

APPENDIX B-3

EMISSIONS SUMMARY

BY

COUNTY AND

POLLUTANT

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TOXIC AIR CONTAMINANTS
2002 ANNUAL REPORT
JUNE 2004**

**EMISSION SUMMARY BY
COUNTY AND POLLUTANT**

(lbs/year)

POLLUTANT	ALAMEDA	CONTRA COSTA	MARIN	NAPA	SAN FRANCISCO	SAN MATEO	SANTA CLARA	SOLANO	SONOMA	TOTAL EMISSIONS
Acetaldehyde	24000	1130	0.264	1.16	1.95	8.89	5560	355	3.14	31100
Acrolein	215	0.00775	0	0	0.00367	0	0	0	0	215
Acrylic acid	0	0	0	0	0	0	0	37.8	1.93	39.7
Acrylonitrile	142	0	0.879	57	0	0	0	0	0	200
Ammonia (NH3) pollutant	100000	1.07E+06	0	0	26.5	27800	1.26E+06	456000	0	2.91E+06
Arsenic (all)	4.27	5.49	0.0666	0.253	0.142	0.117	1.19	0.294	0.295	12.1
Benzene	3380	25500	469	195	452	1520	16200	2090	546	50400
Benzyl chloride	1000	0	0	5.39	0	63	0	0	0	1070
Beryllium (all) pollutant	0.278	0.11	0.0147	0.0975	0.083	0.0224	0.434	0.0132	0.0909	1.14
Bromine	1.1	0	0	0	0	0	0	0	0	1.1
Butadiene, 1,3-	0	298	0.892	0	0	0	70	74.5	0	443
Butyl cellosolve	218000	16600	1090	4640	2270	9420	28600	80900	4640	367000
Cadmium	12.8	9.44	0.0665	0.432	0.382	0.11	2.52	22.4	0.413	48.6
Carbon tetrachloride	8.81	1910	1.46	0.5	0	0.75	5.48	0.377	1.03	1930
Cellosolve	7720	432	0	0	361	473	11300	91400	461	112000
Cellosolve acetate	460	1350	63.7	0	360	126	2250	98.1	74.5	4790
Chlorinated dioxins & furans (Calif TCDD)	0.000515	2.69E-05	2.70E-06	7.57E-06	0.000008	6.14E-06	5.75E-05	2.21E-06	1.22E-05	0.000638
Chlorine pollutant	1.83	1900	0	0	0	0.0344	0.000321	0	1.52	1900
Chlorobenzene	215	882	0	0	0	0	4650	0.7	0	5740
Chlorobenzene - other/not spec	5480	0	0	0	0	38.6	1110	0	0	6620
Chloroform	3430	2280	1280	310	878	2240	3710	722	669	15500
Chromium (hexavalent)	0.704	7.62	0.0272	0.0524	0.0317	0.0627	0.201	0.409	0.0783	9.18
Copper (all) pollutant	23.6	24.3	0.0589	0.0852	0.000493	0.0772	5.74	373	0.137	427
Cresol	311	5.1	0	0	0	0	14.4	0	36.8	367
Dichlorobenzene	1100	1540	171	47.7	0.401	363	148	76.9	1.16	3450
Dioxane, 1,4-	51.3	38.3	1.45	0	0	169	142	3.88	0	406
Epichlorohydrin	0	0	0	0	0	0	0.0882	0	0	0.0882

