

TEXAS AIR CONTROL BOARD
AUSTIN TEXAS

MEMORANDUM

TO: Interested parties
FROM: Effects Evaluation staff
DATE: June 22, 1992 (Replace the August 1, 1991 List)
SUBJECT: List of Effects Screening Levels (ESLs)

Attached is the latest update of the list of ESLs currently used by the TACB Effects Evaluation staff in its evaluation of the impacts of various air contaminants. These screening levels are based on data concerning health effects, odor nuisance potential, vegetation effects, or corrosion effects. The ESLs on the list are based on health effects unless followed by "(o)", "(v)", or "(c)" (for odor nuisance, vegetation damage, or corrosion of materials, respectively). If the ESL of an air contaminant is based on odor threshold and is less than the annual average ESL based on health (denoted by an asterisk in the annual average column), it is not necessary to evaluate the annual average impacts of such chemical.

Remember that these screening levels are just "tools" the Health Effects Section uses to evaluate the impacts of air pollutant emissions. They are not ambient air standards. If predicted or measured airborne levels of a certain chemical do not exceed its screening level, we do not expect any adverse health or welfare effects. If ambient levels of air contaminants exceed the screening levels this does not necessarily mean there is a problem. It is just an indication that further review will be required.

This list incorporates some effects screening levels which have been derived by the Effects Evaluation staff. These are compounds for which there are no currently published occupational exposure standards or guidelines and are followed by a "D". Please note that some compounds' ESL have been changed or newly derived since the August 1, 1991 ESLs List. These compounds and the relative ESLs are printed in **boldface**. The 30-minute ESLs also can be used for the 1-hour ESLs. The 24-hour average ESLs can be obtained by multiplying a ratio of 0.4 to the relative 30-minute ESLs. If you cannot find a listing for a particular chemical, this does not mean that no health effects evaluation is required. Also note that these screening levels are subject to change without notice. To find out if a screening level has been established for a chemical or to be sure of the most current screening level, please check with the Effects Evaluation staff. Before you call us, please check synonyms & Chemical Abstract Service Registry numbers (CAS No.) to make sure the chemical you are interested in is not listed.

cc: Manuel Agiurre, JAW, MW, LCS, NG, LCH, RJT, JSL, File, Board.

FOOTNOTES

- * 30-minute or 1-hour average ESL less than annual average ESL
- ** Disaster potential chemical
- D Health ESLs derived by Effects Evaluation staff
- E ESLs based on Effects Evaluation staff's justification
- M Health ESLs based on the 1989 Maximum Concentration Values in the Workplace (MAKs) from the Deutsche Forschungsgemeinschaft (DFG), Federal Republic of Germany
- N Health ESLs based on the 1989 Recommended Exposure Limits (RELs) from the U.S. National Institute for Occupational Safety and Health (NIOSH)
- O Health ESLs based on the 1989 amended Permissible Exposure Limits (PELs) from the U.S. Occupational Safety and Health Administration (OSHA)
- T Health ESLs based on the 1991-92 Chemical Substances Threshold Limit Values (TLVs) from the American Conference of Governmental Industrial Hygienists (ACGIH)
- (PM) denotes particulate matter form, the respirable fraction of PM consists of those particles with particle sizes that are equal to or below the median cut point of 4.0 μm .
- (c) denotes that annual ESL is set to protect against corrosion damage
- (o) denotes that 30-minute or 1-hour ESL is based on odor threshold
- (v) denotes that 30-minute or 1-hour ESL is based on effects on vegetation

EFFECTS SCREENING LEVELS FOR VARIOUS CHEMICALS
(June 22, 1992)

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|--|---|----------------|-----------|
| | | 30-minute | annual | or 1-hour |
| <hr/> | | | | |
| 75-07-0 | acetaldehyde | 90 (50) | * | (o) |
| 60-35-5 | acetamide | 320 (132) | 32 (13) | D |
| 64-19-7 | acetic acid | 250 (100) | 25 (10) | N,T,O |
| 108-24-7 | acetic anhydride | 200 (50) | 20 (5) | T,O |
| 21287-97-3 | acetoacetoxyethyl methacrylate | 2000 (230) | 200 (23) | D |
| 67-64-1 | acetone | 5900 (2500) | 590 (250) | N |
| 75-86-5 | acetone cyanohydrin | 40 (10) | 4 (1) | N |
| 75-05-8 | acetonitrile | 340 (200) | 34 (20) | N |
| 74-86-2 | acetylene | 26620 (25000) | 2660 (2500) | N |
| 540-59-0 | acetylene dichloride (1,2-dichloroethylene) | 7930 (2000) | 790(200) | N,T,O,M |
| 79-27-6 | acetylene tetrabromide | 140 (10) | 14 (1) | T,O |
| 50-78-2 | acetylsalicylic acid (aspirin) | 50 (PM) | 5 | N,T,O |
| 260-94-6 | acridine (dibenzo[b,e]pyridine) [also see coal tar pitch volatiles] | 0.5 | .05 | E |
| 107-02-8 | acrolein** | 2.3 (1) | .23 (.1) | T |
| 79-06-1 | acrylamide | .3 | .03 | N,T,O |
| 79-10-7 | acrylic acid | 60 (20) | 6 (2) | N,T |
| 141-32-2 | acrylic acid, n-butyl ester | 550 (100) | 55 (10) | M |
| 140-88-5 | acrylic acid, ethyl ester | 200 (50) | 20 (5) | M |
| 96-33-3 | acrylic acid, methyl ester | 180 (50) | 18 (5) | M |
| 107-13-1 | acrylonitrile | 43 (20) | 4 (2) | T,O |
| 281-23-2 | adamantane (sym-tricyclodecane) | 3850 (692) | 385 (69) | D |
| 107-13-1 | adiponitrile | 180 (40) | 18 (4) | N |
| 309-00-2 | Aldrin | 2.5 (PM) | .25 | N,T,O,M |
| 68239-06-5 | aliphatic diisocyanate (see dimethyl diisocyanate) | .25 | .025 | D |
| ----- | alkanes not otherwise specified | 1000 ppb | 100 ppb | D |
| ----- | alkyl phenol, C-12 | 860 | 86 | D |
| ----- | alkyl phenol, C-20 | 1150 | 115 | D |
| ----- | alkyl phenol ethoxylate (see nonylphenol ethoxylate) | 1000 | 100 | D |
| 107-18-6 | allyl alcohol | 48 (20) | 5 (2) | N,T,O,M |
| 107-11-9 | allylamine | 12 (5) | 1 (.5) | D |
| 107-05-1 | allyl chloride** | 30 (10) | 3 (1) | N,T,O |
| 106-92-3 | allyl glycidyl ether (AGE) | 225 (50) | 23 (5) | N,T,O |
| 2179-59-1 | allyl propyl disulfide | 120 (20) | 12 (2) | N,T,O,M |
| 7539-12-0 | allyl succinic anhydride | 6 (1) | .6 (.1) | D |

| CAS No. | SUBSTANCE | EFFECTS | SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | |
|------------|--|--------------------|---|-----------------------|
| 1344-28-1 | alumina | see aluminum oxide | | |
| 7429-90-5 | aluminum, metal and oxide pyro powders, welding fumes alkyls and soluble salts | 50 50 20 | 5 5 2 | N,O N,T,O N,T,O |
| ----- | amino-3-aminomethyl-3,3,5- trimethylcyclohexane | 375 (50) | 38 (5) | D |
| 141-43-5 | aminoethanol (ethanolamine) | 75 (30) | 7.5 (3) | N,T,O,M |
| 111-41-1 | aminoethylethanolamine (hydroxyethyl ethylenediamine) | 640 (150) | 64 (15) | D |
| 123-00-2 | aminopropyl morpholine, 4- | 1650 (280) | 165 (28) | D |
| 504-29-0 | aminopyridine, 2- | 20 (5) | 2 (.5) | N,T,O,M |
| 462-08-8 | aminopyridine, 3- | 15 (3.8) | 1.5 (.38) | D |
| 504-24-5 | aminopyridine, 4- | 2.5 (.7) | .25 (.07) | D |
| 61-82-5 | amino-1,2,4-triazole, 3- (Amitrole) | 2 | .2 | N,T,O,M |
| 7664-41-7 | ammonia** | 170 (250) | 17 (25) | N,T |
| 12125-02-9 | ammonium chloride fume | 100 | 10 | N,T,O |
| 3825-26-1 | ammonium perfluorooctanate | 1 | .1 | T |
| 7773-06-0 | ammonium sulfamate (Ammate) | 50 (resp) | 5 | N,O |
| 7783-20-2 | ammonium sulfate | 50 (PM) | 5 | D |
| 628-63-7 | amyl acetate, n- | 27 (5) (o) | * | |
| 628-38-0 | amyl acetate, sec- | 11 (2) (o) | * | |
| 110-53-2 | amyl bromide | 250 (40) | 25 (4) | D |
| 109-67-1 | amylene, 1- (1-pentene) | 90 (30) | * | |
| 110-66-7 | amyl mercaptan | 0.1 (.02) | * | (o) |
| 628-80-8 | amyl methyl ether, n- | 670 (160) (o) | 270 (65) | D |
| 994-05-8 | amyl methyl ether, tert- (TAME) | 670 (160) (o) | 270 (65) | D |
| 80-46-6 | amylophenol, p-tert-, vapor | 700 (100) | 70 (10) | D |
| | | 35 (PM) | 3.5 | D |
| 872-10-6 | amyl sulfide | .2 (.3) | * | (o) |
| 62-53-3 | aniline | 76 (20) | 7.6 (2) | N,T,O |
| 29191-52-4 | anisidine, o-, p- isomers | 5 (1) | .5 (.1) | N,T,O,M |
| 20-12-7 | anthracene | 0.5 | 0.05 | E |
| 7440-36-0 | antimony, as Sb | 5 (PM) | .5 | N,T,O,M |
| 1309-64-4 | antimony trioxide | 5 (PM) | .5 | T |
| 86-88-4 | ANTU (α -naphthylthiourea) | 3 | .3 | N,T,O,M |
| 7440-37-1 | argon | | simple asphyxiant | |
| 64742-95-6 | Aromatic 100 (see trimethyl benzene) | 1230 (250) | 123 (25) | D |
| 64742-94-5 | Aromatic 150 | 2560 (455) | 256 (46) | D |
| 64742-94-5 | Aromatic 200 | 4200 (620) | 420 (62) | D |
| 7440-38-2 | arsenic and compounds | 5 (organic) | .5 | O,E |
| | | .1 (inorg) | .01 | O,E |
| 7784-42-1 | arsine | 1.6 (.5) | .16 (.05) | T,O |

| CAS No. | Substance | EFFECTS | SCREENING LEVEL | |
|------------|--|--------------------------------|-----------------|---------|
| | | $\mu\text{g}/\text{m}^3$ (ppb) | | |
| | | 30-minute | annual | |
| | | or 1-hour | | |
| 17068-78-9 | asbestos (fibers/cc) ($\mu\text{g}/\text{m}^3$) | .001 .03 | .0001 .003 | N |
| 8052-42-4 | asphalt, vapors particulate fraction | 350 (135) 50 | 35 (13.5) 5 | D T |
| 1912-24-9 | Atrazine | 50 | 5 | N,T,O |
| 86-50-0 | Azinphos-methyl | 2 | .2 | N,T,O,M |
| <hr/> | | | | |
| 7440-39-3 | barium & compounds, as Ba | 5 | .5 | N,T,O,M |
| 7727-43-7 | barium sulfate (PM) | 50 (resp) | 5 | N,O |
| 68359-37-5 | Baythroid (cyfluthrin, also see pyrethrum) | 50 (PM) | 5 | D |
| ----- | Beech wood dust | 10 | 1 | N,T |
| 17804-35-2 | Benomyl (PM) | 50 (resp) | 5 | O |
| 98-87-3 | benzal chloride | 20 (3) | 2 (.3) | D |
| 71-43-2 | benzene | 30 (10) | 3 (1) | O |
| 95-14-7 | benzene azimide (benzotriazole) | 100 (20) | 10 (2) | D |
| 8032-32-4 | benzine | 3500 (875) | 350 (88) | N |
| 205-99-2 | (light petroleum distillate; VM&P naphtha) benzo[b]fluoranthene (see coal tar pitch volatiles) | .5 | .05 | E |
| 100-47-0 | benzonitrile | 505 (120) | 51 (12) | D |
| 50-32-8 | benzo[a]pyrene | .03 (PM) | .003 | D |
| 95-14-7 | benzotriazole (benzene azimide) | 100 (20) | 10 (2) | D |
| 98-88-4 | benzoyl chloride | 60 (10) | 6 (1) | D |
| 94-36-0 | benzoyl peroxide | 50 | 5 | N,T,O,M |
| 140-11-4 | benzyl acetate | 600 (100) | 60 (10) | D |
| 100-51-6 | benzyl alcohol | 500 (110) | 50 (11) | D |
| 100-44-7 | benzyl chloride | 50 (10) | 5 (1) | T,O |
| 98-87-3 | benzyl dichloride (benzal chloride) | 20 (3) | 2 (.3) | D |
| 7440-41-7 | beryllium and compounds | see TACB Reg III | | |
| 121-46-0 | bicycloheptadiene | 2000 | 200 | D |
| 82657-04-3 | Bifenthrin | 25 | 2.5 | D |
| 92-52-4 | biphenyl | 2.3 (o) | 1.3 | T |
| 111-44-4 | bis(chloroethyl) ether (dichloroethyl ether) | 290 (50) | 29 (5) | N,T,O,M |
| 542-88-1 | bis(chloromethyl) ether | .05 (,01) | .005 (.001) | D |
| 1304-82-1 | bismuth telluride resp. fraction | 100 (PM) | 10 | N,T |
| | selenium-doped | 50 | 5 | N |
| 80-05-7 | bisphenol A | 800 (vapor) 40 (PM) | 80 4 | N,T,O,D |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) 30-minute annual or 1-hour | | |
|------------|--|--|-------------|---------|
| | | 50 (PM) | 5 | D |
| 68475-96-0 | Black Grit (Boiler Slag) | | | |
| | <u>borates, tetra, sodium salts:</u> | | | |
| 1330-43-4 | anhydrous | 10 | 1 | N,T |
| 11130-12-4 | pentahydrate | 10 | 1 | N,T |
| 1303-96-4 | decahydrate | 50 | 5 | N,T |
| 10043-35-3 | boric acid | 10 | 1 | D |
| 1303-86-2 | boron oxide | 50 (resp) | 5 | N,O |
| 10294-33-4 | boron tribromide | 100 (10) | 10 (1) | N,T,O |
| 7637-07-2 | boron trifluoride | see TACB Reg III | | |
| 99-30-9 | Botran 75W (2,6-dichloro-4-nitroaniline) | 100 | 10 | D |
| 314-40-9 | Bromacil | 100 (10) | 10 (1) | N,T,O |
| 7726-95-6 | bromine** | 6.6 (1) | .66 (.1) | N,T,O |
| 7789-30-2 | bromine pentafluoride | see TACB Reg III | | |
| 109-70-6 | bromo-3-chloropropane, 1- | .5 (.075) | .05 (.0075) | D |
| 74-97-5 | bromochloromethane (chlorobromomethane) | 1680 (o) | 1060 | T |
| 74-96-4 | bromoethane | (320) | (200) | |
| 75-25-2 | bromoform | 8900 (2000) | 890 (200) | M |
| 106-99-0 | butadiene, 1,3- | 52 (5) | 5 (.5) | N,T,O |
| 106-97-8 | butane | 110 (50) | 11 (5) | E |
| 109-79-5 | butanethiol (butyl mercaptan) | 19000 (8000) | 1900 (800) | N,T,O |
| 78-93-3 | butanone (methyl ethyl ketone) | 1.8 (.5) (o) | 1.8 (.5) | N,T,O |
| | | 3900 (o) | 590 | T,M |
| | | (1320) | (200) | |
| 111-76-2 | butoxyethanol (ethylene glycol monobutyl ether) | 1210 (250) | 121 (25) | N,T,O |
| 123-86-4 | butyl acetate, n- | 1850 (391) (o) | 710 (150) | N,T,O |
| 105-46-4 | butyl acetate, sec- | 9500 (2000) | 950 (200) | NTOM |
| 540-88-5 | butyl acetate, tert- | 19 (4) | * | o-OSHA |
| 141-32-2 | butyl acrylate | 183 (35) (o) | 52 (10) | NTOM |
| 71-36-3 | butyl alcohol, n- | 1220 (407) (o) | 150 (50) | N,T,O |
| 78-92-2 | butyl alcohol, sec- | 3000 (1000) | 300 (100) | NTOM |
| 75-65-0 | butyl alcohol, tert- | 3000 (1000) | 300 (100) | NTOM |
| 109-73-9 | butylamine, n- | 150 (50) | 15 (5) | N,T,O,M |
| 13952-84-6 | butylamine, sec- | 150 (50) | 15 (5) | M |
| 75-64-9 | butylamine, tert- | 12 (4) | 1.2 (.4) | D |
| 85-68-7 | butyl benzyl phthalate (BBP) | 50 (PM) | 5 | D |
| 128-37-0 | butylated hydroxytoluene (BHT) | 100 | 10 | N,T,O |
| 109-69-3 | butyl chloride, n- | 3335 (886) (o) | 440 (117) | D |
| 1189-85-1 | butyl chromate, tert- (as CrO ₃) | .1 | .01 | E |
| 584-03-2 | butylene glycol, 1,2- | 2100 (570) | 210 (57) | D |
| 107-88-0 | butylene glycol, 1,3- | 4400 (1195) | 440 (120) | D |
| 110-63-4 | butylene glycol, 1,4- | 500 (136) | 50 (14) | D |

