NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
Department for Environmental Protection
Division for Air Quality

401 KAR 63:022. New or modified sources emitting toxic air pollutants.

RELATES TO: KRS 224.20-100, 224.20-110, 224.20-120
STATUTORY AUTHORITY: KRS 224.10-100, 224.01-400
NECESSITY AND FUNCTION: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to prescribe regulations for the prevention, abatement, and control of air pollution. This regulation provides for the control of emissions of toxic air pollutants.

Section 1. Applicability. (1) The provisions of this regulation shall apply to each affected facility commenced on or after the effective date of this regulation which emits toxic air pollutants as defined in Section 2 of this regulation.
(2) The provisions of this regulation shall not apply to the following:
(a) Emissions which are regulated under Title 401, Chapter 57, or 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants).
(b) Laboratory equipment used for chemical or physical analysis or experimentation.
(c) Dry cleaning facilities.
(d) Sources which emit less than the significant levels specified in Appendix B, adjusted for height of release and hours of operation per week pursuant to Appendix C to this regulation.
(e) Indirect heat exchangers using fossil fuel, except for indirect heat exchangers which burn waste material containing toxic substances.
(f) Gasoline dispensing facilities other than gasoline bulk plants and terminals.
(g) Agricultural operations.

Section 2. Definitions. As used in this regulation, all terms not defined herein shall have the meaning given to them in 401 KAR 50:010.
(1) "Toxic air pollutant" means a substance which is listed in Appendix B of this regulation.
(2) "Affected facility" means an apparatus, building, operation, or other entity or series of entities which emits or may emit any toxic air pollutant into the outdoor atmosphere.
(3) "Threshold ambient limit (TAL)" means the concentration level in the ambient air of a toxic air pollutant calculated pursuant to Appendix B to this regulation.
(4) "Best available control technology" means emissions limitation based on the maximum degree of reduction for each pollutant listed in Appendix B to this regulation which would be emitted from any proposed affected facility which the cabinet, on a case-by-case basis, taking into account energy, environmental, and

economic impacts and other costs, determined to be achievable for such facility through application of production processes or available methods, systems, and techniques for control of such pollutant. In no event shall application of best available control technology result in the emission of an air pollutant which would exceed the emissions allowed by any applicable standard under Title 401, Chapters 57 and 59, or 40 CFR Parts 60 and 61.

(5) "Modification" means any physical change in or change in the method of operation of a source that would result in a net emission increase of any toxic air pollutant in excess of the significant emission level specified in this regulation.

Section 3. Control of Toxic Air Pollutants. (1) Except as provided in subsection (2) of this section, no owner or operator shall allow any source to exceed the allowable emission limit determined by the formula specified in Appendix A to this regulation.

(2) Where a threshold ambient limit for a toxic air pollutant is not specified in Appendix B to this regulation, or where the owner or operator can demonstrate to the satisfaction of the cabinet that the allowable emission limit referenced in subsection (1) of this section cannot be met even after the application of best available control technology, then best available control technology shall be required.

(3) As used in this regulation, allowable emission limit is applicable to each toxic air pollutant and applied to the source as a whole. The provisions of 401 KAR 50:042 shall not apply when determining an allowable emission limit of a toxic air pollutant.

(4) The maximum ground level concentration as applied in Appendix A is determined for the affected facility, or a series of affected facilities within the source, through the application of an approved dispersion model specified in "Guideline on Air Quality Models," filed by reference in 401 KAR 50:015. For the purpose of this regulation, no additive effect or interaction among sources is presumed in determining maximum ground level concentration.

(5) Demonstration of compliance with emission limits may be made through calculations. Continued compliance shall be demonstrated through production and throughput records, maintenance schedules and operating practices, and/or as specified as a permit condition.

(6) The cabinet may upon request assist the owner or operator in determining the applicable emission limits for the source. The cabinet shall charge no fee for this service, except as required in 401 KAR 50:036.

Section 4. Public Participation. Except for fertilizer dispensing facilities, the cabinet shall notify the public through prominent advertisement in a newspaper of general circulation in the region in which the source is located, of the cabinet's intention to accept best available control technology as a means for compliance with this regulation. The cabinet shall afford the public the opportunity to submit written comments on the cabinet's intended action within thirty (30) days following the publication of said advertisement. The cabinet shall consider these comments in its decision to issue the construction permit.

Section 5. Failure of the owner or operator to comply with the provisions of this regulation may result in the denial or revocation of an operating permit for the non-complying affected facility.

