

Appendix 3.14

Sensitivity Test without Proposed Noise Barrier

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

HSK - Postspeed -80kph
Emission Factor (gm/mile/vehicle) in Caline Format - NOx

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.39027	0.01238	0.43807	2.39855	1.24890	0.45637	0.25785	0.93795	0.55554	0.30491	0.22578	0.79204	0.65278	0.80168	2.39308	0.76346
1:00 - 2:00	0.39120	0.01241	0.43933	2.40049	1.24991	0.45674	0.25819	0.93889	0.55666	0.30515	0.22596	0.79277	0.65331	0.80233	2.39502	0.76463
2:00 - 3:00	0.39257	0.01246	0.44109	2.40390	1.25169	0.45739	0.25871	0.94056	0.55829	0.30558	0.22629	0.79400	0.65424	0.80347	2.39842	0.76644
3:00 - 4:00	0.39422	0.01251	0.44312	2.40817	1.25391	0.45821	0.25932	0.94255	0.56019	0.30612	0.22669	0.79554	0.65540	0.80489	2.40268	0.76865
4:00 - 5:00	0.39468	0.01253	0.44376	2.40893	1.25431	0.45835	0.25944	0.94297	0.56076	0.30622	0.22676	0.79584	0.65561	0.80515	2.40344	0.76920
5:00 - 6:00	0.39584	0.01257	0.44517	2.41185	1.25583	0.45891	0.25986	0.94434	0.56209	0.30658	0.22704	0.79689	0.65640	0.80612	2.40635	0.77073
6:00 - 7:00	0.39620	0.01258	0.44562	2.41267	1.25626	0.45906	0.25999	0.94474	0.56247	0.30669	0.22712	0.79719	0.65663	0.80640	2.40717	0.77120
7:00 - 8:00	0.39614	0.01277	0.43417	2.41292	1.25638	0.46017	0.25609	0.94455	0.56526	0.31969	0.23374	0.79938	0.65788	0.80618	2.40477	0.78593
8:00 - 9:00	0.44080	0.01571	0.47098	2.90263	1.51138	0.83360	0.26919	1.14184	0.86581	0.66552	0.44544	1.20218	0.93618	1.00448	2.96783	1.06552
9:00 - 10:00	0.39647	0.01289	0.42663	2.43667	1.26875	0.47063	0.25493	0.95352	0.57034	0.33164	0.24027	0.81669	0.66768	0.81412	2.42549	0.80005
10:00 - 11:00	0.39079	0.01259	0.42709	2.40555	1.25255	0.45877	0.25448	0.94018	0.55882	0.31872	0.23302	0.79635	0.65587	0.80372	2.39743	0.77977
11:00 - 12:00	0.38899	0.01252	0.42573	2.40180	1.25059	0.45723	0.25432	0.93826	0.55633	0.31689	0.23202	0.79363	0.65391	0.80253	2.39507	0.77546
12:00 - 13:00	0.38542	0.01226	0.43160	2.39421	1.24664	0.45555	0.25642	0.93472	0.54978	0.30479	0.22560	0.78998	0.65160	0.80023	2.38875	0.75954
13:00 - 14:00	0.38495	0.01224	0.43184	2.39231	1.24565	0.45519	0.25639	0.93395	0.54923	0.30411	0.22519	0.78934	0.65108	0.79959	2.38685	0.75767
14:00 - 15:00	0.38485	0.01224	0.43179	2.39184	1.24541	0.45510	0.25634	0.93376	0.54911	0.30405	0.22514	0.78918	0.65096	0.79943	2.38638	0.75750
15:00 - 16:00	0.38559	0.01234	0.42860	2.39136	1.24516	0.45501	0.25417	0.93369	0.55154	0.31066	0.22853	0.78908	0.65083	0.79928	2.38591	0.76449
16:00 - 17:00	0.38785	0.01240	0.43078	2.39664	1.24791	0.45601	0.25492	0.93625	0.55399	0.31134	0.22904	0.79101	0.65226	0.80104	2.39118	0.76745
17:00 - 18:00	0.39030	0.01254	0.42990	2.40066	1.25000	0.45678	0.25402	0.93830	0.55784	0.31695	0.23205	0.79253	0.65336	0.80238	2.39518	0.77635
18:00 - 19:00	0.40112	0.01334	0.42911	2.53137	1.31806	0.52298	0.25196	0.99125	0.60157	0.37868	0.26616	0.84027	0.68417	0.81508	2.42280	0.84104
19:00 - 20:00	0.39053	0.01254	0.43011	2.39981	1.24956	0.45662	0.25402	0.93811	0.55816	0.31685	0.23197	0.79231	0.65313	0.80210	2.39434	0.77640
20:00 - 21:00	0.38902	0.01234	0.43621	2.39725	1.24823	0.45613	0.25749	0.93706	0.55389	0.30474	0.22566	0.79146	0.65243	0.80124	2.39178	0.76213
21:00 - 22:00	0.38872	0.01233	0.43596	2.39581	1.24748	0.45585	0.25734	0.93649	0.55361	0.30456	0.22552	0.79098	0.65204	0.80076	2.39034	0.76161
22:00 - 23:00	0.38874	0.01233	0.43610	2.39530	1.24721	0.45576	0.25732	0.93632	0.55370	0.30450	0.22547	0.79083	0.65190	0.80059	2.38984	0.76154
23:00 - 0:00	0.38947	0.01236	0.43705	2.39674	1.24796	0.45603	0.25757	0.93706	0.55459	0.30468	0.22561	0.79137	0.65229	0.80107	2.39127	0.76243
daily	0.39375	0.01275	0.43706	2.45407	1.27781	0.49385	0.25684	0.96171	0.57995	0.34035	0.24653	0.82321	0.67314	0.81533	2.43086	0.79598

Emission Factor (gm/mile/vehicle) in Caline Format - RSP

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
1:00 - 2:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
2:00 - 3:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
3:00 - 4:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
4:00 - 5:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
5:00 - 6:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
6:00 - 7:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
7:00 - 8:00	0.00248	0.00293	0.00000	0.07836	0.02154	0.02871	0.00525	0.05254	0.01012	0.01123	0.02076	0.02760	0.03904	0.08025	0.17418	0.03247
8:00 - 9:00	0.00406	0.00502	0.00000	0.09568	0.02451	0.03395	0.00766	0.06415	0.01469	0.01628	0.02297	0.03286	0.04358	0.08053	0.19344	0.04270
9:00 - 10:00	0.00254	0.00301	0.00000	0.07861	0.02175	0.02887	0.00535	0.05271	0.01038	0.01149	0.02075	0.02791	0.03919	0.07984	0.17509	0.03271
10:00 - 11:00	0.00248	0.00293	0.00000	0.07836	0.02154	0.02871	0.00525	0.05254	0.01012	0.01123	0.02076	0.02760	0.03904	0.08025	0.17418	0.03247
11:00 - 12:00	0.00248	0.00292	0.00000	0.07835	0.02153	0.02870	0.00524	0.05253	0.01009	0.01119	0.02077	0.02756	0.03903	0.08038	0.17413	0.03246
12:00 - 13:00	0.00246	0.00290	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00984	0.01095	0.02096	0.02753	0.03902	0.08049	0.17410	0.03242
13:00 - 14:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
14:00 - 15:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
15:00 - 16:00	0.00246	0.00291	0.00000	0.07834	0.02151	0.02869	0.00522	0.05253	0.00998	0.01108	0.02085	0.02753	0.03902	0.08049	0.17410	0.03244
16:00 - 17:00	0.00246	0.00291	0.00000	0.07834	0.02151	0.02869	0.00522	0.05253	0.00998	0.01108	0.02085	0.02753	0.03902	0.08049	0.17410	0.03244
17:00 - 18:00	0.00247	0.00292	0.00000	0.07834	0.02151	0.02869	0.00525	0.05253	0.01009	0.01119	0.02077	0.02753	0.03902	0.08049	0.17410	0.03246
18:00 - 19:00	0.00269	0.00322	0.00000	0.07953	0.02252	0.02964	0.00580	0.05333	0.01133	0.01253	0.02082	0.02839	0.03941	0.07917	0.17533	0.03302
19:00 - 20:00	0.00247	0.00292	0.00000	0.07834	0.02151	0.02869	0.00525	0.05253	0.01009	0.01119	0.02077	0.02753	0.03902	0.08049	0.17410	0.03246
20:00 - 21:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
21:00 - 22:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
22:00 - 23:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
23:00 - 0:00	0.00246	0.00289	0.00000	0.07834	0.02151	0.02869	0.00518	0.05253	0.00983	0.01094	0.02097	0.02753	0.03902	0.08049	0.17410	0.03242
daily	0.00259	0.00308	0.00000	0.07987	0.02186	0.02921	0.00549	0.05365	0.01039	0.01153	0.02100	0.02796	0.03934	0.08034	0.17539	0.03321

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Emission Factor (gm/mile/vehicle) in Caline Format - FSP

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.00218	0.00269	0.00000	0.07208	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
1:00 - 2:00	0.00218	0.00269	0.00000	0.07208	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
2:00 - 3:00	0.00218	0.00269	0.00000	0.07207	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
3:00 - 4:00	0.00218	0.00269	0.00000	0.07207	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
4:00 - 5:00	0.00218	0.00269	0.00000	0.07207	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
5:00 - 6:00	0.00218	0.00269	0.00000	0.07208	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02982
6:00 - 7:00	0.00218	0.00269	0.00000	0.07208	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
7:00 - 8:00	0.00220	0.00272	0.00000	0.07209	0.01982	0.02642	0.00486	0.04834	0.00930	0.01033	0.01910	0.02539	0.03592	0.07383	0.16024	0.02988
8:00 - 9:00	0.00362	0.00466	0.00000	0.08802	0.02255	0.03124	0.00708	0.05902	0.01349	0.01498	0.02114	0.03023	0.04009	0.07409	0.17796	0.03929
9:00 - 10:00	0.00225	0.00279	0.00000	0.07232	0.02001	0.02656	0.00494	0.04850	0.00953	0.01057	0.01909	0.02568	0.03606	0.07345	0.16108	0.03010
10:00 - 11:00	0.00220	0.00272	0.00000	0.07209	0.01982	0.02642	0.00486	0.04834	0.00930	0.01033	0.01910	0.02539	0.03592	0.07383	0.16024	0.02988
11:00 - 12:00	0.00219	0.00271	0.00000	0.07208	0.01980	0.02640	0.00484	0.04833	0.00927	0.01030	0.01911	0.02536	0.03591	0.07395	0.16020	0.02986
12:00 - 13:00	0.00218	0.00269	0.00000	0.07208	0.01979	0.02639	0.00479	0.04833	0.00904	0.01007	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
13:00 - 14:00	0.00218	0.00269	0.00000	0.07207	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
14:00 - 15:00	0.00218	0.00269	0.00000	0.07208	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
15:00 - 16:00	0.00218	0.00270	0.00000	0.07208	0.01979	0.02639	0.00482	0.04833	0.00917	0.01020	0.01919	0.02533	0.03590	0.07405	0.16017	0.02984
16:00 - 17:00	0.00218	0.00270	0.00000	0.07207	0.01979	0.02639	0.00482	0.04833	0.00917	0.01020	0.01919	0.02533	0.03590	0.07405	0.16017	0.02984
17:00 - 18:00	0.00219	0.00271	0.00000	0.07207	0.01979	0.02639	0.00485	0.04833	0.00927	0.01030	0.01910	0.02533	0.03590	0.07405	0.16017	0.02986
18:00 - 19:00	0.00239	0.00298	0.00000	0.07317	0.02072	0.02727	0.00536	0.04906	0.01041	0.01153	0.01916	0.02612	0.03625	0.07284	0.16131	0.03038
19:00 - 20:00	0.00219	0.00271	0.00000	0.07208	0.01979	0.02639	0.00485	0.04833	0.00927	0.01030	0.01910	0.02533	0.03590	0.07405	0.16017	0.02986
20:00 - 21:00	0.00218	0.00269	0.00000	0.07208	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
21:00 - 22:00	0.00218	0.00269	0.00000	0.07207	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
22:00 - 23:00	0.00218	0.00269	0.00000	0.07208	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
23:00 - 0:00	0.00218	0.00269	0.00000	0.07207	0.01979	0.02639	0.00479	0.04833	0.00903	0.01006	0.01929	0.02533	0.03590	0.07405	0.16017	0.02983
daily	0.00229	0.00286	0.00000	0.07348	0.02011	0.02687	0.00507	0.04936	0.00955	0.01061	0.01932	0.02572	0.03619	0.07391	0.16136	0.03055

HSK - Postspeed - 70kph

Emission Factor (gm/mile/vehicle) in Caline Format - NOx

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.39431	0.01319	0.41351	2.39855	1.24890	0.45637	0.24234	0.93800	0.56823	0.34555	0.24672	0.79204	0.65278	0.80168	2.39308	0.80999
1:00 - 2:00	0.39524	0.01322	0.41470	2.40049	1.24991	0.45674	0.24262	0.93902	0.56935	0.34583	0.24692	0.79277	0.65331	0.80233	2.39502	0.81123
2:00 - 3:00	0.39663	0.01327	0.41636	2.40390	1.25169	0.45739	0.24317	0.94046	0.57091	0.34632	0.24728	0.79400	0.65424	0.80347	2.39842	0.81317
3:00 - 4:00	0.39829	0.01333	0.41828	2.40817	1.25391	0.45821	0.24369	0.94252	0.57275	0.34693	0.24772	0.79554	0.65540	0.80489	2.40268	0.81553
4:00 - 5:00	0.39876	0.01334	0.41888	2.40893	1.25431	0.45835	0.24381	0.94299	0.57328	0.34704	0.24780	0.79584	0.65561	0.80515	2.40344	0.81612
5:00 - 6:00	0.39993	0.01338	0.42021	2.41185	1.25583	0.45891	0.24420	0.94436	0.57460	0.34745	0.24810	0.79689	0.65640	0.80612	2.40635	0.81776
6:00 - 7:00	0.40030	0.01340	0.42064	2.41267	1.25626	0.45906	0.24435	0.94474	0.57497	0.34757	0.24818	0.79719	0.65663	0.80640	2.40717	0.81825
7:00 - 8:00	0.40597	0.01394	0.41195	2.50895	1.30639	0.49912	0.24096	0.98355	0.60417	0.39604	0.27383	0.85307	0.70750	0.81118	2.41103	0.82452
8:00 - 9:00	0.43154	0.01560	0.42680	2.80463	1.46035	0.70028	0.24969	1.10336	0.78395	0.60496	0.38562	1.10406	0.93886	0.86131	2.54483	0.85583
9:00 - 10:00	0.41091	0.01433	0.41490	2.59623	1.35183	0.55065	0.24181	1.01790	0.63779	0.44082	0.29946	0.90533	0.76761	0.82029	2.43148	0.82950
10:00 - 11:00	0.40235	0.01387	0.40646	2.53499	1.31995	0.51623	0.23948	0.99250	0.60947	0.40999	0.28116	0.86527	0.72575	0.80928	2.40438	0.82138
11:00 - 12:00	0.39901	0.01371	0.40371	2.49972	1.30158	0.49728	0.23901	0.97792	0.59656	0.39459	0.27282	0.84916	0.70490	0.80820	2.40216	0.81634
12:00 - 13:00	0.39600	0.01359	0.40243	2.48910	1.29605	0.49456	0.23840	0.97312	0.59192	0.39028	0.27038	0.84128	0.69885	0.80480	2.39447	0.81215
13:00 - 14:00	0.39162	0.01329	0.40234	2.43873	1.26982	0.47080	0.23882	0.95282	0.57259	0.36236	0.25541	0.81116	0.67039	0.80007	2.38745	0.80821
14:00 - 15:00	0.39426	0.01348	0.40349	2.47886	1.29072	0.49184	0.23858	0.96896	0.58363	0.37758	0.26358	0.82751	0.68889	0.80139	2.38884	0.81092
15:00 - 16:00	0.39509	0.01354	0.40234	2.48806	1.29551	0.49501	0.23818	0.97281	0.58593	0.38106	0.26540	0.83342	0.69312	0.80292	2.39047	0.81106
16:00 - 17:00	0.39937	0.01373	0.40619	2.52123	1.31278	0.51140	0.23898	0.98659	0.59628	0.39248	0.27170	0.85123	0.71984	0.80517	2.39635	0.81713
17:00 - 18:00	0.40498	0.01403	0.41044	2.56933	1.33783	0.53969	0.24093	1.00643	0.61548	0.41323	0.28419	0.87501	0.74403	0.80835	2.40537	0.82356
18:00 - 19:00	0.41415	0.01458	0.41479	2.66890	1.38967	0.60705	0.24451	1.04731	0.66026	0.46444	0.31505	0.94346	0.81922	0.81560	2.42325	0.83331
19:00 - 20:00	0.40140	0.01377	0.40901	2.52144	1.31289	0.51103	0.23976	0.98727	0.59759	0.39106	0.27104	0.84925	0.71845	0.80571	2.39886	0.81987
20:00 - 21:00	0.39570	0.01339	0.40655	2.44301	1.27205	0.47152	0.23991	0.95571	0.57671	0.36269	0.25572	0.81245	0.67120	0.80170	2.39236	0.81303
21:00 - 22:00	0.39540	0.01338	0.40632	2.44154	1.27129	0.47123	0.23978	0.95512	0.57641	0.36247	0.25557	0.81196	0.67080	0.80122	2.39092	0.81247
22:00 - 23:00	0.39424	0.01327	0.40882	2.42070	1.26044	0.46430	0.24067	0.94668	0.57204	0.35473	0.25147	0.80036	0.65926	0.80082	2.39012	0.81016
23:00 - 0:00	0.39349	0.01316	0.41254	2.39674	1.24796	0.45603	0.24203	0.93706	0.56734	0.34529	0.24653	0.79137	0.65229	0.80107	2.39127	0.80889
daily	0.40199	0.01382	0.41161	2.52936	1.31701	0.52120	0.24144	0.99166	0.60989	0.40567	0.27928	0.86543	0.72514	0.80977	2.41003	0.82014

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Emission Factor (gm/mile/vehicle) in Caline Format - RSP