| CAS NO. | SUBSTANCE | EFFECTS | SCREENING LEVEL |
|-----------|--|-------------------------|-----------------|
| | | μg/m ³ (ppb) | |
| | | 30-minute | annual |
| | | or 1-hour | |
| 513-85-9 | butylene glycol, 2,3- | 1400 (380) | 140 (38) |
| 106-88-7 | butylene oxide | 206 (70) (o) | 50 (17) |
| 2426-08-6 | butyl glycidyl ether (BGE) | 266 (50) | 27 (5) |
| 7397-62-8 | butyl glycolate | 270 (50) | 27 (5) |
| 75-91-2 | butyl hydroperoxide, tert- | 35 (10) | 3.5 (1) |
| 111-36-4 | butyl isocyanate | 9 (2.2) | .9 (.22) |
| 138-22-7 | butyl lactate | 300 (50) | 30 (5) |
| 109-79-5 | butyl mercaptan, n- | 1.8 (.5) | 1.8 (.5) (o) |
| 97-88-1 | butyl methacrylate | 6970 (1200) | 697 (120) |
| 614-45-9 | butyl peroxybenzoate, tert- | 15 (2) | 1.5 (.2) |
| 99-71-8 | butylphenol, p-sec- | 130 (21) | 13 (2.1) |
| 89-72-5 | butylphenol, o-sec- | 310 (50) | 31 (5) |
| 98-54-4 | butylphenol, p-tert- | 5 (.8) | .5 (.08) |
| 98-51-1 | butyltoluene, p-tert- | 610 (100) | 61 (10) |
| ----- | butyltoluene diamine, tert- | 70 (10) | N,T,O,M |
| 98-19-1 | butyl-m-xylene, tert- (see Aromatics 150) | 3300 (500) | 330 (50) |
| 123-72-8 | butyraldehyde | 14 (5) (o) | * |
| 616-45-5 | butyrolactam, gamma- (2-pyrrolidone) | 70 | 7 |
| 96-48-0 | butyrolactone, gamma- | 2800 (800) | 280 (80) |
| 109-74-0 | butyronitrile | 220 (80) | 22 (8) |

| | | | | |
|------------|-----------------------------|-------------|---------|------------|
| 7440-43-9 | cadmium & compounds, as Cd | .1 | .01 | N, E |
| 7778-44-1 | calcium arsenate (as As) | .1 | .01 | O, E |
| 1317-65-3 | calcium carbonate (marble) | 100 (total) | 10 | N, T |
| | | 50 (resp) | 5 | N, O |
| 13765-19-0 | calcium chromate (as Cr) | .1 | .01 | E |
| 156-62-7 | calcium cyanamide | 5 | .5 | N, T, O |
| 1305-62-0 | calcium hydroxide | 50 | 5 | N, T, O |
| 1305-78-8 | calcium oxide | 20 | 2 | N, T |
| 1344-95-2 | calcium silicate, synthetic | 100 | 10 | T |
| 7778-18-9 | calcium sulfate (gypsum) | 100 (total) | 10 | N, T |
| | | 50 (resp) | 5 | N, O |
| 5794-03-6 | camphene (see camphor) | | | |
| 76-22-2 | camphor, synthetic | 20 | 2 | N, O |
| 105-60-2 | caprolactam dust | 10 | 1 | N, T, O |
| 105-60-2 | caprolactam vapor | 10 (2.2) | 1 (.22) | N |
| 2425-06-1 | Captafol | 1 | .1 | N, T, O |
| 133-06-2 | Captan | 50 | 5 | N, T, O |
| 63-25-2 | Carbaryl | 50 | 5 | N, T, O, M |
| 1563-66-2 | Carbofuran | 1 | .1 | N, T, O |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) 30-minute annual or 1-hour | | |
|------------|---|--|----------------|------------|
| 1333-86-4 | carbon black, in presence of PAHs | 35 1 | 3.5 .1 | N,T,O N |
| 124-38-9 | carbon dioxide | 90000 (50000) | 9000 (5000) | N,O,M |
| 75-15-0 | carbon disulfide** | 30 (10) | 3 (1) | N |
| 630-08-0 | carbon monoxide | must meet NAAQS | | |
| 558-13-4 | carbon tetrabromide | 14 (1) | 1.4 (.1) | N,T,O |
| 56-23-5 | carbon tetrachloride | 126 (20) | 13 (2) | N,O |
| 75-44-5 | carbonyl chloride** (phosgene) | 4 (1) | .4 (.1) | N,T,O,M |
| 353-50-4 | carbonyl fluoride | 54 (20) | 5 (2) | N,T,O |
| 463-58-1 | carbonyl sulfide | 8 (3) | .8 (.3) | D |
| 120-80-9 | catechol | 230 (50) | 23 (5) | N,T,O |
| 9004-34-6 | cellulose | 100 (total) 50 (resp) | 10 5 | N,T N,O |
| 21351-79-1 | cesium hydroxide | 20 | 2 | N,T,O |
| 2917-26-2 | cetylmercaptan | 53 (5) | 5 (.5) | N |
| 57-74-9 | Chlordane | 5 | .5 | N,T,O,M |
| 143-50-0 | chlordecone (Kepone) | .01 | .001 | N |
| 8001-35-2 | chlorinated camphene (Toxaphene) | 5 | .5 | T,O,M |
| 31242-93-0 | chlorinated diphenyl oxide | 5 | .5 | N,T,O,M |
| 7782-50-5 | chlorine** | 15 (5) | 1.5 (.5) | N,T,O,M |
| 10049-04-4 | chlorine dioxide | 2.8 (1) | .3 (.1) | N,T,O,M |
| 7790-91-2 | chlorine trifluoride | see TACB Reg III | | |
| 107-20-0 | chloroacetaldehyde | 32 (10) | 3 (1) | N,T,O,M |
| 78-95-5 | chloroacetone | 38 (10) | 4 (1) | T |
| 532-27-4 | chloroacetophenone | 3.2 (.5) | .3 (.05) | N,T,O |
| 79-04-9 | chloroacetyl chloride | 2.3 (.5) | .23 (.05) | N,T,O |
| 108-42-9 | chloroaniline, m- | 31 (6) | 3.1 (.6) | D |
| 106-47-8 | chloroaniline, p- | 53 (10) | 5.3 (1) | D |
| 95-51-2 | chloroaniline, o- | 53 (10) | 5.3 (1) | D |
| 108-90-7 | chlorobenzene | 460 (100) | 46 (10) | T |
| 104-83-6 | chlorobenzyl chloride | 26 (4) | 2.6 (.4) | D |
| 2698-41-1 | chlorobenzylidene malono- nitrile, o- | 4 (.5) | .4 (.05) | N,T,O |
| 74-97-5 | chlorobromomethane | 10600(2000) | 1060 (200) | T |
| 1126-99-8 | chloro-1,3-butadiene, 2- (β -chloroprene) | 36 (10) | 3.6 (1) | N |
| 59-50-7 | chlorocresol | 20 (o) | * | |
| 75-68-3 | chlorodifluoroethane (Freon 142B) | 61700 (18750) | 6170 (1875) | D |
| 74-45-6 | chlorodifluoromethane (Freon 22) | 18000 (5000) | 1800 (500) | M |
| 53469-21-9 | chlorodiphenyl, 42% Cl ₂ (PCBs) | .1 | .01 | E |
| 11097-69-1 | chlorodiphenyl, 54% Cl ₂ (PCBs) | .1 | .01 | E |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|--|---|----------------|-----------|
| | | 30-minute | annual | or 1-hour |
| 106-89-8 | chloro-2,3-epoxypropane (epichlorohydrin) | 3.8 (1) | .38 (.1) | T |
| 75-00-3 | chloroethane | 500 (190) | 50 (19) | E |
| 107-07-3 | chloroethanol, 2- (ethylene chlorohydrin) | 33 (10) | 3.3 (1) | N,T,O,M |
| 75-01-4 | chloroethylene (vinyl chloride) | 130 (50) | 13 (5) | T |
| 67-66-3 | chloroform | 100 (20) | 10 (2) | O |
| ----- | chloroglycerin | 50 (11) | 5 (1) | D |
| 542-88-1 | chloromethyl ether, bis- | .047 (.01) | .0047 (.001) | T |
| 107-30-2 | chloromethyl methyl ether | .5 | .05 | D |
| 600-25-9 | chloronitropropane | 100 (20) | 10 (2) | N,T,O |
| 76-15-3 | chloropentafluoroethane | 63200 (10000) | 6320 (1000) | N,T,O |
| 95-57-8 | chlorophenol, o- | 2 (.36) (o) | * | |
| 108-43-0 | chlorophenol, m- | 19 (3.6) (o) | * | |
| 106-47-9 | chlorophenol, p- | 300 (57) | 30 (5.7) | D |
| 76-06-2 | chloropicrin | 7 (1) | .7 (.1) | N,T,O,M |
| 126-99-8 | β -chloroprene | 36 (10) | 3.6 (1) | N |
| 598-78-7 | chloropropionic acid | 4.4 (1) | 0.44 (.1) | T |
| 2039-87-4 | chlorostyrene, o- | 2850 (500) | 285 (50) | N,T,O |
| 1897-45-6 | Chlorothalonil | 15 | 1.5 | D |
| 95-49-8 | chlorotoluene, o- | 235 (o) | * | |
| ----- | chlorotrifluoromethylphenoxy-toluene | 300 | 30 | D |
| 1929-82-4 | 2-chloro-6-(trichloromethyl)-pyridine (Nitrappyrin) | 50 (resp) | 5 | O |
| 2921-88-2 | Chlorpyrifos (Dursban) | 2 | .2 | N,T,O |
| 7738-94-5 | chromic acid (H_2CrO_4) & chromate (CrO_4^{2-}) | .1 | .01 | E |
| 7440-47-3 | chromium (VI) compounds, as Cr | .1 | .01 | E |
| 7440-47-3 | chromium (II) & (III) cpds, | 1 | .1 | E |
| | chromium metal, as Cr | | | |
| 1333-82-0 | chromium trioxide (CrO_3), as Cr | .1 | .01 | E |
| 14977-61-8 | chromyl chloride | .1 | .01 | E |
| 218-01-9 | chrysene | .5 | .05 | M |
| 2971-90-6 | Clopidol | 100 (PM) 50 (resp) | 10 5 | N,T |
| ----- | coal dust, respirable (<5% silica) | 20 | 2 | T,O |
| | (>5% silica) (see quartz) | 1 | .1 | T,O |
| 8007-45-2 | coal tar [also 65996-89-6] | 1 | .1 | N |
| 65996-92-1 | coal tar distillate | 3500 (875) | 350 (88) | N |
| 8030-30-6 | coal tar naphtha (petroleum distillates, naphtha) | 3500 (875) | 350 (88) | N |
| 8001-58-9 | coal tar oil (creosote) | 1 | .1 | N |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL μg/m³(ppb) 30-minute annual or 1-hour |
|------------|--|--|
| 65996-93-2 | coal tar pitch volatiles (assume the fraction of benzo[a]pyrene not exceed 10% of total PPAH) | .5 .05 E |
| 7440-48-4 | cobalt, metal dust & fume | .5 .05 N,T,O |
| 10210-68-1 | cobalt carbonyl | 1 .1 N,T,O |
| 16842-03-8 | cobalt hydrocarbonyl | 1 .1 N,T,O |
| ----- | coke oven emissions | 1.5 .15 O |
| 7440-50-8 | copper fume | 1 .1 N,O,M |
| 7440-50-8 | copper dusts & mists | 10 1 N,T,O,M |
| ----- | cotton dust, raw | 2 .2 Ø |
| 8001-58-9 | creosote (coal tar oil) | 1 .1 N |
| 1319-77-3 | cresol (cresylic acid), mixed isomers | 5(1.1)(o) 10(2.3) N |
| | [also any isomers: 108-39-4; 95-48-4; 106-44-5] | |
| 4170-30-3 | crotonaldehyde | 60 (20) 6 (2) N,T,O |
| 299-86-5 | Cruformate | 50 5 N,T,O |
| 98-82-8 | cumene | 500(100)(o) 245 (50) |
| 80-15-9 | cumene hydroperoxide | 25 (4.4) 2.5 (.44) D |
| 420-04-2 | cyanamide | 20 2 N,T,O |
| 143-33-9 | cyanide, potassium | 50 5 T,O,M |
| 151-50-8 | cyanide, sodium | 50 5 T,O,M |
| 460-19-5 | cyanogen | 210 (100) 21 (10) N,T,O,M |
| 506-68-3 | cyanogen bromide | 2.5 (.6) .25 (.06) D |
| 506-77-4 | cyanogen chloride | .6 (.3) .06 (.03) N |
| 204-62-2 | cyclododecane | 5150 (750) 515 (75) D |
| 1724-39-6 | cyclododecanol | 9800 (1300) 980 (130) D |
| 830-13-7 | cyclododecanone | 1600 (150) 160 (15) D |
| 291-64-5 | cycloheptane | 3400 (850) 340 (85) D |
| 110-82-7 | cyclohexane | 1435 (o) 340 |
| 108-93-0 | cyclohexanol | 613 (153) (o) 200 (50) |
| 108-94-1 | cyclohexanone | 481 (120) (o) 100 (25) |
| 110-83-8 | cyclohexene | 600 (178) (o) * |
| 108-91-8 | cyclohexylamine | 80 (20) 8 (2) E |
| 3173-53-3 | cyclohexyl isocyanate | 20 (4) 2 (.4) D |
| 1569-69-3 | cyclohexylmercaptan | 24 (5) 2.4 (.5) N |
| 121-82-4 | cyclonite | 15 1.5 N,T,O |
| 29965-97-7 | cyclooctadiene | 2000 (470) 200 (47) D |
| 292-64-8 | cyclooctane | 3500 (750) 350 (75) D |
| 542-92-7 | cyclopentadiene | 2030 (750) 203 (75) N,T,O,M |
| 287-92-3 | cyclopentane | 3400 (1190) 340 (119) D |
| 120-92-3 | cyclopentanone | 1700 (500) 170 (50) D |
| 68359-37-5 | cyfluthrin (Baythroid) | 50(PM) 5 D |
| 13121-70-5 | Cyhexatin | 50 5 N,T,O |
| 99-87-6 | cymene, p- (p-methyl cumene) | 2745 (500) 275 (50) D |
| 66841-24-5 | Cypermethrin (see pyrethrum) | 50 5 D |