Effective Date: November 11, 1986

APPENDIX A TO 401 KAR 63:022
Allowable Emission Limit

The following equation shall be used to determine the allowable emission limit for a toxic air pollutant.

$$E_{Allowable} = E_{Actual} \times \frac{TAL}{C}$$

Where:

$E_{Allowable}$	=	**Allowable emission limit in pounds per hour, expressed as an average for a time averaging period corresponding to the TAL time average.**
E_{Actual}	=	**Actual emission rate in pounds per hour.**
TAL	=	**Threshold ambient limit determined using the formula in Appendix B to this regulation.**
C	=	**Maximum ground level concentration in the ambient air estimated through the use of a dispersion model specified in the "Guideline on Air Quality Models."**

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
1,1,2,2-Tetrachloroethane	28.00	8-hour	1.786E-03
1,1,1-Trichloroethane (Methyl chloroform)	7600.00	8-hour	4.848E-01
1,1,2-Trichloroethane	180.00	8-hour	1.148E-02
1,1-Dichloroethane	3240.00	8-hour	2.067E-01
1,1-Dichloro-1-nitroethane	40.00	8-hour	2.551E-03
1,1-Dimethylhydrazine	BACT		2.551E-04
1,2,3-Trichloropropane	1200.00	8-hour	7.654E-02
1,2,4-Trichlorobenzene	160.00	1-hour	7.167E-03
1,2-Dibromo-3-chloropropane (DBCP)	BACT		5.100E-07
1,2-Dichloroethylene	3160.00	8-hour	2.016E-01
1,2-Diethylhydrazine	BACT		2.551E-05
1,2-Dimethylhydrazine	BACT		2.551E-04
1,3-Butadiene	88.00	8-hour	5.613E-03
1,3-Dichloro-5,5-dimethylhydantoin	0.80	8-hour	5.103E-05
1,3-Propane sultone	BACT		5.100E-07
1,4-Butanediol dimethanesulphonate (Myleran)	BACT		5.100E-07
1,4-Dioxane	BACT	2.296E-02	
1-Amino-2-Methylanthraquinone	BACT		1.021E-04
1-Chloro-1-nitropropane	40.00	8-hour	2.551E-03
1-Nitropropane	360.00	8-hour	2.296E-02
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	BACT		5.100E-07
1-[(5-Nitrofurfurylidene)amino]-2-imidazolidinone	BACT		5.100E-07
2,2-Dichloropropionic acid	24.00	8-hour	1.531E-03
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T)	40.00	8-hour	2.551E-03
2,4,6-Trichlorophenol	BACT		5.100E-07
2,4,6-Trinitrotoluene (TNT)	2.00	8-hour	1.276E-04
2,4-D	40.00	8-hour	2.551E-03
2,4-Diaminoanisole sulfate	BACT		5.100E-07
2,4-Dinitrotoluene	BACT		3.827E-04
2,6-Ditert. butyl-p-cresol	40.00	8-hour	2.551E-03
2-Acetylaminofluorene	BACT		5.100E-07
2-Aminoanthraquinone	BACT		1.021E-04

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
2-Aminopyridine	8.00	8-hour	5.103E-04
2-Amino-5-(5-Nitro-2-furyl)-1,3,4-thiadiazole	BACT		5.100E-07
2-Butoxyethanol	480.00	8-hour	3.062E-02
2-Ethoxyethanol	76.00	8-hour	4.848E-03
2-Ethoxyethyl acetate	108.00	8-hour	6.889E-03
2-Hydroxypropyl acrylate	12.00	8-hour	7.654E-04
2-Methylaziridine	BACT		5.100E-07
2-Methyl-1-nitroanthraquinone	BACT		1.021E-04
2-Naphthylamine	BACT		5.100E-07
2-Nitropropane	BACT		1.613E-02
2-N-Dibutylaminoethanol	56.00	8-hour	3.572E-03
2-(2-Formylhydrazine)-4-(5-nitro-2-furyl)thiazole	BACT		5.100E-07
3,3'-Dichlorobenzidine	BACT		5.100E-07
3,3'-Dichloro-4,4'-diaminodiphenyl ether	BACT		5.100E-07
3,3'-Dimethoxybenzidine	BACT		5.100E-07
3,3'-Dimethylbenzidine	BACT		5.100E-07
4,4'-Diaminodiphenyl ether	BACT		5.100E-07
4,4'-Methylene bis (2-chloroaniline) (MOCA)	BACT		5.613E-05
4,4'-Methylene bis (2-methylaniline)	BACT		5.103E-04
4,4'-Methylene bis (N,N-dimethyl) benzenamine	BACT		5.100E-07
4,4'-Methylene dianiline	3.20	8-hour	2.041E-04
4,4'-Thiobis (6-tert, butyl-m-cresol)	40.00	8-hour	2.551E-03
4,4'-Thiodianiline	BACT		5.100E-07
4,4-Methylene dianiline	3.20	8-hour	2.041E-04
4-Aminobiphenyl	BACT		5.100E-07
4-Chloro-ortho-phenylenediamine	BACT		7.654E-04
4-Dimethylaminoazobenzene	BACT		5.100E-07
4-Methoxyphenol	20.00	8-hour	1.276E-03
5-Nitroacenaphthene	BACT		5.100E-07
5-Nitro-o-anisidine	BACT		5.100E-07

