

APPENDIX B-3

SUMMARIES OF TOXIC POLLUTANTS

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TOXIC AIR CONTAMINANTS
2000 ANNUAL REPORT
DEC 2001

SUMMARY OF TOXIC POLLUTANTS

SORTED BY POLLUTANT

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Acetaldehyde	72	72	11	57000
Acrolein	3.9	6	1	200
Acrylic acid	190	3	0	7
Acrylonitrile	.67	3	3	100
Allyl chloride	193	3	0	100
Ammonia (NH3) pollutant	19300	71	23	2800000
Arsenic (all)	.024	201	24	11
Asbestos pollutant	.003	2	0	.000
Benzene	6.7	1104	158	60000
Benzyl chloride	2320	4	0	2400
Beryllium (all) pollutant	.015	198	11	.910
Butadiene, 1,3-	1.1	9	6	12000
Butyl cellosolve	3860	459	10	290000
Cadmium	.046	206	21	51
Carbon tetrachloride	4.6	41	1	2600
Cellosolve	38600	68	1	270000
Cellosolve acetate	12400	52	0	9200
Chlorinated dioxins & furans (	.000012	34	14	.0006300
Chlorine pollutant	1370	5	1	1900
Chlorobenzene	13500	7	0	3500
Chlorobenzene - other/not spec	13500	7	0	12000
Chloroform	36	93	40	19000
Chromium (hexavalent)	.0014	230	60	8.6000
Copper (all) pollutant	463	35	0	320
Cresol	34700	11	0	770
Dichlorobenzene	68	34	5	1500
Dioxane, 1,4-	25	85	11	1500
Epiclorohydrin	8.3	4	0	6.6
Ethyl acrylate	9260	5	0	85
Ethyl benzene	190000	201	0	30000
Ethyl chloride	1930000	29	0	1400
Ethylene dibromide	2.7	28	1	270
Ethylene dichloride	9.7	67	21	1100
Ethylene oxide	2.1	41	3	41
Formaldehyde	33	460	77	200000
Glycol ether - other/not spec	3860	166	3	69000
Hexachlorobenzene	.39	1	0	.00
Hexamethylene-1,6-diisocyanate	1.9	1	0	1.3
Hexane	39000	91	3	310000
Hydrochloric acid mist pollutant	1350	49	3	20000
Hydrogen Chloride (HCl)	1350	44	11	150000
Hydrogen Fluoride (HF)	1140	29	0	1200
Hydrogen Sulfide (H2S)	8110	61	2	98000
Isophorone	390000	5	0	160
Lead (all) pollutant	29	210	2	2000
Manganese	77	182	5	1200
Mercury (all) pollutant	57.9	200	3	510
Methyl alcohol	120000	340	1	330000
Methyl bromide	1160	2	1	2500
Methyl cellosolve	3860	18	1	9700
Methyl methacrylate	189000	4	0	15
Methylene chloride	190	154	69	120000
Naphthalene	270	6	0	110
Nickel pollutant	.73	209	29	590
PAH's (benzo[a]pyrene equiv)	.043	37	8	480
Perchloroethylene	33	930	865	680000
Phenol	8690	19	1	20000
Phosphine	1930	1	0	110
Phthalic anhydride	1350000	3	0	50

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
 TOXIC AIR CONTAMINANTS
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SUMMARY OF TOXIC POLLUTANTS
 SORTED BY POLLUTANT (cont)

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Polychlorinated biphenyl (PCB)	.007	7	6	3,000
Selenium	96.5	28	2	400
Styrene	135000	83	0	220000
Toluene	38600	902	1	380000
Trichloroethane, 1,1,1- (w/o)	61800	131	0	110000
Trichloroethane, 1,1,1- (with)	61800	44	0	13000
Trichloroethylene	97	144	46	41000
Vinyl chloride	2.5	53	39	9000
Vinylidene chloride	6180	36	0	350
Xylene	57900	1033	2	440000
Zinc pollutant	6760	34	0	3200
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70 pollutants				6810013

number of toxic pollutants tracked in BAAQMD: 113
 number of toxic pollutants reported in BAAQMD: 70
 number of toxic pollutants reported > cutoff: 44

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TOXIC AIR CONTAMINANTS
2000 ANNUAL REPORT
DEC 2001