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.00252	0.00300	0.00000	0.07834	0.02151	0.02869	0.00547	0.05254	0.01073	0.01182	0.02026	0.02753	0.03902	0.08049	0.17410	0.03256
1:00 - 2:00	0.00252	0.00300	0.00000	0.07834	0.02151	0.02869	0.00547	0.05254	0.01073	0.01182	0.02026	0.02753	0.03902	0.08049	0.17410	0.03256
2:00 - 3:00	0.00252	0.00300	0.00000	0.07834	0.02151	0.02869	0.00547	0.05252	0.01073	0.01182	0.02026	0.02753	0.03902	0.08049	0.17410	0.03256
3:00 - 4:00	0.00252	0.00300	0.00000	0.07834	0.02151	0.02869	0.00547	0.05253	0.01073	0.01182	0.02026	0.02753	0.03902	0.08049	0.17410	0.03256
4:00 - 5:00	0.00252	0.00300	0.00000	0.07834	0.02151	0.02869	0.00547	0.05253	0.01073	0.01182	0.02026	0.02753	0.03902	0.08049	0.17410	0.03256
5:00 - 6:00	0.00252	0.00300	0.00000	0.07834	0.02151	0.02869	0.00547	0.05253	0.01073	0.01182	0.02026	0.02753	0.03902	0.08049	0.17410	0.03256
6:00 - 7:00	0.00252	0.00300	0.00000	0.07834	0.02151	0.02869	0.00547	0.05253	0.01073	0.01182	0.02026	0.02753	0.03902	0.08049	0.17410	0.03256
7:00 - 8:00	0.00267	0.00320	0.00000	0.07867	0.02235	0.02923	0.00582	0.05275	0.01181	0.01292	0.02020	0.02870	0.03951	0.07874	0.17457	0.03259
8:00 - 9:00	0.00342	0.00419	0.00000	0.08743	0.02445	0.03235	0.00727	0.05863	0.01459	0.01623	0.02157	0.03192	0.04351	0.07754	0.18009	0.03342
9:00 - 10:00	0.00284	0.00342	0.00000	0.07980	0.02300	0.03000	0.00620	0.05351	0.01264	0.01387	0.02046	0.02959	0.04036	0.07803	0.17554	0.03269
10:00 - 11:00	0.00271	0.00326	0.00000	0.07885	0.02261	0.02948	0.00596	0.05287	0.01213	0.01326	0.02026	0.02900	0.03971	0.07863	0.17461	0.03261
11:00 - 12:00	0.00267	0.00320	0.00000	0.07867	0.02235	0.02923	0.00582	0.05275	0.01181	0.01292	0.02020	0.02870	0.03951	0.07874	0.17457	0.03259
12:00 - 13:00	0.00266	0.00319	0.00000	0.07866	0.02231	0.02921	0.00581	0.05275	0.01174	0.01285	0.02021	0.02859	0.03947	0.07921	0.17446	0.03259
13:00 - 14:00	0.00258	0.00307	0.00000	0.07845	0.02192	0.02889	0.00563	0.05260	0.01114	0.01222	0.02019	0.02799	0.03920	0.08033	0.17414	0.03257
14:00 - 15:00	0.00264	0.00315	0.00000	0.07865	0.02224	0.02918	0.00578	0.05274	0.01146	0.01257	0.02024	0.02832	0.03938	0.07991	0.17425	0.03258
15:00 - 16:00	0.00265	0.00317	0.00000	0.07867	0.02233	0.02922	0.00582	0.05275	0.01154	0.01265	0.02022	0.02845	0.03942	0.07935	0.17439	0.03258
16:00 - 17:00	0.00269	0.00323	0.00000	0.07881	0.02254	0.02943	0.00593	0.05285	0.01176	0.01289	0.02026	0.02875	0.03967	0.07926	0.17442	0.03260
17:00 - 18:00	0.00278	0.00335	0.00000	0.07975	0.02285	0.02988	0.00613	0.05348	0.01210	0.01329	0.02041	0.02908	0.04010	0.07921	0.17464	0.03269
18:00 - 19:00	0.00301	0.00364	0.00000	0.08285	0.02357	0.03097	0.00663	0.05555	0.01287	0.01423	0.02079	0.03004	0.04152	0.07861	0.17536	0.03299
19:00 - 20:00	0.00269	0.00322	0.00000	0.07881	0.02251	0.02942	0.00592	0.05284	0.01172	0.01284	0.02027	0.02868	0.03965	0.07943	0.17438	0.03260
20:00 - 21:00	0.00258	0.00307	0.00000	0.07845	0.02192	0.02889	0.00563	0.05260	0.01113	0.01221	0.02019	0.02797	0.03919	0.08034	0.17414	0.03257
21:00 - 22:00	0.00258	0.00307	0.00000	0.07845	0.02192	0.02889	0.00563	0.05261	0.01113	0.01221	0.02019	0.02797	0.03919	0.08034	0.17414	0.03257
22:00 - 23:00	0.00255	0.00304	0.00000	0.07840	0.02174	0.02880	0.00556	0.05257	0.01095	0.01204	0.02022	0.02773	0.03909	0.08041	0.17412	0.03256
23:00 - 0:00	0.00252	0.00300	0.00000	0.07834	0.02151	0.02869	0.00547	0.05253	0.01073	0.01182	0.02026	0.02753	0.03902	0.08049	0.17410	0.03256
daily	0.00272	0.00327	0.00000	0.07978	0.02254	0.02961	0.00599	0.05354	0.01190	0.01306	0.02037	0.02885	0.03991	0.07939	0.17483	0.03268

Emission Factor (gm/mile/vehicle) in Caline Format - FSP

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.00224	0.00278	0.00000	0.07207	0.01979	0.02639	0.00506	0.04833	0.00986	0.01087	0.01864	0.02533	0.03590	0.07405	0.16017	0.02995
1:00 - 2:00	0.00224	0.00278	0.00000	0.07208	0.01979	0.02639	0.00506	0.04834	0.00986	0.01087	0.01864	0.02533	0.03590	0.07405	0.16017	0.02995
2:00 - 3:00	0.00224	0.00278	0.00000	0.07207	0.01979	0.02639	0.00506	0.04832	0.00986	0.01087	0.01864	0.02533	0.03590	0.07405	0.16017	0.02995
3:00 - 4:00	0.00224	0.00278	0.00000	0.07207	0.01979	0.02639	0.00506	0.04833	0.00986	0.01087	0.01864	0.02533	0.03590	0.07405	0.16017	0.02995
4:00 - 5:00	0.00224	0.00278	0.00000	0.07207	0.01979	0.02639	0.00506	0.04833	0.00986	0.01087	0.01864	0.02533	0.03590	0.07405	0.16017	0.02995
5:00 - 6:00	0.00224	0.00278	0.00000	0.07207	0.01979	0.02639	0.00506	0.04833	0.00986	0.01087	0.01864	0.02533	0.03590	0.07405	0.16017	0.02995
6:00 - 7:00	0.00224	0.00278	0.00000	0.07208	0.01979	0.02639	0.00506	0.04833	0.00986	0.01087	0.01864	0.02533	0.03590	0.07405	0.16017	0.02995
7:00 - 8:00	0.00237	0.00297	0.00000	0.07238	0.02056	0.02689	0.00538	0.04853	0.01086	0.01189	0.01859	0.02641	0.03635	0.07244	0.16060	0.02998
8:00 - 9:00	0.00305	0.00388	0.00000	0.08044	0.02249	0.02977	0.00672	0.05394	0.01340	0.01493	0.01985	0.02937	0.04003	0.07134	0.16568	0.03075
9:00 - 10:00	0.00253	0.00318	0.00000	0.07341	0.02116	0.02760	0.00573	0.04923	0.01162	0.01276	0.01882	0.02722	0.03713	0.07179	0.16150	0.03008
10:00 - 11:00	0.00241	0.00302	0.00000	0.07254	0.02080	0.02712	0.00550	0.04864	0.01115	0.01220	0.01864	0.02668	0.03653	0.07234	0.16064	0.03000
11:00 - 12:00	0.00237	0.00297	0.00000	0.07238	0.02056	0.02689	0.00538	0.04853	0.01086	0.01189	0.01859	0.02641	0.03635	0.07244	0.16060	0.02998
12:00 - 13:00	0.00236	0.00296	0.00000	0.07237	0.02053	0.02687	0.00537	0.04853	0.01079	0.01182	0.01860	0.02630	0.03631	0.07287	0.16050	0.02998
13:00 - 14:00	0.00229	0.00285	0.00000	0.07218	0.02017	0.02658	0.00520	0.04840	0.01024	0.01124	0.01858	0.02575	0.03606	0.07390	0.16021	0.02996
14:00 - 15:00	0.00234	0.00293	0.00000	0.07235	0.02046	0.02684	0.00535	0.04852	0.01053	0.01156	0.01862	0.02605	0.03623	0.07351	0.16031	0.02998
15:00 - 16:00	0.00235	0.00294	0.00000	0.07238	0.02054	0.02688	0.00538	0.04853	0.01061	0.01164	0.01860	0.02617	0.03627	0.07300	0.16044	0.02998
16:00 - 17:00	0.00239	0.00300	0.00000	0.07251	0.02073	0.02708	0.00548	0.04862	0.01081	0.01186	0.01864	0.02645	0.03650	0.07291	0.16047	0.02999
17:00 - 18:00	0.00247	0.00310	0.00000	0.07337	0.02102	0.02749	0.00566	0.04920	0.01112	0.01223	0.01878	0.02675	0.03689	0.07288	0.16067	0.03007
18:00 - 19:00	0.00268	0.00338	0.00000	0.07622	0.02169	0.02849	0.00613	0.05111	0.01182	0.01309	0.01913	0.02764	0.03819	0.07232	0.16133	0.03035
19:00 - 20:00	0.00239	0.00299	0.00000	0.07250	0.02071	0.02706	0.00547	0.04862	0.01077	0.01182	0.01865	0.02639	0.03648	0.07308	0.16043	0.02999
20:00 - 21:00	0.00229	0.00285	0.00000	0.07217	0.02016	0.02658	0.00520	0.04840	0.01023	0.01124	0.01858	0.02574	0.03606	0.07391	0.16021	0.02996
21:00 - 22:00	0.00229	0.00285	0.00000	0.07217	0.02016	0.02658	0.00520	0.04840	0.01023	0.01124	0.01858	0.02574	0.03606	0.07391	0.16021	0.02996
22:00 - 23:00	0.00226	0.00282	0.00000	0.07213	0.02000	0.02650	0.00514	0.04837	0.01006	0.01107	0.01861	0.02551	0.03596	0.07398	0.16019	0.02996
23:00 - 0:00	0.00224	0.00278	0.00000	0.07207	0.01979	0.02639	0.00506	0.04833	0.00986	0.01087	0.01864	0.02533	0.03590	0.07405	0.16017	0.02995
daily	0.00242	0.00304	0.00000	0.07340	0.02073	0.02724	0.00554	0.04925	0.01093	0.01202	0.01874	0.02654	0.03671	0.07304	0.16084	0.03006

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

HSK - Postspeed - 50kph
Emission Factor (gm/mile/vehicle) in Caline Format - NOx

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.49407	0.02868	0.41383	2.84760	1.48272	0.67532	0.26733	1.37658	0.68002	0.50501	0.33288	1.03832	0.89647	0.85534	2.48046	1.25712
1:00 - 2:00	0.50128	0.02885	0.41278	2.81807	1.46734	0.65595	0.27310	1.45038	0.67034	0.49236	0.32552	1.01882	0.87782	0.85072	2.46789	1.20787
2:00 - 3:00	0.51270	0.02972	0.41184	2.79873	1.45727	0.64229	0.27327	1.54607	0.66445	0.48483	0.32065	1.00549	0.86399	0.84840	2.46172	1.20970
3:00 - 4:00	0.50020	0.02895	0.41275	2.78932	1.45237	0.63444	0.26820	1.39163	0.66200	0.48031	0.31813	0.99773	0.85504	0.84819	2.46140	1.19553
4:00 - 5:00	0.50332	0.02795	0.41381	2.79773	1.45675	0.63934	0.26966	1.32604	0.66430	0.48236	0.31949	0.99996	0.85950	0.84708	2.45837	1.14208
5:00 - 6:00	0.50867	0.02761	0.41571	2.80769	1.46194	0.64423	0.26821	1.50112	0.66947	0.48751	0.32257	1.01078	0.86927	0.85293	2.47459	1.20139
6:00 - 7:00	0.51222	0.02789	0.42259	2.88987	1.50473	0.69705	0.27173	1.54860	0.89933	0.52230	0.34353	1.06515	0.92429	0.86225	2.50043	1.26880
7:00 - 8:00	0.52814	0.02911	0.44386	3.16979	1.65048	0.98396	0.28348	1.61625	1.03450	0.65815	0.45138	1.27344	1.24335	0.93874	2.71576	1.30542
8:00 - 9:00	0.53080	0.02958	0.44836	3.24778	1.69109	1.04301	0.28563	1.56221	1.04034	0.70722	0.48370	1.35646	1.32629	0.98025	2.83369	1.25918
9:00 - 10:00	0.52211	0.02949	0.44158	3.18023	1.65592	0.99215	0.28293	1.39426	0.98850	0.67012	0.45923	1.29273	1.26271	0.94472	2.73313	1.13319
10:00 - 11:00	0.51645	0.02940	0.43612	3.14577	1.63798	0.97096	0.28079	1.39281	0.96963	0.65719	0.45064	1.27081	1.24144	0.92944	2.68969	1.11808
11:00 - 12:00	0.51283	0.02945	0.43385	3.13653	1.63317	0.96566	0.28091	1.38209	0.96727	0.65049	0.44653	1.26237	1.23387	0.92508	2.67752	1.11611
12:00 - 13:00	0.50459	0.02903	0.42257	3.08008	1.60377	0.86608	0.27549	1.37925	0.96425	0.62131	0.41397	1.22295	1.12895	0.90920	2.63208	1.12477
13:00 - 14:00	0.50137	0.02896	0.41744	2.96822	1.54552	0.75787	0.27124	1.32057	0.89531	0.57166	0.37175	1.16481	1.01448	0.89874	2.60154	1.12500
14:00 - 15:00	0.50362	0.02913	0.41791	2.97573	1.54944	0.76279	0.27187	1.33479	0.89479	0.57447	0.37342	1.16905	1.01827	0.90071	2.60692	1.13318
15:00 - 16:00	0.50227	0.02915	0.41865	2.98222	1.55281	0.76714	0.27188	1.34748	0.88913	0.57734	0.37514	1.17335	1.02250	0.90303	2.61326	1.13836
16:00 - 17:00	0.50852	0.02940	0.42090	2.99183	1.55782	0.77073	0.27434	1.36242	0.90215	0.57935	0.37638	1.17688	1.02538	0.90623	2.62234	1.15659
17:00 - 18:00	0.51336	0.02966	0.42552	3.02794	1.57662	0.79469	0.27477	1.43776	0.93304	0.59933	0.38965	1.21297	1.05883	0.92634	2.67989	1.19898
18:00 - 19:00	0.51917	0.03009	0.43175	3.10403	1.61624	0.85803	0.27860	1.49771	0.95665	0.63827	0.42069	1.27784	1.13451	0.97299	2.81370	1.23134
19:00 - 20:00	0.51496	0.02981	0.42497	3.01405	1.56939	0.78551	0.27587	1.50301	0.90239	0.58617	0.38031	1.18489	1.03055	0.90946	2.63149	1.24971
20:00 - 21:00	0.51448	0.02979	0.42073	2.96220	1.54239	0.75055	0.27406	1.46276	0.94475	0.55728	0.36431	1.13363	0.98894	0.89029	2.57745	1.24361
21:00 - 22:00	0.50869	0.02967	0.41895	2.93488	1.52817	0.73349	0.27378	1.47459	0.84001	0.54693	0.35808	1.11893	0.97326	0.88126	2.55240	1.24987
22:00 - 23:00	0.51038	0.02967	0.41845	2.92409	1.52255	0.72631	0.27268	1.49722	0.89364	0.54166	0.35490	1.10816	0.96230	0.87591	2.53751	1.24640
23:00 - 0:00	0.50724	0.02932	0.41684	2.89158	1.50562	0.70397	0.27448	1.42482	0.92590	0.52557	0.34517	1.08302	0.93833	0.86498	2.50733	1.23718
daily	0.51256	0.02943	0.43098	3.03932	1.58255	0.83296	0.27689	1.45439	0.92687	0.60392	0.40088	1.21048	1.10258	0.91199	2.63985	1.20004

Emission Factor (gm/mile/vehicle) in Caline Format - RSP

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.00409	0.00473	0.00000	0.08139	0.02509	0.03176	0.00768	0.05458	0.01401	0.01534	0.02056	0.03221	0.04182	0.07076	0.17879	0.03347
1:00 - 2:00	0.00408	0.00472	0.00000	0.08071	0.02487	0.03143	0.00768	0.05413	0.01379	0.01508	0.02046	0.03191	0.04146	0.07088	0.17816	0.03326
2:00 - 3:00	0.00426	0.00496	0.00000	0.08021	0.02470	0.03120	0.00773	0.05379	0.01365	0.01492	0.02040	0.03169	0.04117	0.07096	0.17774	0.03318
3:00 - 4:00	0.00406	0.00472	0.00000	0.07991	0.02460	0.03105	0.00748	0.05359	0.01356	0.01481	0.02036	0.03155	0.04098	0.07100	0.17754	0.03318
4:00 - 5:00	0.00441	0.00509	0.00000	0.08007	0.02465	0.03113	0.00779	0.05370	0.01360	0.01486	0.02037	0.03157	0.04106	0.07103	0.17738	0.03318
5:00 - 6:00	0.00463	0.00527	0.00000	0.08021	0.02470	0.03119	0.00787	0.05379	0.01367	0.01496	0.02041	0.03171	0.04122	0.07092	0.17794	0.03319
6:00 - 7:00	0.00471	0.00542	0.00000	0.08219	0.02528	0.03205	0.00823	0.05512	0.01573	0.01563	0.02067	0.03249	0.04226	0.07075	0.17900	0.03360
7:00 - 8:00	0.00539	0.00633	0.00000	0.09164	0.02705	0.03553	0.00977	0.06145	0.01805	0.01779	0.02183	0.03569	0.04710	0.07010	0.18729	0.03483
8:00 - 9:00	0.00546	0.00646	0.00000	0.09444	0.02758	0.03645	0.01001	0.06333	0.01824	0.01852	0.02223	0.03676	0.04860	0.07006	0.19174	0.03538
9:00 - 10:00	0.00504	0.00596	0.00000	0.09208	0.02712	0.03566	0.00952	0.06175	0.01749	0.01797	0.02193	0.03595	0.04747	0.07017	0.18794	0.03498
10:00 - 11:00	0.00491	0.00582	0.00000	0.09119	0.02695	0.03537	0.00935	0.06115	0.01726	0.01779	0.02184	0.03572	0.04714	0.07022	0.18653	0.03459
11:00 - 12:00	0.00483	0.00572	0.00000	0.09101	0.02689	0.03529	0.00927	0.06103	0.01714	0.01767	0.02179	0.03562	0.04700	0.07028	0.18609	0.03456
12:00 - 13:00	0.00455	0.00536	0.00000	0.08919	0.02654	0.03444	0.00874	0.05981	0.01642	0.01718	0.02153	0.03482	0.04583	0.07034	0.18492	0.03446
13:00 - 14:00	0.00434	0.00507	0.00000	0.08475	0.02601	0.03314	0.00826	0.05683	0.01573	0.01658	0.02107	0.03399	0.04412	0.07022	0.18410	0.03445
14:00 - 15:00	0.00439	0.00514	0.00000	0.08492	0.02607	0.03323	0.00833	0.05695	0.01579	0.01664	0.02109	0.03406	0.04419	0.07017	0.18435	0.03450
15:00 - 16:00	0.00440	0.00516	0.00000	0.08509	0.02612	0.03330	0.00836	0.05706	0.01581	0.01670	0.02111	0.03412	0.04428	0.07012	0.18465	0.03456
16:00 - 17:00	0.00445	0.00522	0.00000	0.08515	0.02614	0.03333	0.00843	0.05710	0.01589	0.01672	0.02112	0.03413	0.04429	0.07009	0.18479	0.03457
17:00 - 18:00	0.00458	0.00539	0.00000	0.08631	0.02633	0.03368	0.00857	0.05788	0.01621	0.01699	0.02128	0.03455	0.04486	0.07022	0.18670	0.03471
18:00 - 19:00	0.00472	0.00559	0.00000	0.08922	0.02678	0.03457	0.00889	0.05983	0.01656	0.01751	0.02163	0.03548	0.04606	0.07030	0.19108	0.03503
19:00 - 20:00	0.00446	0.00525	0.00000	0.08588	0.02627	0.03356	0.00849	0.05759	0.01587	0.01681	0.02116	0.03419	0.04438	0.07006	0.18503	0.03463
20:00 - 21:00	0.00440	0.00517	0.00000	0.08430	0.02593	0.03300	0.00829	0.05653	0.01584	0.01636	0.02096	0.03360	0.04359	0.07016	0.18296	0.03434
21:00 - 22:00	0.00432	0.00506	0.00000	0.08366	0.02574	0.03273	0.00816	0.05610	0.01525	0.01616	0.02088	0.03340	0.04330	0.07031	0.18196	0.03420
22:00 - 23:00	0.00440	0.00516	0.00000	0.08335	0.02567	0.03261	0.00817	0.05589	0.01552	0.01607	0.02084	0.03324	0.04309	0.07040	0.18135	0.03417
23:00 - 0:00	0.00438	0.00512	0.00000	0.08242	0.02542	0.03224	0.00811	0.05527	0.01557	0.01575	0.02071	0.03287	0.04262	0.07061	0.18000	0.03385
daily	0.00461	0.00543	0.00000	0.08720	0.02635	0.03394	0.00879	0.05863	0.01633	0.01701	0.02135	0.03468	0.04528	0.07028	0.18497	0.03449