| CAS NO. | SUBSTANCE | EFFECTS | SCREENING LEVEL |
|------------|--|-------------------------|------------------|
| | | μg/m ³ (ppb) | |
| | | 30-minute | annual |
| | | or 1-hour | |
| 39515-41-8 | Danitol (Fenpropathrin) (see Pyrethrum) | 50 (PM) | 5 D |
| 94-75-7 | 2,4-D (Dichlorophenoxy-acetic acid) | 100 | 10 N,T,O,M |
| 50-29-3 | DDT (Dichlorodiphenyl-trichloroethane) | 1 | .1 N |
| 75-99-0 | Dalapon (2,2-dichloropropionic acid) | 58 (10) | 5.8 (1) N,T,O,M |
| 17702-41-9 | decaborane | 2.5 (.5) | .25 (.05) N,T,O |
| 143-10-2 | decyl mercaptan | 36 (5) | 3.6 (.5) N |
| 8022-00-2 | demethon-methyl | 50 (5) | 5 (.5) M |
| 8065-48-3 | Demeton | 1 (.1) | .1 (.01) N,T,O |
| 123-42-2 | diacetone alcohol | 1328 (279) | 238 (50) (O) |
| 56-18-8 | diaminodipropylamine, 3,3'-(dipropylene triamine) | 60 (11) | 6 (1) D |
| 107-15-3 | diaminoethane, 1,2-(ethylenediamine) | 250 (100) | 25 (10) N,T,O,M |
| 61790-53-2 | diatomaceous earth (silica-amorphous) | 60 | 6 N |
| 333-41-5 | Diazinon | 1 | .1 N,T,O |
| 334-88-3 | diazomethane | 3.4 (2) | .34 (.2) N,T,O |
| 260-94-6 | dibenzo[b,e]pyridine (acridine) [also see coal tar pitch volatiles] | .5 | .05 E |
| 19287-45-7 | diborane | 1.1 (1) | .11 (.1) N,T,O,M |
| 300-76-5 | dibrom | 30 (PM) | 3 M |
| 96-12-8 | dibromochloropropane (DBCP) | .1 (.01) | .01 (.001) O |
| 106-93-4 | dibromoethane, 1,2-(ethylene dibromide) | 3.8 (.5) | .38 (.05) N |
| 102-81-8 | dibutylaminoethanol | 140 (20) | 14 (2) N,T,O |
| 105-76-0 | dibutyl maleate (DBM) | 2600 (280) | 260 (28) D |
| 2528-36-1 | dibutyl phenyl phosphate | 35 (3) | 3.5 (.3) T |
| 107-66-4 | dibutyl phosphate | 86 (10) | 8.6 (1) T |
| 84-74-2 | dibutyl phthalate | 50 (PM) | 5 N,T,O |
| 7572-29-4 | dichloroacetylene | 3.9 (1) | .39 (.1) N,T,O |
| 95-82-9 | dichloroaniline, 2,5- | 210 (32) | 21(3.2) D |
| 95-76-1 | dichloroaniline, 3,4- | 80 (12) | 8(1.2) D |
| 541-73-1 | dichlorobenzene, m- | 2500 (415) | 250 (42) D |
| 95-50-1 | dichlorobenzene, o- | 1500 (250) | 150 (25) T |
| 106-46-7 | dichlorobenzene, p- | 600 (100) | 60 (10) T |
| 28577-62-0 | dichlorobutadiene | 165 | 17 D |
| 760-23-6 | dichloro-1-butene, 3,4- | 135 (26) | 14 (2.6) D |
| 7415-31-8 | dichloro-2-butene, 1,3- [also 926-57-81] | 56 (11) | 5.6 (1.1) D |

| CAS No. | SUBSTANCE | EFFECTS | SCREENING LEVEL μg/m ³ (ppb) | |
|------------|---|-----------------------|--|---------|
| | | 30-minute or 1-hour | annual | |
| 764-41-0 | dichloro-2-butene, 1,4- | 6 (1.2) | .6 (.12) | D |
| 75-71-8 | dichlorodifluoromethane (Freon 12) | 49500 (10000) | 4950 (1000) | N,T,O,M |
| 118-52-5 | dichlorodimethylhydantoin | 2 | .2 | N,T,O |
| 75-34-3 | dichloroethane, 1,1- | 4000 (1000) | 400 (100) | NTOM |
| 107-06-2 | dichloroethane, 1,2- (ethylene dichloride) | 40 (10) | 4 (1) | N,O |
| 75-35-4 | dichloroethylene, 1,1- (vinylidene chloride) | 40 (10) | 4 (1) | O |
| 540-59-0 | dichloroethylene, 1,2- | 7930 (2000) | 790 (200) | NTOM |
| 111-44-4 | dichloroethyl ether | 290 (50) | 29 (5) | N,T,O,M |
| 75-43-4 | dichlorofluoromethane (Freon 21) | 420 (100) | 42 (10) | N,T,O,M |
| 96-23-1 | dichlorohydrin | 130 (25) | 13 (2.5) | D |
| 542-88-1 | dichloromethyl ether [bis(chloromethyl) ether] | .05 | .005 | D |
| 75-09-2 | dichloromethane (methylene chloride) | 260 (75) | 26 (7.5) | E |
| 676-97-1 | dichloromethyl phosphine oxide | 3 | .3 | D |
| 99-30-9 | dichloro-4-nitroaniline, 2,6- (Botran 75W) | 100 | 10 | D |
| ----- | dichloronitrobenzene, all isomers | 9 | .9 | D |
| 594-72-9 | dichloro-1-nitroethane, 1,1- | 120 (20) | 12 (2) | N,T,O |
| 120-83-2 | dichlorophenol, 2,4- | 525 | 53 | D |
| 87-65-0 | dichlorophenol, 2,6- | 20 | * | (o) |
| 78-87-5 | dichloropropane, 1,2- (propylene dichloride) | 1150(o) (250) | 350 (75) | T,O,M |
| 542-75-6 | dichloropropene, 1,3- | 45 (10) | 4.5 (1) | N,T,O |
| 709-98-8 | dichloropropionanilide (Propanil) | 15 (PM) | 1.5 | D |
| 75-99-0 | dichloropropionic acid, 2,2- (Dalapon) | 58 (10) | 5.8 (1) | N,T,O,M |
| 76-14-2 | dichlorotetrafluoroethane (Freon 114) | 69900 (10000) | 6990 (1000) | N,T,O,M |
| 62-73-7 | Dichlorvos (DDVP) | 9 (1) | .9 (.1) | N,T,O,M |
| 141-66-2 | Dicrotophos | 2.5 | .25 | N,T,O |
| 5124-30-1 | dicyclohexylmethane-4,4'- diisocyanate | .55 | .055 | D |
| 77-73-6 | dicyclopentadiene | 31 (6) | 27 (5) | (o) |
| 102-54-5 | dicyclopentadienyl iron | 50 (resp) | 5 | N,O |
| 60-57-1 | Dieldrin | 2.5 | .25 | N,T,O,M |
| 68334-30-5 | diesel fuel combustion products | 90 (vapor) 10 (PM) | 9 1 | D |
| 111-42-2 | diethanolamine | 130 (30) | 13 (3) | N,T,O |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|---|---|-------------|-----------|
| | | 30-minute | annual | or 1-hour |
| 109-89-7 | diethylamine | 179 (60) | (o) 30 (10) | |
| 100-37-8 | diethylaminoethanol | 55 (11) | (o) 48 (10) | |
| 25340-17-4 | diethyl benzene | 2500 (455) | 250 (46) | D |
| 111-90-0 | diethylene glycol monoethyl ether (ethyl Carbitol) | 1500 (208) | 150 (21) | D |
| 111-40-0 | diethylene triamine | 42 (10) | 4.2 (1) | N,T,O |
| 3710-84-7 | diethylhydroxylamine | 400 | 40 | D |
| 60-29-7 | diethyl ether (ethyl ether) | 930 (300) | (o) * | |
| 117-81-7 | di(2-ethylhexyl)phthalate (di-sec-octyl phthalate) | 50 | 5 | N,T,O |
| 96-22-0 | diethyl ketone | 7050 (2000) | 705 (200) | N,T,O |
| 2524-04-1 | diethyl phosphorochloro-dithioate (ethyl PCT) | 70 | 7 | D |
| 84-66-2 | diethyl phthalate | 50 | 5 | N,T,O |
| 64-67-5 | diethyl sulfate | 25 | 2.5 | D |
| 105-55-5 | diethylthiourea | 50 (PM) | 5 | D |
| 75-61-6 | difluorodibromomethane (Freon 12B2) | 8580 (1000) | 858 (100) | N,T,O,M |
| 2238-07-5 | diglycidyl ether (DGE)** | 5.3 (1) | 0.53 (.1) | N,T,O |
| 929-06-6 | diglycolamine | 380 | 38 | D |
| 123-31-9 | dihydroxybenzene (hydroquinone) | 20 | 2 | T,O,M |
| 110-96-3 | diisobutylamine | 125 | 13 | D |
| 108-82-7 | diisobutylcarbinol (2,6-dimethyl-4-heptanol) | 188 (o) | 100 (D) | |
| 108-83-8 | diisobutyl ketone | 639 (110) | 145 (25) | (o) |
| 84-69-5 | diisobutyl phthalate (see dibutyl phthalate) | 50 (PM) | 5 | D |
| 110-97-4 | diisopropanolamine (DIPA) | 460 | 46 | D |
| 108-18-9 | diisopropylamine | 210 (50) | 21 (5) | N,T,O |
| 68239-06-5 | dimeryl diisocyanate | .25 | .025 | D |
| 110-71-4 | dimethoxyethane, 1,2- (ethylene glycol dimethyl ether, EGDME) | 220 (60) | 22 (6) | D |
| 109-87-5 | dimethoxymethane (methylal) | 31100 (10000) | 3110 (1000) | N,T,O,M |
| 127-19-5 | dimethyl acetamide | 360 (100) | 36 (10) | N,T,O,M |
| 124-40-3 | dimethylamine | 92 (50) | 9.2 (5) | T |
| 1300-73-8 | dimethylaminobenzene (xylidine) | 25 (5) | 2.5 (.5) | N |
| 108-01-0 | dimethylaminoethanol (deanol) | 55 (o) | 50 | D |
| 1704-62-7 | dimethylaminoethoxyethanol | 130 (24) | 13 (2.4) | D |
| 121-69-7 | dimethylaniline, N,N- | 64 (32) (o) | 10 (5) | N |
| 1330-20-7 | dimethylbenzene (xylene) | 3700 (850) (o) | 435 (100) | N,T,O |
| 75-83-2 | dimethyl butane (see hexane isomers) | 3500 (1000) | 350 (100) | N |
| ----- | dimethylcyclohexylamine, N,N- | 100 | 10 | D |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) 30-minute annual or 1-hour | | |
|------------|--|--|----------------------|---------|
| 300-76-5 | dimethyl-1,2-dibromo-2,2-dichloroethyl phosphate (Naled) | 30 | 3 | N,T,O,M |
| 108-01-0 | dimethylethanolamine (dimethylaminoethanol) | 55 (o) | 50 | D |
| 115-10-6 | dimethyl ether | 19100 (10000) | 1910 (1000) | M |
| 598-56-1 | dimethyl ethyl amine, N,N- | 750 (250) | 75 (25) | M |
| 68-12-2 | dimethylformamide | 300 (100) | 30 (10) | N,T,O |
| 108-83-8 | dimethyl-4-heptanone, 2,6-(diisobutyl ketone) | 640 (o) (110) | 145 (25) | N,T,O |
| 108-82-7 | dimethyl-4-heptanol, 2,6-(diisobutylcarbinol) | 188 (o) | 100 | D |
| 57-14-7 | dimethylhydrazine, 1,1- | .25 (.1) | .025 (.01) | T |
| ----- | dimethyl-3-hydroxythiophene, 2,4- | 100 | 10 | D |
| ----- | dimethyl oxazolidinone | 2500 | 250 | D |
| 131-11-3 | dimethylphthalate | 50 (PM) | 5 | N,T,O |
| 3179-63-3 | dimethyl propanolamine | 750 | 75 | D |
| 77-78-1 | dimethyl sulfate | 5.2 (1) | .52 (.1) | N,T,O |
| 75-18-3 | dimethyl sulfide | 3 (o) | * | |
| 67-68-5 | dimethyl sulfoxide (DMSO) | 140 | 14 | D |
| 148-01-6 | dinitolmide (3,5-dinitro-o-toulamide; zoalene) | 50 (PM) | 5 | N,T,O |
| 528-29-0 | dinitrobenzene (all isomers) [also 99-65-0; 100-25-4] | 10 (1.5) | 1 (.15) | N,T,O |
| 534-52-1 | dinitro-o-cresol | 2 (PM) | .2 | N,T,O,M |
| 25550-58-7 | dinitrophenol | 3 (PM) | .3 | D |
| 25321-14-6 | dinitrotoluene | 15 (PM) | 1.5 | N,T,O |
| 101-67-7 | dioctyldiphenylamine | 100 | 10 | D |
| 123-91-1 | dioxane, 1,4- | 900 (250) | 90 (25) | T,O |
| 78-34-2 | Dioxathion (Delnav) | 2 (PM) | .2 | N,T,O |
| 1746-01-6 | dioxins, polychlorinated-dibenzo-p- (as 2,3,7,8-tetrachlorodibenzo-p-dioxin, TCDD) | --- | 9.2×10^{-8} | E, NY |
| 646-06-0 | dioxolane, 1,3- | 520 (172) | 52 (17) | D |
| 122-39-4 | diphenylamine | 100 (PM) | 10 | N,T,O |
| 101-68-8 | diphenylmethane-4,4'-disocyanate (methylene bisphenyl isocyanate) | .5 (.05) | .05 (.005) | N,T |
| 142-84-7 | dipropylamine | 200 (48) | 20 (5) | D |
| 34590-94-8 | dipropylene glycol methyl ether | 3000 (500) | 300 (50) | M |
| 56-18-8 | dipropylene triamine | 60 (11) | 6 (1) | D |
| 111-43-3 | dipropyl ether (propyl ether) | 2500 (600) | 250 (60) | D |
| 123-19-3 | dipropyl ketone | 2330 (500) | 233 (50) | N,T,O |
| 231-36-7 | Diquat | 5 (total) | .5 | N,T,O |
| | | 1 (resp) | .1 | T |
| 85-00-7 | Diquat dibromide | same as Diquat | | |
| 6385-62-2 | Diquat dibromide monohydrate | same as Diquat | | |