SUMMARY OF TOXIC POLLUTANTS

SORTED BY EMISSIONS

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Ammonia (NH3) pollutant	19300	71	23	2800000
Perchloroethylene	33	930	865	680000
Xylene	57900	1033	2	440000
Toluene	38600	902	1	380000
Methyl alcohol	120000	340	1	330000
Hexane	39000	91	3	310000
Butyl cellosolve	3860	459	10	290000
Cellosolve	38600	68	1	270000
Styrene	135000	83	0	220000
Formaldehyde	33	460	77	200000
Hydrogen Chloride (HCl)	1350	44	11	150000
Methylene chloride	190	154	69	120000
Trichloroethane, 1,1,1- (w/o)	61800	131	0	110000
Hydrogen Sulfide (H2S)	8110	61	2	98000
Glycol ether - other/not spec	3860	166	3	69000
Benzene	6.7	1104	158	60000
Acetaldehyde	72	72	11	57000
Trichloroethylene	97	144	46	41000
Ethyl benzene	190000	201	0	30000
Phenol	8690	19	1	20000
Hydrochloric acid mist pollutant	1350	49	3	20000
Chloroform	36	93	40	19000
Trichloroethane, 1,1,1- (with)	61800	44	0	13000
Butadiene, 1,3-	1.1	9	6	12000
Chlorobenzene - other/not spec	13500	7	0	12000
Methyl cellosolve	3860	18	1	9700
Cellosolve acetate	12400	52	0	9200
Vinyl chloride	2.5	53	39	9000
Chlorobenzene	13500	7	0	3500
Zinc pollutant	6760	34	0	3200
Carbon tetrachloride	4.6	41	1	2600
Methyl bromide	1160	2	1	2500
Benzyl chloride	2320	4	0	2400
Lead (all) pollutant	29	210	2	2000
Chlorine pollutant	1370	5	1	1900
Dioxane, 1,4-	25	85	11	1500
Dichlorobenzene	68	34	5	1500
Ethyl chloride	1930000	29	0	1400
Hydrogen Fluoride (HF)	1140	29	0	1200
Manganese	77	182	5	1200
Ethylene dichloride	9.7	67	21	1100
Cresol	34700	11	0	770
Nickel pollutant	.73	209	29	590
Mercury (all) pollutant	57.9	200	3	510
PAH's (benzo[a]pyrene equiv)	.043	37	8	480
Selenium	96.5	28	2	400
Vinylidene chloride	6180	36	0	350
Copper (all) pollutant	463	35	0	320
Ethylene dibromide	2.7	28	1	270
Acrolein	3.9	6	1	200
Isophorone	390000	5	0	160
Naphthalene	270	6	0	110
Phosphine	1930	1	0	110
Acrylonitrile	.67	3	3	100
Allyl chloride	193	3	0	100
Ethyl acrylate	9260	5	0	85
Cadmium	.046	206	21	51
Phthalic anhydride	1350000	3	0	50
Ethylene oxide	2.1	41	3	41

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SUMMARY OF TOXIC POLLUTANTS
 SORTED BY EMISSIONS (cont)

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Methyl methacrylate	189000	4	0	15
Arsenic (all)	.024	201	24	11
Chromium (hexavalent)	.0014	230	60	8.6000
Acrylic acid	190	3	0	7
Epichlorohydrin	8.3	4	0	6.6
Polychlorinated biphenyl (PCB)	.007	7	6	3.000
Hexamethylene-1,6-diisocyanate	1.9	1	0	1.3
Beryllium (all) pollutant	.015	198	11	.910
Hexachlorobenzene	.39	1	0	.00
Chlorinated dioxins & furans (.0000012	34	14	.0006300
Asbestos pollutant	.003	2	0	.000
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70 pollutants				6810014

number of toxic pollutants tracked in BAAQMD: 113
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 number of toxic pollutants reported > cutoff: 44