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Emission Factor (gm/mile/vehicle) in Caline Format - FSP

Hour	MC	PC	Taxi	NFB6	NFB7	NFB8	PV4	PV5	LGV3	LGV4	LGV6	HGV7	HGV8	FBSD	FBDD	PLB
0:00 - 1:00	0.00362	0.00439	0.00000	0.07488	0.02309	0.02922	0.00710	0.05021	0.01287	0.01411	0.01891	0.02963	0.03847	0.06510	0.16448	0.03080
1:00 - 2:00	0.00363	0.00438	0.00000	0.07425	0.02288	0.02892	0.00710	0.04980	0.01268	0.01387	0.01883	0.02936	0.03814	0.06521	0.16390	0.03060
2:00 - 3:00	0.00379	0.00460	0.00000	0.07380	0.02272	0.02870	0.00715	0.04949	0.01254	0.01373	0.01877	0.02915	0.03788	0.06528	0.16352	0.03053
3:00 - 4:00	0.00360	0.00438	0.00000	0.07352	0.02263	0.02856	0.00692	0.04930	0.01246	0.01362	0.01873	0.02902	0.03770	0.06532	0.16334	0.03053
4:00 - 5:00	0.00390	0.00472	0.00000	0.07366	0.02268	0.02864	0.00720	0.04940	0.01250	0.01367	0.01874	0.02905	0.03777	0.06535	0.16319	0.03053
5:00 - 6:00	0.00409	0.00489	0.00000	0.07379	0.02272	0.02870	0.00727	0.04949	0.01256	0.01376	0.01877	0.02918	0.03792	0.06525	0.16371	0.03054
6:00 - 7:00	0.00417	0.00503	0.00000	0.07561	0.02325	0.02949	0.00761	0.05071	0.01444	0.01438	0.01902	0.02989	0.03888	0.06509	0.16468	0.03091
7:00 - 8:00	0.00479	0.00587	0.00000	0.08431	0.02489	0.03269	0.00903	0.05654	0.01656	0.01637	0.02008	0.03284	0.04333	0.06449	0.17231	0.03204
8:00 - 9:00	0.00485	0.00599	0.00000	0.08689	0.02537	0.03353	0.00925	0.05827	0.01675	0.01704	0.02046	0.03382	0.04471	0.06445	0.17640	0.03255
9:00 - 10:00	0.00449	0.00553	0.00000	0.08472	0.02495	0.03281	0.00881	0.05681	0.01606	0.01653	0.02018	0.03307	0.04367	0.06456	0.17291	0.03218
10:00 - 11:00	0.00437	0.00540	0.00000	0.08389	0.02479	0.03254	0.00864	0.05626	0.01585	0.01636	0.02009	0.03286	0.04337	0.06460	0.17161	0.03183
11:00 - 12:00	0.00430	0.00531	0.00000	0.08373	0.02474	0.03247	0.00857	0.05615	0.01574	0.01626	0.02004	0.03277	0.04324	0.06466	0.17120	0.03179
12:00 - 13:00	0.00405	0.00497	0.00000	0.08205	0.02441	0.03168	0.00808	0.05503	0.01507	0.01581	0.01980	0.03203	0.04217	0.06471	0.17013	0.03170
13:00 - 14:00	0.00386	0.00471	0.00000	0.07797	0.02393	0.03049	0.00764	0.05229	0.01444	0.01526	0.01938	0.03127	0.04059	0.06461	0.16937	0.03169
14:00 - 15:00	0.00390	0.00477	0.00000	0.07813	0.02398	0.03057	0.00770	0.05240	0.01450	0.01531	0.01940	0.03133	0.04066	0.06456	0.16961	0.03174
15:00 - 16:00	0.00391	0.00479	0.00000	0.07828	0.02403	0.03064	0.00773	0.05250	0.01452	0.01537	0.01942	0.03139	0.04074	0.06451	0.16988	0.03179
16:00 - 17:00	0.00396	0.00484	0.00000	0.07834	0.02405	0.03067	0.00779	0.05254	0.01459	0.01538	0.01943	0.03140	0.04075	0.06448	0.17001	0.03181
17:00 - 18:00	0.00408	0.00500	0.00000	0.07941	0.02422	0.03098	0.00792	0.05325	0.01488	0.01563	0.01957	0.03179	0.04127	0.06460	0.17177	0.03193
18:00 - 19:00	0.00421	0.00519	0.00000	0.08209	0.02464	0.03180	0.00822	0.05505	0.01520	0.01611	0.01990	0.03264	0.04237	0.06468	0.17579	0.03223
19:00 - 20:00	0.00397	0.00487	0.00000	0.07901	0.02417	0.03087	0.00784	0.05299	0.01457	0.01546	0.01947	0.03146	0.04083	0.06446	0.17023	0.03186
20:00 - 21:00	0.00392	0.00479	0.00000	0.07755	0.02385	0.03036	0.00767	0.05201	0.01455	0.01505	0.01928	0.03091	0.04010	0.06454	0.16833	0.03159
21:00 - 22:00	0.00384	0.00469	0.00000	0.07697	0.02368	0.03011	0.00754	0.05162	0.01401	0.01487	0.01921	0.03072	0.03984	0.06469	0.16740	0.03146
22:00 - 23:00	0.00391	0.00478	0.00000	0.07668	0.02362	0.03001	0.00755	0.05142	0.01425	0.01479	0.01917	0.03058	0.03965	0.06477	0.16684	0.03143
23:00 - 0:00	0.00389	0.00475	0.00000	0.07583	0.02339	0.02966	0.00750	0.05085	0.01430	0.01450	0.01906	0.03024	0.03921	0.06496	0.16560	0.03114
daily	0.00410	0.00504	0.00000	0.08023	0.02424	0.03123	0.00812	0.05394	0.01500	0.01565	0.01964	0.03190	0.04166	0.06466	0.17017	0.03173

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

at 50kph

Vehicle Class	Sum of NO2	Sum of Nox	NO2/NOX Ratio	NO/NOX Ratio
FBDD	4.359	15.031	0.29	0.71
FBSD	0.076	0.263	0.29	0.71
HGV7	40.358	122.958	0.33	0.67
HGV8	9.918	33.925	0.29	0.71
LGV3	0.084	1.587	0.05	0.95
LGV4	2.875	50.696	0.06	0.94
LGV6	4.155	14.838	0.28	0.72
MC	0.354	7.105	0.05	0.95
NFB6	14.036	50.130	0.28	0.72
NFB7	5.882	17.857	0.33	0.67
NFB8	2.558	8.168	0.31	0.69
PC	0.335	6.592	0.05	0.95
PLB	2.844	22.584	0.13	0.87
PV4	0.097	0.564	0.17	0.83
PV5	0.559	2.415	0.23	0.77
TAXI	10.998	402.933	0.03	0.97

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

at 70kph

Vehicle Class	Sum of NO2	Sum of Nox	NO2/NOX Ratio	NO/NOX Ratio
FBDD	1.138	3.924	0.29	0.71
FBSD	0.020	0.069	0.29	0.71
HGV7	13.606	41.517	0.33	0.67
HGV8	3.440	12.135	0.28	0.72
LGV3	0.042	0.801	0.05	0.95
LGV4	1.328	23.429	0.06	0.94
LGV6	1.912	6.829	0.28	0.72
MC	0.164	3.284	0.05	0.95
NFB6	6.277	22.418	0.28	0.72
NFB7	2.630	7.986	0.33	0.67
NFB8	0.950	3.065	0.31	0.69
PC	0.139	2.723	0.05	0.95
PLB	1.417	10.951	0.13	0.87
PV4	0.050	0.288	0.17	0.83
PV5	0.249	1.072	0.23	0.77
TAXI	4.563	167.174	0.03	0.97

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

at 80kph

Vehicle Class	Sum of NO2	Sum of Nox	NO2/NOX Ratio	NO/NOX Ratio
FBDD	0.701	2.418	0.29	0.71
FBSD	0.012	0.042	0.29	0.71
HGV7	33.235	101.531	0.33	0.67
HGV8	13.792	50.131	0.28	0.72
LGV3	0.097	1.849	0.05	0.95
LGV4	2.666	47.124	0.06	0.94
LGV6	3.759	13.425	0.28	0.72
MC	0.456	9.150	0.05	0.95
NFB6	17.129	61.175	0.28	0.72
NFB7	7.177	21.791	0.33	0.67
NFB8	2.281	7.426	0.31	0.69
PC	0.353	6.898	0.05	0.95
PLB	1.544	11.837	0.13	0.87
PV4	0.156	0.884	0.18	0.82
PV5	0.683	2.930	0.23	0.77
TAXI	9.145	335.036	0.03	0.97

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Bridge 24 hour FSP Emission and Traffic Profile

Table with 47 columns: District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, Hour 01 to Hour 24. It lists traffic flow and emission data for various roads and districts.

Remarks:

- 1. Links with blank source ID are road sources which are not used
2. The field presents the actual width of road link.
The width input to the model is the actual width plus 6 metres where mixing zone of 3 metre is added on both side.

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO Emission and Traffic Profile

Table with columns for District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, and 24-hour traffic profiles (Hour 01 to Hour 24). Each hour contains sub-columns for Flow and Emission (E_{CO}, E_{HC}, E_{NO}, E_{PM}).

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO Emission and Traffic Profile

Table with columns for District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, and Hourly Emission factors (Hour 01 to Hour 24). The table contains 1000 rows of data for various districts and road segments.

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO_x Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
HSK	L205	121	1	818922	833483	818875	833541	0.0	10.0	74.9	16.0	0.073	10.0	0.071	7.0	0.071	6.0	0.144	2.0	0.080	3.0	0.081	8.0	0.085	2.2	0.101	31.0	0.084	24.0	0.100	22.0	0.108	21.0	0.107	19.0	0.095	46.0	0.162	56.0	0.158	52.0	0.165	56.0	0.149	62.0	0.128	51.0	0.113	39.0	0.104	33.0	0.097	34.0	0.077	24.0	0.075		
HSK	L206	122	1	818950	833447	818922	833483	0.0	10.0	45.5	18.0	0.058	12.0	0.058	9.0	0.057	6.0	0.120	10.0	0.087	14.0	0.088	33.0	0.092	92.0	0.109	127.0	0.087	98.0	0.096	89.0	0.099	85.0	0.100	78.0	0.092	50.0	0.118	43.0	0.114	56.0	0.116	57.0	0.126	62.0	0.113	70.0	0.102	58.0	0.093	44.0	0.085	38.0	0.078	35.0	0.061	28.0	0.060
HSK	L207	122	1	819149	833325	818950	833447	0.0	10.0	233.8	18.0	0.058	12.0	0.058	9.0	0.057	6.0	0.120	10.0	0.087	14.0	0.088	33.0	0.092	92.0	0.109	127.0	0.087	98.0	0.096	89.0	0.099	85.0	0.100	78.0	0.092	50.0	0.118	43.0	0.114	56.0	0.116	57.0	0.126	62.0	0.113	70.0	0.102	58.0	0.093	44.0	0.085	38.0	0.078	35.0	0.061	28.0	0.060
HSK	L208	123	1	818950	833447	818922	833483	0.0	10.0	45.5	25.0	0.077	17.0	0.076	12.0	0.075	10.0	0.144	6.0	0.123	9.0	0.124	21.0	0.129	58.0	0.151	76.0	0.123	61.0	0.125	54.0	0.127	49.0	0.120	77.0	0.129	82.0	0.125	86.0	0.128	90.0	0.143	94.0	0.131	105.0	0.127	86.0	0.119	65.0	0.109	56.0	0.101	49.0	0.081	39.0	0.079		
HSK	L209	123	1	819149	833325	818950	833447	0.0	10.0	233.8	25.0	0.077	17.0	0.076	12.0	0.075	10.0	0.144	6.0	0.123	9.0	0.124	21.0	0.129	58.0	0.151	76.0	0.123	61.0	0.125	54.0	0.127	49.0	0.120	77.0	0.129	82.0	0.125	86.0	0.128	90.0	0.143	94.0	0.131	105.0	0.127	86.0	0.119	65.0	0.109	56.0	0.101	49.0	0.081	39.0	0.079		
HSK	L210	124	1	819218	833671	818922	833447	0.0	25.5	350.9	219.0	0.053	143.0	0.053	106.0	0.053	64.0	0.087	45.0	0.092	63.0	0.092	148.0	0.092	408.0	0.095	537.0	0.096	420.0	0.086	383.0	0.088	362.0	0.086	331.0	0.083	485.0	0.078	517.0	0.075	547.0	0.076	562.0	0.082	642.0	0.076	767.0	0.066	645.0	0.060	507.0	0.059	445.0	0.058	422.0	0.053	339.0	0.052
HSK	L211	125	1	819218	833671	818922	833447	0.0	25.5	350.9	208.0	0.045	136.0	0.045	101.0	0.046	66.0	0.104	104.0	0.068	145.0	0.068	342.0	0.068	943.0	0.071	1303.0	0.067	1011.0	0.069	916.0	0.071	869.0	0.070	797.0	0.066	510.0	0.094	542.0	0.090	571.0	0.091	587.0	0.099	654.0	0.093	757.0	0.083	631.0	0.075	493.0	0.074	431.0	0.073	402.0	0.066	323.0	0.065
HSK	L212	126	4	818501	832877	818540	832999	10.0	20.0	50.1	1444.0	0.035	946.0	0.035	497.0	0.035	453.0	0.078	431.0	0.064	603.0	0.064	1422.0	0.064	3921.0	0.064	5339.0	0.071	4286.0	0.057	3947.0	0.058	3752.0	0.059	3388.0	0.056	3581.0	0.067	3848.0	0.065	4065.0	0.065	4164.0	0.071	4592.0	0.062	5418.0	0.056	4531.0	0.050	3480.0	0.048	3015.0	0.045	2788.0	0.035	2240.0	0.035
HSK	L213	126	4	818440	832803	818501	832877	10.0	20.0	95.9	1444.0	0.035	946.0	0.035	497.0	0.035	453.0	0.078	431.0	0.064	603.0	0.064	1422.0	0.064	3921.0	0.064	5339.0	0.071	4286.0	0.057	3947.0	0.058	3752.0	0.059	3388.0	0.056	3581.0	0.067	3848.0	0.065	4065.0	0.065	4164.0	0.071	4592.0	0.062	5418.0	0.056	4531.0	0.050	3480.0	0.048	3015.0	0.045	2788.0	0.035	2240.0	0.035
HSK	L220	127	4	818838	833037	818970	833081	10.0	20.0	138.8	1169.0	0.033	766.0	0.033	364.0	0.033	361.0	0.073	455.0	0.061	636.0	0.061	1500.0	0.061	4136.0	0.061	5668.0	0.069	4533.0	0.056	4167.0	0.058	3960.0	0.058	3581.0	0.055	2884.0	0.067	3101.0	0.064	3373.0	0.069	3692.0	0.060	4353.0	0.052	3639.0	0.046	2800.0	0.044	2431.0	0.042	2257.0	0.033	1813.0	0.033		
HSK	L221	128	4	818135	832905	818274	832802	10.0	20.0	173.1	618.0	0.028	405.0	0.028	299.0	0.028	178.0	0.065	147.0	0.056	206.0	0.056	485.0	0.056	1337.0	0.060	1886.0	0.059	1470.0	0.063	1335.0	0.066	1269.0	0.065	1159.0	0.059	1433.0	0.071	1550.0	0.070	1636.0	0.069	1656.0	0.072	1864.0	0.063	2248.0	0.050	1889.0	0.041	1457.0	0.038	1268.0	0.036	1194.0	0.028	959.0	0.028
HSK	L222	128	4	818022	833048	818135	832905	10.0	20.0	182.2	618.0	0.028	405.0	0.028	299.0	0.028	178.0	0.065	147.0	0.056	206.0	0.056	485.0	0.056	1337.0	0.060	1886.0	0.059	1470.0	0.063	1335.0	0.066	1269.0	0.065	1159.0	0.059	1433.0	0.071	1550.0	0.070	1636.0	0.069	1656.0	0.072	1864.0	0.063	2248.0	0.050	1889.0	0.041	1457.0	0.038	1268.0	0.036	1194.0	0.028	959.0	0.028
HSK	L223	128	4	817961	833181	818022	833048	10.0	20.0	146.6	618.0	0.028	405.0	0.028	299.0	0.028	178.0	0.065	147.0	0.056	206.0	0.056	485.0	0.056	1337.0	0.060	1886.0	0.059	1470.0	0.063	1335.0	0.066	1269.0	0.065	1159.0	0.059	1433.0	0.071	1550.0	0.070	1636.0	0.069	1656.0	0.072	1864.0	0.063	2248.0	0.050	1889.0	0.041	1457.0	0.038	1268.0	0.036	1194.0	0.028	959.0	0.028
HSK	L224	129	4	818135	832905	818274	832802	10.0	20.0	173.1	541.0	0.035	355.0	0.035	261.0	0.035	161.0	0.080	202.0	0.053	283.0	0.053	668.0	0.053	1841.0	0.056	2634.0	0.052	1980.0	0.053	1764.0	0.055	1679.0	0.055	1559.0	0.051	1281.0	0.080	1383.0	0.079	1461.0	0.079	1489.0	0.085	1663.0	0.074	1994.0	0.062	1674.0	0.053	1288.0	0.048	1119.0	0.046	1045.0	0.036	840.0	0.035
HSK	L225	129	4	818022	833048	818135	832905	10.0	20.0	182.2	541.0	0.035	355.0	0.035	261.0	0.035	161.0	0.080	202.0	0.053	283.0	0.053	668.0	0.053	1841.0	0.056	2634.0	0.052	1980.0	0.053	1764.0	0.055	1679.0	0.055	1559.0	0.051	1281.0	0.080	1383.0	0.079	1461.0	0.079	1489.0	0.085	1663.0	0.074	1994.0	0.062	1674.0	0.053	1288.0	0.048	1119.0	0.046	1045.0	0.036	840.0	0.035
HSK	L226	129	4	817961	833181	818022	833048	10.0	20.0	146.6	541.0	0.035	355.0	0.035	261.0	0.035	161.0	0.080	202.0	0.053	283.0	0.053	668.0	0.053	1841.0	0.056	2634.0	0.052	1980.0	0.053	1764.0	0.055	1679.0	0.055	1559.0	0.051	1281.0	0.080	1383.0	0.079	1461.0	0.079	1489.0	0.085	1663.0	0.074	1994.0	0.062	1674.0	0.053	1288.0	0.048	1119.0	0.046	1045.0	0.036	840.0	0.035
HSK	L227	130	1	818551	832661	818422	832729	10.0	15.0	146.6	328.0	0.027	215.0	0.027	158.0	0.026	88.0	0.066	53.0	0.070	74.0	0.070	175.0	0.074	482.0	0.091	685.0	0.079	541.0	0.102	494.0	0.113	469.0	0.112	426.0	0.096	706.0	0.094	767.0	0.090	811.0	0.089	818.0	0.088	939.0	0.074	1162.0	0.053	983.0	0.043	760.0	0.040	664.0	0.038	633.0	0.029	509.0	0.028
HSK	L228	130	1	818599	832672	818551	832661	0.0	15.0	48.6	328.0	0.027	215.0	0.027	158.0	0.026	88.0	0.066	53.0	0.070	74.0	0.070	175.0	0.074	482.0	0.091	685.0	0.079	541.0	0.102	494.0	0.113	469.0	0.112	426.0	0.096	706.0	0.094	767.0	0.090	811.0	0.089	818.0	0.088	939.0	0.074	1162.0	0.053	983.0	0.043	760.0	0.040	664.0	0.038	633.0	0.029	509.0	0.028
HSK	L229	130	1	818626	832694	818599	832672	0.0	15.0	34.8	328.0	0.027	215.0	0.027	158.0	0.026	88.0	0.066	53.0	0.070	74.0																																					