| CAS No. | SUBSTANCE | EFFECTS | SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | |
|--|--|---------------------|---|---------|
| | | 30-minute or 1-hour | annual | |
| 117-81-7 | di-sec-octyl phthalate | 50 (PM) | 5 | N,T,O |
| 97-77-8 | Disulfiram | 20 (PM) | 2 | N,T,O,M |
| 298-04-4 | Disulfoton | 1 (PM) | .1 | N,T,O |
| 25231-47-4 | di-tert-amyl phenol | 700 | 70 | D |
| 128-37-0 | di-tert-butyl-p-cresol, 2,6- (butylated hydroxytoluene, BHT) | 100 | 10 | N,T,O |
| 330-54-1 | Diuron | 100 (PM) | 10 | N,T,O |
| 1321-74-0 | divinyl benzene | 530 (100) | 53 (10) | N,T,O |
| 25377-73-5 | dodecenylsuccinic anhydride (see tetrapropenylsuccinic anhydride) | 40 (3.6) | 4 (.36) | D |
| 112-55-0 | dodecylmercaptan | 41 (5) | 4 (.5) | N |
| 27193-86-8 | dodecylphenol | 1200 (110) | 120 (11) | D |
| EE | | | | |
| 1302-74-5 | emery, respirable fraction | 50 (PM) | 5 | O |
| 115-29-7 | Endosulfan | 1 | .1 | N,T,O |
| 72-20-8 | Endrin | 1 | .1 | N,T,O |
| 13838-16-9 | enflurane | 151 (20) | 15 (2) | N |
| 1395-21-7 | enzymes (Subtilisins) | .0006 | .00006 | N,T,O |
| 106-89-8 | epichlorohydrin | 3.8 (1) | .38 (.1) | T |
| 2104-64-5 | EPN (O-ethyl,O-p-nitrophenyl phenylphosphonothioate) | 5 | .5 | N,T,O,M |
| 75-56-9 | epoxypropane, 1,2- (propylene oxide) | 250 (100) | 25 (10) | E |
| 556-52-5 | epoxy-1-propanol, 2,3- (glycidol) | 760 (250) | 76 (25) | N,T,O |
| 74-84-0 | ethane | simple asphyxiant | | |
| 75-08-1 | ethanethiol** (ethyl mercaptan) | .8 (o) | * | |
| 141-43-5 | ethanolamine | 75 (30) | 7.5 (3) | N,T,O,M |
| 100-40-3 | ethenylcyclohexene, 4- (4-vinylcyclohexene) | 40 (1) | 4 (.1) | T |
| 563-12-2 | Ethion | 4 | .4 | N,T,O |
| 110-80-5 | ethoxyethanol, 2- (ethylene glycol monoethyl ether) | 180 (50) | 18 (5) | T |
| 111-15-9 | ethoxyethanol acetate, 2- (ethylene glycol monoethyl ether acetate) | 270 (50) | 27 (5) | T |
| 14631-45-9 | ethoxypropionitrile, β- | 2000 | 200 | D |
| 141-78-6 | ethyl acetate | 14400 (4000) | 1440 (400) | N,T,O,M |
| ----- | ethyl acrolein | 60 (18) | 6 (1.8) | D |
| 140-88-5 | ethyl acrylate | 5 (1.25) | * | (o) |
| 64-17-5 | ethyl alcohol | 18800 (10000) | 1880 (1000) | N,T,O,M |

| CAS No. | SUBSTANCE | EFFECTS | SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | 30-minute | annual |
|----------|--|---------|---|-----------|---------|
| 75-04-7 | ethylamine | 180 | (100) | 18 (10) | N,T,O,M |
| 541-85-5 | ethyl amy1 ketone | 1310 | (250) | 131 (25) | N,T,O |
| 103-69-5 | ethylaniline | 20 | | 2 | D |
| 100-41-4 | ethyl benzene | 2000 | (460) (o) | 434 (100) | |
| ----- | ethyl benzene hydroperoxide | 4350 | | 435 | D |
| 74-96-4 | ethyl bromide | 220 | (50) | 22 (5) | T |
| 628-81-9 | ethyl butyl ether | 2340 | (560) | 234 (56) | D |
| 106-35-4 | ethyl butyl ketone | 2340 | (500) | 234 (50) | N,T,O |
| 75-00-3 | ethyl chloride | 500 | (189) | 50 (19) | E |
| 541-41-3 | ethyl chlorocarbonate (ethyl chloroformate) | 5 | | .5 | D |
| 107-12-0 | ethyl cyanide (propionitrile) | 140 | (60) | 14 (6) | N |
| 74-85-1 | ethylene | 1170 | | 117 | (v) |
| ----- | ethylene bisdithiocarbamates (EBDCs, see ethylene thiourea) | 50 (PM) | | 5 | D |
| 107-07-3 | ethylene chlorhydrin | 33 | (10) | 3.3 (1) | N,T,O,M |
| 110-61-2 | ethylene cyanide (succinonitrile) | 200 | (60) | 20 (6) | N |
| 107-15-3 | ethylenediamine | 250 | (100) | 25 (10) | N,T,O,M |
| 106-93-4 | ethylene dibromide | 3.8 | (.5) | .38 (.05) | N |
| 107-06-2 | ethylene dichloride | 40 | (10) | 4 (1) | N,O |
| 107-21-1 | ethylene glycol | 1270 | (500) | 127 (50) | T,O |
| 111-55-7 | ethylene glycol diacetate | 555 | (o) | 85 | D |
| 110-71-4 | ethylene glycol dimethyl ether (1,2-methoxyethane, EGDME) | 220 | (60) | 22 (6) | D |
| 628-96-6 | ethylene glycol dinitrate | 1 | | .1 | N,O |
| 111-76-2 | ethylene glycol monobutyl ether (butyl Cellosolve) | 1210 | (250) | 121 (25) | N,T,O |
| 112-07-2 | ethylene glycol monobutyl ether acetate | 1310 | (200) | 131 (20) | M |
| 110-80-5 | ethylene glycol monoethyl ether (ethyl Cellosolve) | 180 | (50) | 18 (5) | T |
| 111-15-9 | ethylene glycol monoethyl ether acetate | 270 | (50) | 27 (5) | T |
| 112-25-4 | ethylene glycol monohexyl ether (2-hexyloxyethanol) | 2100 | (350) | 210 (35) | D |
| 109-59-1 | ethylene glycol monoiso- propyl ether | 1060 | (250) | 106 (25) | T,O |
| 109-86-4 | ethylene glycol monomethyl ether (methyl Cellosolve) | 160 | (50) | 16 (5) | T,M |
| 110-49-6 | ethylene glycol monomethyl ether acetate | 240 | (50) | 24 (5) | T,M |
| 122-99-6 | ethylene glycol monophenyl ehter (phenyl Cellosolve) | 170 | (30) | 17 (3) | D |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|--|--|---|-----------|-----------|
| | | 30-minute | annual | or 1-hour |
| 2807-30-9 | ethylene glycol monopropyl ether | 1500 (250) | 150 (25) | D |
| 75-21-8 | ethylene oxide | 18 (10) | 1.8 (1) | T,O |
| 96-45-7 | ethylene thiourea (ETU) | 50(PM) | 5 | D |
| 151-56-4 | ethylenimine** | 8.8 (5) | .88 (.5) | T |
| 60-29-7 | ethyl ether | 927 (306) | * | (O) |
| 763-69-9 | ethyl-3-ethoxypropionate | 400 (67) | 40 (7) | D |
| 109-94-4 | ethyl formate | 3030 (1000) | 303 (100) | NTOM |
| 94-96-2 | 2-ethyl hexanediol-1,3 | 500 | 50 | D |
| 123-05-7 | ethylhexyl aldehyde | 1400 (267) | 140 (27) | D |
| 75-34-3 | ethylidene chloride (1,1-dichloroethane) | 4000 (1000) | 400 (100) | N,O,M |
| 16219-75-3 | ethylidene norbornene | 70 (14) (O) | 25 (5) | |
| 97-64-3 | ethyl lactate | 120(25) | 12(2.5) | D |
| 75-08-1 | ethyl mercaptan** | .8 (O) | * | |
| 97-63-2 | ethyl methacrylate | 32 (7) (O) | * | |
| 18328-90-0 | ethyl-2-methylallylamine | 50 | 5 | D |
| 100-74-3 | ethylmorpholine, N- | 240 (50) | 24 (5) | N,T,O |
| 645-62-5 | ethyl-3-propyl acrolein (2-ethyl hexenal) | 150 (29) | 15 (3) | D |
| 78-10-4 | ethyl silicate | 850 (100) | 85 (10) | N,T,O |
| 352-93-2 | ethyl sulfide | 16 (O) | * | |
| 620-14-4 | ethyltoluene, m- (1-methyl-3-ethylbenzene, see trimethyl benzene) | 1250 (250) | 125 (25) | D |
| 622-96-8 | ethyltoluene, p- (1-methyl-4-ethylbenzene, see trimethyl benzene) | 1250 (250) | 125 (25) | D |
| 611-14-3 | ethyltoluene, o- (1-methyl-2-ethylbenzene, see trimethyl benzene) | 1250 (250) | 125 (25) | D |
| XX | | | | |
| 22224-92-6 | Fenamiphos | 1 | .1 | N,T,O |
| 39515-41-8 | Fenpropathrin (Danitol) (see Pyrethrum) | 50(PM) | 5 | D |
| 115-90-2 | Fensulfothion (Dasanit) | 1 | .1 | N,T,O |
| 55-38-9 | Fenthion | 2 | .2 | T,O,M |
| 51630-58-1 | Fenvalerate (see pyrethrum) | 50 | 5 | D |
| 14484-64-1 | Ferbam | 50 | 5 | O |
| 12604-58-9 | ferrovanadium dust | 10 | 1 | N,T,O,M |
| ----- | fibrous glass dust, | 50 | 5 | N |
| ----- | fluorides, as F | see TACB Reg III | | |
| 7782-41-4 | fluorine | 2 (1) | .2 (.1) | N,O,M |
| 406-90-6 | fluroxene | 103 (20) | 10 (2) | N |
| 944-22-9 | Fonophos | 1 | .1 | N,T,O |