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SUMMARY OF TOXIC POLLUTANTS
SORTED BY OCCURRENCES

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Benzene	6.7	1104	158	60000
Xylene	57900	1033	2	440000
Perchloroethylene	33	930	865	680000
Toluene	38600	902	1	380000
Formaldehyde	33	460	77	200000
Butyl cellosolve	3860	459	10	290000
Methyl alcohol	120000	340	1	330000
Chromium (hexavalent)	.0014	230	60	8.6000
Lead (all) pollutant	.29	210	2	2000
Nickel pollutant	.73	209	29	590
Cadmium	.046	206	21	51
Arsenic (all)	.024	201	24	11
Ethyl benzene	190000	201	0	30000
Mercury (all) pollutant	57.9	200	3	510
Beryllium (all) pollutant	.015	198	11	.910
Manganese	.77	182	5	1200
Glycol ether - other/not spec	3860	166	3	69000
Methylene chloride	190	154	69	120000
Trichloroethylene	97	144	46	41000
Trichloroethane, 1,1,1- (w/o)	61800	131	0	110000
Chloroform	36	93	40	19000
Hexane	39000	91	3	310000
Dioxane, 1,4-	25	85	11	1500
Styrene	135000	83	0	220000
Acetaldehyde	72	72	11	57000
Ammonia (NH3) pollutant	19300	71	23	2800000
Cellosolve	38600	68	1	270000
Ethylene dichloride	9.7	67	21	1100
Hydrogen Sulfide (H2S)	8110	61	2	98000
Vinyl chloride	2.5	53	39	9000
Cellosolve acetate	12400	52	0	9200
Hydrochloric acid mist pollutant	1350	49	3	20000
Hydrogen Chloride (HCl)	1350	44	11	150000
Trichloroethane, 1,1,1- (with)	61800	44	0	13000
Carbon tetrachloride	4.6	41	1	2600
Ethylene oxide	2.1	41	3	41
PAH's (benzo[a]pyrene equiv)	.043	37	8	480
Vinylidene chloride	6180	36	0	350
Copper (all) pollutant	463	35	0	320
Chlorinated dioxins & furans (	.0000012	34	14	.0006300
Dichlorobenzene	68	34	5	1500
Zinc pollutant	6760	34	0	3200
Ethyl chloride	1930000	29	0	1400
Hydrogen Fluoride (HF)	1140	29	0	1200
Ethylene dibromide	2.7	28	1	270
Selenium	96.5	28	2	400
Phenol	8690	19	1	20000
Methyl cellosolve	3860	18	1	9700
Cresol	34700	11	0	770
Butadiene, 1,3-	1.1	9	6	12000
Chlorobenzene	13500	7	0	3500
Chlorobenzene - other/not spec	13500	7	0	12000
Polychlorinated biphenyl (PCB)	.007	7	6	3.000
Acrolein	3.9	6	1	200
Naphthalene	270	6	0	110
Chlorine pollutant	1370	5	1	1900
Ethyl acrylate	9260	5	0	85
Isophorone	390000	5	0	160
Benzyl chloride	2320	4	0	2400

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SUMMARY OF TOXIC POLLUTANTS
 SORTED BY OCCURRENCES (cont)

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Epi chlorohydrin	8.3	4	0	6.6
Methyl methacrylate	189000	4	0	15
Acrylic acid	190	3	0	7
Acrylonitrile	.67	3	3	100
Allyl chloride	193	3	0	100
Phthalic anhydride	1350000	3	0	50
Asbestos pollutant	.003	2	0	.000
Methyl bromide	1160	2	1	2500
Hexachlorobenzene	.39	1	0	.00
Hexamethylene-1, 6-diisocyanate	1.9	1	0	1.3
Phosphine	1930	1	0	110
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70 pollutants				6810013

number of toxic pollutants tracked in BAAQMD: 113
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SUMMARY OF TOXIC POLLUTANTS

SORTED BY TRIGGER LEVEL

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Chlorinated dioxins & furans (	.0000012	34	14	.0006300
Chromium (hexavalent)	.0014	230	60	8.6000
Asbestos pollutant	.003	2	0	.000
Polychlorinated biphenyl (PCB)	.007	7	6	3.000
Beryllium (all) pollutant	.015	198	11	.910
Arsenic (all)	.024	201	24	11
PAH's (benzo[a]pyrene equiv)	.043	37	8	480
Cadmium	.046	206	21	51
Hexachlorobenzene	.39	1	0	.00
Acrylonitrile	.67	3	3	100
Nickel pollutant	.73	209	29	590
Butadiene, 1,3-	1.1	9	6	12000
Hexamethylene-1,6-dithiocyanate	1.9	1	0	1.3
Ethylene oxide	2.1	41	3	41
Vinyl chloride	2.5	53	39	9000
Ethylene dibromide	2.7	28	1	270
Acrolein	3.9	6	1	200
Carbon tetrachloride	4.6	41	1	2600
Benzene	6.7	1104	158	60000
Epiclorohydrin	8.3	4	0	6.6
Ethylene dichloride	9.7	67	21	1100
Dioxane, 1,4-	25	85	11	1500
Lead (all) pollutant	29	210	2	2000
Formaldehyde	33	460	77	200000
Perchloroethylene	33	930	865	680000
Chloroform	36	93	40	19000
Mercury (all) pollutant	57.9	200	3	510
Dichlorobenzene	68	34	5	1500
Acetaldehyde	72	72	11	57000
Manganese	77	182	5	1200
Selenium	96.5	28	2	400
Trichloroethylene	97	144	46	41000
Acrylic acid	190	3	0	7
Methylene chloride	190	154	69	120000
Allyl chloride	193	3	0	100
Naphthalene	270	6	0	110
Copper (all) pollutant	463	35	0	320
Hydrogen Fluoride (HF)	1140	29	0	1200
Methyl bromide	1160	2	1	2500
Hydrochloric acid mist pollutant	1350	49	3	20000
Hydrogen Chloride (HCl)	1350	44	11	150000
Chlorine pollutant	1370	5	1	1900
Phosphine	1930	1	0	110
Benzyl chloride	2320	4	0	2400
Butyl cellosolve	3860	459	10	290000
Glycol ether - other/not spec	3860	166	3	69000
Methyl cellosolve	3860	18	1	9700
Vinylidene chloride	6180	36	0	350
Zinc pollutant	6760	34	0	3200
Hydrogen Sulfide (H2S)	8110	61	2	98000
Phenol	8690	19	1	20000
Ethyl acrylate	9260	5	0	85
Cellosolve acetate	12400	52	0	9200
Chlorobenzene	13500	7	0	3500
Chlorobenzene - other/not spec	13500	7	0	12000
Ammonia (NH3) pollutant	19300	71	23	2800000
Cresol	34700	11	0	770
Cellosolve	38600	68	1	270000
Toluene	38600	902	1	380000