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO_x Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
HSK	L314	336	1	816928	835793	816975	835758	0.0	17.5	58.8	40	0.111	27	0.109	20	0.108	14	0.167	12	0.156	17	0.158	41	0.166	112	0.193	142	0.173	121	0.193	114	0.203	108	0.201	96	0.184	117	0.196	123	0.191	129	0.190	131	0.193	141	0.181	153	0.156	125	0.137	98	0.133	86	0.130	78	0.115	63	0.113
HSK	L315	336	1	816847	835858	816928	835793	0.0	17.5	103.9	40	0.111	27	0.109	20	0.108	14	0.167	12	0.156	17	0.158	41	0.166	112	0.193	142	0.173	121	0.193	114	0.203	108	0.201	96	0.184	117	0.196	123	0.191	129	0.190	131	0.193	141	0.181	153	0.156	125	0.137	98	0.133	86	0.130	78	0.115	63	0.113
HSK	L316	336	1	816823	835892	816847	835858	0.0	17.5	42.2	40	0.111	27	0.109	20	0.108	14	0.167	12	0.156	17	0.158	41	0.166	112	0.193	142	0.173	121	0.193	114	0.203	108	0.201	96	0.184	117	0.196	123	0.191	129	0.190	131	0.193	141	0.181	153	0.156	125	0.137	98	0.133	86	0.130	78	0.115	63	0.113
HSK	L317	336	1	816800	835936	816823	835892	0.0	17.5	50.0	40	0.111	27	0.109	20	0.108	14	0.167	12	0.156	17	0.158	41	0.166	112	0.193	142	0.173	121	0.193	114	0.203	108	0.201	96	0.184	117	0.196	123	0.191	129	0.190	131	0.193	141	0.181	153	0.156	125	0.137	98	0.133	86	0.130	78	0.115	63	0.113
HSK	L318	336	1	816597	836211	816800	835936	0.0	17.5	341.5	40	0.111	27	0.109	20	0.108	14	0.167	12	0.156	17	0.158	41	0.166	112	0.193	142	0.173	121	0.193	114	0.203	108	0.201	96	0.184	117	0.196	123	0.191	129	0.190	131	0.193	141	0.181	153	0.156	125	0.137	98	0.133	86	0.130	78	0.115	63	0.113
HSK	L319	337	1	816456	836395	816597	836211	0.0	17.5	231.7	24	0.178	16	0.174	12	0.173	10	0.219	12	0.141	17	0.144	39	0.150	108	0.175	140	0.155	117	0.176	110	0.186	104	0.184	92	0.167	88	0.249	91	0.247	97	0.247	97	0.250	100	0.245	98	0.232	77	0.210	61	0.202	53	0.199	47	0.184	37	0.181
HSK	L320	337	1	816429	836440	816456	836395	0.0	17.5	52.2	24	0.178	16	0.174	12	0.173	10	0.219	12	0.141	17	0.144	39	0.150	108	0.175	140	0.155	117	0.176	110	0.186	104	0.184	92	0.167	88	0.249	91	0.247	97	0.247	97	0.250	100	0.245	98	0.232	77	0.210	61	0.202	53	0.199	47	0.184	37	0.181
HSK	L321	338	1	816456	836395	816597	836211	0.0	17.5	231.7	36	0.123	23	0.120	17	0.119	13	0.177	9	0.195	13	0.198	30	0.207	83	0.242	101	0.228	90	0.242	88	0.248	82	0.246	72	0.230	107	0.207	113	0.203	118	0.202	120	0.204	128	0.194	136	0.170	110	0.150	86	0.145	76	0.142	69	0.127	55	0.125
HSK	L322	338	1	816429	836440	816456	836395	0.0	17.5	52.2	36	0.123	23	0.120	17	0.119	13	0.177	9	0.195	13	0.198	30	0.207	83	0.242	101	0.228	90	0.242	88	0.248	82	0.246	72	0.230	107	0.207	113	0.203	118	0.202	120	0.204	128	0.194	136	0.170	110	0.150	86	0.145	76	0.142	69	0.127	55	0.125
HSK	L323	339	1	816777	836765	816432	836436	0.0	10.0	477.5	16	0.167	10	0.164	8	0.163	6	0.203	5	0.194	7	0.197	17	0.205	46	0.235	56	0.215	48	0.225	46	0.230	44	0.228	38	0.214	51	0.225	53	0.220	55	0.220	56	0.223	59	0.220	60	0.205	48	0.185	38	0.183	30	0.173	24	0.170		
HSK	L324	340	1	816777	836765	816432	836436	0.0	10.0	477.5	25	0.127	16	0.125	12	0.124	9	0.177	6	0.204	8	0.207	18	0.216	51	0.252	61	0.241	56	0.250	55	0.254	52	0.252	44	0.237	76	0.202	80	0.197	83	0.196	84	0.199	90	0.191	95	0.170	77	0.150	60	0.147	53	0.145	48	0.132	38	0.130
HSK	L325	341	1	816392	836086	816418	836440	0.0	7.0	355.4	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L326	341	1	816381	836044	816392	836086	0.0	7.0	43.3	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L327	341	1	816342	836003	816381	836044	0.0	7.0	57.0	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L328	341	1	816284	835975	816342	836003	0.0	7.0	64.3	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L329	341	1	816181	835934	816284	835975	0.0	7.0	110.7	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L330	341	1	816114	835878	816181	835934	0.0	7.0	86.7	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L331	341	1	816042	835787	816114	835878	0.0	7.0	116.5	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L332	341	1	816010	835722	816042	835787	0.0	7.0	72.2	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L333	341	1	815968	835588	816010	835722	0.0	7.0	140.6	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.235	24	0.213	28	0.221	30	0.218	31	0.216	31	0.215	33	0.197	36	0.161	29	0.137	22	0.128	20	0.124	18	0.102	14	0.100
HSK	L334	341	1	815906	835497	815968	835588	0.0	7.0	109.6	9	0.097	6	0.095	4	0.094	3	0.169	3	0.162	4	0.165	10	0.174	27	0.208	34	0.193	30	0.224	29	0.237	27	0.2																								

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO_x Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
HSK	L416	421	2	816442	835025	816637	834943	-6.0	7.0	81.8	87	0.027	57	0.026	42	0.026	22	0.071	60	0.043	84	0.043	197	0.045	544	0.052	798	0.040	581	0.040	509	0.048	485	0.049	456	0.044	163	0.069	178	0.066	190	0.066	195	0.074	230	0.061	301	0.050	258	0.045	200	0.041	174	0.037	167	0.028	135	0.027
HSK	L417	422	2	817445	834993	817405	835048	-1.0	15.0	68.4	142	0.024	93	0.023	69	0.023	37	0.059	41	0.060	57	0.060	134	0.063	370	0.076	532	0.063	406	0.080	365	0.088	347	0.087	320	0.076	291	0.083	317	0.079	336	0.078	340	0.078	395	0.065	497	0.047	422	0.038	327	0.035	286	0.033	274	0.025	221	0.025
HSK	L418	422	1	817307	835138	817250	835187	0.0	7.0	74.8	142	0.024	93	0.023	69	0.023	37	0.059	41	0.060	57	0.060	134	0.063	370	0.076	532	0.063	406	0.080	365	0.088	347	0.087	320	0.076	291	0.083	317	0.079	336	0.078	340	0.078	395	0.065	497	0.047	422	0.038	327	0.035	286	0.033	274	0.025	221	0.025
HSK	L419	422	1	817376	835082	817307	835138	0.0	7.0	89.3	142	0.024	93	0.023	69	0.023	37	0.059	41	0.060	57	0.060	134	0.063	370	0.076	532	0.063	406	0.080	365	0.088	347	0.087	320	0.076	291	0.083	317	0.079	336	0.078	340	0.078	395	0.065	497	0.047	422	0.038	327	0.035	286	0.033	274	0.025	221	0.025
HSK	L420	422	1	817405	835048	817376	835082	0.0	7.0	44.3	142	0.024	93	0.023	69	0.023	37	0.059	41	0.060	57	0.060	134	0.063	370	0.076	532	0.063	406	0.080	365	0.088	347	0.087	320	0.076	291	0.083	317	0.079	336	0.078	340	0.078	395	0.065	497	0.047	422	0.038	327	0.035	286	0.033	274	0.025	221	0.025
HSK	L421	423	1	817375	835118	817273	835201	0.0	7.0	130.9	155	0.027	102	0.027	75	0.026	41	0.067	30	0.038	43	0.038	100	0.040	277	0.047	408	0.038	300	0.048	264	0.054	251	0.053	235	0.046	326	0.091	354	0.088	375	0.086	379	0.087	438	0.073	546	0.053	463	0.044	358	0.040	313	0.038	299	0.029	240	0.028
HSK	L422	423	1	817429	835064	817375	835118	0.0	7.0	76.8	155	0.027	102	0.027	75	0.026	41	0.067	30	0.038	43	0.038	100	0.040	277	0.047	408	0.038	300	0.048	264	0.054	251	0.053	235	0.046	326	0.091	354	0.088	375	0.086	379	0.087	438	0.073	546	0.053	463	0.044	358	0.040	313	0.038	299	0.029	240	0.028
HSK	L423	423	2	817456	835008	817429	835064	-1.0	15.0	61.7	155	0.027	102	0.027	75	0.026	41	0.067	30	0.038	43	0.038	100	0.040	277	0.047	408	0.038	300	0.048	264	0.054	251	0.053	235	0.046	326	0.091	354	0.088	375	0.086	379	0.087	438	0.073	546	0.053	463	0.044	358	0.040	313	0.038	299	0.029	240	0.028
HSK	L424	424	1	817501	834893	817479	834935	0.0	8.0	47.5	212	0.034	139	0.033	102	0.033	56	0.072	63	0.065	89	0.066	209	0.069	577	0.080	824	0.064	617	0.075	549	0.080	522	0.080	486	0.072	432	0.088	469	0.084	497	0.083	505	0.085	587	0.073	737	0.056	626	0.048	487	0.045	426	0.043	409	0.035	328	0.035
HSK	L425	424	1	817540	834694	817537	834744	0.0	8.0	50.2	212	0.034	139	0.033	102	0.033	56	0.072	63	0.065	89	0.066	209	0.069	577	0.080	824	0.064	617	0.075	549	0.080	522	0.080	486	0.072	432	0.088	469	0.084	497	0.083	505	0.085	587	0.073	737	0.056	626	0.048	487	0.045	426	0.043	409	0.035	328	0.035
HSK	L426	424	1	817537	834621	817542	834668	0.0	8.0	46.9	212	0.034	139	0.033	102	0.033	56	0.072	63	0.065	89	0.066	209	0.069	577	0.080	824	0.064	617	0.075	549	0.080	522	0.080	486	0.072	432	0.088	469	0.084	497	0.083	505	0.085	587	0.073	737	0.056	626	0.048	487	0.045	426	0.043	409	0.035	328	0.035
HSK	L427	424	1	817527	834819	817531	834794	0.0	8.0	25.6	212	0.034	139	0.033	102	0.033	56	0.072	63	0.065	89	0.066	209	0.069	577	0.080	824	0.064	617	0.075	549	0.080	522	0.080	486	0.072	432	0.088	469	0.084	497	0.083	505	0.085	587	0.073	737	0.056	626	0.048	487	0.045	426	0.043	409	0.035	328	0.035
HSK	L428	424	1	817501	834893	817516	834857	0.0	8.0	38.8	212	0.034	139	0.033	102	0.033	56	0.072	63	0.065	89	0.066	209	0.069	577	0.080	824	0.064	617	0.075	549	0.080	522	0.080	486	0.072	432	0.088	469	0.084	497	0.083	505	0.085	587	0.073	737	0.056	626	0.048	487	0.045	426	0.043	409	0.035	328	0.035
HSK	L429	424	1	817516	834857	817527	834819	0.0	8.0	39.9	212	0.034	139	0.033	102	0.033	56	0.072	63	0.065	89	0.066	209	0.069	577	0.080	824	0.064	617	0.075	549	0.080	522	0.080	486	0.072	432	0.088	469	0.084	497	0.083	505	0.085	587	0.073	737	0.056	626	0.048	487	0.045	426	0.043	409	0.035	328	0.035
HSK	L430	424	1	817542	834668	817540	834694	0.0	8.0	26.6	212	0.034	139	0.033	102	0.033	56	0.072	63	0.065	89	0.066	209	0.069	577	0.080	824	0.064	617	0.075	549	0.080	522	0.080	486	0.072	432	0.088	469	0.084	497	0.083	505	0.085	587	0.073	737	0.056	626	0.048	487	0.045	426	0.043	409	0.035	328	0.035
HSK	L431	424	1	817537	834744	817531	834794	0.0	8.0	49.8	212	0.034	139	0.033	102	0.033	56	0.072	63	0.065	89	0.066	209	0.069	577	0.080	824	0.064	617	0.075	549	0.080	522	0.080	486	0.072	432	0.088	469	0.084	497	0.083	505	0.085	587	0.073	737	0.056	626	0.048	487	0.045	426	0.043	409	0.035	328	0.035
HSK	L432	425	1	817525	834862	817513	834889	0.0	8.0	29.2	211	0.032	138	0.032	102	0.031	55	0.068	60	0.048	83	0.049	197	0.051	542	0.059	788	0.047	582	0.058	514	0.063	488	0.063	457	0.055	426	0.085	462	0.081	490	0.080	498	0.082	581	0.070	732	0.053	623	0.045	484	0.042	424	0.041	408	0.034	328	0.033
HSK	L433	425	1	817551	834685	817546	834757	0.0	8.0	71.9	211	0.032	138	0.032	102	0.031	55	0.068	60	0.048	83	0.049	197	0.051	542	0.059	788	0.047	582	0.058	514	0.063	488	0.063	457	0.055	426	0.085	462	0.081	490	0.080	498	0.082	581	0.070	732	0.053	623	0.045	484	0.042	424	0.041	408	0.034	328	0.033
HSK	L434	425	1	817547	834620	817551	834685	0.0	8.0	64.4	211	0.032	138	0.032	102	0.031	55	0.068	60	0.048	83	0.049	197	0.051	542	0.059	788	0.047	582	0.058	514	0.063	488	0.063	457	0.055	426	0.085	462	0.081	490	0.080	498	0.082	581	0.070	732	0.053	623	0.045	484	0.042	424	0.041	408	0.034	328	0.033
HSK	L435	425	1	817525	834862	817544	834783	0.0	8.0	81.5	211	0.032	138	0.032	102	0.031	55	0.068	60	0.048	83	0.049	197	0.051	542	0.059	788	0.047	582	0.058	514	0.063	488	0.063	457	0.055	426	0.085	462	0.081	490	0.080	498	0.082	581	0.070	732	0.053	623	0.045	484	0.042	424					

