

Diesel Exhaust PM Risk (Potential Cancer Cases in A Million) for 750 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	0
20	1	1	1	1	0	0	0	0	0	0	0	4	4	4	4	3	2	1	0	0	0	0
30	1	1	1	1	1	0	0	0	0	0	0	6	6	6	6	5	3	1	0	0	0	0
40	1	1	1	1	1	1	0	0	0	0	0	8	8	8	8	7	4	1	0	0	0	0
50	1	1	1	1	1	1	0	0	0	0	0	10	10	10	10	8	5	2	0	0	0	0
100	3	3	3	3	2	1	0	0	0	0	0	20	20	20	20	16	11	3	1	0	0	0
150	4	4	4	4	3	2	1	0	0	0	0	30	30	30	30	25	16	5	1	0	0	0
200	5	5	5	5	4	3	1	0	0	0	0	40	40	40	40	33	21	7	2	0	0	0
300	8	8	8	8	7	4	1	0	0	0	0	61	61	61	61	49	32	10	3	1	0	0
400	11	11	11	11	9	6	2	0	0	0	0	81	81	81	81	66	42	13	3	1	0	0
500	13	13	13	13	11	7	2	1	0	0	0	101	101	101	101	82	53	17	4	1	0	0
1000	27	27	27	27	22	14	4	1	0	0	0	202	202	202	202	164	106	33	8	2	1	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	4	3	1	0	0	0	0	7	7	7	7	6	4	1	0	0	0	0
20	11	11	11	11	9	6	2	0	0	0	0	15	15	15	15	12	8	3	0	0	0	0
30	16	16	16	16	13	8	2	1	0	0	0	22	22	22	22	18	12	3	1	0	0	0
40	21	21	21	21	17	11	3	1	0	0	0	30	30	30	30	24	15	5	1	0	0	0
50	27	27	27	27	22	14	4	1	0	0	0	37	37	37	37	30	20	6	2	0	0	0
100	54	54	54	54	44	28	9	2	1	0	0	74	74	74	74	60	39	12	3	1	0	0
150	81	81	81	81	66	43	13	3	1	0	0	111	111	111	111	90	59	18	5	1	0	0
200	108	108	108	108	87	57	18	4	1	1	0	148	148	148	148	120	78	24	6	2	1	0
300	161	161	161	161	131	85	26	7	2	1	1	222	222	222	222	180	117	36	9	2	1	1
400	215	215	215	215	175	113	35	9	2	1	1	296	296	296	296	240	156	48	12	3	1	1
500	269	269	269	269	218	142	44	11	3	1	1	370	370	370	370	300	195	61	15	4	2	1
1000	538	538	538	538	437	283	88	22	6	2	2	740	740	740	740	601	389	121	31	8	3	2

Hours	EF = 1.0 g/bhp-hr										
	Downwind Distance (m)										
	20	30	40	50	70	100	200	400	800	1200	1600
10	13	13	13	13	11	7	2	1	0	0	0
20	27	27	27	27	22	14	5	1	0	0	0
30	40	40	40	40	33	21	6	2	1	0	0
40	54	54	54	54	44	28	9	2	1	0	0
50	67	67	67	67	54	36	11	3	1	0	0
100	135	135	135	135	109	71	22	5	2	1	1
150	201	201	201	201	164	107	33	9	2	1	1
200	269	269	269	269	219	142	44	11	3	2	1
300	404	404	404	404	327	212	66	17	4	2	2
400	538	538	538	538	437	283	88	23	5	2	2
500	673	673	673	673	546	354	110	28	7	3	2
1000	1345	1345	1345	1345	1093	708	220	56	14	6	4

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.