

Diesel Exhaust PM Risk (Potential Cancer Cases in A Million) for 1500 HP Engines

Hours	EF = 0.02 g/bhp-hr											EF = 0.15 g/bhp-hr										
	Downwind Distance (m)											Downwind Distance (m)										
	20	30	40	50	70	100	200	400	800	1200	1600	20	30	40	50	70	100	200	400	800	1200	1600
10	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	1	0	0	0	0	
20	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	1	0	0	0	0	
30	1	1	1	1	1	1	0	0	0	0	0	5	5	5	5	4	2	0	0	0	0	
40	1	1	1	1	1	1	0	0	0	0	0	7	7	7	7	6	2	1	0	0	0	
50	1	1	1	1	1	1	0	0	0	0	0	9	9	9	9	7	3	1	0	0	0	
100	2	2	2	2	2	2	1	0	0	0	0	17	17	17	17	15	6	2	0	0	0	
150	3	3	3	3	3	3	1	0	0	0	0	26	26	26	26	22	9	2	1	0	0	
200	5	5	5	5	5	4	2	0	0	0	0	34	34	34	34	30	12	3	1	0	0	
300	7	7	7	7	7	6	2	1	0	0	0	51	51	51	51	44	18	5	1	1	0	
400	9	9	9	9	9	8	3	1	0	0	0	69	69	69	69	59	24	7	2	1	0	
500	11	11	11	11	11	10	4	1	0	0	0	86	86	86	86	74	30	8	2	1	1	
1000	23	23	23	23	23	20	8	2	1	0	0	172	172	172	172	147	59	16	4	2	1	

Hours	EF = 0.40 g/bhp-hr											EF = 0.55 g/bhp-hr										
	Downwind Distance (m)											Downwind Distance (m)										
	20	30	40	50	70	100	200	400	800	1200	1600	20	30	40	50	70	100	200	400	800	1200	1600
10	5	5	5	5	5	4	2	0	0	0	0	6	6	6	6	6	2	0	0	0	0	
20	9	9	9	9	9	8	3	1	0	0	0	12	12	12	12	11	4	1	0	0	0	
30	14	14	14	14	14	12	5	1	0	0	0	19	19	19	19	16	6	2	0	0	0	
40	18	18	18	18	18	16	6	2	0	0	0	25	25	25	25	22	9	3	0	0	0	
50	23	23	23	23	23	20	8	2	1	0	0	32	32	32	32	27	11	3	1	0	0	
100	46	46	46	46	46	39	16	4	1	1	0	63	63	63	63	54	22	6	2	1	0	
150	69	69	69	69	69	59	24	7	2	1	1	95	95	95	95	81	33	9	2	1	1	
200	91	91	91	91	91	79	32	9	2	1	1	126	126	126	126	108	44	12	3	1	1	
300	137	137	137	137	137	118	48	13	3	2	1	189	189	189	189	162	65	18	5	2	1	
400	183	183	183	183	183	157	63	17	4	2	1	252	252	252	252	216	87	24	6	3	2	
500	229	229	229	229	229	196	79	22	6	2	2	315	315	315	315	270	109	30	8	3	2	
1000	458	458	458	458	458	393	158	44	11	5	3	630	630	630	630	540	217	60	15	7	4	

Hours	EF = 1.0 g/bhp-hr										
	Downwind Distance (m)										
	20	30	40	50	70	100	200	400	800	1200	1600
10	12	12	12	12	12	10	4	1	0	0	0
20	23	23	23	23	23	19	8	2	1	0	0
30	34	34	34	34	34	30	12	3	1	0	0
40	46	46	46	46	46	40	16	5	1	1	0
50	58	58	58	58	58	49	19	5	2	1	1
100	114	114	114	114	114	98	40	11	3	2	1
150	172	172	172	172	172	147	59	16	4	2	2
200	229	229	229	229	229	197	79	22	5	2	2
300	343	343	343	343	343	295	119	33	9	4	2
400	458	458	458	458	458	393	158	44	11	5	3
500	572	572	572	572	572	491	198	54	14	6	4
1000	1145	1145	1145	1145	1145	982	395	110	27	12	8

Assume: 50% load.

Model Used: ISCST3; Meteorological Data: West Los Angeles (1981), Urban Option.

The bold number indicates the downwind distance at the maximum risks.