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO_x Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
HSK	L518	464	1	815949	834301	815992	834450	0.0	21.0	155.7	91	0.072	60	0.071	44	0.070	33	0.138	53	0.123	74	0.154	175	0.131	483	0.161	642	0.148	563	0.175	539	0.182	511	0.185	446	0.165	298	0.184	318	0.181	332	0.179	331	0.178	348	0.163	371	0.131	300	0.109	229	0.101	198	0.097	177	0.077	142	0.075
HSK	L519	465	1	816039	834527	816112	834593	0.0	21.0	98.6	90	0.092	59	0.090	43	0.089	36	0.160	22	0.152	31	0.153	73	0.162	201	0.200	659	0.189	237	0.215	232	0.224	219	0.222	188	0.201	330	0.208	350	0.205	365	0.204	363	0.203	373	0.190	381	0.160	304	0.135	231	0.125	199	0.121	173	0.098	139	0.096
HSK	L520	465	1	815992	834450	816039	834527	0.0	21.0	89.6	90	0.092	59	0.090	43	0.089	36	0.160	22	0.152	31	0.153	73	0.162	201	0.200	659	0.189	237	0.215	232	0.224	219	0.222	188	0.201	330	0.208	350	0.205	365	0.204	363	0.203	373	0.190	381	0.160	304	0.135	231	0.125	199	0.121	173	0.098	139	0.096
HSK	L521	465	1	815949	834301	815992	834450	0.0	21.0	155.7	90	0.092	59	0.090	43	0.089	36	0.160	22	0.152	31	0.153	73	0.162	201	0.200	659	0.189	237	0.215	232	0.224	219	0.222	188	0.201	330	0.208	350	0.205	365	0.204	363	0.203	373	0.190	381	0.160	304	0.135	231	0.125	199	0.121	173	0.098	139	0.096
HSK	L522	466	1	816127	834150	816199	834104	0.0	7.0	85.5	92	0.160	60	0.157	44	0.155	49	0.214	32	0.183	45	0.185	105	0.195	291	0.240	364	0.232	347	0.251	344	0.258	325	0.256	276	0.236	478	0.262	502	0.261	520	0.260	516	0.261	502	0.257	456	0.242	348	0.213	261	0.200	223	0.195	178	0.171	143	0.167
HSK	L523	466	1	816064	834203	816127	834150	0.0	7.0	82.0	92	0.160	60	0.157	44	0.155	49	0.214	32	0.183	45	0.185	105	0.195	291	0.240	364	0.232	347	0.251	344	0.258	325	0.256	276	0.236	478	0.262	502	0.261	520	0.260	516	0.261	502	0.257	456	0.242	348	0.213	261	0.200	223	0.195	178	0.171	143	0.167
HSK	L524	466	1	816008	834235	816064	834203	0.0	7.0	64.2	92	0.160	60	0.157	44	0.155	49	0.214	32	0.183	45	0.185	105	0.195	291	0.240	364	0.232	347	0.251	344	0.258	325	0.256	276	0.236	478	0.262	502	0.261	520	0.260	516	0.261	502	0.257	456	0.242	348	0.213	261	0.200	223	0.195	178	0.171	143	0.167
HSK	L525	467	1	816178	834156	816212	834153	0.0	7.0	33.8	66	0.101	43	0.099	32	0.097	27	0.170	26	0.179	36	0.181	85	0.192	236	0.235	296	0.229	283	0.249	281	0.257	266	0.254	225	0.234	252	0.218	268	0.215	278	0.214	278	0.214	283	0.201	284	0.173	225	0.147	171	0.136	147	0.131	127	0.107	102	0.105
HSK	L526	467	1	816112	834208	816178	834156	0.0	7.0	84.2	66	0.101	43	0.099	32	0.097	27	0.170	26	0.179	36	0.181	85	0.192	236	0.235	296	0.229	283	0.249	281	0.257	266	0.254	225	0.234	252	0.218	268	0.215	278	0.214	278	0.214	283	0.201	284	0.173	225	0.147	171	0.136	147	0.131	127	0.107	102	0.105
HSK	L527	467	1	816024	834258	816112	834208	0.0	7.0	100.9	66	0.101	43	0.099	32	0.097	27	0.170	26	0.179	36	0.181	85	0.192	236	0.235	296	0.229	283	0.249	281	0.257	266	0.254	225	0.234	252	0.218	268	0.215	278	0.214	278	0.214	283	0.201	284	0.173	225	0.147	171	0.136	147	0.131	127	0.107	102	0.105
HSK	L528	467	1	816004	834281	816024	834258	0.0	7.0	30.2	66	0.101	43	0.099	32	0.097	27	0.170	26	0.179	36	0.181	85	0.192	236	0.235	296	0.229	283	0.249	281	0.257	266	0.254	225	0.234	252	0.218	268	0.215	278	0.214	278	0.214	283	0.201	284	0.173	225	0.147	171	0.136	147	0.131	127	0.107	102	0.105
HSK	L529	468	1	816530	833280	816534	833224	0.0	7.0	55.5	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L530	468	1	816567	833446	816530	833280	0.0	7.0	169.9	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L531	468	1	816568	833546	816567	833446	0.0	7.0	100.0	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L532	468	1	816544	833656	816568	833546	0.0	7.0	113.0	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L533	468	1	816506	833729	816544	833656	0.0	7.0	82.2	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L534	468	1	816469	833774	816506	833729	0.0	7.0	58.3	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L535	468	1	816456	833800	816469	833774	0.0	7.0	29.3	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L536	468	1	816448	833868	816456	833800	0.0	7.0	67.9	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L537	468	1	816397	833943	816448	833868	0.0	7.0	90.6	29	0.087	19	0.086	14	0.085	11	0.155	20	0.219	28	0.222	67	0.234	184	0.287	217	0.293	225	0.292	229	0.291	217	0.290	179	0.273	98	0.176	104	0.173	109	0.173	110	0.179	114	0.167	120	0.148	97	0.131	74	0.121	63	0.114	55	0.093	44	0.091
HSK	L538	468	1	816348	833970																																																					

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO_x Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width ²	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
HSK	L666	503	1	816266	833046	816356	833021	0.0	8.5	93.8	136	0.062	89	0.063	65	0.063	49	0.129	26	0.133	37	0.133	239	0.133	306	0.164	273	0.134	263	0.138	249	0.138	422	0.132	405	0.125	432	0.122	455	0.121	464	0.127	492	0.112	547	0.118	448	0.087	341	0.083	293	0.079	262	0.062	210	0.062		
HSK	L667	502	1	816366	832987	816266	833018	0.0	8.5	120.3	61	0.077	40	0.078	30	0.078	24	0.145	55	0.153	77	0.153	181	0.154	498	0.154	630	0.175	530	0.139	293	0.138	463	0.138	228	0.138	333	0.143	241	0.129	257	0.114	208	0.104	158	0.100	129	0.095	118	0.077	95	0.077						
HSK	L668	504	1	816215	832485	816171	832452	0.0	8.0	54.8	9	0.075	6	0.074	4	0.073	4	0.128	6	0.130	8	0.131	18	0.137	50	0.165	64	0.149	57	0.158	55	0.162	52	0.161	45	0.150	32	0.142	34	0.140	35	0.140	36	0.145	37	0.137	38	0.124	30	0.111	23	0.103	20	0.097	17	0.080	14	0.078
HSK	L669	504	1	816247	832510	816215	832485	0.0	8.0	41.5	9	0.075	6	0.074	4	0.073	4	0.128	6	0.130	8	0.131	18	0.137	50	0.165	64	0.149	57	0.158	55	0.162	52	0.161	45	0.150	32	0.142	34	0.140	35	0.140	36	0.145	37	0.137	38	0.124	30	0.111	23	0.103	20	0.097	17	0.080	14	0.078
HSK	L670	504	1	816278	832547	816247	832510	0.0	8.0	48.1	9	0.075	6	0.074	4	0.073	4	0.128	6	0.130	8	0.131	18	0.137	50	0.165	64	0.149	57	0.158	55	0.162	52	0.161	45	0.150	32	0.142	34	0.140	35	0.140	36	0.145	37	0.137	38	0.124	30	0.111	23	0.103	20	0.097	17	0.080	14	0.078
HSK	L671	504	1	816306	832616	816278	832547	0.0	8.0	74.4	9	0.075	6	0.074	4	0.073	4	0.128	6	0.130	8	0.131	18	0.137	50	0.165	64	0.149	57	0.158	55	0.162	52	0.161	45	0.150	32	0.142	34	0.140	35	0.140	36	0.145	37	0.137	38	0.124	30	0.111	23	0.103	20	0.097	17	0.080	14	0.078
HSK	L672	505	1	816215	832485	816171	832452	0.0	8.0	54.8	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L673	505	1	816247	832510	816215	832485	0.0	8.0	41.5	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L674	505	1	816278	832547	816247	832510	0.0	8.0	48.1	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L675	505	1	816306	832616	816278	832547	0.0	8.0	74.4	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L676	506	1	816191	832439	816171	832452	0.0	7.0	23.8	28	0.071	19	0.070	14	0.069	11	0.123	6	0.112	8	0.113	19	0.119	53	0.145	69	0.132	61	0.147	58	0.153	55	0.152	48	0.138	101	0.144	107	0.141	112	0.141	113	0.145	116	0.135	120	0.120	97	0.105	73	0.097	63	0.093	55	0.075	44	0.074
HSK	L677	506	1	816242	832428	816191	832439	0.0	7.0	52.9	28	0.071	19	0.070	14	0.069	11	0.123	6	0.112	8	0.113	19	0.119	53	0.145	69	0.132	61	0.147	58	0.153	55	0.152	48	0.138	101	0.144	107	0.141	112	0.141	113	0.145	116	0.135	120	0.120	97	0.105	73	0.097	63	0.093	55	0.075	44	0.074
HSK	L678	507	1	816191	832439	816171	832452	0.0	7.0	23.8	18	0.075	12	0.074	9	0.073	7	0.128	11	0.130	15	0.131	36	0.137	100	0.165	128	0.149	114	0.158	110	0.162	104	0.161	90	0.150	64	0.142	68	0.140	71	0.140	72	0.145	73	0.137	76	0.124	61	0.111	46	0.103	40	0.097	34	0.080	27	0.078
HSK	L679	507	1	816242	832428	816191	832439	0.0	7.0	52.9	18	0.075	12	0.074	9	0.073	7	0.128	11	0.130	15	0.131	36	0.137	100	0.165	128	0.149	114	0.158	110	0.162	104	0.161	90	0.150	64	0.142	68	0.140	71	0.140	72	0.145	73	0.137	76	0.124	61	0.111	46	0.103	40	0.097	34	0.080	27	0.078
HSK	L680	508	1	816123	832320	816212	832152	0.0	8.0	190.1	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L681	508	1	816113	832361	816123	832320	0.0	8.0	42.3	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L682	508	1	816122	832398	816113	832361	0.0	8.0	38.4	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L683	508	1	816147	832434	816122	832398	0.0	8.0	44.2	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L684	508	1	816171	832452	816147	832434	0.0	8.0	29.3	14	0.071	9	0.070	7	0.069	6	0.123	3	0.112	4	0.113	10	0.119	26	0.145	34	0.132	30	0.147	29	0.153	28	0.152	24	0.138	51	0.144	54	0.141	56	0.141	56	0.145	58	0.135	60	0.120	48	0.105	37	0.097	31	0.093	27	0.075	22	0.074
HSK	L685	509	1	816123	832320	816212	832152	0.0	8.0	190.1	9	0.075	6	0.074	4	0.073	4	0.128	6	0.130	8	0.131	18	0.137	50	0.165	64	0.149	57	0.158	55	0.162	52	0.161	45	0.150	32	0.142	34	0.140	35	0.140	36	0.145	37	0.137	38	0.124	30	0.111	23	0.103	20	0.097	17	0.080	14	0.078
HSK	L686	509	1	816113	832361	816123	832320	0.0	8.0	42.3	9	0.075	6	0.074	4	0.073	4	0.128	6	0.130	8	0.131	18	0.137	50	0.165	64	0.149	57	0.158	55	0.162	52	0.161	45	0.150	32	0.142	34	0.140	35	0.140	36	0.145	37	0.137	38											

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO_x Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
HSK	L769	536	1	817204	833257	817205	833228	0.0	10.0	28.6	61	0.135	40	0.133	29	0.131	26	0.192	17	0.174	24	0.175	57	0.183	157	0.217	201	0.201	182	0.220	177	0.228	167	0.226	145	0.209	241	0.235	255	0.231	265	0.230	264	0.231	268	0.223	264	0.199	208	0.172	159	0.164	137	0.161	117	0.142	94	0.139
HSK	L770	536	1	817199	833385	817204	833257	0.0	10.0	128.0	61	0.135	40	0.133	29	0.131	26	0.192	17	0.174	24	0.175	57	0.183	157	0.217	201	0.201	182	0.220	177	0.228	167	0.226	145	0.209	241	0.235	255	0.231	265	0.230	264	0.231	268	0.223	264	0.199	208	0.172	159	0.164	137	0.161	117	0.142	94	0.139
HSK	L771	536	1	817213	833478	817199	833385	0.0	10.0	94.9	61	0.135	40	0.133	29	0.131	26	0.192	17	0.174	24	0.175	57	0.183	157	0.217	201	0.201	182	0.220	177	0.228	167	0.226	145	0.209	241	0.235	255	0.231	265	0.230	264	0.231	268	0.223	264	0.199	208	0.172	159	0.164	137	0.161	117	0.142	94	0.139
HSK	L772	537	1	817204	833257	817205	833228	0.0	10.0	28.6	62	0.062	54	0.062	40	0.061	25	0.116	22	0.090	31	0.091	73	0.095	200	0.110	281	0.090	217	0.105	196	0.113	186	0.112	171	0.101	210	0.143	226	0.137	238	0.136	240	0.137	264	0.124	307	0.099	255	0.084	197	0.080	171	0.078	159	0.066	128	0.064
HSK	L773	537	1	817199	833385	817204	833257	0.0	10.0	128.0	62	0.062	54	0.062	40	0.061	25	0.116	22	0.090	31	0.091	73	0.095	200	0.110	281	0.090	217	0.105	196	0.113	186	0.112	171	0.101	210	0.143	226	0.137	238	0.136	240	0.137	264	0.124	307	0.099	255	0.084	197	0.080	171	0.078	159	0.066	128	0.064
HSK	L774	537	1	817213	833478	817199	833385	0.0	10.0	94.9	62	0.062	54	0.062	40	0.061	25	0.116	22	0.090	31	0.091	73	0.095	200	0.110	281	0.090	217	0.105	196	0.113	186	0.112	171	0.101	210	0.143	226	0.137	238	0.136	240	0.137	264	0.124	307	0.099	255	0.084	197	0.080	171	0.078	159	0.066	128	0.064
HSK	L775	538	1	817225	833577	817203	833662	0.0	10.0	88.0	49	0.163	32	0.160	24	0.159	23	0.211	16	0.190	22	0.192	52	0.201	142	0.238	178	0.224	166	0.240	163	0.246	154	0.243	132	0.227	221	0.253	233	0.250	241	0.249	240	0.250	239	0.246	226	0.229	175	0.201	133	0.193	114	0.190	95	0.172	76	0.169
HSK	L776	538	1	817213	833478	817225	833577	0.0	10.0	98.8	49	0.163	32	0.160	24	0.159	23	0.211	16	0.190	22	0.192	52	0.201	142	0.238	178	0.224	166	0.240	163	0.246	154	0.243	132	0.227	221	0.253	233	0.250	241	0.249	240	0.250	239	0.246	226	0.229	175	0.201	133	0.193	114	0.190	95	0.172	76	0.169
HSK	L777	538	1	817174	833802	817190	833862	0.0	10.0	62.5	49	0.163	32	0.160	24	0.159	23	0.211	16	0.190	22	0.192	52	0.201	142	0.238	178	0.224	166	0.240	163	0.246	154	0.243	132	0.227	221	0.253	233	0.250	241	0.249	240	0.250	239	0.246	226	0.229	175	0.201	133	0.193	114	0.190	95	0.172	76	0.169
HSK	L778	538	1	817203	833662	817179	833743	0.0	10.0	84.4	49	0.163	32	0.160	24	0.159	23	0.211	16	0.190	22	0.192	52	0.201	142	0.238	178	0.224	166	0.240	163	0.246	154	0.243	132	0.227	221	0.253	233	0.250	241	0.249	240	0.250	239	0.246	226	0.229	175	0.201	133	0.193	114	0.190	95	0.172	76	0.169
HSK	L779	538	1	817179	833743	817174	833802	0.0	10.0	59.1	49	0.163	32	0.160	24	0.159	23	0.211	16	0.190	22	0.192	52	0.201	142	0.238	178	0.224	166	0.240	163	0.246	154	0.243	132	0.227	221	0.253	233	0.250	241	0.249	240	0.250	239	0.246	226	0.229	175	0.201	133	0.193	114	0.190	95	0.172	76	0.169
HSK	L780	539	1	817174	833802	817190	833862	0.0	10.0	62.5	76	0.066	50	0.065	37	0.065	24	0.120	18	0.102	26	0.103	60	0.106	166	0.124	230	0.101	180	0.118	164	0.126	155	0.125	142	0.113	200	0.148	214	0.143	225	0.141	227	0.143	249	0.130	287	0.104	238	0.088	183	0.085	159	0.082	148	0.070	119	0.068
HSK	L781	539	1	817203	833662	817179	833743	0.0	10.0	84.4	76	0.066	50	0.065	37	0.065	24	0.120	18	0.102	26	0.103	60	0.106	166	0.124	230	0.101	180	0.118	164	0.126	155	0.125	142	0.113	200	0.148	214	0.143	225	0.141	227	0.143	249	0.130	287	0.104	238	0.088	183	0.085	159	0.082	148	0.070	119	0.068
HSK	L782	539	1	817225	833577	817203	833662	0.0	10.0	88.0	76	0.066	50	0.065	37	0.065	24	0.120	18	0.102	26	0.103	60	0.106	166	0.124	230	0.101	180	0.118	164	0.126	155	0.125	142	0.113	200	0.148	214	0.143	225	0.141	227	0.143	249	0.130	287	0.104	238	0.088	183	0.085	159	0.082	148	0.070	119	0.068
HSK	L783	539	1	817213	833478	817225	833577	0.0	10.0	98.8	76	0.066	50	0.065	37	0.065	24	0.120	18	0.102	26	0.103	60	0.106	166	0.124	230	0.101	180	0.118	164	0.126	155	0.125	142	0.113	200	0.148	214	0.143	225	0.141	227	0.143	249	0.130	287	0.104	238	0.088	183	0.085	159	0.082	148	0.070	119	0.068
HSK	L784	539	1	817179	833743	817174	833802	0.0	10.0	59.1	76	0.066	50	0.065	37	0.065	24	0.120	18	0.102	26	0.103	60	0.106	166	0.124	230	0.101	180	0.118	164	0.126	155	0.125	142	0.113	200	0.148	214	0.143	225	0.141	227	0.143	249	0.130	287	0.104	238	0.088	183	0.085	159	0.082	148	0.070	119	0.068
HSK	L785	540	1	817305	833246	817210	833229	0.0	10.0	96.5	122	0.043	80	0.042	59	0.042	37	0.098	28	0.070	40	0.071	93	0.074	257	0.088	364	0.072	280	0.086	253	0.093	241	0.093	221	0.082	293	0.118	317	0.114	334	0.113	340	0.117	378	0.101	451	0.081	378	0.069	290	0.063	252	0.059	235	0.046	189	0.045
HSK	L786	540	1	817447	833295	817305	833246	0.0	10.0	149.8	122	0.043	80	0.042	59	0.042	37	0.098	28	0.070	40	0.071	93	0.074	257	0.088	364	0.072	280	0.086	253	0.093	241	0.093	221	0.082	293	0.118	317	0.114	334	0.113	340	0.117	378	0.101	451	0.081	378	0.069	290	0.063	252	0.059	235	0.046	189	0.045
HSK	L787	540	1	817541	833294	817447	833295	0.0	10.0	93.7	122	0.043	80	0.042	59	0.042	37	0.098	28	0.070	40	0.071	93	0.074	257	0.088	364	0.072	280	0.086	253	0.093	241	0.093	221	0.082	293	0.118	317	0.114	334	0.113	340	0.117	378	0.101	451	0.081	378	0.069	290	0.063	252	0.059	235	0.046	189	0.045
HSK	L788	541	1	817305	833246	817210	833229	0.0	10.0	96.5	52	0.094	34	0.093	25	0.092	20	0.175	26	0.102	36	0.103	84	0.108	232	0.125	320	0.098	242	0.104	216	0.107	207	0.109	191	0.101	162	0.181	173	0.177	182	0.178	188	0.189	197	0.174	217	0.159	178	0.144	135	0.133	115	0.124	101	0.099	81	0.097

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour NO_x Emission and Traffic Profile

Table with 47 columns: District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, and 24 hourly Flow columns. Rows represent various road segments and their traffic flow profiles over 24 hours.