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
5-(Morpholinomethyl)-3[(5-nitrofurfurylidene)amino]-2-oxazolidinone	BACT		5.100E-07
Acetaldehyde	720.00	8-hour	4.593E-02
Acetic acid	100.00	8-hour	6.379E-03
Acetic anhydride	80.00	1-hour	3.583E-03
Acetone	7120.00	8-hour	4.542E-01
Acetonitrile	BACT		1.786E-02
Acetylene tetrabromide	60.00	8-hour	3.827E-03
Acetylsalicylic acid	20.00	8-hour	1.276E-03
Acrolein	1.00	8-hour	6.379E-05
Acrylamide	1.20	8-hour	7.654E-05
Acrylic acid	120.00	8-hour	7.654E-03
Acrylonitrile	BACT		1.148E-03
Actymomycin D	BACT		5.100E-07
Adriamycin	BACT		5.100E-07
Aflatoxins	BACT		5.100E-07
Aldrin	10.00	8-hour	6.379E-04
Allyl alcohol	20.00	8-hour	1.276E-03
Allyl chloride	12.00	8-hour	7.654E-04
Allyl glycidyl ether	88.00	8-hour	5.613E-03
Allyl propyl disulfide	48.00	8-hour	3.062E-03
alpha-Chloroacetophenone	1.20	8-hour	7.654E-05
Aluminum Metal and oxide	40.00	8-hour	2.551E-03
Alkyls (NOC)	8.00	8-hour	5.103E-04
Pyro powders	20.00	8-hour	1.276E-03
Soluble salts	8.00	8-hour	5.103E-04
Amitrole	BACT		5.103E-05
Ammonia	72.00	8-hour	4.593E-03
Ammonium chloride	40.00	8-hour	2.551E-03
Ammonium sulfamate	40.00	8-hour	2.551E-03
Aniline	40.00	8-hour	2.551E-03
Antimony Trioxide Production	2.00	8-hour	1.276E-04
Antimony and compounds, as Sb	2.00	8-hour	1.276E-04
ANTU	1.20	8-hour	7.654E-05
Aramite	BACT		5.100E-07

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Arsenic and arsenic compounds	BACT		5.103E-05
Arsenic Trioxide Production	BACT		5.103E-05
Arsine	0.80	8-hour	5.103E-05
Atrazine	20.00	8-hour	1.276E-03
Auramine	BACT		5.100E-07
Azaserine	BACT		5.100E-07
Azathioprine	BACT		5.100E-07
Azinphos-methyl	0.80	8-hour	5.103E-05
a-Methyl styrene	960.00	8-hour	6.124E-02
Barium soluble compounds, as Ba	2.00	8-hour	1.276E-04
Benomyl	40.00	8-hour	2.551E-03
Benzal chloride	1000.00	8-hour	6.379E-02
Benzene	BACT		7.654E-03
Benzidine	BACT		5.100E-07
Benzotrichloride	BACT		1.276E-03
Benzoyl chloride	20.00	8-hour	1.276E-03
Benzoyl peroxide	20.00	8-hour	1.276E-03
Benzo(a)pyrene	BACT		5.100E-07
Benzo(b)fluoranthene	BACT		5.100E-07
Benzyl chloride	BACT		1.276E-03
Benzyl violet 4B	BACT		5.100E-07
Benz(a)anthracene	BACT		5.100E-07
Beryl ore	BACT		5.103E-07
Beryllium	BACT		5.103E-07
Beryllium carbonate	BACT		5.103E-07
Beryllium chloride	BACT		5.103E-07
Beryllium fluoride	BACT		5.103E-07
Beryllium hydroxide	BACT		5.103E-07
Beryllium oxide	BACT		5.103E-07
Beryllium phosphate	BACT		5.103E-07
Beryllium silicate	BACT		5.103E-07
Beryllium sulfate	BACT		5.103E-07
Beryllium-aluminum alloy	BACT		5.103E-07
beta-Chloroprene	140.00	8-hour	8.930E-03
Biphenyl	6.00	8-hour	3.827E-04
bis Chloromethyl ether	0.02	8-hour	1.276E-06

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Bischloroethyl nitrosourea (BCNU)	BACT		5.100E-07
Bismuth telluride	40.00	8-hour	2.551E-03
Bis(2-chloroethyl) ether	120.00	8-hour	7.654E-03
Bis(chloromethyl) ether (BCME)	BACT		1.276E-06
Borates, tetra, sodium salts, Anhydrous	4.00	8-hour	2.551E-04
Borates, tetra, sodium salts, Decahydrate	20.00	8-hour	1.276E-03
Borates, tetra, sodium salts, Pentahydrate	4.00	8-hour	2.551E-04
Boron oxide	40.00	8-hour	2.551E-03
Boron tribromide	40.00	1-hour	1.792E-03
Boron trifluoride	12.00	1-hour	5.375E-04
Bromacil	40.00	8-hour	2.551E-03
Bromine pentafluoride	2.80	8-hour	1.786E-04
Bromine	2.80	8-hour	1.786E-04
Bromoform	20.00	8-hour	1.276E-03
Butyl acrylate	220.00	8-hour	1.403E-02
Butyl mercaptan	6.00	8-hour	3.827E-04
Butylamine	60.00	1-hour	2.688E-03
b-Butyrolactone	BACT		5.100E-07
b-Propiolactone	BACT		3.827E-04
Cadmium	BACT		1.276E-05
Cadmium oxide	BACT		8.959E-06
Cadmium sulfate	BACT		1.276E-05
Cadmium sulfide	BACT		1.276E-05
Calcium chromate	0.20	8-hour	1.276E-05
Calcium cyanamide	2.00	8-hour	1.276E-04
Calcium hydroxide	20.00	8-hour	1.276E-03
Calcium oxide	8.00	8-hour	5.103E-04
Camphor, synthetic	48.00	8-hour	3.062E-03
Caprolactam dust	4.00	8-hour	2.551E-04
Caprolactam vapor	80.00	8-hour	5.103E-03
Captafol	0.40	8-hour	2.551E-05
Captan	20.00	8-hour	1.276E-03
Carbaryl	20.00	8-hour	1.276E-03