| CAS No. | SUBSTANCE | EFFECTS | SCREENING LEVEL |
|----------|------------------------------|-----------------------|--------------------------------|
| | | | $\mu\text{g}/\text{m}^3$ (ppb) |
| | | 30-minute | annual |
| | | or 1-hour | |
| 50-00-0 | formaldehyde | 15* (12) | 1.5* (1.2) E |
| | | * under review | |
| 75-12-7 | formamide | 180 (100) | 18 (10) N,T |
| 64-18-6 | formic acid | 94 (50) | 9.4 (5) N,T,O,M |
| 109-94-4 | formic acid, ethyl ester | 3000 (1000) | 300 (100) M |
| 107-31-3 | formic acid, methyl ester | 2500 (1000) | 250 (100) M |
| ----- | Freon TMS | 28300 | 2830 D |
| ----- | furans, chlorinated dibenzo- | --- | 1x10⁻⁶ D |
| 794-93-4 | furatone | 50 | 5 D |
| 98-01-1 | furfural | 79 (20) | 8 (2) T,O |
| 98-00-0 | furfuryl alcohol | 400 (100) | 40 (10) N,T,O |

| | | | | | |
|---|-------------------------------|-------------|-----------|---------|---|
| 1303-00-0 | gallium arsenide, as As | 0.1 | .01 | | O |
| 8006-61-9 | gasoline | 3500 (1180) | 350 (118) | E | |
| (also need to consider benzene content) | | | | | |
| 7782-65-2 | germanium tetrahydride | 6.3 (2) | .6 (.2) | N,T,O | |
| 111-30-8 | glutaraldehyde | 8.2 (2) | .8 (.2) | N,T,O,M | |
| 56-81-5 | glycerin mist | 50 | 5 | | O |
| 556-52-5 | glycidol | 760 (250) | 76 (25) | N,T,O | |
| 106-91-2 | glycidyl methacrylate | 580 (100) | 58 (10) | D | |
| 107-16-4 | glycolonitrile | 50 (20) | 5 (2) | N | |
| 298-12-4 | glycoxylic acid | 75 | 7.5 | D | |
| 107-22-2 | glyoxal | 70 | 7 | D | |
| ----- | grain dust | 40 | 4 | N,T | |
| 7782-42-5 | graphite, natural & synthetic | 20 | 2 | T | |
| 86-50-0 | guthion (azinphos-methyl) | 2 | .2 | N,T,O,M | |
| 7778-18-9 | gypsum (calcium sulfate) | 50 | 5 | N,O | |

| | | | | |
|-----------|---|-------------------|----------|------------|
| 7440-58-6 | hafnium | 5 | .5 | N, T, O, M |
| 151-67-7 | halothane | 162 (20) | 16.2 (2) | N |
| 7440-59-7 | helium | simple asphyxiant | | |
| 526-73-8 | hemimellitene (1,2,3-trimethylbenzene) | 1250 (250) | 125 (25) | N, T, O |
| 76-44-8 | Heptachlor and Heptachlor epoxide | .5 | .05 | T |
| 142-82-5 | heptane | 3500 (850) | 350 (85) | N |
| 110-43-0 | heptanone, 2- (methyl n-amyl ketone) | 94 (o) | * | |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL | | |
|------------|--|--------------------------------|------------|---------|
| | | $\mu\text{g}/\text{m}^3$ (ppb) | | |
| | | 30-minute | annual | |
| | | or 1-hour | | |
| 106-35-4 | heptanone, 3- (ethyl butyl ketone) | 2340 (500) | 234 (50) | N,T,O |
| 111-14-8 | heptanoic acid | 108 (o) | 53 | D |
| 111-70-6 | heptyl alcohol | 1900 (o) | 270 | |
| 1639-09-4 | heptylmercaptan, n- | 1 (o) | * | |
| 118-74-1 | hexachlorobenzene (HCB) | .25 | .025 | T |
| 87-68-3 | hexachlorobutadiene | 2.1 (.2) | .21 (.02) | N,T,O |
| 58-89-9 | Hexachlorocyclohexane, gamma- (Lindane) | 5 | .5 | N,T,O,M |
| 77-47-4 | hexachlorocyclopentadiene | 1.1 (.1) | .11 (.01) | N,T,O |
| 67-72-1 | hexachloroethane | 97 (10) | 10 (1) | N,T,O,M |
| 1335-87-1 | hexachloronaphthalene | 2 | .2 | N,T,O |
| 1888-71-7 | hexachloropropene | 60 | 6 | D |
| 2917-26-2 | hexadecyl mercaptan (cetylmercaptan) | 53 (5) | 5 (.5) | N |
| 648-16-2 | hexafluoroacetone | 7 (1) | .7 (.1) | N,T,O |
| 124-09-4 | hexamethylene diamine | 3.2 (o) | * | |
| 822-06-0 | hexamethylene diisocyanate (HDI) | .34 (.05) | .03 (.005) | W |
| 28182-81-2 | hexylmethlene diisocyanate polymer | 50 (PM) | 5 | D |
| 629-11-8 | hexamethylene glycol | 750 | 75 | D |
| 111-49-9 | hexamethyleneimine | 100 (25) | 10 (2.5) | D |
| 100-97-0 | hexamethylenetetramine | 170 | 17 | D |
| 110-54-3 | hexane, n- | 1760 (500) | 176(50) | N,T,O,M |
| ----- | hexane, other isomers | 3500 (1000) | 350 (100) | N |
| 124-09-4 | hexanediamine, 1,6- | 23 (5) | 2.3 (.5) | T |
| 591-78-6 | hexanone, 2- (methyl n-butyl ketone) | 40 (10) | 4 (1) | N |
| 108-10-1 | hexone (methyl isobutyl ketone) | 2050 (500) | 205 (50) | N,T,O |
| 108-84-9 | hexyl acetate, sec- | 12 (2) | * (o) | |
| 111-25-1 | hexyl bromide | 135 (20) | 14 (2) | D |
| 107-41-5 | hexylene glycol | 1210 (250) | 121 (25) | N,T,O |
| 111-31-9 | hexylmercaptan, N- | 27 (5) | 2.7 (.5) | N |
| 302-01-2 | hydrazine | 0.13 (.1) | .013 (.01) | T |
| 7782-79-8 | hydrazoic acid | 2.7 (1) | .27 (.1) | M |
| 1333-74-0 | hydrogen | simple asphyxiant | | |
| 61788-32-7 | hydrogenated terphenyls | 50 (5) | 5 (.5) | N,T,O |
| 10035-10-6 | hydrogen bromide** | 100 (30) | 10 (3) | N,T,O |
| 7647-01-0 | hydrogen chloride** | 75 (50) | .1 (c) | N,T,O |
| 74-90-8 | hydrogen cyanide | 50 (47) | 5 (4.7) | N,O |
| 7664-39-3 | hydrogen fluoride** | see TACB Reg III | | |
| 10034-85-2 | hydrogen iodide | 150 (30) | 15 (3) | D |
| 7722-84-1 | hydrogen peroxide | 14 (10) | 1.4 (1) | N,T,O,M |
| 7783-07-5 | hydrogen selenide (as Se) | 1.6 (.5) | .16 (.05) | NTOM |
| 7783-06-4 | hydrogen sulfide** | see TACB Reg II | | |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL | | |
|----------|--|-------------------------|-----------|---------------------|
| | | μg/m ³ (ppb) | 30-minute | annual or 1-hour |
| 123-31-9 | hydroquinone | 20 | 2 | N,T,O,M |
| 150-76-5 | hydroquinone monomethyl ether (4-methoxyphenol; p-hydroxyanisole) | 50(PM) | 5 | N,T,O |
| 118-93-4 | hydroxyacetophenone, 2- | 1250 | 125 | D |
| 99-93-4 | hydroxyacetophenone, 4- | 2500 | 250 | D |
| ----- | hydroxyacetophenone oxime, 4- | 1250 | 125 | D |
| 111-41-1 | hydroxyethyl ethylenediamine | 640 (150) | 64 (15) | D |
| 868-77-9 | hydroxyethyl methacrylate, 2- | 3170 (595) | 317 (60) | D |
| 123-42-2 | 4-hydroxy-4-methyl-2- pentanone (diacetone alcohol) | 1330 (280)(o) | 240 (50) | |
| 597-31-9 | hydroxypivaldehyde | 1800 | 180 | D |
| 999-61-1 | hydroxypropyl acrylate | 28 (5) | 2.8 (.5) | N,T,O |

| | | | | |
|-------------------|--|------------------|----------------|----------|
| 15687-27-1 | Ibuprofen | 40 | 4 | D |
| 56-18-8 | iminobispropylamine, 3,3'-(dipropylene triamine) | 60 (11) | 6 (1) | D |
| 95-13-6 | indene | 70 (15) (o) | 45 (10) | N,T,O |
| 7740-74-6 | indium & compounds (as In) | 1 | .1 | N,T,O |
| 7553-56-2 | iodine | 10 (1) | 1 (.1) | N,T,O,M |
| 75-47-8 | iodoform | 6 (o) | * | |
| 36734-19-7 | Iprodione | 100 | 10 | D |
| 1309-37-1 | iron oxide (fume) | 50 | 5 | N,T,M |
| 13463-40-6 | iron pentacarbonyl | 8 (1) | .8 (.01) | N,T,O,M |
| ----- | iron salts, soluble (as Fe) | 10 | 1 | N,T,O |
| 118-48-9 | isatoic anhydride | 100 (PM) | 10 | D |
| 123-92-2 | isoamyl acetate | 1330 (o) | 525 | N,T,O |
| 123-51-3 | isoamyl alcohol | 151 (o) | * | |
| 124-68-5 | isobutanolamine | 400 | 40 | D |
| 110-19-0 | isobutyl acetate | 630 (o) | * | D |
| 78-83-1 | isobutyl alcohol | 1520 (500) | 152 (50) | N,T,O |
| 78-81-9 | isobutyl amine | 150 (50) | 15 (5) | M |
| 97-85-8 | isobutyl isobutyrate (IBIB) | 6000 (980) | 600 (98) | D |
| 123-17-1 | isobutyl heptyl ketone | 3750 (500) | 375 (50) | D |
| 97-86-9 | isobutyl methacrylate | 1900 (330) | 190 (33) | D |
| 78-84-2 | isobutyraldehyde | 138 (o) | * | |
| 78-82-0 | isobutyronitrile | 220 (80) | 22 (8) | N |
| 71121-36-3 | isocyanobenzotrifluoride | .38 | .038 | D |
| 540-84-1 | isoctane (methyl heptane) | 3500(750) | 350(75) | D |
| 26952-21-6 | isoctyl alcohol | 2660 (500) | 266 (50) | N,T,O |
| 78-59-1 | isophorone | 230 (40) | 23 (4) | N,O |
| 4098-71-9 | isophorone diisocyanate | 0.45 (.05) | .045 (.005) | N,T |
| 78-96-6 | isopropanolamine (MIPA) | 200 | 20 | D |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) 30-minute annual or 1-hour | | |
|------------|---|--|-------------------|---------|
| MMMMMM | | | | |
| 546-93-0 | magnesite | 50 | 5 | N,O |
| 1309-48-4 | magnesium oxide (fume) | 50 | 5 | O |
| 121-75-5 | Malathion | 50 | 5 | O |
| 110-16-7 | maleic acid | 14 | 1.4 | D |
| 108-31-6 | maleic anhydride | 10 (2.5) | 1 (.25) | N,T,O |
| 109-77-3 | malonitrile | 80 (30) | 8 (3) | N |
| 7439-96-5 | manganese fume | 10 | 1 | N,T,O |
| 7439-96-5 | manganese dust & compounds | 30 | 3 | N |
| 12079-65-1 | manganese cyclopentadienyl tricarbonyl | 1 | .1 | N,T,O |
| 1313-35-7 | manganese tetroxide | 10 | 1 | O,M |
| 1317-65-3 | marble (calcium carbonate) | 50 | 5 | N,O |
| 7439-97-6 | mercury alkyl compounds | .1 | .01 | N,T,O,M |
| 7439-97-6 | mercury, aryl & inorganic cpds. | 1 | .1 | N,T,O,M |
| 7439-97-6 | mercury, all other forms | .5 | .05 | N,T,O |
| 108-67-8 | (Hg vapor, colloidal or metallic Hg) mesitylene (1,3,5-trimethyl benzene) | 1250 (250) | 125 (25) | N,T,O |
| 141-79-7 | mesityl oxide | 204 (51) (o) | 40 (10) | N |
| 57837-19-1 | metalexyl | 50 (PM) | 5 | D |
| 79-41-4 | methacrylic acid | 700 (200) | 70 (20) | N,T,O |
| 126-98-7 | methacrylonitrile | 27 (10) | 2.7 (1) | N,T,O |
| 74-82-8 | (methylacrylonitrile; 2-methyl-2-propenenitrile, MAN) | | | |
| 74-93-1 | methane | | simple asphyxiant | |
| | methanethiol** | 2 (1) (o) | 1 (.1) | N,T,O,M |
| | (methyl mercaptan) | | | |
| 16752-77-5 | Methomyl (Lannate) | 25 | 2.5 | N,T,O |
| 72-43-5 | Methoxychlor | 50 | 5 | O |
| 109-86-4 | methoxyethanol, 2- | 160 (50) | 16 (5) | T,M |
| 110-49-6 | (methyl Cellosolve; ethylene glycolmonomethyl ether) | | | |
| | methoxyethanol acetate, 2- | 240 (50) | 24 (5) | T,M |
| | (ethylene glycol monomethyl ether acetate) | | | |
| 76-38-0 | methoxyflurane | 135 (20) | 13.5 (2) | N |
| 150-76-5 | methoxyphenol, 4- | 50 (PM) | 5 | N,T,O |
| | (hydroquinone monomethyl ether; p-hydroxyanisole) | | | |
| 1589-47-5 | methoxypropan-1-ol, 2- | 750 (200) | 75 (20) | M |
| 110-67-8 | methoxypropionitrile, 3- | 2000 | 200 | D |
| 70657-70-4 | methoxypropyl-1-acetate, 2- | 1100 (200) | 110 (20) | M |
| 79-20-9 | methyl acetate | 6060 (2000) | 606 (200) | NTOM |
| 105-45-3 | methyl acetoacetate | 3000 | 300 | D |
| 74-99-7 | methyl acetylene | 16400 (10000) | 1640 (1000) | N,T,O,M |
| 96-33-3 | methyl acrylate | 61 (17) (o) | 18 (5) | M |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|---|---|----------------|-----------|
| | | 30-minute | annual | or 1-hour |
| 126-98-7 | methylacrylonitrile (methacrylonitrile) | 27 (10) | 2.7 (1) | N,T,O |
| 109-87-5 | methylal (dimethoxymethane; methoxymethane) | 31100 (10000) | 3110 (1000) | N,T,O,M |
| 67-56-1 | methyl alcohol | 2620 (2000) | 262 (200) | NTOM |
| 74-89-5 | methylamine | 64 (50) | 6.4 (5) | T |
| 108-11-2 | methyl amyl alcohol (methyl isobutyl carbinol) | 292 (70) (o) | 104 (25) | N,T,O,M |
| 110-43-0 | methyl n-amyl ketone | 94 (o) | * | |
| 100-61-8 | methyl aniline, N- | 22 (5) | 2.2 (.5) | N,T,O,M |
| 589-18-4 | methylbenzyl alcohol | 600 (120) | 60 (12) | D |
| 74-83-9 | methyl bromide** | 190 (50) | 19 (5) | T,O,M |
| 591-78-6 | methyl n-butyl ketone | 40 (10) | 4 (1) | N |
| 1634-04-4 | methyl-tert-butyl ether (MTBE) | 600 (125) (o) | 288 (80) | D |
| ----- | methylbutyraldehyde | 1800 (510) | 180 (51) | D |
| 74-87-3 | methyl chloride | 1030 (500) | 103 (50) | T,O,M |
| 71-55-6 | methyl chloroform (1,1,1-trichloroethane) | 10800 (2000) | 1080 (200) | M |
| 79-22-1 | methyl chloroformate | 2 | .2 | D |
| 137-05-3 | methyl 2-cyanoacrylate | 91 (20) | 9.1 (2) | N,T,O,M |
| 108-87-2 | methyl cyclohexane | 16100 (4000) | 1610 (400) | N,T,O |
| 25639-42-3 | methyl cyclohexanol | 2340 (500) | 234 (50) | N,T,O,M |
| 583-60-8 | methyl cyclohexanone, o- | 2290 (500) | 229 (50) | N,T,O,M |
| 12108-13-3 | methyl cyclopentadienyl manganese tricarbonyl | 2 | .2 | N,T,O |
| 96-37-7 | methylcyclopentane | 2580 (750) | 258 (75) | D |
| 8022-00-2 | methyl demeton | 5 | .5 | N,T,O,M |
| 105-59-9 | methyldiethanolamine | 500 (100) | 50 (10) | D |
| 101-68-8 | methylene bisphenyl diisocyanate (MDI) | .5 (.05) | .05 (.005) | N,T |
| 75-09-2 | methylene chloride | 260 (75) | 26 (7.5) | E |
| 101-14-4 | methylene bis(2-chloro- aniline), 4,4'-(MBOCA) | 2.2 (.2) | .22 (.02) | T,O |
| 5124-30-1 | methylene bis(4-cyclo- hexylisocyanate) | .54 (.05) | .054 (.005) | T |
| 101-77-9 | methylene dianiline, 4,4' | 8.1 (1) | .81 (.1) | T |
| 115-10-6 | methyl ether (dimethyl ether) | 19100 (10000) | 1910 (1000) | M |
| ----- | methyl ethyl benzene, all isomers (ethyltoluene, m-, p-, o-) | 1250 (250) | 125 (25) | N,T,O |
| 78-93-3 | methyl ethyl ketone (MEK) | 3900 (1320) (o) | 590 (200) | N,T,O,M |
| 96-29-7 | methyl ethyl ketone oxime | 1960 (550) | 196 (55) | D |
| 1338-23-4 | methyl ethyl ketone peroxide | 15 (2) | 1.5 (.2) | N,T |
| 107-31-3 | methyl formate | 2460 (1000) | 246 (100) | N,T,O,M |
| 534-22-5 | methylfuran, 2- | 550 | 55 | D |
| 540-84-1 | methyl heptane (isooctane) | 3500 (750) | 350 (75) | D |

