

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	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	4	2	2	1	1	0	0	0	0	0	0
40	1	0	0	0	0	0	0	0	0	0	0	5	3	2	1	1	0	0	0	0	0	0
50	1	0	0	0	0	0	0	0	0	0	0	6	4	2	2	1	0	0	0	0	0	0
100	2	1	1	0	0	0	0	0	0	0	0	12	8	5	3	2	1	0	0	0	0	0
150	2	2	1	1	0	0	0	0	0	0	0	18	11	7	5	3	1	0	0	0	0	0
200	3	2	1	1	0	0	0	0	0	0	0	23	15	10	7	4	2	0	0	0	0	0
300	5	3	2	1	1	0	0	0	0	0	0	35	23	15	10	5	3	1	0	0	0	0
400	6	4	3	2	1	0	0	0	0	0	0	47	30	20	14	7	4	1	0	0	0	0
500	8	5	3	2	1	1	0	0	0	0	0	58	38	25	17	9	5	1	0	0	0	0
1000	16	10	7	5	2	1	0	0	0	0	0	117	75	49	34	18	9	2	1	0	0	0

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	3	2	1	1	1	0	0	0	0	0	0	4	3	2	1	1	0	0	0	0	0	0
20	6	4	2	2	1	1	0	0	0	0	0	9	6	3	3	1	1	0	0	0	0	0
30	9	6	4	3	2	1	0	0	0	0	0	13	8	6	4	2	1	0	0	0	0	0
40	12	8	5	4	2	1	0	0	0	0	0	17	11	7	5	3	1	0	0	0	0	0
50	16	10	7	4	2	1	0	0	0	0	0	21	14	9	6	3	2	0	0	0	0	0
100	31	20	13	9	5	2	1	0	0	0	0	43	28	18	12	7	3	1	0	0	0	0
150	47	30	20	13	7	4	1	0	0	0	0	64	41	27	18	10	5	1	0	0	0	0
200	62	40	26	18	10	5	1	0	0	0	0	86	55	36	25	14	7	2	0	0	0	0
300	93	60	40	27	15	7	2	0	0	0	0	128	83	54	37	20	10	3	0	0	0	0
400	124	80	53	36	20	10	2	1	0	0	0	171	110	72	50	27	14	3	1	0	0	0
500	155	100	66	45	25	12	3	1	0	0	0	213	138	91	62	34	17	4	1	0	0	0
1000	311	201	132	90	49	25	6	2	0	0	0	427	276	181	124	68	34	9	2	0	0	0

Hours	EF = 1.0 g/bhp-hr										
	Downwind Distance (m)										
	20	30	40	50	70	100	200	400	800	1200	1600
10	8	5	3	2	2	1	0	0	0	0	
20	16	10	6	5	2	2	0	0	0	0	
30	23	15	10	7	4	2	1	0	0	0	
40	31	20	13	9	5	2	1	0	0	0	
50	39	25	16	11	6	3	1	0	0	0	
100	78	51	33	23	12	6	2	0	0	0	
150	117	75	50	33	19	9	2	1	0	0	
200	156	100	66	45	25	12	3	1	0	0	
300	233	151	99	68	37	19	5	1	0	0	
400	311	201	131	90	49	25	6	2	0	0	
500	388	251	165	113	61	31	8	2	1	0	
1000	777	502	330	226	123	62	16	4	1	1	

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.

www.arb.ca.gov/ab2588/diesel/50modified.xls