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Carbofuran	0.40	8-hour	2.551E-05
Carbon black	14.00	8-hour	8.930E-04
Carbon disulfide	120.00	8-hour	7.654E-03
Carbon tetrabromide	5.60	8-hour	3.572E-04
Carbon tetrachloride	BACT		7.654E-03
Carbonyl fluoride	20.00	8-hour	1.276E-03
Catechol	80.00	8-hour	5.103E-03
Cesium hydroxide	8.00	8-hour	5.103E-04
Chlorambucil	BACT		5.100E-07
Chloramphenicol	BACT		5.100E-07
Chlordane	2.00	8-hour	1.276E-04
Chlordecone (Kepone)	BACT		5.100E-07
Chlorinated camphene	2.00	8-hour	1.276E-04
Chlorinated diphenyl oxide	2.00	8-hour	1.276E-04
Chlorine	12.00	8-hour	7.654E-04
Chlorine dioxide	1.20	8-hour	7.654E-05
Chlorine trifluoride	1.60	1-hour	7.167E-05
Chloroacetaldehyde	12.00	1-hour	5.375E-04
Chloroacetyl chloride	0.80	8-hour	5.103E-05
Chlorobenzene	1400.00	8-hour	8.930E-02
Chlorobromomethane	4200.00	8-hour	2.679E-01
Chlorodiphenyl	2.00	8-hour	1.276E-04
Chloroform	BACT		1.276E-02
Chloromethyl methyl ether (CMME)	BACT		5.100E-07
Chlorophenols	BACT		5.100E-07
Chloropicrin	2.80	8-hour	1.786E-04
Chloroprene	140.00	8-hour	8.930E-03
Chlorpyrifos	0.80	8-hour	5.103E-05
Chromium Metal	2.00	8-hour	1.276E-04
Chromium VI compounds, certain water insoluble, as Cr	BACT		1.276E-05
Chromium (III) compounds as Cr	2.00	8-hour	1.276E-04
Chromium (II) compounds as Cr	2.00	8-hour	1.276E-04
Chromyl chloride	0.60	8-hour	3.827E-05
Chrysene	0.80	8-hour	5.103E-05
Cisplatin	BACT		5.100E-07
Citrus Red No. 2	BACT		5.100E-07

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Clopidol	40.00	8-hour	2.551E-03
Coal Tar Pitch Volatiles	0.80	8-hour	5.103E-05
Cobalt carbonyl as Co	0.40	8-hour	2.551E-05
Cobalt hydrocarbonyl as Co	0.40	8-hour	2.551E-05
Cobalt	0.40	8-hour	2.551E-05
Cobalt-chromium alloy	0.20	8-hour	1.276E-05
Coke oven emissions	BACT		5.103E-05
Copper	0.80	8-hour	5.103E-05
Dusts and mists, as Cu	4.00	8-hour	2.551E-04
Cresol all isomers	88.00	8-hour	5.613E-03
Crotonaldehyde	24.00	8-hour	1.531E-03
Cruformate	20.00	8-hour	1.276E-03
Cumene	980.00	8-hour	6.251E-02
Cupferron	BACT		5.100E-07
Cyanamide	8.00	8-hour	5.103E-04
Cyanides, as CN	20.00	8-hour	1.276E-03
Cyanogen chloride	2.40	1-hour	1.075E-04
Cyanogen	80.00	8-hour	5.103E-03
Cycasin	BACT		5.100E-07
Cyclohexane	4200.00	8-hour	2.679E-01
Cyclohexanol	800.00	8-hour	5.103E-02
Cyclohexanone	400.00	8-hour	2.551E-02
Cyclohexene	4060.00	8-hour	2.590E-01
Cyclohexylamine	160.00	8-hour	1.021E-02
Cyclonite	6.00	8-hour	3.827E-04
Cyclopentadiene	800.00	8-hour	5.103E-02
Cyclopentane	6880.00	8-hour	4.389E-01
Cyclophosphamide	BACT		5.100E-07
Cyhexatin	20.00	8-hour	1.276E-03
Dacarbazine	BACT		5.100E-07
Daunomycin	BACT		5.100E-07
DDT	BACT		2.551E-04
Decaborane	1.20	8-hour	7.654E-05
Demeton	0.40	8-hour	2.551E-05
Diacetone alcohol	960.00	8-hour	6.124E-02
2,4-Diaminotoluene	BACT		5.100E-07