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Ethyl acrylate	65	0	0	0	0	108	0.25	0	0	174
Ethyl benzene	2720	14500	731	521	230	2840	6090	515	863	29000
Ethyl chloride	260	167	109	65.5	0	95.5	707	49.4	128	1580
Ethylene dibromide	6.16	272	0.767	0	0	0	0.00389	0.00304	0.0294	279
Ethylene dichloride	186	265	56.6	33.8	0	49.5	360	24.9	68.7	1040
Ethylene oxide	25.3	1.77	1.62	0.149	0.000845	1.65	5.23	0.161	11.4	47.3
Formaldehyde	14000	121000	573	1130	20600	3440	41700	1850	1800	206000
Glycol ether - other/not spec	35400	5320	1170	8630	1750	3960	7430	623	1470	65800
Hexachlorobenzene	0	0.0263	0	0	0	0	0.00809	0	0	0.0344
Hexane	10300	90900	805	480	180	2220	7340	3230	79200	195000
Hydrazine	0.0292	0	0	0	0	0	0	0	0	0.0292
Hydrochloric acid mist pollutant	67	18200	0	0	0	348	856	2.69	0.0169	19500
Hydrogen Chloride (HCl)	3880	131000	5660	2000	0	245	5350	66.2	383	148000
Hydrogen Fluoride (HF)	20.8	194	0.89	511	0	2.2	658	0.607	3.51	1390
Hydrogen Sulfide (H2S)	21900	10700	1640	1210	6900	10500	22900	32200	2030	110000
Isophorone	4.04	0	0	0	0	5.51	0	0	80	89.5
Lead (all) pollutant	418	3.52	0.173	0.545	0.706	0.255	10.4	0.0995	0.637	434
Manganese	625	276	0.0663	0.528	0.473	0.105	23	281	0.475	1210
Mercury (all) pollutant	37.2	280	1.25	3.58	0.1	3.17	185	32.2	5.67	548
Methyl alcohol	28500	221000	116	0	1580	5620	106000	16300	397	379000
Methyl cellosolve	3330	99.1	0	0	65.4	0	18.9	0	0	3510
Methyl ethyl ketone (MEK)	67600	28400	3930	1270	7100	11200	101000	13400	8680	242000
Methyl methacrylate	0	3.64	0	0	0	0	15.8	0	0	19.5
Methylene chloride	20500	16300	3730	1250	2050	23400	26700	1600	2780	98300
Methyl tertiary-butyl ether	1400	173000	28.6	336	532	6780	20400	12000	427	215000
Naphthalene	6.73	133	0.034	25.9	0.118	7.81	2.46	0	0	176
Nickel pollutant	90.9	148	0.92	6.54	6.56	5.19	36.4	426	7.52	728

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Nitropropane, 2-	0.219	0	0	0	0	0	0	0	0	0.219
PAH's (benzo[a]pyrene equiv)	0.00265	428	0.000109	0.000306	0.948	0.000246	0.215	33.7	0.000491	463
Perchloroethylene	124000	64300	34300	7980	78700	85400	129000	11100	26500	561000
Phenol	1720	5510	0	0	0	0	4120	119	4070	15500
Phosphine	110	0	0	0	0	0	0	0	0	110
Phthalic anhydride	135	0	35	0	0	0	0	0	0	170
Polychlorinated biphenyl (PCB)	0	0.631	0	0	0	0	2.35	0	0	2.99
Selenium	518	0.124	0.0558	0.139	0.00124	0.126	101	0.0404	0.223	620
Styrene	78100	35200	605	5450	8030	13200	96900	4710	13500	256000
Tetrachloroethane, 1,1,2,2-	63	0.00315	0	0	0	0	0	0	0	63
Toluene	92500	114000	10800	4330	19100	33500	69300	22400	16100	382000
Toluene diisocyanate (TDI)	232	0	0	0	0	0	0.0615	0	0	232
Trichloroethane, 1,1,1- (w/o dioxane)	67500	1640	422	52	1	9990	8280	894	107	89000
Trichloroethane, 1,1,1- (with dioxane)	7530	906	893	252	1	1150	989	23	259	12000
Trichloroethylene	11400	989	670	327	3.33	2130	10300	369	817	27000
Triethylamine	0	0	0	0	0	0	0	0	285	285
Vinyl chloride	1970	1090	688	405	0	850	4110	282	772	10200
Vinylidene chloride	93.2	42.3	26.2	15.8	0	23.6	172	11.9	32.5	418
Xylene	119000	102000	7010	9840	19800	22300	74800	10700	15300	381000
Zinc pollutant	635	1320	0.393	1.1	0.000329	1	7.48	756	1.68	2720
Total Weighted* Carcinogenic Emissions	2490	6910	498	212	1050	1180	3340	852	458	16990
Total Weighted** non-Carcinogenic Emissions	726	1340	38	24	146	89	593	240	42	3238

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Notes: The following weighted emissions are calculated using the prioritization scoring method for AB2588 risk assessment

* weighted carcinogenic emissions = (facility emissions) (pollutant unit risk value) (normalization factor)
= (emissions lbs/year) (urv ug/m³) (1700)

** weighted non-carcinogenic emissions = $\frac{\text{facility emissions} \text{ (normalization factor)}}{\text{acceptable exposure level} \text{ (hours/year)}}$

= $\frac{\text{emissions lbs/hr} \text{ (150)}}{\text{ael ug/m}^3 \text{ (8760 hrs/yr)}}$