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour RSP Emission and Traffic Profile

Table with columns for District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, and 24 columns for Hour 01 to Hour 24, each with Flow and Emf sub-columns.

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour RSP Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
HSK	L314	336	1	816928	835793	816975	835758	0.0	17.5	58.8	40	0.020	27	0.020	20	0.020	14	0.026	12	0.025	17	0.025	41	0.025	112	0.027	142	0.024	121	0.026	114	0.027	108	0.026	96	0.025	117	0.027	123	0.026	129	0.026	131	0.026	141	0.026	153	0.023	125	0.021	98	0.022	86	0.022	78	0.021	63	0.021

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour RSP Emission and Traffic Profile

District		Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Hour 01		Hour 02		Hour 03		Hour 04		Hour 05		Hour 06		Hour 07		Hour 08		Hour 09		Hour 10		Hour 11		Hour 12		Hour 13		Hour 14		Hour 15		Hour 16		Hour 17		Hour 18		Hour 19		Hour 20		Hour 21		Hour 22		Hour 23		Hour 24	
											Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf
HSK	L518	464	1	81599	83401	81599	83445	0.0	21.0	15.7	91	0.012	60	0.012	44	0.012	33	0.019	53	0.010	74	0.017	175	0.018	483	0.019	642	0.018	563	0.021	539	0.022	511	0.022	446	0.020	298	0.022	318	0.022	332	0.022	331	0.022	348	0.020	371	0.017	300	0.015	229	0.014	198	0.014	177	0.012	142	0.012

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour RSP Emission and Traffic Profile

Table with columns for District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, and 24 columns of Hourly Flow (Emf). The table contains 1000 rows of traffic profile data for various sources and locations.

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour RSP Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
HSK	L1007	721	1	816280	831105	816326	831095	0.0	6.0	47.7	10	0.008	6	0.008	5	0.008	3	0.013	3	0.011	4	0.011	9	0.011	24	0.013	34	0.011	27	0.012	24	0.013	23	0.013	21	0.012	26	0.015	28	0.015	29	0.015	29	0.015	32	0.014	37	0.012	31	0.011	24	0.010	20	0.010	19	0.008	15	0.008
HSK	L1008	721	1	816458	831049	816476	831048	0.0	6.0	18.9	10	0.008	6	0.008	5	0.008	3	0.013	3	0.011	4	0.011	9	0.011	24	0.013	34	0.011	27	0.012	24	0.013	23	0.013	21	0.012	26	0.015	28	0.015	29	0.015	29	0.015	32	0.014	37	0.012	31	0.011	24	0.010	20	0.010	19	0.008	15	0.008
HSK	L1009	721	1	816357	831097	816424	831085	0.0	6.0	67.8	10	0.008	6	0.008	5	0.008	3	0.013	3	0.011	4	0.011	9	0.011	24	0.013	34	0.011	27	0.012	24	0.013	23	0.013	21	0.012	26	0.015	28	0.015	29	0.015	29	0.015	32	0.014	37	0.012	31	0.011	24	0.010	20	0.010	19	0.008	15	0.008
HSK	L1010	722	1	816577	831002	816709	830994	0.0	6.0	132.1	7	0.009	5	0.009	4	0.009	2	0.015	2	0.013	3	0.013	7	0.013	18	0.015	25	0.013	20	0.014	19	0.013	24	0.015	18	0.015	16	0.014	19	0.016	20	0.015	21	0.015	22	0.016	24	0.015	28	0.013	23	0.012	18	0.011	14	0.009	11	0.009

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour FSP Emission and Traffic Profile

Table with columns for District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, Hour 01 to Hour 24, and Emission factors for each hour.

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour FSP Emission and Traffic Profile

District		Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																							
HSK	L314	336	1	816928	835793	816975	835758	0.0	17.5	58.8	40	0.019	27	0.019	20	0.019	14	0.024	12	0.023	17	0.023	41	0.023	112	0.025	142	0.022	121	0.024	114	0.025	108	0.024	96	0.023	117	0.025	123	0.024	129	0.024	131	0.024	141	0.024	153	0.021	125	0.020	98	0.020	86	0.020	78	0.019	63	0.019

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour FSP Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01		Hour 02		Hour 03		Hour 04		Hour 05		Hour 06		Hour 07		Hour 08		Hour 09		Hour 10		Hour 11		Hour 12		Hour 13		Hour 14		Hour 15		Hour 16		Hour 17		Hour 18		Hour 19		Hour 20		Hour 21		Hour 22		Hour 23		Hour 24	
											Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf
HSK	L416	421	2	816442	835025	816637	834943	-6.0	7.0	81.8	147	0.006	57	0.006	42	0.006	22	0.010	60	0.006	84	0.006	197	0.007	544	0.007	798	0.006	581	0.007	405	0.007	485	0.007	456	0.006	163	0.010	178	0.010	190	0.010	195	0.010	300	0.009	301	0.008	258	0.008	200	0.007	174	0.007	167	0.006	135	0.006

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour FSP Emission and Traffic Profile

Table with columns for District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, and 24 hours of traffic flow data (Hour 01 to Hour 24). Each row represents a specific road segment with its associated emission data.

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour FSP Emission and Traffic Profile

Table with columns: District, Source ID, Link No., Road Type, X-Start, Y-Start, X-End, Y-End, Height, Width, Length, Hour 01 to Hour 24 (Flow, Emf), and Hour 25 to Hour 24 (Flow, Emf). Rows include districts like HSK, L666, L667, etc., with detailed traffic and emission data for each hour.

Appendix 3.14 Calculation of Vehicular Emission Source for Sensitivity Test

Scenario: Year 2031 - Year 2039 (Operation Phase)

Summary of Composite Vehicular Emission Factors for CALINE4

Open Road 24 hour FSP Emission and Traffic Profile

District	Source ID	Link No.	Road Type	X-Start	Y-Start	X-End	Y-End	Height	Width	Length	Hour 01	Hour 02	Hour 03	Hour 04	Hour 05	Hour 06	Hour 07	Hour 08	Hour 09	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24																								
											Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf	Flow	Emf																								
HSK	L1114	745	1	816103	830662	816062	830652	0.0	10.0	41.9	234	0.014	153	0.014	113	0.014	70	0.019	110	0.011	154	0.012	364	0.012	1003	0.013	1416	0.010	1066	0.011	950	0.012	904	0.012	839	0.011	534	0.019	572	0.018	605	0.018	624	0.019	703	0.018	844	0.016	710	0.015	552	0.015	481	0.015	452	0.014	363	0.014
HSK	L1115	743	1	816074	830630	816103	830662	0.0	10.0	42.4	76	0.010	50	0.010	37	0.010	27	0.017	27	0.014	38	0.014	89	0.014	245	0.016	328	0.014	265	0.015	245	0.016	234	0.016	210	0.015	212	0.017	226	0.017	239	0.017	246	0.018	264	0.016	302	0.014	250	0.013	191	0.013	164	0.012	148	0.010	119	0.010
HSK	L1116	743	1	816064	830597	816074	830630	0.0	10.0	34.8	76	0.010	50	0.010	37	0.010	27	0.017	27	0.014	38	0.014	89	0.014	245	0.016	328	0.014	265	0.015	245	0.016	234	0.016	210	0.015	212	0.017	226	0.017	239	0.017	246	0.018	264	0.016	302	0.014	250	0.013	191	0.013	164	0.012	148	0.010	119	0.010
HSK	L1117	743	1	816007	830521	816064	830597	0.0	10.0	94.7	76	0.010	50	0.010	37	0.010	27	0.017	27	0.014	38	0.014	89	0.014	245	0.016	328	0.014	265	0.015	245	0.016	234	0.016	210	0.015	212	0.017	226	0.017	239	0.017	246	0.018	264	0.016	302	0.014	250	0.013	191	0.013	164	0.012	148	0.010	119	0.010
HSK	L1118	738	1	816131	830780	816163	830730	0.0	10.0	59.7	137	0.013	90	0.013	66	0.013	37	0.017	23	0.023	32	0.023	75	0.023	206	0.025	252	0.021	208	0.022	195	0.023	183	0.023	164	0.022	268	0.017	285	0.016	302	0.015	313	0.016	370	0.016	457	0.014	388	0.013	309	0.014	273	0.014	264	0.013	212	0.013
HSK	L1119	738	1	816124	830814	816131	830780	0.0	10.0	35.0	137	0.013	90	0.013	66	0.013	37	0.017	23	0.023	32	0.023	75	0.023	206	0.025	252	0.021	208	0.022	195	0.023	183	0.023	164	0.022	268	0.017	285	0.016	302	0.015	313	0.016	370	0.016	457	0.014	388	0.013	309	0.014	273	0.014	264	0.013	212	0.013
HSK	L1120	737	1	816230	830678	816191	830732	0.0	10.0	66.1	64	0.038	42	0.038	31	0.038	20	0.042	20	0.038	27	0.038	65	0.038	178	0.040	215	0.034	168	0.035	154	0.036	145	0.036	133	0.035	137	0.040	140	0.038	148	0.038	156	0.039	182	0.040	208	0.037	173	0.035	142	0.038	128	0.039	123	0.039	99	0.039
HSK	L1121	737	1	816233	830661	816230	830678	0.0	10.0	17.3	64	0.038	42	0.038	31	0.038	20	0.042	20	0.038	27	0.038	65	0.038	178	0.040	215	0.034	168	0.035	154	0.036	145	0.036	133	0.035	137	0.040	140	0.038	148	0.038	156	0.039	182	0.040	208	0.037	173	0.035	142	0.038	128	0.039	123	0.039	99	0.039
HSK	L1122	736	1	816233	830661	816163	830730	0.0	10.0	98.4	240	0.020	157	0.020	116	0.020	69	0.025	87	0.017	121	0.017	286	0.017	789	0.019	1079	0.015	816	0.016	730	0.017	692	0.016	642	0.016	499	0.023	528	0.022	559	0.022	580	0.023	675	0.023	816	0.020	689	0.019	547	0.020	483	0.020	463	0.020	372	0.020
HSK	L1123	736	1	816249	830589	816233	830661	0.0	10.0	73.3	240	0.020	157	0.020	116	0.020	69	0.025	87	0.017	121	0.017	286	0.017	789	0.019	1079	0.015	816	0.016	730	0.017	692	0.016	642	0.016	499	0.023	528	0.022	559	0.022	580	0.023	675	0.023	816	0.020	689	0.019	547	0.020	483	0.020	463	0.020	372	0.020
HSK	L1124	736	1	816239	830496	816249	830589	0.0	10.0	93.4	240	0.020	157	0.020	116	0.020	69	0.025	87	0.017	121	0.017	286	0.017	789	0.019	1079	0.015	816	0.016	730	0.017	692	0.016	642	0.016	499	0.023	528	0.022	559	0.022	580	0.023	675	0.023	816	0.020	689	0.019	547	0.020	483	0.020	463	0.020	372	0.020
HSK	L1125	737	1	816249	830589	816233	830661	0.0	10.0	73.3	64	0.038	42	0.038	31	0.038	20	0.042	20	0.038	27	0.038	65	0.038	178	0.040	215	0.034	168	0.035	154	0.036	145	0.036	133	0.035	137	0.040	140	0.038	148	0.038	156	0.039	182	0.040	208	0.037	173	0.035	142	0.038	128	0.039	123	0.039	99	0.039
HSK	L1126	737	1	816239	830496	816249	830589	0.0	10.0	93.4	64	0.038	42	0.038	31	0.038	20	0.042	20	0.038	27	0.038	65	0.038	178	0.040	215	0.034	168	0.035	154	0.036	145	0.036	133	0.035	137	0.040	140	0.038	148	0.038	156	0.039	182	0.040	208	0.037	173	0.035	142	0.038	128	0.039	123	0.039	99	0.039
HSK	L1127	759	4	816050	830500	816132	830573	5.0	10.0	110.6	235	0.009	154	0.009	113	0.009	84	0.015	111	0.013	156	0.013	367	0.013	1012	0.013	1350	0.013	1128	0.013	1058	0.014	1005	0.014	893	0.013	713	0.016	761	0.015	798	0.015	809	0.016	857	0.015	940	0.013	769	0.012	587	0.011	506	0.011	453	0.009	364	0.009
HSK	L1128	731	4	816323	830662	816348	830668	10.0	18.0	25.9	1165	0.007	763	0.007	563	0.007	376	0.012	311	0.013	435	0.013	1026	0.013	2828	0.013	3681	0.014	3167	0.013	3010	0.013	2857	0.013	2512	0.013	3020	0.012	3241	0.012	3418	0.012	3491	0.012	3815	0.011	4434	0.009	3692	0.009	2830	0.008	2449	0.008	2250	0.007	1808	0.007
HSK	L1129	732	4	816323	830662	816348	830668	10.0	18.0	25.9	990	0.009	649	0.009	478	0.009	355	0.015	371	0.010	520	0.010	1225	0.010	3379	0.010	4604	0.010	3699	0.009	3408	0.010	3240	0.010	2924	0.009	2960	0.015	3157	0.015	3315	0.015	3373	0.015	3580	0.014	3954	0.012	3243	0.011	2474	0.011	2134	0.010	1912	0.009	1536	0.009
HSK	L1130	733	4	816124	830814	816160	830872	5.0	14.0	68.0	378	0.011	248	0.011	183	0.011	128	0.016	92	0.018	128	0.018	302	0.018	834	0.019	1047	0.018	927	0.018	892	0.019	844	0.019	735	0.018	1048	0.016	1115	0.016	1171	0.016	1193	0.016	1291	0.015	1446	0.013	1191	0.012	920	0.012	800	0.012	730	0.011	587	0.011
HSK	L1131	730	3	816374	830659	816411	830681	3.0	10.0	43.1	220	0.011	144	0.011	106	0.011	63	0.016	81	0.010	114	0.010	268	0.010	739	0.011	1054	0.009	789	0.010	702	0.010	667	0.010	620	0.010	474	0.016	510	0.015	541	0.015	556	0.016	636	0.015	781	0.013	660	0.012	514	0.012	449	0.012	425	0.011	342	0.011
HSK	L1132	730	3	816301	830617	816374	830659	3.0	10.0	84.4	220	0.011	144	0.011	106	0.011	63	0.016	81	0.010	114	0.010	268	0.010	739	0.011	1054	0.009	789	0.010	702	0.010	667	0.010	620	0.010	474	0.016	510	0.015	541	0.015	556	0.016	636	0.015	781	0.013	660	0.012	514	0.012	449	0.012	425	0.011	342	0.011
HSK	L1133	730	3	816249	830589	816301	830617	3.0	10.0	59.0	220	0.011	144	0.011	106	0.011	63	0.016	81	0.010																																						

Appendix 3.14 Sensitivity Test without Propose Noise Barrier

The noise barriers and the assessment points included in the sensitivity test are summarized in the table below.

Noise Barrier ID #	Type of Noise Barrier	Assessment Points
VB4	5 m vertical barrier on Road D2	P1138, P1139
VB6	5 m vertical barrier on Road D1	P1060, P1068
VB10	4m vertical barrier on Road D2	P1126, P1128
VB12	6m vertical barrier on Road D2	P1130, P1132
CB1	Cantilever barrier (6+4.2m at 45 degree) on Road D2	P704, P706
VB15, VB16 & VB17	5m vertical barrier on Road D2	P727, P729
VB18	4m vertical barrier on Road D2	P726
VB20 & CB5	7m vertical barrier on Road L3 Cantilever barrier (6+4.2m at 45 degree) on Road D2, near Site 1-22	P740, P737, P738
VB23	7m vertical barrier on Road D2/Ping Ha Road	P712, P713
VB28, VB29 & VB31	5m & 7m vertical barrier on Hung Tin Road	P721, P718, P747
VB24	7m vertical barrier on Ping Ha Road	P804, P805, P807
CB3a & CB3b	Cantilever barrier (5.5+2.5m at 45 degree) on Road P1	P1645, P1652
VB35 & VB36	5m vertical barrier on Road D5	P1636, P1635, P1642, P1643
VB37 & VB38	3m vertical barrier on Road D2	P1653, P1654

Remarks:

- Figure 4.7.16 shows the locations of the noise barriers.

Appendix 3.14 Sensitivity Test without Propose Noise Barrier

FSP Concentration (µg/m³)