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Diazinon	0.40	8-hour	2.551E-05
Diazomethane	1.60	8-hour	1.021E-04
7H-Dibenzo(c,g)carbazole	BACT		5.100E-07
Dibenzo(a,h)pyrene	BACT		5.100E-07
Dibenzo(a,i)pyrene	BACT		5.100E-07
Dibenz(a,h)acridine	BACT		5.100E-07
Dibenz(a,h)anthracene	BACT		5.100E-07
Dibenz(a,j)acridine	BACT		5.100E-07
Diborane	0.40	8-hour	2.551E-05
1,2-Dibromoethane (EDB)	BACT		5.100E-07
Dibutyl phosphate	20.00	8-hour	1.276E-03
Dibutyl phthalate	20.00	8-hour	1.276E-03
Dichloroacetylene	1.60	1-hour	7.167E-05
Dichlorobenzene - ortho	1200.00	1-hour	5.375E-02
Dichlorobenzene - para	1800.00	8-hour	1.148E-01
Dichloroethyl ether	120.00	8-hour	7.654E-03
Dichlorofluoromethane	160.00	8-hour	1.021E-02
Dichloropropene	20.00	8-hour	1.276E-03
Dichlorvos	4.00	8-hour	2.551E-04
Dicrotophos	1.00	8-hour	6.379E-05
Dicyclopentadiene	120.00	8-hour	7.654E-03
Dicyclopentadienyl iron	40.00	8-hour	2.551E-03
Dieldrin	1.00	8-hour	6.379E-05
Dienoestrol	BACT		5.100E-07
Diepoxybutane	BACT		5.100E-07
Diethanolamine	60.00	8-hour	3.827E-03
Diethyl ketone	2820.00	8-hour	1.799E-01
Diethyl sulfate	BACT		5.100E-07
Diethylamine	120.00	8-hour	7.654E-03
Diethylaminoethanol	200.00	8-hour	1.276E-02
Diethylene triamine	16.00	8-hour	1.021E-03
Diethylstilbestrol (DES)	BACT		5.100E-07
Difluorodibromomethane	3440.00	8-hour	2.194E-01
Diglycidyl ether	2.00	8-hour	1.276E-04
Dihydrosafrole	BACT		5.100E-07
Diisobutyl ketone	1000.00	8-hour	6.379E-02
Diisopropylamine	80.00	8-hour	5.103E-03

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Dimethyl acetamide	140.00	8-hour	8.930E-03
Dimethyl sulfate	BACT		1.276E-04
Dimethylamine	72.00	8-hour	4.593E-03
Dimethylaniline	100.00	8-hour	6.379E-03
Dimethylcarbamoyl chloride	BACT		5.100E-07
Dimethylformamide	120.00	8-hour	7.654E-03
Dimethylphthalate	20.00	8-hour	1.276E-03
Dinitolmide	20.00	8-hour	1.276E-03
Dinitrobenzene	4.00	8-hour	2.551E-04
Dinitrotoluene	6.00	8-hour	3.827E-04
Dinitro-o-cresol	0.80	8-hour	5.103E-05
Dioxane	360.00	8-hour	2.296E-02
Dioxathion	0.80	8-hour	5.103E-05
Dioxin (2,3,7,8-Tetrachlorodibenzo-p-dioxin)	BACT		5.100E-07
Diphenylamine	40.00	8-hour	2.551E-03
Diphenylhydrazine	0.40	8-hour	2.551E-05
Dipropyl ketone	940.00	8-hour	5.996E-02
Dipropylene glycol methyl ether	2400.00	8-hour	1.531E-01
Diquat	2.00	8-hour	1.276E-04
Direct Black 38	BACT		5.103E-05
Direct Blue 6	BACT		5.103E-05
Direct Brown 95	BACT		5.103E-05
Di-sec, octyl phthalate	20.00	8-hour	1.276E-03
Disulfiram	8.00	8-hour	5.103E-04
Disulfoton	0.40	8-hour	2.551E-05
Diuron	40.00	8-hour	2.551E-03
Divinyl benzene	200.00	8-hour	1.276E-02
Di(2-ethylhexyl)phthalate	BACT		1.276E-03
Endosulfan	0.40	8-hour	2.551E-05
Endrin	0.40	8-hour	2.551E-05
Epichlorohydrin	BACT		2.551E-03
EPN 2.00	8-hour	1.276E-04	
Ethanolamine	32.00	8-hour	2.041E-03
Ethinyloestradiol	BACT		5.100E-07
Ethion	1.60	8-hour	1.021E-04

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Ethyl acetate	5600.00	8-hour	3.572E-01
Ethyl acrylate	80.00	8-hour	5.103E-03
Ethyl amyl ketone	520.00	8-hour	3.317E-02
Ethyl benzene	1740.00	8-hour	1.110E-01
Ethyl bromide	3560.00	8-hour	2.271E-01
Ethyl butyl ketone	920.00	8-hour	5.868E-02
Ethyl chloride	10400.00	8-hour	6.634E-01
Ethyl ether	4800.00	8-hour	3.062E-01
Ethyl formate	1200.00	8-hour	7.654E-02
Ethyl mercaptan	4.00	8-hour	2.551E-04
Ethyl methanesulphonate	BACT		5.100E-07
Ethyl silicate	340.00	8-hour	2.169E-02
Ethylamine	72.00	8-hour	4.593E-03
Ethylene chlorohydrin	12.00	1-hour	5.375E-04
Ethylene dibromide (EDB)	BACT		5.100E-07
Ethylene dichloride (EDC)	BACT		1.021E-02
Ethylene glycol dinitrate	1.20	8-hour	7.654E-05
Ethylene glycol vapor	500.00	1-hour	2.240E-02
Ethylene oxide	BACT		5.103E-04
Ethylene thiourea	BACT		5.100E-07
Ethylenediamine	100.00	8-hour	6.379E-03
Ethylenimine	4.00	8-hour	2.551E-04
Ethylidene norbornene	100.00	1-hour	4.479E-03
Fenamiphos	0.40	8-hour	2.551E-05
Fensulfothion	0.40	8-hour	2.551E-05
Fenthion	0.80	8-hour	5.103E-05
Ferbam	40.00	8-hour	2.551E-03
Ferrovanadium dust	4.00	8-hour	2.551E-04
Fonofos	0.40	8-hour	2.551E-05
Formaldehyde	BACT		3.827E-04
Formamide	120.00	8-hour	7.654E-03
Formic acid	36.00	8-hour	2.296E-03
Furfural	32.00	8-hour	2.041E-03
Furfuryl alcohol	160.00	8-hour	1.021E-02
Germanium tetrahydride	2.40	8-hour	1.531E-04
Glutaraldehyde	2.80	1-hour	1.254E-04

