

### DPM Traveling Emissions Data

Train	Travel Destinations	Max No. of cars	No of Gen Sets	HP Potential	Trips/yr (loaded + unloaded)	Engine Load Factor			Factored HP			Time to travel 450 meters at 30 mph (Sec)	Annual hrs of operation in 450 m segment (hr/yr)	Emissions (g/s)
						Loaded	Unloaded	Ave	Loaded	Unloaded	Ave			
1	Redwood to Willits	10	1	2100	624	60%	40%	50%	1260	840	1050	33.55	5.82	1.36E-05
2	Lombard to Redwood	25	1	2100	624	60%	40%	50%	1260	840	1050	33.55	5.82	1.36E-05
3	Lombard to Willits	60	2	4200	624	70%	25%	48%	2940	1050	1995	33.55	5.82	2.58E-05
4	Lombard to Santa Rosa	60	2	4200	624	40%	25%	33%	1680	1050	1365	33.55	5.82	1.76E-05
<b>Maximum of all overlapping operations (trains 2, 3, &amp; 4) (g/s)</b>													<b>5.69E-05</b>	
<b>Totals (g/s-m^2) using 450 m by 9 m area</b>													<b>1.41E-08</b>	

Emission Factor (g/bhp-hr)  
0.07

**DPM Model Results  
Traveling Trains**

Run #	File Name	Max Result* ( $\mu\text{g}/\text{m}^3$ )	X (m)	Y (m)	Calculated Risk (per million)
0	NCRA_SR01-600_DPM_TRAV_ANN_N-S Bound	0.00844	9	40	2.532
1	NCRA_SR01-300_DPM_TRAV_ANN_E-W Bound	0.00622	80	13	1.865
2	NCRA_SR02-300_DPM_TRAV_ANN_E-W Bound	0.00633	80	9	1.899
3	NCRA_SR03-300_DPM_TRAV_ANN_E-W Bound	0.00654	60	9	1.963
4	NCRA_SR04-300_DPM_TRAV_ANN_E-W Bound	0.00638	70	15	1.913
5	NCRA_SR05-300_DPM_TRAV_ANN_E-W Bound	0.00640	50	9	1.919
6	NCRA_SR01-300_DPM_TRAV_ANN_N-S Bound	0.00844	9	40	2.532
7	NCRA_SR02-300_DPM_TRAV_ANN_N-S Bound	0.00876	9	40	2.627
8	NCRA_SR03-300_DPM_TRAV_ANN_N-S Bound	0.00873	9	40	2.619
9	NCRA_SR04-300_DPM_TRAV_ANN_N-S Bound	0.00858	9	40	2.575
10	NCRA_SR05-300_DPM_TRAV_ANN_N-S Bound	0.00863	9	40	2.589
11	NCRA_SR01-300_DPM_TRAV_ANN_SE-NW Bound	0.00960	-14.85	27.58	2.881
12	NCRA_SR02-300_DPM_TRAV_ANN_SE-NW Bound	0.01000	41.72	-28.99	3.000
13	NCRA_SR03-300_DPM_TRAV_ANN_SE-NW Bound	0.01048	-14.85	27.58	3.144
14	NCRA_SR04-300_DPM_TRAV_ANN_SE-NW Bound	0.01030	-21.92	34.65	3.090
15	NCRA_SR05-300_DPM_TRAV_ANN_SE-NW Bound	0.01000	-14.85	27.58	3.000
16	NCRA_SR01-300_DPM_TRAV_ANN_NE-SW Bound	0.00636	64.35	77.07	1.907
17	NCRA_SR02-300_DPM_TRAV_ANN_NE-SW Bound	0.00655	57.28	70	1.965
18	NCRA_SR03-300_DPM_TRAV_ANN_NE-SW Bound	0.00656	64.35	77.07	1.967
19	NCRA_SR04-300_DPM_TRAV_ANN_NE-SW Bound	0.00662	64.35	77.07	1.987
20	NCRA_SR05-300_DPM_TRAV_ANN_NE-SW Bound	0.00653	57.28	70	1.959
1	NCRA_PL91-300_DPM_TRAV_ANN_N-S Bound	0.00501	17	-80	1.502
2	NCRA_PL92-300_DPM_TRAV_ANN_N-S Bound	0.00521	15	-70	1.562
3	NCRA_PL93-300_DPM_TRAV_ANN_N-S Bound	0.00565	15	-70	1.694
4	NCRA_PL94-300_DPM_TRAV_ANN_N-S Bound	0.00664	15	-90	1.991
5	NCRA_PL97-300_DPM_TRAV_ANN_N-S Bound	0.00573	13	-110	1.718
