Diesel Exhaust PM Risk (Potential Cancer Cases in A Million) for 550 HP Engines

	EF = 0.01 g/bhp-hr											EF = 0.15 g/bhp-hr										
	Downwind Distance (m)											Downwind Distance (m)										
Hours	30	**40**	50	70	100	200	300	400	800	1200	1600	30	**40**	50	70	100	200	300	400	800	1200	1600
10	0	0	0	0	0	0	0	0	0	0	0	2	2	1	2	1	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	4	4	3	3	2	1	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	6	6	4	5	3	1	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	7	7	6	7	5	1	1	0	0	0	0
50	1	1	0	1	0	0	0	0	0	0	0	9	9	7	9	6	2	1	0	0	0	0
100	1	1	1	1	1	0	0	0	0	0	0	19	19	15	17	11	4	2	1	0	0	0
150	2	2	1	2	1	0	0	0	0	0	0	28	28	22	26	17	5	2	1	0	0	0
200	2	2	2	2	2	0	0	0	0	0	0	37	37	29	34	23	7	3	2	0	0	0
300	4	4	3	3	2	1	0	0	0	0	0	56	56	44	51	34	11	5	3	1	0	0
400	5	5	4	5	3	1	0	0	0	0	0	74	74	59	68	45	14	7	4	1	0	0
500	6	6	5	6	4	1	1	0	0	0	0	93	93	73	85	57	18	8	5	1	1	0
1000	12	12	10	11	8	2	1	1	0	0	0	186	186	146	170	113	36	17	9	2	1	1

	EF = 0.40 g/bhp-hr											EF = 0.55 g/bhp-hr										
	Downwind Distance (m)											Downwind Distance (m)										
Hours	30	**40**	50	70	100	200	300	400	800	1200	1600	30	**40**	50	70	100	200	300	400	800	1200	1600
10	3	5	4	5	3	1	0	0	0	0	0	7	7	5	6	4	1	1	0	0	0	0
20	10	10	8	9	6	2	1	0	0	0	0	14	14	11	12	8	3	1	1	0	0	0
30	15	15	12	14	9	3	1	1	0	0	0	20	20	16	19	12	4	2	1	0	0	0
40	20	20	16	18	12	4	2	1	0	0	0	27	27	21	25	17	5	2	1	0	0	0
50	25	25	20	23	15	5	2	1	0	0	0	34	34	27	31	21	7	3	2	0	0	0
100	50	50	39	45	30	10	4	2	1	0	0	68	68	54	62	41	13	6	3	1	0	0
150	74	74	59	68	45	14	7	4	1	0	0	102	102	80	94	62	20	9	5	1	1	0
200	99	99	78	91	60	19	9	5	1	1	0	136	136	107	125	83	26	12	7	2	1	0
300	149	149	117	136	90	29	13	7	2	1	1	205	205	161	187	124	40	18	10	3	1	1
400	198	198	156	181	121	38	18	10	2	1	1	273	273	215	249	166	53	24	14	3	2	1
500	248	248	195	227	151	48	22	12	3	1	1	341	341	268	312	207	66	30	17	4	2	1
1000	496	496	390	454	302	96	44	25	6	3	2	682	682	537	624	415	132	61	34	8	4	2

	EF = 1.00 g/bhp-hr										
	Downwind Distance (m)										
Hours	30	**40**	50	70	100	200	300	400	800	1200	1600
10	12	12	10	11	8	2	1	1	0	0	0
20	25	25	20	23	15	5	2	1	0	0	0
30	37	37	29	34	23	7	3	2	0	0	0
40	50	50	39	45	30	10	4	2	1	0	0
50	62	62	49	57	38	12	6	3	1	0	0
100	124	124	98	113	75	24	11	6	2	1	0
150	186	186	146	170	113	36	17	9	2	1	1
200	248	248	195	227	151	48	22	12	3	1	1
300	372	372	293	340	226	72	33	19	5	2	1
400	496	496	390	454	302	96	44	25	6	3	2
500	620	620	488	567	377	120	55	31	8	3	2
1000	1240	1240	976	1134	754	240	110	62	15	7	4

Assume: 75% load.

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

Stack Info: emission rate = 0.01389 g/s; stack diameter = 0.152 m; stack height = 3 m; stack temp = 622 K; stack velocity = 73.1 m/s.

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