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Glycidaldehyde	BACT		5.100E-07
Glycidol	300.00	8-hour	1.914E-02
Hafnium	2.00	8-hour	1.276E-04
Hematite underground mining	BACT		1.276E-03
Heptachlor	2.00	8-hour	1.276E-04
Hexachlorobenzene	BACT		7.654E-03
Hexachlorobutadiene	0.96	8-hour	6.124E-05
Hexachlorocyclohexane	2.00	8-hour	1.276E-04
Hexachlorocyclopentadiene	0.40	8-hour	2.551E-05
Hexachlorodibenzodioxin	BACT		5.100E-07
Hexachloroethane	BACT		2.551E-02
Hexachloronaphthalene	0.80	8-hour	5.103E-05
Hexafluoroacetone	2.80	8-hour	1.786E-04
Hexamethylphosphoramide	BACT		5.100E-07
Hexylene glycol	500.00	1-hour	2.240E-02
Hydrazine	BACT		2.551E-05
Hydrazine sulfate	BACT		2.551E-05
Hydrazobenzene (1,2-diphenylhydrazine)	BACT		2.551E-05
Hydrogen bromide	40.00	8-hour	2.551E-03
Hydrogen chloride	28.00	1-hour	1.254E-03
Hydrogen cyanide	40.00	1-hour	1.792E-03
Hydrogen peroxide	6.00	8-hour	3.827E-04
Hydrogen selenide as Se	0.80	8-hour	5.103E-05
Hydrogenated terphenyls	20.00	8-hour	1.276E-03
Hydroquinone	8.00	8-hour	5.103E-04
Indene	180.00	8-hour	1.148E-02
Indeno(1,2,3-cd)pyrene	BACT		5.100E-07
Indium and compounds, as In	0.40	8-hour	2.551E-05
Iodine	4.00	1-hour	1.792E-04
Iodoform	40.00	8-hour	2.551E-03
Iron dextran complex	BACT		2.551E-04
Iron pentacarbonyl, as Fe	3.20	8-hour	2.041E-04
Iron salts, soluble, as Fe	4.00	8-hour	2.551E-04
Isoamyl acetate	2100.00	8-hour	1.340E-01

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Isoamyl alcohol	1440.00	8-hour	9.185E-02
Isobutyl acetate	2800.00	8-hour	1.786E-01
Isobutyl alcohol	600.00	8-hour	3.827E-02
Isoocytl alcohol	1080.00	8-hour	6.889E-02
Isophorone diisocyanate	0.36	8-hour	2.296E-05
Isophorone	100.00	1-hour	4.479E-03
Isopropoxyethanol	420.00	8-hour	2.679E-02
Isopropyl acetate	3800.00	8-hour	2.424E-01
Isopropyl alcohol manufacturing (strong acid process)	BACT		5.100E-07
Isopropyl ether	4200.00	8-hour	2.679E-01
Isopropyl glycidyl ether	960.00	8-hour	6.124E-02
Isopropylamine	48.00	8-hour	3.062E-03
Isosafrole	BACT		5.100E-07
Ketene	3.60	8-hour	2.296E-04
Lasiocarpine	BACT		5.100E-07
Lead, inorg. dusts and fumes, as Pb	0.60	8-hour	3.827E-05
Lead acetate	BACT		3.827E-05
Lead arsenate, as Pb3(AsO4)2	0.60	8-hour	3.827E-05
Lead chromate, as Cr	BACT		1.276E-05
Lead chromate oxide	BACT		1.276E-05
Lead phosphate	BACT		3.827E-05
Lindane (all isomers)	BACT		1.276E-04
Lithium hydride	0.10	8-hour	6.379E-06
Magenta	BACT		5.100E-07
Magnesium oxide fume	40.00	8-hour	2.551E-03
Malathion	40.00	8-hour	2.551E-03
Maleic anhydride	4.00	8-hour	2.551E-04
Manganese cyclopentadienyl tricarbonyl, as Mn	0.40	8-hour	2.551E-05
Manganese tetroxide	4.00	8-hour	2.551E-04
Manganese, Dust and compounds as Mn	20.00	1-hour	8.959E-04
Manganese, Fume, as Mn	4.00	8-hour	2.551E-04
Melphalan	BACT		5.100E-07