| CAS No. | Substance | Effects Screening Level μg/m ³ (ppb) 30-minute annual or 1-hour | | |
|------------|---|---|------------|---------|
| 541-85-5 | methyl-3-heptanone, 5- (ethyl amyl ketone) | 1310 (250) | 131 (25) | N,T,O |
| ----- | methyl hexane, 2- (isoheptane) | 3070(750) | 307(75) | D |
| 111-13-7 | methyl hexyl ketone (octanone) | 5100 (970) | 510 (97) | D |
| 60-34-4 | methyl hydrazine | .19 (.1) | .02 (.01) | T |
| 74-88-4 | methyl iodide | 120 (20) | 12 (2) | N,T,O |
| 110-12-3 | methyl isoamyl ketone | 56 (12) (o) | * | |
| 108-11-2 | methyl isobutyl carbinol (4-methyl-2-pentanol) | 292 (70) (o) | 104 (25) | N,T,O,M |
| 108-10-1 | methyl isobutyl ketone (MIBK; hexanone) | 2050 (500) | 205 (50) | N,T,O |
| 624-83-9 | methyl isocyanate** | .47 (.2) | .05 (.02) | N,T,O |
| 99-87-6 | methyl isopropylbenzene, 4- (p-cymene) | 2745 (500) | 275 (50) | D |
| 563-80-4 | methyl isopropyl ketone | 7050 (2000) | 705 (200) | N,T,O |
| 74-93-1 | methyl mercaptan** | 2 (1) (o) | 1 (.5) | N,T,O,M |
| 80-62-6 | methyl methacrylate | 339 (82) (o) | 210(50) | M |
| 298-00-0 | Methyl parathion | 2 | .2 | N,T,O |
| 108-11-2 | methyl-2-petanol, 4- | 1000(250) | 100(25) | M |
| 107-87-9 | methyl propyl ketone (2-pentanone) | 5300 (1500) | 530 (150) | N |
| 120-94-5 | methylpyrrolidine, N- | 70 | 7 | D |
| 872-50-4 | methyl-2-pyrrolidone, N- | 1100 (275) | 110 (27.5) | D |
| 681-84-5 | methyl silicate | 60 (10) | 6 (1) | N,T,O |
| 98-83-9 | methyl styrene, α- | 250 (52) (o) | 240 (50) | N,T,O |
| ----- | methyl styrylphenol, p- | 140 | 14 | D |
| 75-18-3 | methyl sulfide (dimethyl sulfide) | 3 (o) | * | |
| 21087-64-9 | Metribuzin | 50 | 5 | N,T,O |
| 7786-34-7 | Mevinphos | .92 (.1) | .09 (.01) | T |
| 12001-26-2 | mica | 30 | 3 | N,T,O |
| 8032-32-4 | mineral spirits (naphtha) | 3500 (875) | 350 (88) | N |
| ----- | mineral wool fibers | 50 | 5 | N |
| 7439-98-7 | molybdenum, soluble | 50 | 5 | T,O,M |
| 7439-98-7 | molybdenum, insoluble | 100 | 10 | T,O |
| 6923-22-4 | Monocrotophos (Azodrin) | 2.5 | .25 | N,T,O |
| 110-91-8 | morpholine | 36 (o) | * | |

| | | | | |
|-----------|--|-------------|-----------|------|
| 300-76-5 | Naled (Dibrom) | 30 | 3 | T, M |
| 8030-30-6 | naphtha, coal-tar | 4000 (1000) | 400 (100) | N, O |
| 8032-32-4 | naphtha, VM&P (petroleum distillates) | 3500 (875) | 350 (88) | N |

| CAS No. | SUBSTANCE | EFFECTS | SCREENING LEVEL |
|------------|--|---|-------------------|
| | | $\mu\text{g}/\text{m}^3$ (ppb) | |
| | | 30-minute | annual |
| | | or 1-hour | |
| 91-20-3 | naphthalene | 440 (88) (o) | 50 (10) |
| 25551-28-4 | naphthalene diisocyanate (NDI) | .4 | .04 |
| 3173-72-6 | naphthalene diisocyanate, 1,5- | .9 (.1) | .09 (.01) |
| 7440-01-9 | neon | | simple asphyxiant |
| 126-30-7 | neopentyl glycol | 500 | 50 |
| 7440-02-0 | nickel & compounds | .15 | .015 |
| 13463-39-3 | nickel carbonyl** | .15 | .015 |
| 54-11-5 | nicotine | 5 | .5 |
| 1929-82-4 | Nitrapyrin | 50 | 5 |
| 7697-37-2 | nitric acid** | 52 (20) | 5.2 (2) |
| 10102-43-9 | nitric oxide | 310 (250) | 31 (25) |
| 100-01-6 | nitroaniline | 30 | 3 |
| 98-95-3 | nitrobenzene | 24 (4.8) (o) | 5 (1) |
| 100-00-5 | nitrochlorobenzene | 6.4 (1) | .64 (.1) |
| 79-24-3 | nitroethane | 3070 (1000) | 307 (100) |
| 10102-44-0 | nitrogen dioxide | must meet NAAQS | |
| 7783-54-2 | nitrogen trifluoride | see TACB Reg III | |
| 55-63-0 | nitroglycerin (NG) | 1 | .1 |
| 75-52-5 | nitromethane (nitrocarbol) | 500 (200) | 50 (20) |
| 108-03-2 | nitropropane, 1- | 910 (250) | 91 (25) |
| 79-46-9 | nitropropane, 2- | 360 (100) | 36 (10) |
| ----- | nitrosamines | .007 ppb | .0007 ppb |
| | | (ESL in $\mu\text{g}/\text{m}^3$ will depend on molecular weight: 70-100) | |
| 99-08-1 | nitrotoluene, m- | 110 (20) | 11 (2) |
| 88-72-2 | nitrotoluene, o- | 110 (20) | 11 (2) |
| 99-99-0 | nitrotoluene, p- | 110 (20) | 11 (2) |
| 10024-97-2 | nitrous oxide | 450 (250) | 45 (25) |
| 111-84-2 | nonane | 10500 (2000) | 1050 (200) |
| 112-05-0 | nonoic acid | 4.6 (o) | * |
| 1455-21-6 | nonylmercaptan, n- | 33 (5) | 3.3 (.5) |
| 25154-52-3 | nonylphenol, mixed isomers | 400 (45) | 40 (4.5) |
| 9016-45-9 | nonyl phenol ethoxylate [also 26027-38-3] | 1000 | 100 |
| 9016-45-9 | nonylphenol polyethylene-glycol ether, nonionic [Tergitol TP-9; polyethylene (9) glycol nonyl phenyl ether; nonylphenoxy poly-(ethyleneoxy)ethanol] | 600 (24) | 60 (2.4) |

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| | | | | |
|-----------|--------------------------------|------------|----------|-------|
| 2234-13-1 | octachloronaphthalene | 1 | .1 | N,T,O |
| 111-13-7 | octanone (methyl hexyl ketone) | 5100 (970) | 510 (97) | D |
| 2885-00-9 | octadecylmercaptan | 60 (5) | 6 (.5) | N |
| 111-65-9 | octane | 3500 (750) | 350 (75) | N |

| CAS No. | SUBSTANCE | EFFECTS | SCREENING LEVEL μg/m ³ (ppb) | |
|------------|---|------------------|--|---------|
| 111-86-4 | octylamine | 60 (11) | 6 (1) | D |
| 111-88-6 | octylmercaptan, n- | 30 (5) | 3 (.5) | N |
| 27193-28-8 | octyl phenol | 20 | 2 | D |
| 2687-94-7 | octyl pyrrolidone, N- | 100 | 10 | D |
| 8012-95-1 | oil mist, mineral & others | 50 | 5 | N,T,O |
| 20816-12-0 | osmium tetroxide | .016 (.002) | .0016 (.0002) | N,T,O,M |
| 144-62-7 | oxalic acid | 10 | 1 | N,T,O |
| ----- | oxo-hexyl acetate | 2750 | 275 | D |
| 3033-62-3 | oxybis(N,N-dimethylethylamine) (Thancat ZF-20) | 216 (33) | 22 (3.3) | D |
| 7783-41-7 | oxygen difluoride | see TACB Reg III | | |
| 10028-15-6 | ozone | must meet NAAQS | | |

