

Diesel Exhaust PM Risk (Potential Cancer Cases in A Million) for 2600 HP Engines

Hours	EF = 0.02 g/bhp-hr												EF = 0.15 g/bhp-hr											
	Downwind Distance (m)												Downwind Distance (m)											
	50	80	100	120	150	175	200	280	370	400	800	1600	50	80	100	120	150	175	200	280	370	400	800	1600
10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	1	1	1	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	2	1	1	0	0	
40	1	1	1	1	1	1	0	0	0	0	0	0	4	4	4	4	4	4	3	2	2	1	0	0
50	1	1	1	1	1	1	1	0	0	0	0	0	4	4	4	4	4	4	3	2	2	1	0	0
100	1	1	1	1	1	1	1	1	1	1	0	0	9	9	9	9	9	9	8	6	4	4	1	0
150	2	2	2	2	2	2	2	1	1	1	0	0	13	13	13	13	13	13	12	9	6	5	2	1
200	2	2	2	2	2	2	2	2	1	1	0	0	18	18	18	18	18	17	16	12	8	7	2	1
300	4	4	4	4	4	4	3	2	2	1	0	0	26	26	26	26	26	26	25	18	12	11	3	1
400	5	5	5	5	5	5	4	3	2	2	1	0	35	35	35	35	35	35	33	24	16	14	4	1
500	6	6	6	6	6	6	6	4	3	2	1	0	44	44	44	44	44	44	41	30	20	18	5	2
1000	12	12	12	12	12	12	11	8	5	5	1	0	88	88	88	88	88	87	82	59	40	36	10	3

Hours	EF = 0.4 g/bhp-hr												EF = 0.55 g/bhp-hr											
	Downwind Distance (m)												Downwind Distance (m)											
	50	80	100	120	150	175	200	280	370	400	800	1600	50	80	100	120	150	175	200	280	370	400	800	1600
10	2	2	2	2	2	2	2	2	1	1	0	0	3	3	3	3	3	3	3	2	2	1	0	0
20	5	5	5	5	5	5	4	3	2	2	1	0	7	7	7	7	7	6	6	4	3	3	1	0
30	7	7	7	7	7	7	7	5	3	3	1	0	10	10	10	10	10	10	9	7	4	4	1	0
40	9	9	9	9	9	9	9	6	4	4	1	0	13	13	13	13	13	13	12	9	6	5	2	1
50	12	12	12	12	12	12	11	8	5	5	1	0	16	16	16	16	16	16	15	11	7	7	2	1
100	24	24	24	24	24	23	22	16	11	10	3	1	32	32	32	32	32	32	30	22	15	13	4	1
150	35	35	35	35	35	35	33	24	16	14	4	1	48	48	48	48	48	48	45	33	22	20	6	2
200	47	47	47	47	47	46	44	32	22	19	6	2	65	65	65	65	65	64	60	44	30	26	8	2
300	70	70	70	70	70	70	66	48	32	28	8	3	97	97	97	97	97	96	90	65	44	39	11	4
400	94	94	94	94	94	93	87	63	43	38	11	3	129	129	129	129	129	128	120	87	59	52	15	5
500	117	117	117	117	117	116	109	79	54	47	14	4	161	161	161	161	161	160	150	109	74	65	19	6
1000	235	235	235	235	235	232	218	158	108	95	27	8	323	323	323	323	323	319	300	218	148	130	38	12

Hours	EF = 1.0 g/bhp-hr											
	Downwind Distance (m)											
	50	80	100	120	150	175	200	280	370	400	800	1600
10	6	6	6	6	6	6	6	4	3	2	1	0
20	12	12	12	12	12	12	11	8	6	5	1	1
30	18	18	18	18	18	18	17	12	8	7	2	1
40	24	24	24	24	24	23	22	16	11	10	3	1
50	29	29	29	29	29	29	27	20	14	12	4	1
100	59	59	59	59	59	58	55	40	27	24	7	2
150	88	88	88	88	88	87	82	60	40	36	10	3
200	117	117	117	117	117	116	109	79	54	47	14	4
300	176	176	176	176	176	174	164	119	81	71	21	6
400	235	235	235	235	235	232	219	158	108	95	27	9
500	293	293	293	293	293	290	273	198	135	118	34	11
1000	587	587	587	587	587	581	546	396	269	237	68	21

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.