Site	Receptor ID	Height (mAG)	10th Highest Daily			Annual		
			With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)	With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)
1-15	P704	1.5	68.78823	68.79007	-0.00184	28.98328	28.98561	-0.00233
1-15	P704	5	68.78549	68.78673	-0.00124	28.98061	28.98256	-0.00195
1-15	P704	10	68.77859	68.77877	-0.00018	28.97359	28.97481	-0.00122
1-15	P704	20	68.76409	68.76393	0.00016	28.95741	28.95792	-0.00051
1-15	P704	40	68.74358	68.74356	0.00002	28.93064	28.93070	-0.00006
1-15	P706	1.5	68.78643	68.78761	-0.00118	28.97624	28.97858	-0.00234
1-15	P706	5	68.78413	68.78508	-0.00095	28.97449	28.97655	-0.00206
1-15	P706	10	68.77791	68.77843	-0.00052	28.96941	28.97082	-0.00141
1-15	P706	20	68.76331	68.76347	-0.00016	28.95536	28.95592	-0.00056
1-15	P706	40	68.74225	68.74221	0.00004	28.92959	28.92952	-0.00007
1-19	P726	1.5	68.81591	68.81934	-0.00343	28.99484	28.99838	-0.00354
1-19	P726	5	68.81307	68.81609	-0.00302	28.99235	28.99235	-0.00000
1-19	P726	10	68.80528	68.80742	-0.00214	28.98520	28.98703	-0.00183
1-19	P726	20	68.78619	68.78714	-0.00095	28.96625	28.96625	-0.00000
1-19	P726	40	68.75504	68.75447	0.00057	28.93451	28.93435	0.00016
1-19	P726	80	68.72327	68.72274	0.00053	28.90115	28.90115	-0.00000
1-19	P726	90	68.71944	68.71908	0.00036	28.89658	28.89665	-0.00007
1-19	P727	1.5	68.80783	68.80783	-0.00000	28.99929	28.99929	-0.00000
1-19	P727	5	68.80330	68.80553	-0.00223	28.99440	28.99731	-0.00291
1-19	P727	10	68.79316	68.79382	-0.00066	28.98404	28.98327	0.00077
1-19	P727	20	68.77592	68.77657	-0.00065	28.96301	28.96317	-0.00016
1-19	P727	40	68.75080	68.75102	-0.00022	28.93330	28.93327	0.00003
1-19	P727	80	68.72277	68.72234	0.00043	28.90084	28.90086	-0.00002
1-19	P727	90	68.71906	68.71906	0.00000	28.89633	28.89633	-0.00000
1-19	P729	1.5	68.79426	68.79139	0.00287	28.98748	28.99011	-0.00263
1-19	P729	5	68.79129	68.78884	0.00245	28.98467	28.98683	-0.00216
1-19	P729	10	68.78376	68.78242	0.00134	28.97721	28.97847	-0.00126
1-19	P729	20	68.76832	68.76832	-0.00000	28.96038	28.96038	-0.00000
1-19	P729	40	68.74636	68.74629	0.00007	28.93187	28.93188	-0.00001
1-19	P729	80	68.72143	68.72113	0.00030	28.90022	28.90022	-0.00000
1-19	P729	90	68.71799	68.71775	0.00024	28.89580	28.89584	-0.00004
1-22	P737	1.5	68.94941	68.94941	-0.00000	29.07761	29.07761	-0.00000
1-22	P737	5	68.92641	68.92641	-0.00000	29.05698	29.05698	-0.00000
1-22	P737	10	68.87752	68.87752	-0.00000	29.01743	29.01743	-0.00000
1-22	P737	20	68.80952	68.80943	0.00009	28.97267	28.97267	-0.00000
1-22	P737	40	68.75488	68.75261	0.00227	28.93633	28.93633	-0.00000
1-22	P738	1.5	69.00473	69.00236	0.00237	29.11121	29.11121	-0.00000
1-22	P738	5	68.96490	68.97672	-0.01182	29.07521	29.07912	-0.00391
1-22	P738	10	68.89867	68.88896	0.00971	29.02190	29.01496	0.00694
1-22	P738	20	68.81641	68.80847	0.00794	28.97725	28.97455	0.00270
1-22	P738	40	68.75205	68.75010	0.00195	28.93580	28.93543	0.00037
1-22	P740	1.5	68.86892	68.88157	-0.01265	29.01765	29.02592	-0.00827
1-22	P740	5	68.86434	68.87500	-0.01066	29.01373	29.02044	-0.00671
1-22	P740	10	68.85058	68.85656	-0.00598	29.00251	29.00566	-0.00315
1-22	P740	20	68.81309	68.81146	0.00163	28.97447	28.97349	0.00098
1-22	P740	40	68.75770	68.75502	0.00268	28.93602	28.93557	0.00045
1-22	P740	80	68.85735	68.85752	-0.00017	28.92117	28.92397	-0.00280
1-8	P1126	1.5	68.85630	68.85645	-0.00015	28.91814	28.92013	-0.00199
1-8	P1126	5	68.85318	68.85326	-0.00008	28.91122	28.91122	-0.00000
1-8	P1126	10	68.84366	68.84369	-0.00003	28.89709	28.89695	0.00014
1-8	P1126	20	68.82730	68.82736	-0.00006	28.87459	28.87459	-0.00000
1-8	P1126	40	68.81531	68.81538	-0.00007	28.84988	28.84994	-0.00006
1-8	P1126	80	68.81219	68.81220	-0.00001	28.83764	28.83764	-0.00000
1-8	P1128	1.5	68.85801	68.85820	-0.00019	28.92240	28.92510	-0.00270
1-8	P1128	5	68.85698	68.85713	-0.00015	28.91894	28.92085	-0.00191
1-8	P1128	10	68.85394	68.85401	-0.00007	28.91092	28.91152	-0.00060
1-8	P1128	20	68.84483	68.84485	-0.00002	28.89569	28.89569	-0.00000
1-8	P1128	40	68.82867	68.82873	-0.00006	28.87394	28.87397	-0.00003
1-8	P1128	80	68.81578	68.81573	0.00005	28.84956	28.84956	-0.00000
1-8	P1128	130	68.81226	68.81227	-0.00001	28.83753	28.83756	-0.00003
1-9	P1130	1.5	68.85083	68.85088	-0.00005	28.92779	28.93095	-0.00316
1-9	P1130	5	68.85005	68.85012	-0.00007	28.92350	28.92555	-0.00205
1-9	P1130	10	68.84768	68.84775	-0.00007	28.91391	28.91444	-0.00053
1-9	P1130	20	68.84031	68.84038	-0.00007	28.89758	28.89770	-0.00012
1-9	P1130	40	68.82624	68.82631	-0.00007	28.87564	28.87564	-0.00000
1-9	P1130	80	68.81500	68.81506	-0.00006	28.85046	28.85051	-0.00005
1-9	P1130	130	68.81212	68.81213	-0.00001	28.83784	28.83787	-0.00003
1-9	P1132	1.5	68.85350	68.85363	-0.00013	28.92663	28.93136	-0.00473
1-9	P1132	5	68.85260	68.85260	-0.00000	28.92297	28.92555	-0.00258
1-9	P1132	10	68.84987	68.84993	-0.00006	28.91419	28.91407	0.00012
1-9	P1132	20	68.84162	68.84165	-0.00003	28.89754	28.89727	0.00027
1-9	P1132	40	68.82674	68.82680	-0.00006	28.87496	28.87509	-0.00013
1-9	P1132	80	68.81519	68.81526	-0.00007	28.85016	28.85022	-0.00006
1-9	P1132	130	68.81216	68.81217	-0.00001	28.83775	28.83778	-0.00003
2-24	P1138	1.5	68.89383	68.89383	0.00000	28.92505	28.92505	-0.00000
2-24	P1138	5	68.88544	68.88438	0.00106	28.92125	28.92095	0.00030
2-24	P1138	10	68.87030	68.87222	-0.00192	28.91271	28.91387	-0.00116
2-24	P1138	20	68.85252	68.85291	-0.00039	28.89691	28.89785	-0.00094
2-24	P1138	40	68.83129	68.83127	0.00002	28.87343	28.87363	-0.00020
2-24	P1139	1.5	68.91470	68.91368	0.00102	28.95065	28.95176	-0.00111
2-24	P1139	5	68.89856	68.89917	-0.00061	28.93451	28.93796	-0.00345
2-24	P1139	10	68.86780	68.86900	-0.00120	28.91614	28.91991	-0.00377
2-24	P1139	20	68.85257	68.85274	-0.00017	28.89803	28.89948	-0.00145
2-24	P1139	40	68.83035	68.83035	0.00000	28.87298	28.87320	-0.00022
2-26	P1060	1.5	70.58903	70.58946	-0.00043	29.55226	29.55321	-0.00095
2-26	P1060	5	70.58676	70.58708	-0.00032	29.55049	29.55130	-0.00081
2-26	P1060	10	70.58045	70.58059	-0.00014	29.54540	29.54593	-0.00053
2-26	P1060	20	70.56565	70.56560	0.00005	29.53219	29.53241	-0.00022
2-26	P1060	40	70.54351	70.54339	0.00012	29.51058	29.51071	-0.00013
2-29	P1068	1.5	70.61035	70.61271	-0.00236	29.58035	29.58173	-0.00138
2-29	P1068	5	70.60217	70.60351	-0.00134	29.57438	29.57539	-0.00101
2-29	P1068	10	70.58592	70.58602	-0.00010	29.56105	29.56162	-0.00057
2-29	P1068	20	70.56411	70.56386	0.00025	29.53951	29.53978	-0.00027
2-29	P1068	40	70.54323	70.54316	0.00007	29.51461	29.51466	-0.00005

Site	Receptor ID	Height (mAG)	10th Highest Daily		Difference (With Noise Barrier - Without Noise Barrier)	Annual		Difference (With Noise Barrier - Without Noise Barrier)
			With Noise Barrier	Without Noise Barrier		With Noise Barrier	Without Noise Barrier	
2-29	P1068	50	70.53724	70.53722	0.00002	29.50605	29.50603	0.00002
4-1	P1635	1.5	70.44944	70.45365	-0.00421	29.95505	29.95861	-0.00356
4-1	P1635	5	70.42314	70.42411	-0.00097	29.94241	29.94421	-0.00180
4-1	P1635	10	70.39100	70.39051	0.00049	29.92531	29.92587	-0.00056
4-1	P1635	20	70.36169	70.36162	0.00007	29.89993	29.89803	0.00190
4-1	P1635	40	70.32648	70.32647	0.00001	29.82085	29.82075	0.00010
4-1	P1635	80	70.29617	70.29601	0.00016	29.77161	29.77157	0.00004
4-1	P1635	120	70.28242	70.28225	0.00017	29.75234	29.75232	0.00002
4-1	P1636	1.5	70.4836					

Site	Receptor ID	Height (mAG)	10th Highest Daily			Annual		
			With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)	With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)
5-17	P721	80	68.71857	68.71836	0.00021	28.89982	28.90001	-0.00019
5-17	P721	110	68.71211	68.71206	0.00005	28.88876	28.88891	-0.00015
5-18b	P747	1.5	68.89190	68.89110	0.00080	29.07413	29.07481	-0.00068
5-18b	P747	5	68.87928	68.87929	-0.00001	29.06471	29.06609	-0.00138
5-18b	P747	10	68.84223	68.84320	-0.00097	29.03693	29.03917	-0.00224
5-18b	P747	20	68.77931	68.77968	-0.00037	28.98371	28.98516	-0.00145
5-18b	P747	40	68.74613	68.74562	0.00051	28.93923	28.93957	-0.00034
5-18b	P747	80	68.72109	68.72085	0.00024	28.90118	28.90137	-0.00019
5-18b	P747	120	68.71224	68.71220	0.00004	28.88684	28.88698	-0.00014
5-2	P807	1.5	68.97528	68.98525	-0.00997	29.08935	29.09438	-0.00503
5-2	P807	5	68.96320	68.96985	-0.00665	29.08326	29.08719	-0.00393
5-2	P807	10	68.93300	68.93347	-0.00047	29.06738	29.06911	-0.00173
5-2	P807	20	68.87851	68.87516	0.00335	29.03457	29.03447	0.00010
5-2	P807	40	68.83301	68.83232	0.00069	28.99590	28.99605	-0.00015
5-2	P807	50	68.82490	68.82458	0.00032	28.98442	28.98462	-0.00020

Appendix 3.14 Sensitivity Test without Propose Noise Barrier

NO ₂ Concentration (µg/m ³)								
Site	Receptor ID	Height	19th Highest Daily			Annual		
			With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)	With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)
1-15	P704	1.5	99.37398	99.75179	-0.37781	21.07154	21.14593	-0.07439
1-15	P704	5	98.91144	99.37503	-0.46359	20.98645	21.04811	-0.06166
1-15	P704	10	97.78263	98.74663	-0.96400	20.76646	20.80347	-0.03701
1-15	P704	20	96.16952	96.16992	-0.00040	20.27656	20.29105	-0.01449
1-15	P704	40	94.36522	94.36422	0.00100	19.51529	19.51703	-0.00174
1-15	P706	1.5	98.33285	99.36723	-1.03438	20.82544	20.89882	-0.07338
1-15	P706	5	98.14657	99.11035	-0.96378	20.77206	20.83641	-0.06435
1-15	P706	10	97.60270	98.13822	-0.53552	20.61935	20.66300	-0.04365
1-15	P706	20	96.18947	96.16416	0.02531	20.20661	20.22290	-0.01629
1-15	P706	40	94.34610	94.36260	-0.01650	19.47893	19.48097	-0.00204
1-19	P726	1.5	100.10190	99.80468	0.29722	21.43658	21.55058	-0.11400
1-19	P726	5	99.91629	99.75240	0.16389	21.35912	21.45583	-0.09671
1-19	P726	10	99.34871	99.39894	-0.05023	21.13927	21.19701	-0.05774
1-19	P726	20	96.85991	96.61981	0.24010	20.56461	20.57381	-0.00920
1-19	P726	40	94.66966	94.66226	0.00740	19.64301	19.63748	0.00553
1-19	P726	80	92.00504	91.94784	0.05720	18.73764	18.73788	-0.00024
1-19	P726	90	91.19658	91.16788	0.02870	18.57889	18.58006	-0.00117
1-19	P727	1.5	100.78990	101.05980	-0.26990	21.61810	21.77348	-0.15538
1-19	P727	5	99.80774	99.99824	-0.19050	21.45628	21.54944	-0.09316
1-19	P727	10	99.14515	99.40499	-0.25984	21.09340	21.11439	-0.02099
1-19	P727	20	96.63816	96.83796	-0.19980	20.46226	20.46489	-0.00263
1-19	P727	40	94.49838	94.49728	0.00110	19.60234	19.60082	0.00152
1-19	P727	80	93.62460	93.62090	0.00370	18.72571	18.72557	0.00014
1-19	P727	90	91.19428	91.16528	0.02900	18.57064	18.57130	-0.00066
1-19	P729	1.5	99.57336	99.86556	-0.29220	21.21390	21.29631	-0.08241
1-19	P729	5	99.37254	99.56386	-0.19132	21.12391	21.19063	-0.06672
1-19	P729	10	98.48228	99.20867	-0.72639	20.88791	20.92551	-0.03760
1-19	P729	20	96.26448	96.42280	-0.15832	20.35921	20.37222	-0.01301
1-19	P729	40	94.39921	94.39881	0.00040	19.55524	19.55488	0.00036
1-19	P729	80	93.54840	93.54570	0.00270	18.70511	18.70479	0.00032
1-19	P729	90	91.17085	91.14645	0.02440	18.55486	18.55528	-0.00042
1-22	P737	1.5	101.90930	102.78710	-0.87780	23.99073	24.90228	-0.91155
1-22	P737	5	101.01710	101.66430	-0.64720	23.35613	23.69358	-0.33745
1-22	P737	10	99.21983	99.11466	0.10517	22.13720	22.01211	0.12509
1-22	P737	20	97.04340	97.02570	0.01770	20.81282	20.75855	0.05427
1-22	P737	40	95.71580	95.67751	0.03829	19.72234	19.70470	0.01764
1-22	P738	1.5	103.74290	106.32740	-2.58450	25.02241	26.08244	-1.06003
1-22	P738	5	101.49240	101.75220	-0.25980	23.91222	24.03477	-0.12255
1-22	P738	10	99.84844	99.62354	0.22490	22.26326	22.04372	0.21954
1-22	P738	20	97.00431	96.92641	0.07790	20.89322	20.80569	0.08753
1-22	P738	40	95.70871	95.42081	0.28790	19.68867	19.67620	0.01247
1-22	P740	1.5	99.78354	99.84544	-0.06190	22.10388	22.36066	-0.25678
1-22	P740	5	99.67311	99.67593	-0.00282	21.98678	22.19625	-0.20947
1-22	P740	10	99.23673	99.30321	-0.06648	21.65276	21.75297	-0.10021
1-22	P740	20	97.44488	97.46828	-0.02340	20.81558	20.78561	0.02997
1-22	P740	40	95.54356	95.53376	0.00980	19.69446	19.67950	0.01496
1-8	P1126	1.5	98.34857	99.13887	-0.79030	20.51574	20.59371	-0.07797
1-8	P1126	5	97.82098	98.53258	-0.71160	20.42152	20.47490	-0.05338
1-8	P1126	10	96.99362	96.84212	0.15150	20.20981	20.23730	-0.02749
1-8	P1126	20	95.12393	95.06423	0.05970	19.79472	19.78321	0.01151
1-8	P1126	40	93.60575	93.62075	-0.01500	19.16767	19.16546	0.00221
1-8	P1126	80	92.45291	92.45841	-0.00550	18.49356	18.49452	-0.00096
1-8	P1126	130	91.92815	91.92815	0.00000	18.12156	18.12260	-0.00104
1-8	P1128	1.5	98.00542	98.00742	-0.00200	20.55747	20.63612	-0.07865
1-8	P1128	5	97.90932	97.91122	-0.00190	20.44895	20.50188	-0.05293
1-8	P1128	10	97.22102	97.22482	-0.00380	20.20218	20.21265	-0.01047
1-8	P1128	20	96.62963	96.62963	0.00000	19.75368	19.74833	0.00535
1-8	P1128	40	93.61144	93.62134	-0.00990	19.15087	19.14757	0.00330
1-8	P1128	80	92.37295	92.37735	-0.00440	18.48213	18.48265	-0.00052
1-8	P1128	130	91.92311	91.92301	0.00010	18.11806	18.11905	-0.00099
1-9	P1130	1.5	101.19650	101.60510	-0.40860	20.73133	20.82862	-0.09729
1-9	P1130	5	100.56680	100.85900	-0.29220	20.59497	20.65481	-0.05984
1-9	P1130	10	98.88906	98.60086	0.28820	20.29433	20.30267	-0.00834
1-9	P1130	20	96.96137	96.94947	0.01190	19.80448	19.79969	0.00479
1-9	P1130	40	93.84398	93.84238	0.00160	19.19024	19.19117	-0.00093
1-9	P1130	80	92.59271	92.59591	-0.00320	18.51381	18.51431	-0.00050
1-9	P1130	130	91.94124	91.94124	0.00000	18.12778	18.12890	-0.00112
1-9	P1132	1.5	99.41451	100.05770	-0.64319	20.69367	20.84113	-0.14746
1-9	P1132	5	98.51748	98.83448	-0.31700	20.57915	20.65536	-0.07621
1-9	P1132	10	97.18792	97.17682	0.01110	20.30641	20.29364	0.01277
1-9	P1132	20	95.14374	94.94723	0.19651	19.80798	19.79126	0.01672
1-9	P1132	40	93.63578	93.65298	-0.01720	19.17765	19.17727	0.00038
1-9	P1132	80	92.51423	92.51963	-0.00540	18.50310	18.50391	-0.00081
1-9	P1132	130	91.93266	91.93266	0.00000	18.12477	18.12584	-0.00107
2-24	P1138	1.5	97.17593	97.17593	0.00000	20.73285	20.67166	0.06119
2-24	P1138	5	97.08452	97.13897	-0.05445	20.60730	20.58596	0.02134

Site	Receptor ID	Height	19th Highest Daily			Annual		
			With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)	With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)
2-24	P1138	10	96.62239	96.75589	-0.13350	20.33032	20.36218	-0.03186
2-24	P1138	20	94.91303	94.98933	-0.07630	19.84170	19.86849	-0.02679
2-24	P1138	40	92.46877	92.45687	0.01190	19.15289	19.15523	-0.00234
2-24	P1139	1.5	97.38042	97.68090	-0.30048	21.59580	21.61214	-0.01634
2-24	P1139	5	97.15618	97.45348	-0.29730	21.04197	21.14837	-0.10640
2-24	P1139	10	96.24514	96.42144	-0.17630	20.43172	20.55253	-0.12081
2-24	P1139	20	94.62392	94.74552	-0.12160	19.87531	19.91776	-0.04245
2-24	P1139	40	92.37492	92.36742	0.00750	19.13977	19.14285	-0.00308
2-26	P1060	1.5	99.32978	99.39858	-0.06880	20.13609	20.16632	-0.03023
2-26	P1060	5	99.12514	99.17354	-0.04840	20.07863	20.10434	-0.02571
2-26	P1060	10	98.55360	98.55660	-0.00300	19.91534	19.93119	-0.01585
2-26	P1060	20	97.23393	97.26626	-0.03233	19.49765	19.50340	-0.00575
2-26	P1060	40	96.36627	96.36247	0.00380	18.84499	18.84890	-0.00391
2-29	P1068	1.5	100.93210	100.93210	0.00000	21.05441	21.10074	-0.04633
2-29	P1068	5	100.58910	100.74980	-0.16070	20.85167	20.88483	-0.03316
2-29	P1068	10	99.48471	99.48801	-0.00330	20.40730	20.42437	-0.01707
2-29	P1068	20	97.47061	97.47061	0.00000	19.71057	19.71835	-0.00778
2-29	P1068	40	96.44529	96.44529	0.00000	18.95664	18.95754	-0.00090
2-29	P1068	50	95.81214	95.81484	-0.00270	18.70660	18.70572	0.00088
4-1	P1635	1.5	105.53760	106.00750	-0.46990	24.45898	24.58240	-0.12342
4-1	P1635	5	105.27700	105.62700	-0.35000	23.97870	24.03659	-0.05789
4-1	P1635	10	104.91300	104.95000	-0.03700	23.34307	23.35845	-0.01538
4-1	P1635	20	101.24540	100.98730	0.25810	22.36131	22.35873	0.00258
4-1	P1635	40	96.92784	96.91554	0.01230	20.68756	20.68533	0.00223
4-1	P1635	80	94.80759	94.79759	0.01000	19.46518	19.46437	0.00081
4-1	P1635	120	93.54283	93.54283	0.00000	18.96663	18.96621	0.00042
4-1	P1636	1.5	111.90950	112.44680	-0.53730	25.68652	25.87842	-0.19190
4-1	P1636	5	111.21590	112.11490	-0.89900	25.11762	25.19500	-0.07738
4-1	P1636	10	110.29180	110.26030	0.03150	24.39416	24.40230	-0.00814
4-1	P1636	20	103.86400	103.66600	0.19800	22.82096	22.80224	0.01872
4-1	P1636	40	97.65276	97.65276	0.00000	20.75948	20.75574	0.00374
4-1	P1636	80	94.93620	94.93620	0.00000	19.47948	19.47827	0.00121
4-1	P1636	120	93.54257	93.54257	0.00000	18.97122	18.97072	0.00050
4-3	P1642	1.5	102.39090	102.72670	-0.33580	23.57767	23.65700	-0.07933
4-3	P1642	5	102.21490	102.20910	0.00580	23.03553	23.06557	-0.03004
4-3	P1642	10	101.68370	101.92140	-0.23770	22.33666	22.35280	-0.01614
4-3	P1642	20	100.65780	100.65050	0.00730	21.68793	21.69593	-0.