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SUMMARY OF TOXIC POLLUTANTS
 SORTED BY TRIGGER LEVEL (cont)

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Hexane	39000	91	3	310000
Xylene	57900	1033	2	440000
Trichloroethane, 1,1,1- (w/o	61800	131	0	110000
Trichloroethane, 1,1,1- (with	61800	44	0	13000
Methyl alcohol	120000	340	1	330000
Styrene	135000	83	0	220000
Methyl methacrylate	189000	4	0	15
Ethyl benzene	190000	201	0	30000
Isophorone	390000	5	0	160
Phthalic anhydride	1350000	3	0	50
Ethyl chloride	1930000	29	0	1400
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70 pollutants				6810011

number of toxic pollutants tracked in BAAQMD: 113
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 number of toxic pollutants reported > cutoff: 44

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TOXIC AIR CONTAMINANTS
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SUMMARY OF TOXIC POLLUTANTS
SORTED BY PLANTS ABOVE TRIGGER

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Perchloroethylene	33	930	865	680000
Benzene	6.7	1104	158	60000
Formaldehyde	33	460	77	200000
Methylene chloride	190	154	69	120000
Chromium (hexavalent)	.0014	230	60	8.6000
Trichloroethylene	97	144	46	41000
Chloroform	36	93	40	19000
Vinyl chloride	2.5	53	39	9000
Nickel pollutant	.73	209	29	590
Arsenic (all)	.024	201	24	11
Ammonia (NH3) pollutant	19300	71	23	2800000
Cadmium	.046	206	21	51
Ethylene dichloride	9.7	67	21	1100
Chlorinated dioxins & furans (.000012	34	14	.0006300
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Manganese	77	182	5	1200
Acrylonitrile	.67	3	3	100
Ethylene oxide	2.1	41	3	41
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Hydrochloric acid mist pollutant	1350	49	3	20000
Mercury (all) pollutant	57.9	200	3	510
Hydrogen Sulfide (H2S)	8110	61	2	98000
Lead (all) pollutant	29	210	2	2000
Selenium	96.5	28	2	400
Xylene	57900	1033	2	440000
Acrolein	3.9	6	1	200
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Cellosolve	38600	68	1	270000
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Asbestos pollutant	.003	2	0	.000
Benzyl chloride	2320	4	0	2400
Cellosolve acetate	12400	52	0	9200
Chlorobenzene	13500	7	0	3500
Chlorobenzene - other/not spec	13500	7	0	12000
Copper (all) pollutant	463	35	0	320
Cresol	34700	11	0	770
Epi chlorohydrin	8.3	4	0	6.6
Ethyl acrylate	9260	5	0	85
Ethyl benzene	190000	201	0	30000
Ethyl chloride	1930000	29	0	1400
Hexachlorobenzene	.39	1	0	.00
Hexamethylene-1,6-dithiocyanate	1.9	1	0	1.3

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 TOXIC AIR CONTAMINANTS
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SUMMARY OF TOXIC POLLUTANTS
 SORTED BY PLANTS ABOVE TRIGGER (cont)

Pollutant	Trigger Level (lbs/yr)	Total # Plants Emitting	# Plants Above Trigger	Total Emissions (lbs/yr)
Hydrogen Fluoride (HF)	1140	29	0	1200
Isophorone	390000	5	0	160
Methyl methacrylate	189000	4	0	15
Naphthalene	270	6	0	110
Phosphine	1930	1	0	110
Phthalic anhydride	1350000	3	0	50
Styrene	135000	83	0	220000
Trichloroethane, 1,1,1- (w/o	61800	131	0	110000
Trichloroethane, 1,1,1- (with	61800	44	0	13000
Vinylidene chloride	6180	36	0	350
Zinc pollutant	6760	34	0	3200
----- 70 pollutants				----- 6810012

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