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Mercury, alkyl compounds, as Hg	0.04	8-hour	2.551E-06
Mercury, as Hg, All forms except alkyl vapor	0.20	8-hour	1.276E-05
Mercury, as Hg, Aryl and inorganic compounds	0.40	8-hour	2.551E-05
Merphalan	BACT		5.100E-07
Mesityl oxide	240.00	8-hour	1.531E-02
Mestranol	BACT		5.100E-07
Methacrylic acid	280.00	8-hour	1.786E-02
Methomyl	10.00	8-hour	6.379E-04
Methoxychlor	40.00	8-hour	2.551E-03
2-Methoxyethanol	64.00	8-hour	4.082E-03
2-Methoxyethyl acetate	96.00	8-hour	6.124E-03
4-Methoxyphenol	20.00	8-hour	1.276E-03
Methyl 2-cyanoacrylate	32.00	8-hour	2.041E-03
Methyl acetate	2440.00	8-hour	1.556E-01
Methyl acetylene	6600.00	8-hour	4.210E-01
Methyl acetylene-propadiene mixture	7200.00	8-hour	4.593E-01
Methyl acrylate	140.00	8-hour	8.930E-03
Methyl alcohol	1040.00	8-hour	6.634E-02
Methyl bromide	80.00	8-hour	5.103E-03
Methyl chloride	420.00	8-hour	2.679E-02
Methyl chloroform	7600.00	8-hour	4.848E-01
Methyl demeton	2.00	8-hour	1.276E-04
Methyl ether	4800.00	8-hour	3.062E-01
Methyl ethyl ketone	2360.00	8-hour	1.505E-01
Methyl ethyl ketone peroxide	6.00	1-hour	2.688E-04
Methyl formate	1000.00	8-hour	6.379E-02
Methyl hydrazine	1.40	8-hour	6.271E-05
Methyl iodide	BACT		2.551E-03
Methyl isoamyl ketone	960.00	8-hour	6.124E-02
Methyl isobutyl carbinol	400.00	8-hour	2.551E-02
Methyl isobutyl ketone	820.00	8-hour	5.231E-02
Methyl isocyanate	0.20	8-hour	1.276E-05
Methyl isopropyl ketone	2820.00	8-hour	1.799E-01
Methyl mercaptan	4.00	8-hour	2.551E-04

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Methyl methacrylate	1640.00	8-hour	1.046E-01
Methyl methanesulphonate	BACT		5.100E-07
Methyl n-amyl ketone	80.00	8-hour	5.103E-03
Methyl n-butyl ketone	80.00	8-hour	5.103E-03
Methyl parathion	0.80	8-hour	5.103E-05
Methyl propyl ketone	2800.00	8-hour	1.786E-01
Methyl silicate	24.00	8-hour	1.531E-03
Methylacrylonitrile	12.00	8-hour	7.654E-04
Methylal	12400.00	8-hour	7.910E-01
Methylamine	48.00	8-hour	3.062E-03
Methylazoxymethanol and its acetate	BACT		5.100E-07
Methylcyclohexane	6400.00	8-hour	4.082E-01
Methylcyclohexanol	940.00	8-hour	5.996E-02
Methylcyclopentadienyl manganese tricarbonyl as Mn	0.80	8-hour	5.103E-05
Methylene bis (4-cyclohexylisocyanate)	0.44	1-hour	1.971E-05
Methylene bisphenyl isocyanate (MDI)	0.80	1-hour	3.583E-05
Methylene chloride (dichloromethane)	1400.00	8-hour	8.930E-02
Methylthiouracil	BACT		5.100E-07
Metribuzin	20.00	8-hour	1.276E-03
Metronidazole	BACT		5.100E-07
Mevinphos	0.40	8-hour	2.551E-05
Michler's ketone (Tetramethyl-diaminobenzophenone)	BACT		5.100E-07
Mirex BACT		5.100E-07	
Mitromycin C	BACT		5.100E-07
Molybdenum, as Mo, Insoluble compounds	40.00	8-hour	2.551E-03
Molybdenum, as Mo, Soluble compounds	20.00	8-hour	1.276E-03
Monocrotaline	BACT		5.100E-07
Monocrotophos	1.00	8-hour	6.379E-05
Morpholine	280.00	8-hour	1.786E-02
m-Phthalodinitrile	20.00	8-hour	1.276E-03