6	NCRA_PL91-300_DPM_TRAV_ANN_E-W Bound	0.00656	40	-9	1.969
7	NCRA_PL92-300_DPM_TRAV_ANN_E-W Bound	0.00645	40	-9	1.935
8	NCRA_PL93-300_DPM_TRAV_ANN_E-W Bound	0.00721	40	-9	2.164
9	NCRA_PL94-300_DPM_TRAV_ANN_E-W Bound	0.00797	40	-9	2.392
10	NCRA_PL97-300_DPM_TRAV_ANN_E-W Bound	0.00660	40	-9	1.981
11	NCRA_PL91-300_DPM_TRAV_ANN_NE-SW Bound	0.00424	-3.54	-38.89	1.273
12	NCRA_PL92-300_DPM_TRAV_ANN_NE-SW Bound	0.00428	-3.54	-38.89	1.285
13	NCRA_PL93-300_DPM_TRAV_ANN_NE-SW Bound	0.00477	-3.54	-38.89	1.430
14	NCRA_PL94-300_DPM_TRAV_ANN_NE-SW Bound	0.00534	-3.54	-38.89	1.602
15	NCRA_PL97-300_DPM_TRAV_ANN_NE-SW Bound	0.00452	-3.54	-38.89	1.357
16	NCRA_PL91-300_DPM_TRAV_ANN_SE-NW Bound	0.00830	77.07	-64.35	2.490
17	NCRA_PL92-300_DPM_TRAV_ANN_SE-NW Bound	0.00804	70	-57.28	2.412
18	NCRA_PL93-300_DPM_TRAV_ANN_SE-NW Bound	0.00906	70	-57.28	2.719
19	NCRA_PL94-300_DPM_TRAV_ANN_SE-NW Bound	0.00983	62.93	-50.2	2.948
20	NCRA_PL97-300_DPM_TRAV_ANN_SE-NW Bound	0.00817	77.07	-64.35	2.450
1	NCRA_NAPA94-300_DPM_TRAV_ANN_N-S Bound	0.00892	-9	40	2.677
2	NCRA_NAPA95-300_DPM_TRAV_ANN_N-S Bound	0.00823	-9	40	2.470
3	NCRA_NAPA97-300_DPM_TRAV_ANN_N-S Bound	0.00919	-9	40	2.757
4	NCRA_NAPA00-300_DPM_TRAV_ANN_N-S Bound	0.01041	-9	40	3.122
5	NCRA_NAPA01-300_DPM_TRAV_ANN_N-S Bound	0.00932	-9	40	2.795
6	NCRA_NAPA94-300_DPM_TRAV_ANN_E-W Bound	0.00482	-40	9	1.446
7	NCRA_NAPA95-300_DPM_TRAV_ANN_E-W Bound	0.00530	-40	9	1.590
8	NCRA_NAPA97-300_DPM_TRAV_ANN_E-W Bound	0.00540	-50	9	1.620
9	NCRA_NAPA00-300_DPM_TRAV_ANN_E-W Bound	0.00517	-40	9	1.550
10	NCRA_NAPA01-300_DPM_TRAV_ANN_E-W Bound	0.00487	-40	9	1.462
11	NCRA_NAPA94-300_DPM_TRAV_ANN_NE-SW Bound	0.00843	-34.65	-21.92	2.528
12	NCRA_NAPA95-300_DPM_TRAV_ANN_NE-SW Bound	0.00855	-34.65	-21.92	2.565
13	NCRA_NAPA97-300_DPM_TRAV_ANN_NE-SW Bound	0.00891	-34.65	-21.92	2.673
14	NCRA_NAPA00-300_DPM_TRAV_ANN_NE-SW Bound	0.00886	-34.65	-21.92	2.657
15	NCRA_NAPA01-300_DPM_TRAV_ANN_NE-SW Bound	0.00890	-34.65	-21.92	2.669
16	NCRA_NAPA94-300_DPM_TRAV_ANN_SE-NW Bound	0.00528	-21.92	34.65	1.584
17	NCRA_NAPA95-300_DPM_TRAV_ANN_SE-NW Bound	0.00505	-20.51	36.06	1.516
18	NCRA_NAPA97-300_DPM_TRAV_ANN_SE-NW Bound	0.00539	-21.92	34.65	1.616
19	NCRA_NAPA00-300_DPM_TRAV_ANN_SE-NW Bound	0.00602	-21.92	34.65	1.805
20	NCRA_NAPA01-300_DPM_TRAV_ANN_SE-NW Bound	0.00541	-20.51	36.06	1.624

\* Emission rate was incorrectly calculated initially for an area source due to using incorrect width of area (used 6m instead of 9m). This results in overestimating the impacts by a factor of 0.66837. Max results were thus multiplied by this factor to give the Max Results for a width of 9m for the area calculation rather than 6m.