Site	Receptor ID	Height	19th Highest Daily			Annual		
			With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)	With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)
5-1	P804	40	94.24665	94.22005	0.02660	21.28941	21.29158	-0.00217
5-1	P804	80	92.96364	92.93234	0.03130	20.43096	20.43669	-0.00573
5-1	P804	160	91.69170	91.69170	0.00000	19.82218	19.82508	-0.00290
5-1	P805	1.5	101.55000	101.81160	-0.26160	24.42538	24.58723	-0.16185
5-1	P805	5	101.30910	101.33630	-0.02720	24.15086	24.26945	-0.11859
5-1	P805	10	99.77213	99.79003	-0.01790	23.49716	23.54336	-0.04620
5-1	P805	20	96.70250	96.67290	0.02960	22.36718	22.36651	0.00067
5-1	P805	40	94.37971	94.35141	0.02830	21.22665	21.22854	-0.00189
5-1	P805	80	92.93529	92.89979	0.03550	20.38269	20.38814	-0.00545
5-1	P805	160	91.65120	91.65120	0.00000	19.81243	19.81504	-0.00261
5-16	P712	1.5	98.03460	98.60480	-0.57020	22.47397	22.62156	-0.14759
5-16	P712	5	97.82553	98.51840	-0.69287	22.35456	22.47955	-0.12499
5-16	P712	10	97.18625	98.02735	-0.84110	22.00885	22.07918	-0.07033
5-16	P712	20	96.40543	96.39213	0.01330	21.07785	21.07320	0.00465
5-16	P712	40	95.09494	95.06744	0.02750	19.74219	19.73754	0.00465
5-16	P712	80	94.08861	94.08731	0.00130	18.78896	18.79400	-0.00504
5-16	P712	110	90.93318	90.92208	0.01110	18.36271	18.36680	-0.00409
5-16	P713	1.5	102.06980	103.31350	-1.24370	25.58136	26.16073	-0.57937
5-16	P713	5	100.80170	102.00480	-1.20310	24.33099	24.17784	0.15315
5-16	P713	10	97.09730	97.41291	-0.31561	22.55989	22.40443	0.15546
5-16	P713	20	96.04708	96.03778	0.00930	20.97332	20.95353	0.01979
5-16	P713	40	94.88874	94.85454	0.03420	19.64126	19.64016	0.00110
5-16	P713	80	93.10362	93.09942	0.00420	18.73102	18.73574	-0.00472
5-16	P713	110	90.84256	90.83496	0.00760	18.33987	18.34378	-0.00391
5-17	P718	1.5	97.26051	97.28101	-0.02050	22.73117	22.79216	-0.06099
5-17	P718	5	97.24994	97.26994	-0.02000	22.59517	22.65734	-0.06217
5-17	P718	10	97.01826	97.24105	-0.22279	22.20382	22.26521	-0.06139
5-17	P718	20	96.35440	96.38963	-0.03523	21.18569	21.22611	-0.04042
5-17	P718	40	95.47149	95.44659	0.02490	19.84922	19.85595	-0.00673
5-17	P718	80	94.11442	94.11312	0.00130	18.90745	18.91204	-0.00459
5-17	P718	110	91.00595	90.99245	0.01350	18.38166	18.38589	-0.00423
5-17	P721	1.5	98.18980	98.57260	-0.38280	23.96826	23.91614	0.05212
5-17	P721	5	98.03461	98.20059	-0.16598	23.61724	23.64197	-0.02473
5-17	P721	10	97.16185	97.61851	-0.45666	22.70703	22.82008	-0.11305
5-17	P721	20	96.37569	96.35979	0.01590	21.06548	21.11425	-0.04877
5-17	P721	40	95.05757	95.19558	-0.13801	19.71107	19.71093	0.00014
5-17	P721	80	91.54175	91.55105	-0.00930	18.80900	18.81375	-0.00475
5-17	P721	110	90.89089	90.88379	0.00710	18.35481	18.35893	-0.00412
5-18b	P747	1.5	98.62045	98.62865	-0.00820	23.86496	23.88390	-0.01894
5-18b	P747	5	98.37091	98.61948	-0.24857	23.57691	23.61892	-0.04201
5-18b	P747	10	97.38184	97.61764	-0.23580	22.73420	22.80484	-0.07064
5-18b	P747	20	96.29653	96.34625	-0.04972	21.12988	21.17676	-0.04688
5-18b	P747	40	95.43897	95.41497	0.02400	19.85538	19.86547	-0.01009
5-18b	P747	80	94.11795	94.11645	0.00150	18.91628	18.92070	-0.00442
5-18b	P747	120	90.79448	90.78918	0.00530	18.29100	18.29457	-0.00357
5-2	P807	1.5	101.58060	101.81980	-0.23920	24.06962	24.22635	-0.15673
5-2	P807	5	101.21740	101.24300	-0.02560	23.87987	24.00208	-0.12221
5-2	P807	10	99.94003	99.96753	-0.02750	23.38782	23.44115	-0.05333
5-2	P807	20	96.60465	96.57055	0.03410	22.37374	22.36844	0.00530
5-2	P807	40	94.40345	94.37695	0.02650	21.21396	21.21683	-0.00287
5-2	P807	50	93.86104	93.82714	0.03390	20.89310	20.89846	-0.00536

Appendix 3.14 Sensitivity Test without Propose Noise Barrier

RSP Concentration (µg/m³)								
Site	Receptor ID	Height (mAG)	10th Highest Daily			Annual		
			With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)	With Noise Barrier	Without Noise Barrier	Difference (With Noise Barrier - Without Noise Barrier)
1-15	P704	5	91.69556	91.70058	-0.00203	40.79031	40.79283	-0.00252
1-15	P704	10	91.69556	91.69691	-0.00135	40.78742	40.78953	-0.00211
1-15	P704	20	91.68800	91.68819	-0.00019	40.77979	40.78111	-0.00132
1-15	P704	40	91.67209	91.67189	0.00020	40.76235	40.76290	-0.00055
1-15	P704	80	91.64935	91.64930	0.00005	40.73313	40.73319	-0.00006
1-15	P706	1.5	91.69655	91.69783	-0.00128	40.78256	40.78508	-0.00252
1-15	P706	5	91.69403	91.69506	-0.00103	40.78066	40.78288	-0.00222
1-15	P706	10	91.68719	91.68775	-0.00056	40.77513	40.77666	-0.00153
1-15	P706	20	91.67118	91.67138	-0.00020	40.75999	40.76059	-0.00060
1-15	P706	40	91.64785	91.64780	0.00005	40.73186	40.73193	-0.00007
1-19	P726	1.5	91.72862	91.73237	-0.00375	40.80337	40.80721	-0.00384
1-19	P726	5	91.72551	91.72880	-0.00329	40.80067	40.80394	-0.00327
1-19	P726	10	91.71696	91.71932	-0.00236	40.79292	40.79489	-0.00197
1-19	P726	20	91.69611	91.69713	-0.00102	40.77246	40.77280	-0.00034
1-19	P726	40	91.66185	91.66123	0.00062	40.73749	40.73731	0.00018
1-19	P726	80	91.62718	91.62661	0.00057	40.69844	40.69848	-0.00004
1-19	P726	90	91.62301	91.62261	0.00040	40.69311	40.69318	-0.00007
1-19	P727	1.5	91.71998	91.72402	-0.00404	40.80802	40.81315	-0.00513
1-19	P727	5	91.71501	91.71746	-0.00245	40.80271	40.80586	-0.00315
1-19	P727	10	91.70383	91.70456	-0.00073	40.79060	40.79143	-0.00083
1-19	P727	20	91.68495	91.68565	-0.00070	40.76849	40.76885	-0.00036
1-19	P727	40	91.65750	91.65725	0.00025	40.73610	40.73605	0.00005
1-19	P727	80	91.62659	91.62612	0.00047	40.69807	40.69810	-0.00003
1-19	P727	90	91.62255	91.62218	0.00037	40.69279	40.69284	-0.00005
1-19	P729	1.5	91.70518	91.70397	0.00121	40.79503	40.79788	-0.00285
1-19	P729	5	91.70190	91.69916	0.00274	40.79199	40.79432	-0.00233
1-19	P729	10	91.69365	91.69211	0.00154	40.78388	40.78523	-0.00135
1-19	P729	20	91.67472	91.67483	-0.00011	40.76521	40.76570	-0.00049
1-19	P729	40	91.65240	91.65233	0.00007	40.73453	40.73453	0.00000
1-19	P729	80	91.62511	91.62479	0.00032	40.69731	40.69732	-0.00001
1-19	P729	90	91.62134	91.62108	0.00026	40.69212	40.69217	-0.00005
1-22	P737	1.5	91.87266	91.87203	0.00063	40.89397	40.89258	0.00139
1-22	P737	5	91.84776	91.84766	0.00010	40.87165	40.87165	0.00000
1-22	P737	10	91.79485	91.79257	0.00228	40.82885	40.82450	0.00435
1-22	P737	20	91.72133	91.71551	0.00582	40.78232	40.78051	0.00181
1-22	P737	40	91.65930	91.66177	-0.00247	40.74077	40.74019	0.00058
1-22	P738	1.5	91.93281	91.93886	-0.00605	40.96717	40.97067	-0.00350
1-22	P738	5	91.89187	91.90246	-0.01059	40.89175	40.89597	-0.00422
1-22	P738	10	91.81795	91.80524	0.01271	40.83404	40.82651	0.00753
1-22	P738	20	91.72881	91.72021	0.00860	40.78581	40.78287	0.00294
1-22	P738	40	91.65863	91.65651	0.00212	40.74001	40.73960	0.00041
1-22	P740	1.5	91.78577	91.79948	-0.01371	40.82877	40.83771	-0.00894
1-22	P740	5	91.78081	91.79235	-0.01154	40.82453	40.83179	-0.00726
1-22	P740	10	91.76589	91.77236	-0.00647	40.81238	40.81578	-0.00340
1-22	P740	20	91.72525	91.72525	0.00000	40.78212	40.78105	0.00107
1-22	P740	40	91.66479	91.66187	0.00292	40.73963	40.73914	0.00049
1-8	P1126	1.5	91.79846	91.79865	-0.00019	40.79630	40.79933	-0.00303
1-8	P1126	5	91.79734	91.79749	-0.00015	40.79301	40.79515	-0.00214
1-8	P1126	10	91.79393	91.79422	-0.00029	40.69593	40.69624	-0.00031
1-8	P1126	20	91.78360	91.78364	-0.00004	40.68024	40.68008	0.00016
1-8	P1126	40	91.76583	91.76590	-0.00007	40.65574	40.65581	-0.00007
1-8	P1126	80	91.75280	91.75287	-0.00007	40.62740	40.62740	-0.00000
1-8	P1126	130	91.74940	91.74941	-0.00001	40.61342	40.61345	-0.00003
1-8	P1128	1.5	91.79917	91.79936	-0.00019	40.70740	40.71032	-0.00292
1-8	P1128	5	91.79805	91.79820	-0.00015	40.70364	40.70570	-0.00206
1-8	P1128	10	91.79474	91.79481	-0.00007	40.69493	40.69556	-0.00063
1-8	P1128	20	91.78487	91.78489	-0.00002	40.67848	40.67853	-0.00005
1-8	P1128	40	91.76734	91.76740	-0.00006	40.65480	40.65483	-0.00003
1-8	P1128	80	91.75226	91.75333	-0.00007	40.62685	40.62690	-0.00005
1-8	P1128	130	91.74949	91.74949	0.00000	40.61323	40.61326	-0.00003
1-9	P1130	1.5	91.79149	91.79155	-0.00006	40.71384	40.71728	-0.00344
1-9	P1130	5	91.79065	91.79072	-0.00007	40.70918	40.71140	-0.00222
1-9	P1130	10	91.78809	91.78816	-0.00007	40.69875	40.69932	-0.00057
1-9	P1130	20	91.78005	91.78011	-0.00006	40.68109	40.68121	-0.00012
1-9	P1130	40	91.76471	91.76478	-0.00007	40.65700	40.65719	-0.00019
1-9	P1130	80	91.75247	91.75255	-0.00008	40.62815	40.62820	-0.00005
1-9	P1130	130	91.74936	91.74936	0.00000	40.61373	40.61376	-0.00003
1-9	P1132	1.5	91.79435	91.79448	-0.00013	40.71238	40.71753	-0.00515
1-9	P1132	5	91.79337	91.79337	-0.00000	40.70841	40.71121	-0.00280
1-9	P1132	10	91.79040	91.79047	-0.00007	40.69886	40.69871	0.00015
1-9	P1132	20	91.78142	91.78147	-0.00005	40.68086	40.68056	0.00030
1-9	P1132	40	91.76523	91.76531	-0.00008	40.65627	40.65641	-0.00014
1-9	P1132	80	91.75268	91.75275	-0.00007	40.62771	40.62777	-0.00006
1-9	P1132	130	91.74940	91.74940	0.00000	40.61357	40.61360	-0.00003
2-24	P1138	1.5	91.83805	91.83832	-0.00027	40.70974	40.70819	0.00155
2-24	P1138	5	91.82893	91.82776	0.00117	40.70561	40.70528	0.00033
2-24	P1138	10	91.81244	91.81452	-0.00208	40.69635	40.69760	-0.00125
2-24	P1138	20	91.79316	91.79357	-0.00041	40.68031	40.67929	0.00102
2-24	P1138	40	91.77011	91.77010	0.00001	40.65375	40.65396	-0.00021
2-24	P1139	1.5	91.86069	91.85956	0.00113	40.73750	40.73868	-0.00118
2-24	P1139	5	91.83224	91.83400	-0.00176	40.71993	40.72368	-0.00375
2-24	P1139	10	91.80968	91.81097	-0.00129	40.69998	40.70408	-0.00410
2-24	P1139	20	91.79317	91.79336	-0.00019	40.68041	40.68198	-0.00157
2-24	P1139	40	91.76912	91.76912	0.00000	40.65317	40.65341	-0.00024
2-26	P1060	1.5	94.10276	94.10321	-0.00045	41.59570	41.59672	-0.00102
2-26	P1060	5	94.10030	94.10065	-0.00035	41.59378	41.59466	-0.00088
2-26	P1060	10	94.09342	94.09342	0.00000	41.58828	41.58855	-0.00027
2-26	P1060	20	94.07716	94.07711	0.00005	41.57400	41.57424	-0.00024
2-26	P1060	40	94.05157	94.05145	0.00012	41.55031	41.55045	-0.00014
2-29	P1068	1.5	94.12571	94.12823	-0.00252	41.62633	41.62781	-0.00148
2-29	P1068	5	94.11827	94.11827	0.00000	41.61984	41.62093	-0.00109
2-29	P1068	10	94.09929	94.09939	-0.00010	41.60539	41.60600	-0.00061
2-29	P1068	20	94.07527	94.07527	0.00000	41.58235	41.58235	0.00000
2-29	P1068	40	94.05124	94.05117	0.00007	41.55476	41.55480	-0.00004
4-1	P1635	1.5	93.94444	93.94444	0.00000	41.54534	41.54534	0.00000
4-1	P1635	5	93.86585	93.86688	-0.00103	42.17714	42.17714	0.00000
4-1	P1635	10	93.83083	93.83029	0.00054	42.14494	42.14553	-0.00059
4-1	P1635	20	93.79796	93.79787	0.00009	42.10425	42.10414	0.00011
4-1	P1635	40	93.75719	93.75718	0.00001	42.00471	42.00460	0.00011
4-1	P1635	80	93.72218	93.72199	0.00019	41.93728	41.93724	0.00004
4-1	P1635	120	93.70647	93.70630	0.00017	41.90877	41.90875	0.00002
4-1	P1636	1.5	93.93339	93.93323	0.00016	42.23699	42.24308	-0.00609
4-1	P1636	5	93.90033	93.90033	0.00000	42.22086	42.22356	-0.00270
4-1	P1636	10	93.86313	93.86214	0.00099	42.19960	42.19998	-0.00038
4-1	P1636	20	93.81591	93.81591	0.00000	42.13128	42.13062	0.00066

Site	Receptor ID	Height (mAG)	10th Highest Daily		Difference (With Noise Barrier - Without Noise Barrier)	Annual		Difference (With Noise Barrier - Without Noise Barrier)
			With Noise Barrier	Without Noise Barrier		With Noise Barrier	Without Noise Barrier	
4-1	P1636	40	93.76411	93.76407	0.00004	42.01206	42.01191	0.00015
4-1	P1636	80	93.72452	93.72430	0.00022	41.94006	41.94001	0.00005
4-1	P1636	120	93.70753	93.70734	0.00019	41.90945	41.90943	0.00002
4-3	P1642	1.5	93.86818	93.87175	-0.00357	42.11451	42.11696	-0.00245
4-3	P1642	5	93.83620	93.83674	-0.00054	42.09913	42.10016	-0.00103
4-3	P1642	10	93.79785	93.79810	-0.00025	42.07860	42.07918	-0.00058
4-3	P1642	20	93.77619	93.77641	-0.00022	42.05531	42.05577	-0.00046
4-3	P1642	40	93.74823	93.74831	-0.00008	41.98913	41.98918	-0.00005
4-3	P1642	80	93.71					