| | | | | |
|------------|--|--------------------------|-----------------|---------|
| 8012-95-1 | paraffin oil (see mineral oil mist) | 50 | 5 | N,T,O |
| 64741-89-5 | paraffinic distillate [include all 64741-xx-x oil mist group] | 50 | 5 | N,T,O |
| 8002-74-2 | paraffin wax fume | 20 | 2 | N,T,O |
| 4685-14-7 | Paraquat | 1 | .1 | N,T,O,M |
| 56-38-2 | [also 1910-42-5; 2074-50-2] | | | |
| ----- | Parathion | .5 | .05 | N |
| | particulates not otherwise classified (PNOc) | 100 (total) 50 (resp) | 10 5 | T O |
| 19624-22-7 | pentaborane | .13 .05) | .013 (.0015) | N,T,O,M |
| 76-01-7 | pentachloroethane | 400 (50) | 40 (5) | M |
| 1321-64-8 | pentachloronaphthalene | 5 | .5 | N,T,O,M |
| 82-68-8 | pentachloronitrobenzene | 5 | .5 | T |
| 87-86-5 | pentachlorophenol | 5 | .5 | N,T,O |
| 115-77-5 | pentaerythritol | 50 | 5 | N,O |
| 4067-16-7 | pentaethylene hexamine | 625 | 63 | D |
| 109-66-0 | pentane | 3500 (1200) | 350 (120) | N |
| 107-87-9 | pentanone, 2- (methyl propyl ketone) | 5300 (1500) | 530 (150) | N |
| 109-67-1 | pentene, 1- (1-amylene) | 90 (30) | * | |
| 4635-87-4 | pentene nitrile, 3- | 70 (27) | 7 (3) | D |
| 110-66-7 | pentylmercaptan | 21 (5) | 2 (.5) | N |
| 127-18-4 | perchloroethylene | 340 (50) | 34 (5) | E |
| 594-42-3 | perchloromethyl mercaptan | 7.5(1.1)(o) | .8 (.1) | |
| 7616-94-6 | perchloryl fluoride | see TACB Reg III | | |
| 382-21-8 | perfluoroisobutylene | .82 (.1) | .082 (.01) | T |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|--|---|------------|---------|
| | | 30-minute | annual | |
| | | or 1-hour | | |
| 93763-70-3 | perlite | 50 | 5 | N,O |
| 52645-53-1 | Permethrin (see pyrethrum) | 50 (PM) | 5 | D |
| ----- | petroleum distillates (see VM&P naphtha) | 3500 (875) | 350 (88) | N |
| 8030-30-6 | petroleum ether (VM&P naphtha) | 3500 (875) | 350 (88) | N |
| 8032-32-4 | petroleum spirit (VM&P naphtha) | 3500 (875) | 350 (88) | N |
| 532-27-4 | phenacyl chloride (α -chloroacetophenone) | 3.2 (.5) | .32 (.05) | N,T,O |
| 85-01-8 | phenanthracene (see coal tar pitch volatiles) | 0.5 | 0.05 | E |
| 156-43-4 | phenetidine, p- | 150 | 15 | D |
| 103-73-1 | phenetole (phenyl ethyl ether) | | | |
| 108-95-2 | phenol | 154 (40) (o) | 19 (5) | N,T,O,M |
| 92-84-2 | phenothiazine | 50 | 5 | N,T,O |
| 108-45-2 | phenylene diamine, m- | 1 | .1 | T |
| 95-54-5 | phenylene diamine, o- | 1 | .1 | T |
| 106-50-3 | phenylene diamine, p- | 1 | .1 | T |
| 101-84-8 | phenyl ether (diphenyl oxide) | 8 (1.1) (o) | 7 (1) | N,T,O,M |
| 60-12-8 | phenylethyl alcohol | 500 (110) | 50 (11) | D |
| 100-42-5 | phenylethylene (styrene) | 430 (100) (o) | 85 (20) | M |
| 122-60-1 | phenyl glycidyl ether (PGE) | 60 (10) | 6 (1) | N,T,O,M |
| 100-63-0 | phenylhydrazine | 4.4 (1) | .44 (.1) | T |
| 108-98-5 | phenyl mercaptan | 4 (.8) (o) | .5 (.1) | N |
| 638-21-1 | phenylphosphine | 2.3 (.5) | .23 (.05) | N,T,O |
| 122-97-4 | phenylpropyl alcohol | 1100 (200) | 110 (20) | D |
| 298-02-2 | Phorate | .5 | .05 | N,T,O |
| 7786-34-7 | Phosdrin (Mevinphos) | .92 (.1) | .092 (.01) | T |
| 75-44-5 | phosgene** | 4 (1) | .4 (.1) | N,T,O,M |
| 732-11-6 | Phosmet (Prolate) | 20 | 2 | D |
| 7803-51-2 | phosphine** | 4.2 (3) | .42 (.3) | N,T,O |
| 7664-38-2 | phosphoric acid | 10 | 1 | N,T,O |
| 2929-95-5 | phosphorodithioic acid esters, zinc salt | 1500 | 150 | D |
| 13598-36-2 | phosphorous acid | 10 | 1 | D |
| 7723-14-0 | phosphorus (yellow) | 1 | .1 | N,T,O,M |
| 10025-87-3 | phosphorus oxychloride | 6.3 (1) | .63 (.1) | N,T,O |
| 10026-13-8 | phosphorus pentachloride | 8.5 (1) | .85 (.1) | N,T,O,M |
| 1314-80-3 | phosphorus pentasulfide | 10 | 1 | N,T,O,M |
| 1314-56-3 | phosphorus pentoxide | 10 | 1 | M |
| 7719-12-2 | phosphorus trichloride | 11 (2) | 1.1 (.2) | N,T,O |
| 85-44-9 | phthalic anhydride | 61 | 6.1 | N,T,O |
| 626-17-5 | phthalodinitrile, m- | 50 | 5 | N,T,O |
| 1918-02-1 | Picloram | 50 | 5 | O |
| 109-06-8 | picoline, 2- | 53 (14) (o) | 8 (2) | D |
| 108-99-6 | picoline, 3- | 80 (20) | 8 (2) | D |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|--|---|-------------|-----------|
| | | 30-minute | annual | or 1-hour |
| 108-89-4 | picoline, 4- | 46 (12) | 4.6 (1.2) | D |
| 88-89-1 | picric acid | .5 (o) | .1 | N,T,O |
| 83-26-1 | Pindone | 1 | .1 | N,T,O |
| 1330-16-1, | pinene [also 127-91-3; 80-56-8] | 64 (11) (o) | * | |
| 110-85-0 | piperazine | 34 | 3.4 | D |
| 142-64-3 | piperazine dihydrochloride | 50 | 5 | N,T,O |
| 72-98-9 | pivalic acid | 250 | 25 | D |
| 3282-30-2 | pivaloyl chloride | 40 | 4 | D |
| 83-26-1 | pivaloyl-1,3-indandione, 2- (pindone) | 1 | .1 | N,T,O |
| 10101-41-4 | plaster of Paris (see calcium sulfate) | 50 (resp) | 5 | N,T |
| 7440-06-4 | platinum, metal | 10 | 1 | N,T,O |
| 7440-06-4 | platinum, soluble salts | .02 | .002 | N,T,O,M |
| 1336-36-3 | polychlorinated biphenyls (PCBs, see chlorodiphenyl) | .1 | .01 | E |
| 65996-93-2 | polycyclic aromatic hydro- carbons, particulate (PPAH) (assume the fraction of benzo[a]pyrene not exceed 10% of total PPAH, see coal tar pitch volatiles) | .5 | .05 | E |
| 9016-45-9 | polyethylene (9) glycol nonyl phenyl ether, nonionic surfactant (Tergitol TP-9) | 600 (24) | 60 (2.4) | D |
| 9003-39-8 | poly(1-vinyl-2-pyrrolidinone) | 100 | 10 | D |
| 9003-53-2 | polystyrene | 100 | 10 | D |
| 65997-15-1 | Portland cement | 50 | 5 | N,O |
| 1310-58-3 | potassium hydroxide | 20 | 2 | N,T,O |
| 7722-64-7 | potassium permanganate | 20 | 2 | D |
| 74-98-6 | propane | 18000 (10000) | 1800 (1000) | N,O,M |
| 107-19-7 | propargyl alcohol | 23 (10) | 2.3 (1) | N,T,O |
| 57-57-8 | propiolactone, β - | 15 (5) | 1.5 (.5) | T |
| 79-09-4 | propionic acid | 103 (34) (o) | 30 (10) | N,T,O,M |
| 107-12-0 | propionitrile | 140 (60) | 14 (6) | N |
| 93-55-0 | propiophenone | 2300 | 230 | D |
| 114-26-1 | Propoxur (Baygon) | 5 | .5 | N,T,O |
| 109-60-4 | propyl acetate, n- | 626 (o) | * | |
| 71-23-8 | propyl alcohol, n- | 4920 (2000) | 492 (200) | N,T,O |
| 540-54-5 | propyl chloride | 30000 | 3000 | D |
| 115-07-1 | propylene | 117000 (v) | * | |
| 78-89-7 | propylene chlorhydrin | 170 | 17 | D |
| 78-90-0 | propylene diamine | 42 (o) | 17 | D |
| 78-87-5 | propylene dichloride | 1150 (250) (o) | 350 (75) | T,O,M |
| 57-55-6 | propylene glycol, vapor | 4000 (1290) | 400 (129) | D |
| | | 20 (PM) | 2 | D |
| 6423-43-4 | propylene glycol dinitrate | 3 (.5) | .3 (.05) | N,T,O,M |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|--|---|----------------|---------|
| | | 30-minute | annual | |
| | | or 1-hour | | |
| ----- | propylene glycol mono-t-butyl ether | 5400 (1000) | 540 (100) | D |
| 107-98-2 | propylene glycol monomethyl ether | 3600 (1000) | 360 (100) | N,T,O |
| 75-58-8 | propyleneimine** | 50 (20) | 5 (2) | N,T,O |
| 75-56-9 | propylene oxide | 250 (100) | 25 (10) | E |
| 111-43-3 | propyl ether (dipropyl ether) | 2500 (600) | 250 (60) | D |
| 110-74-7 | propyl formate | 6475 (1800) | 650 (180) | D |
| 107-03-9 | propylmercaptan, n- | 2.3 (.7) (o) | 1.6 (.5) | N |
| 627-13-4 | propyl nitrate | 1050 (250) | 105 (25) | N,T,O,M |
| 106-36-5 | propyl propionate | 4750 (1000) | 475 (100) | D |
| 74-99-7 | propyne (methyl acetylene) | 16400 (10000) | 1640 (1000) | N,T,O,M |
| 95-63-6 | pseudocumene (1,2,4-trimethylbenzene) | 1250 (250) | 125 (25) | N,T,O |
| 9002-86-2 | PVC | 50 | 5 | M |
| 8003-74-7 | Pyrethrum (Pyrethrin) | 50 | 5 | N,T,O,M |
| 129-00-0 | pyrene (see coal tar pitch volatiles) | 0.5 | 0.05 | E |
| 110-86-1 | pyridine | 69 (23) (o) | 15 (5) | N,T,O,M |
| 68391-11-7 | pyridines, alkyl | 150 | 15 | D |
| 120-80-9 | pyrocatechol (catechol) | 230 (50) | 23 (5) | N,T,O |
| ----- | pyronaphtha (dripolene; pyrolysis gasoline) | 40(10) | 4(1) | D-MSDS |
| 123-75-1 | pyrrolidine, 2- | 140 | 14 | D |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) 30-minute annual or 1-hour | | |
|----------------------------|--|--|-----------|---------|
| 616-45-5 | pyrrolidone, 2- | 70 | 7 | D |
| 14808-60-7 | quartz (silica-crystalline) | 1 | .1 | T,O,E |
| 106-51-4 | quinone | 4 (1) | .4 (.1) | N,T,O,M |
| 121-82-4 | RDX (cyclonite) | 15 | 1.5 | N,T,O |
| 108-46-3 | resorcinol | 450 (100) | 45 (10) | N,T,O |
| 7440-16-6 | rhodium, soluble compounds, metal & insoluble cmpds | .01 | .001 | N,T,O |
| 299-84-3 | Ronnel | 1 | .1 | N,T,O |
| ----- | rosin core pyrolysis prods (as formaldehyde) | 100 | 10 | N,T,O |
| 83-79-4 | Rotenone | 1 | .1 | N,T,O |
| 1309-37-1 | rouge (Fe_2O_3) | 50 | 5 | O |
| 38641-94-0 | Roundup herbicide | 50 | 5 | D |
| 8030-30-6 | rubber solvent (naphtha) | 4000 (1000) | 400 (100) | N |
| 7782-49-2 | selenium and compounds | 2 | .2 | N,T,O |
| 7783-79-1 | selenium hexafluoride (as HF) | see TACB Reg III | | |
| 136-78-7 | Sesone (Crag herbicide) | 50 | 5 | N,O |
| 7803-62-5 | silane (silicon tetrahydride) | 70 (50) | 7 (5) | N,T,O |
| <u>Silica-Amorphous:</u> | | | | |
| 61790-53-2 | diatomaceous earth | 60 | 6 | N |
| 112926-00-8 | gel & precipitated silica | 60 | 6 | N,O |
| 69012-64-2 | silica fume | 20 (resp) | 2 | T |
| 60676-86-0 | silica, fused | .5 | .05 | N |
| <u>Silica-Crystalline:</u> | | | | |
| 14464-46-1 | cristobalite | .5 | .05 | N,T,O |
| 14808-60-7 | quartz | 1 | .1 | T,O,E |
| 15468-32-3 | tridymite | .5 | .05 | N,T,O |
| 1317-95-9 | tripoli | .5 | .05 | N |
| 7440-21-3 | silicon | 50 | 5 | N,O |
| 409-21-2 | silicon carbide | 50 | 5 | N,O |

