

### Diesel Exhaust PM Risk (Potential Cancer Cases in A Million) for 50 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	1	1	1	1	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	3	2	1	1	1	0	0	0	0	0	0
30	1	0	0	0	0	0	0	0	0	0	0	4	3	2	1	1	0	0	0	0	0	0
40	1	1	0	0	0	0	0	0	0	0	0	5	4	3	2	1	1	0	0	0	0	0
50	1	1	0	0	0	0	0	0	0	0	0	7	5	3	2	1	1	0	0	0	0	0
100	2	1	1	1	0	0	0	0	0	0	0	13	10	7	5	3	1	0	0	0	0	0
150	3	2	1	1	1	0	0	0	0	0	0	19	15	10	7	4	2	1	0	0	0	0
200	4	3	2	1	1	0	0	0	0	0	0	26	19	14	10	5	3	1	0	0	0	0
300	5	4	3	2	1	1	0	0	0	0	0	39	29	20	14	8	4	1	0	0	0	0
400	7	5	4	3	1	1	0	0	0	0	0	52	39	27	19	11	6	1	0	0	0	0
500	9	6	5	3	2	1	0	0	0	0	0	65	48	34	24	13	7	2	0	0	0	0
1000	17	13	9	6	4	2	1	0	0	0	0	130	97	67	48	27	14	4	1	0	0	0

Hours	EF = 0.4 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	4	3	2	1	1	0	0	0	0	0	0	5	4	3	2	1	1	0	0	0	0	0
20	7	5	4	3	1	1	0	0	0	0	0	10	7	5	4	2	1	0	0	0	0	0
30	10	8	5	4	2	1	0	0	0	0	0	14	11	7	5	3	2	0	0	0	0	0
40	14	10	7	5	3	2	0	0	0	0	0	19	14	10	7	4	2	1	0	0	0	0
50	17	13	9	6	4	2	1	0	0	0	0	24	18	12	9	5	3	1	0	0	0	0
100	35	26	18	13	7	4	1	0	0	0	0	48	36	25	18	10	5	1	0	0	0	0
150	52	39	27	19	11	6	1	0	0	0	0	71	53	37	26	15	8	2	1	0	0	0
200	69	52	36	25	14	7	2	1	0	0	0	95	71	49	35	20	10	3	1	0	0	0
300	104	77	54	38	21	11	3	1	0	0	0	143	106	74	52	29	15	4	1	0	0	0
400	138	103	72	51	29	15	4	1	0	0	0	190	142	99	70	39	20	5	1	0	0	0
500	173	129	90	64	36	18	5	1	0	0	0	238	177	124	87	49	25	7	2	0	0	0
1000	346	258	180	127	71	37	10	2	1	0	0	475	355	247	175	98	50	13	3	1	0	0

Hours	EF = 1.0 g/bhp-hr										
	Downwind Distance (m)										
	20	30	40	50	70	100	200	400	800	1200	1600
10	9	7	5	3	2	1	0	0	0	0	0
20	17	13	9	6	4	2	1	0	0	0	0
30	26	19	14	10	5	3	1	0	0	0	0
40	35	26	18	13	7	4	1	0	0	0	0
50	43	32	23	16	9	5	1	0	0	0	0
100	87	65	45	32	18	9	2	1	0	0	0
150	130	97	68	48	27	14	4	1	0	0	0
200	173	129	90	64	36	18	5	1	0	0	0
300	259	194	135	95	54	28	7	2	1	0	0
400	346	258	180	127	71	37	10	2	1	0	0
500	432	322	225	159	89	46	12	3	1	0	0
1000	864	645	450	317	178	92	24	6	1	1	1

Assume: 75% load.

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

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

[www.arb.ca.gov/ab2588/diesel/75modified.xls](http://www.arb.ca.gov/ab2588/diesel/75modified.xls)