96341	5.099683	STCK9	12.26309	--	--	--
STCK10	--	364.5617	364.5617	144.5659	STCK10	--	6.599953	12.74474	5.05389	STCK10	12.31956	--	--	--

3B) Concentrations at Residential

	PM10 (24-hr N/A	N/A	N/A
VOL01	1.12E-05 --	--	--
VOL02	1.15E-05 --	--	--
VOL03	1.6E-05 --	--	--
VOL04	1.23E-05 --	--	--
VOL05	1.71E-05 --	--	--
VOL06	1.81E-05 --	--	--
VOL07	1.87E-05 --	--	--
VOL08	9.66E-06 --	--	--
VOL09	1.37E-05 --	--	--
VOL10	9.31E-06 --	--	--
VOL11	1.43E-05 --	--	--
VOL12	1.94E-05 --	--	--
VOL13	2E-05 --	--	--
VOL14	6.06E-06 --	--	--
VOL15	1.85E-05 --	--	--
VOL16	1.19E-05 --	--	--
VOL17	6.54E-06 --	--	--
VOL18	2.54E-05 --	--	--
VOL19	2.55E-05 --	--	--
VOL20	7.47E-06 --	--	--
VOL21	7.87E-06 --	--	--
VOL22	8.28E-06 --	--	--
VOL23	8.66E-06 --	--	--
VOL24	9.01E-06 --	--	--
VOL25	9.32E-06 --	--	--
VOL26	9.58E-06 --	--	--
VOL27	1.04E-06 --	--	--
VOL28	2.33E-06 --	--	--
VOL29	2.41E-06 --	--	--
VOL30	9.78E-06 --	--	--
VOL31	6.73E-06 --	--	--
VOL32	6.93E-06 --	--	--
VOL33	7.14E-06 --	--	--
VOL34	5.18E-06 --	--	--
VOL35	4.21E-06 --	--	--
VOL36	2.73E-06 --	--	--
VOL37	2.8E-06 --	--	--
VOL38	1.91E-06 --	--	--
VOL39	1.95E-06 --	--	--
VOL40	1.99E-06 --	--	--
VOL41	1.42E-06 --	--	--
VOL42	1.48E-06 --	--	--
VOL43	1.54E-06 --	--	--
VOL44	1.59E-06 --	--	--
VOL45	1.63E-06 --	--	--
VOL46	1.67E-06 --	--	--
VOL47	1.7E-06 --	--	--
VOL48	1.72E-06 --	--	--
VOL49	1.73E-06 --	--	--
VOL50	1.73E-06 --	--	--
VOL51	1.75E-06 --	--	--
VOL52	1.71E-06 --	--	--
VOL53	1.64E-06 --	--	--
VOL54	1.65E-06 --	--	--
VOL55	2.41E-06 --	--	--
VOL56	2.35E-06 --	--	--
VOL57	2.27E-06 --	--	--
VOL58	2.23E-06 --	--	--
VOL59	2.18E-06 --	--	--
VOL60	1.88E-06 --	--	--
VOL61	1.87E-06 --	--	--
VOL62	1.85E-06 --	--	--
VOL63	3.21E-07 --	--	--
STCK01	0.001657 --	--	--
STCK02	0.001575 --	--	--
STCK03	0.001748 --	--	--
STCK04	0.001854 --	--	--
AREA1	0.000414 --	--	--
AREA2	0.000414 --	--	--
STCK5	0.056503 --	--	--
STCK6	0.055088 --	--	--
STCK7	0.03575 --	--	--
STCK8	0.034851 --	--	--
STCK9	0.28708 --	--	--
STCK10	0.288402 --	--	--

Sum
0.765779