| CAS No. | SUBSTANCE | | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | |
|------------|--|-------------------------------|---|---------|
| | | | 30-minute | annual |
| | | | or 1-hour | |
| 7803-62-5 | silicon tetrahydride (silane) | 70 (50) | 7 (5) | N,T,O |
| 7440-22-4 | silver and compounds | .1 | .01 | N,O,M |
| ----- | soapstone, respirable dust | 30 | 3 | N,T,O |
| | total dust | 60 | 6 | |
| 26628-22-8 | sodium azide | 3 (1) | .3 (.1) | N,T |
| 7631-90-5 | sodium bisulfite | 50 | 5 | N,T,O |
| 16940-66-2 | sodium borohydride | 1 | .1 | D |
| 136-78-7 | sodium, 2,4-dichloro- | 50 | 5 | N,O |
| | phenoxyethyl sulfate (Sesone) | | | |
| 62-74-8 | sodium fluoroacetate | .5 | .05 | N,T,O |
| 1310-73-2 | sodium hydroxide | 20 | 2 | N,T,O,M |
| 7681-57-4 | sodium metabisulfite | 50 | 5 | N,T,O |
| 9005-25-8 | starch | 50 | 5 | N,O |
| ----- | stearates | 100 | 10 | T |
| 2885-00-9 | stearyl mercaptan (octadecyl mercaptan) | 60 (5) | 6 (.5) | N |
| 7803-52-3 | stibine | 5 (1) | .5 (.1) | N,T,O,M |
| 8052-41-3 | Stoddard solvent | 3250 (1000) | 325 (100) | N |
| 7440-24-6 | strontium and compounds | 20 | 2 | D |
| 7789-06-2 | strontium chromate, as Cr | .1 | .01 | E |
| 57-24-9 | Strychnine | 1.5 | .15 | N,T,O,M |
| 100-42-5 | styrene, monomer | 430* (100) (o) | 85 (20) | M |
| | * under review | | | |
| 1395-21-7 | Subtilisins [also 9014-01-1] | .0006 | .00006 | N,T,O |
| 108-30-5 | succinic anhydride | 25 | 2.5 | D |
| 110-61-2 | succinonitrile | 200 (60) | 20 (6) | N |
| 57-50-1 | sucrose | 50 | 5 | N,O |
| ----- | Sulfinol | 230 | 23 | D |
| 75-22-4 | Sulfonic N-95 (nonylphenyl ethoxylate) | 1000 | 100 | D |
| 3689-24-5 | Sulfotep (TEDP) | 2 | .2 | N,T,O,M |
| 7446-09-5 | sulfur dioxide | must meet NAAQS & TACB Reg II | | |
| 7446-09-5 | sulfur dioxide (liquid)** | must meet NAAQS & TACB Reg II | | |
| 2551-62-4 | sulfur hexafluoride | see TACB Reg III | | |
| 7664-93-9 | sulfuric acid | see TACB Reg II | | |
| 10025-67-9 | sulfur monochloride | 5.6 (1) (o) | 5.5 (1) | N,T,O,M |
| 5714-22-7 | sulfur pentafluoride | see TACB Reg III | | |
| 7783-60-0 | sulfur tetrafluoride | see TACB Reg III | | |
| 7791-25-5 | sulfuryl chloride | 36 | 3.6 | D |
| 2699-79-8 | sulfuryl fluoride | see TACB Reg III | | |
| 35400-43-2 | Sulprofos | 10 | 1 | N,T,O |
| ----- | Surfonamine | 180 | 18 | D |
| 8065-48-3 | Systox | see Demeton | | |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) 30-minute annual or 1-hour | | |
|------------|--|--|----------------------|---------|
| <hr/> | | | | |
| 93-76-5 | 2,4,5-T (2,4,5-trichloro-phenoxyacetic acid) | 100 | 10 | N,T,O,M |
| 14807-96-6 | talc (no asbestos), respirable | 20 | 2 | N,T,O,M |
| ----- | talc (with asbestos) | use asbestos | ESL | |
| 7440-25-7 | tantalum, metal | 50 | 5 | N,T,O,M |
| 1314-61-0 | tantalum oxide | 50 | 5 | N,T,O |
| 3689-24-5 | TEDP (Sulfotep) | 2 | .2 | N,T,O,M |
| 13494-80-9 | tellurium & compounds | 1 | .1 | N,T,O,M |
| 7783-80-4 | tellurium hexafluoride | see TACB Reg III | | |
| 3383-96-8 | Temephos | 50 | 5 | N,O |
| ----- | Tenneco T500-100 | 2700 (550) | 270 (55) | D |
| 107-49-3 | TEPP (tetraethylpyrophosphate) | .5 | .05 | N,T,O,M |
| 9016-45-9 | Tergitol TP-9 (polyethylene glycol nonyl phenyl ether) | 50 (PM) | 5 | D |
| 68956-56-9 | terpenes | 2000 | 200 | D |
| 26140-60-3 | terphenyls | 50 (5) | 5 (.5) | N,T,O |
| 79-27-6 | tetrabromoethane, 1,1,2,2- | 140 (10) | 14 (1) | M |
| 634-66-2 | tetrachlorobenzenes [also 95-94-3] | 1000 (0) | 350 | D |
| 1746-01-6 | tetrachlorodibenzo-p-dioxin, 2,3,7,8- (TCDD) | --- | 9.2 $\times 10^{-8}$ | E,NY |
| ----- | tetrachlorodibenzofuran (TCDF) | --- | 1 $\times 10^{-6}$ | D |
| 76-11-9 | tetrachloro-2,2-difluoro- ethane, 1,1,1,2- (Freon 112A) | 41700 (5000) | 4170 (500) | N,T,O |
| 76-12-0 | tetrachloro-1,2-difluoro- ethane, 1,1,2,2- (Freon 112) | 41700 (5000) | 4170 (500) | N,T,O |
| 79-34-5 | tetrachloroethane, 1,1,2,2- | 70 (10) | 7 (1) | N,T,O,M |
| 127-18-4 | tetrachloroethylene (perchloroethylene) | 340 (50) | 34 (5) | E |
| 56-23-5 | tetrachloromethane (carbon tetrachloride) | 126 (20) | 13 (2) | N,O |
| 1335-88-2 | tetrachloronaphthalene | 20 | 2 | N,T,O |
| 58-90-2 | tetrachlorophenol, 2,3,4,6- | 20 (0) | 7 | D |
| 112-57-2 | tetraethylenepentamine | 400 | 40 | D |
| 78-00-2 | tetraethyl lead | .75 | .075 | N,O |
| 78-10-4 | tetraethylorthosilicate | 8500 (1000) | 850 (100) | M |
| 107-49-3 | tetraethylpyrophosphate (TEPP) | .5 | .05 | N,T,O,M |
| 109-99-9 | tetrahydrofuran | 5900 (2000) | 590 (200) | NTOM |
| 119-64-2 | tetrahydronaphthalene (tetraline) | 3030 (560) | 303 (56) | D |
| 75-59-2 | tetramethylammonium hydroxide | 10 | 1 | D |
| 110-60-1 | tetramethylenediamine | 180 | 18 | D |
| 75-74-1 | tetramethyl lead | .75 | .075 | N,O |
| 3333-52-6 | tetramethyl succinonitrile | 30 (5) | 3 (.5) | N,T,O,M |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|--|---|-------------|-----------|
| | | 30-minute | annual | or 1-hour |
| 509-14-8 | tetranitromethane | 80 (10) | 8 (1) | N,T,O,M |
| 26544-38-7 | tetrapropenylsuccinic anhydride | 40 (3.6) | 4 (.36) | D |
| 7722-88-5 | tetrasodium pyrophosphate | 50 | 5 | N,T,O |
| 479-45-8 | tetryl (2,4,6-trinitrophenyl-methyl-nitramine) | 1 | .1 | O |
| 25265-77-4 | Texanol | 835 (140) | 84 (14) | D |
| 7440-28-0 | thallium, soluble compounds | 1 | .1 | N,T,O,M |
| 96-69-5 | thiobis(t-butyl-m-cresol), 4,4- | 50 | 5 | N,O |
| 68-11-1 | thioglycolic acid | 1.25 (o) | * | |
| 7719-09-7 | thionyl chloride | 50 (10) | 5 (1) | N,T,O |
| 62-56-6 | thiourea (thiocarbamide) | 50 (PM) | 5 | D |
| 137-26-8 | Thiram | 10 | 1 | T |
| 7440-31-5 | tin compounds: | | | |
| | organic compounds (as Sn) | 1 | .1 | N,T,O |
| | metal, oxide & inorganic compounds (except SnH4) | 20 | 2 | N,T,O |
| 13463-67-7 | titanium dioxide, respirable | 50 | 5 | O |
| 7550-45-0 | titanium tetrachloride | 10 | 1 | D |
| 119-93-7 | tolidine, o- | .2 | .02 | N |
| 108-88-3 | toluene (toluol) | 1880 (500) | 188 (50) | T |
| 95-80-7 | toluene-2,4-diamine | 50 | 5 | D |
| 584-84-9 | toluene-2,4-diisocyanate (TDI) | .36 (.05) | .035 (.005) | NTO |
| 91-08-7 | toluene-2,6-diisocyanate | .7 (.1) | .07 (.01) | M |
| 95-53-4 | toluidine, all isomers [also 108-44-1; 106-49-0] | 90 (20) | 9 (2) | N,T,O |
| 8001-35-2 | Toxaphene | 5 | .5 | T,O,M |
| 126-73-8 | tributyl phosphate | 25 (2) | 2.5 (.2) | N,T,O |
| 102-85-2 | tributyl phosphite | 20 (2) | 2 (.2) | D |
| 76-03-9 | trichloroacetic acid | 70 (10) | 7 (1) | N,T,O |
| 120-82-1 | trichlorobenzene, 1,2,4- | 400 (50) | 40 (5) | N,T,O,M |
| 71-55-6 | trichloroethane, 1,1,1-(methyl chloroform) | 10800 (2000) | 1080 (200) | M |
| 79-00-5 | trichloroethane, 1,1,2- | 550 (100) | 55 (10) | T,M |
| 79-01-6 | trichloroethylene | 1350 (250) | 135 (25) | N |
| 75-69-4 | trichlorofluoromethane (Freon 11) | 28000 (o) (5000) | 5600 (1000) | |
| 67-66-3 | trichloromethane (chloroform) | 100 (20) | 10 (2) | O |
| 1321-65-9 | trichloronaphthalene | 50 | 5 | N,T,O,M |
| 76-06-2 | trichloronitromethane (chloropicrin) | 6.7 (1) | .67 (.1) | N,T,O,M |
| 95-95-4 | trichlorophenol, 2,4,5- | 440 | 44 | D |
| 88-06-2 | trichlorophenol, 2,4,6- | 21 (o) | * | |
| 96-18-4 | trichloropropane, 1,2,3- | 600 (100) | 60 (10) | N,T,O |
| 76-13-1 | trichloro-1,2,2-trifluoro-ethane, 1,1,2- (Freon 113) | 76000 (10000) | 7600 (1000) | N,T,O |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) 30-minute annual or 1-hour | | |
|------------|--|--|----------------|---------|
| 13121-70-5 | tricyclohexyltin hydroxide (Cyhexatin) | 50 | 5 | N,T,O |
| 102-71-6 | triethanolamine | 31 (5) | 3 (.5) | T |
| 121-44-8 | triethylamine | 40 (10) | 4 (1) | E |
| ----- | triethylene phosphate | 500 (67) | 50 (7) | D |
| 280-57-9 | triethylene diamine | 370 (80) | 37 (8) | D |
| 112-24-3 | triethylene tetramine | 240 (40) | 24 (4) | D |
| ----- | trifluoroacetoacetyl chloride | 20 | 2 | D |
| 75-63-8 | trifluorobromomethane (Freon 13B1) | 61000 (10000) | 6100 (1000) | N,T,O,M |
| 63979-83-9 | tri(isobutetyl)succinic anhydride | 10 (1) | 1 (.1) | D |
| 552-30-7 | trimellitic anhydride | .1 | .01 | T |
| 563-04-2 | trimetacresyl phosphate | 3 | .3 | D |
| 75-98-9 | trimethylacetic acid (pivalic acid) | 250 | 25 | D |
| 75-50-3 | trimethylamine | 1 (.4) | * | |
| 25551-13-7 | trimethyl benzene (mixed isomers) | 1250 (250) | 125 (25) | N,T,O |
| 121-43-7 | trimethyl borate | 13 | 1.3 | D |
| 109-76-2 | trimethylene diamine | 50 | 5 | D |
| 123-17-1 | trimethyl-4-nonanone, 2,6,8- (isobutyl heptyl ketone) | 3750 (500) | 375 (50) | D |
| 25265-77-4 | trimethylpentanediol iso- butyrate (Texanol) | 835 | 84 | D |
| 121-45-9 | trimethyl phosphite | .5 (o) | * | |
| 88-89-1 | trinitrophenol (picric acid) | .5 (o) | .1 | N,T,O |
| 118-96-7 | trinitrotoluene (TNT) | 5 | .5 | N,T,O |
| 78-30-8 | triorthocresyl phosphate | 1 | .1 | N,T,O |
| 110-88-3 | trioxane | 190 | 19 | D |
| 78-32-0 | triparacresylphosphate | 3 | .3 | D |
| 603-34-9 | triphenylamine | 50 | 5 | N,T,O |
| 115-86-6 | triphenyl phosphate | 30 | 3 | N,T,O |
| 101-02-0 | triphenyl phosphite | 25 | 2.5 | D |
| 102-69-2 | tripropylamine | 16 | 1.6 | D |
| 24800-44-0 | tripropylene glycol | 400 (vapor) 25 (PM) | 40 2.5 | D |
| 27955-94-8 | tris(hydroxyphenyl)ethane | 60 | 6 | D |
| 26523-78-4 | tris(nonylphenol)phosphite | 30 | 3 | D |
| 786-19-6 | Trithion | 1 | .1 | D |
| 7440-33-7 | tungsten, insoluble cpds soluble cpds | 50 10 | 5 1 | N,T,O |
| 8006-64-2 | turpentine | 5560 (1000) | 556 (100) | NTOM |

| CAS No. | SUBSTANCE | EFFECTS SCREENING LEVEL $\mu\text{g}/\text{m}^3$ (ppb) | | |
|------------|---|---|-----------|-----------|
| | | 30-minute | annual | or 1-hour |
| <hr/> | | | | |
| 112-37-8 | undecanoic acid | 11 (o) | * | |
| 5332-52-5 | undecyl mercaptan (1-undecanethiol) | 39 (5) | 3.9 (.5) | N |
| 7440-61-1 | uranium, soluble cpds insoluble cpds | .5 2 | .05 .2 | N,O |
| 51-79-6 | urethane (ethyl carbamate) | 5 | .5 | D |
| <hr/> | | | | |
| <hr/> | | | | |
| 110-62-3 | valeraldehyde | 98 (o) | * | |
| 1314-62-1 | vanadium pentoxide | .5 | .05 | N,T,O,M |
| 68956-68-3 | vegetable oil mists | 50 | 5 | N,O |
| 108-05-4 | vinyl acetate | 150 (40) | 15 (4) | N |
| 100-42-5 | vinyl benzene (styrene) | 430 (100) (o) | 85 (20) | M |
| 593-60-2 | vinyl bromide | 200 (50) | 20 (5) | T,O |
| 75-01-4 | vinyl chloride | 130 (50) | 13 (5) | T |
| 107-13-1 | vinyl cyanide (acrylonitrile) | 43 (20) | 4.3 (2) | T,O |
| 100-40-3 | vinylcyclohexene, 4- | 4 (1) | .4 (.1) | T |
| 106-87-6 | vinyl cyclohexene dioxide | 570 (100) | 57 (10) | N,T,O |
| 75-02-5 | vinyl fluoride | 19 (10) | 2 (1) | N |
| 75-35-4 | vinylidene chloride | 40 (10) | 4 (1) | O |
| 75-38-7 | vinylidene fluoride | 26 (10) | 2.6 (1) | N |
| 88-12-0 | vinyl-2-pyrrolidone, 1- | 180 | 18 | D |
| 25013-15-4 | vinyl toluene | 2420 (500) | 242 (50) | T |
| <hr/> | | | | |
| <hr/> | | | | |
| 81-81-2 | Warfarin | 1 | .1 | N,T,O |
| ----- | welding fumes | 50 | 5 | T,O |
| ----- | wood dust, hard woods | 10 | 1 | T |
| ----- | wood dust, soft woods | 50 | 5 | T,O |
| <hr/> | | | | |
| <hr/> | | | | |
| ----- | xylene, all isomers | 3700 (850) (o) | 435 (100) | N,T,O |
| 1477-55-0 | xylene- α,α' -diamine, m- | 1 | .1 | N,T,O |
| 1300-71-6 | xlenol | 165 | 17 | D |
| 1300-73-8 | xylidine (mixed isomers) | 25 (5) | 2.5 (.5) | N |

THE END

ADDENDUM

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