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
m-Xylene alpha,alpha'-diamine	0.40	1-hour	1.792E-05
Nafenopin (perfluorosulfonic acid)	BACT		5.100E-07
Naled 12.00	8-hour	7.654E-04	
Naphthalene	200.00	8-hour	1.276E-02
Nickel carbonate	BACT		2.551E-05
Nickel carbonyl	BACT		8.930E-05
Nickel oxide	BACT		2.551E-05
Nickel subsulfide	BACT		2.551E-04
Nickel - metal	BACT		2.551E-04
Nickel - soluble compounds, as Ni	BACT		2.551E-05
Nickelocene (dicyclopentadienylnickel)	BACT		2.551E-05
Niridazole	BACT		5.100E-07
Nitrapyrin	40.00	8-hour	2.551E-03
Nitric acid	20.00	8-hour	1.276E-03
Nitriloacetic acid	BACT		5.100E-07
Nitrilotriacetic acid	BACT		5.100E-07
Nitrobenzene	20.00	8-hour	1.276E-03
Nitroethane	1240.00	8-hour	7.910E-02
Nitrofen (2,4-dichlorophenyl-p-nitrophenylether)	BACT		5.100E-07
Nitrogen mustard N-oxide	BACT		5.100E-07
Nitrogen mustard (Mechlorethamine hydrochloride)	BACT		5.100E-07
Nitrogen trifluoride	120.00	8-hour	7.654E-03
Nitroglycerin (NG)	2.00	8-hour	1.276E-04
Nitromethane	1000.00	8-hour	6.379E-02
Nitrotoluene	44.00	8-hour	2.807E-03
Nonane	4200.00	8-hour	2.679E-01
Norethisterone	BACT		5.100E-07
N,N-bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)	BACT		5.100E-07
N,N-Diacetylbenzidine	BACT		5.100E-07
n-Amyl acetate	2120.00	8-hour	1.352E-01
n-Butyl acetate	2840.00	8-hour	1.812E-01
n-Butyl alcohol	600.00	1-hour	2.688E-02

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
n-Butyl glycidyl ether	540.00	8-hour	3.444E-02
n-Butyl lactate	100.00	8-hour	6.379E-03
N-Ethylmorpholine	92.00	8-hour	5.868E-03
n-Hexane	720.00	8-hour	4.593E-02
N-Isopropylaniline	40.00	8-hour	2.551E-03
N-Methyl aniline	8.00	8-hour	5.103E-04
N-Methyl-N'-nitro-n-nitrosoguanidine	BACT		5.100E-07
N-Nitrosodiethanolamine	BACT		5.100E-07
N-Nitrosodiethylamine	BACT		5.100E-07
N-Nitrosodimethylamine	BACT		5.100E-07
N-Nitrosodi-n-butylamine	BACT		5.100E-07
N-Nitrosodi-n-propylamine	BACT		5.100E-07
N-Nitrosomethylethylamine	BACT		5.100E-07
N-Nitrosomethylvinylamine	BACT		5.100E-07
N-Nitrosomorpholine	BACT		1.786E-02
N-Nitrosonornicotine (Nicotine)	BACT		1.276E-04
N-Nitrosopiperidine	BACT		5.100E-07
N-Nitrosopyrrolidine	BACT		5.100E-07
N-Nitrososarcosine	BACT		5.100E-07
N-Nitroso-n-ethylurea	BACT		5.100E-07
N-Nitroso-n-methylurea	BACT		5.100E-07
N-Nitroso-n-methylurethane	BACT		5.100E-07
N-Nitroso-n-propylamine	BACT		5.100E-07
N-Phenyl-2-naphthylamine	BACT		5.100E-07
N-Phenyl-beta-naphthylamine	BACT		5.100E-07
n-Propyl acetate	3360.00	8-hour	2.143E-01
n-Propyl nitrate	420.00	8-hour	2.679E-02
N-[4-(5-Nitro-2-furyl)-2-thiazolyl] acetamide	BACT		5.100E-07
Octachloronaphthalene	0.40	8-hour	2.551E-05
Oestradiol-17 beta	BACT		5.100E-07
Oestrone	BACT		5.100E-07
Oil orange SS (phenylazo-2-naphthol)	BACT		5.100E-07
Osmium tetroxide, as Os	0.01	8-hour	5.103E-07

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Oxalic acid	4.00	8-hour	2.551E-04
Oxymetholone	BACT		5.100E-07
o-Aminoazotoluene	BACT		5.100E-07
o-Anisidine	BACT		1.276E-04
o-Anisidine Hydrochloride	BACT		1.276E-04
o-Chlorobenzylidene malononitrile	1.60	1-hour	7.167E-05
o-Chlorostyrene	1140.00	8-hour	7.272E-02
o-Chlorotoluene	1000.00	8-hour	6.379E-02
o-Methylcyclohexanone	920.00	8-hour	5.868E-02
o-sec-Butylphenol	120.00	8-hour	7.654E-03
o-Tolidine	BACT		5.100E-07
o-Toluidine	BACT		2.296E-03
o-Toluidine hydrochloride	BACT		2.296E-03
Panfuran S (Dihydroxymethyl-furatrizine)	BACT		5.100E-07
Paraffin wax fume	8.00	8-hour	5.103E-04
Paraquat	0.40	8-hour	2.551E-05
Parathion	0.40	8-hour	2.551E-05
Pentaborane	0.04	8-hour	2.551E-06
Pentachloronaphthalene	2.00	8-hour	1.276E-04
Pentachlorophenol	2.00	8-hour	1.276E-04
Perchloroethylene	1340.00	8-hour	8.548E-02
Perchloromethyl mercaptan	3.20	8-hour	2.041E-04
Perchloryl fluoride	56.00	8-hour	3.572E-03
Phenacetin	BACT		5.100E-07
Phenazopyridine	BACT		5.100E-07
Phenazopyridine hydrochloride	BACT		5.100E-07
Phenol	76.00	8-hour	4.848E-03
Phenothiazine	20.00	8-hour	1.276E-03
Phenoxyacetic acid Herbicides	BACT		5.100E-07
Phenoxybenzamine and its hydrochloride	BACT		5.100E-07
Phenyl ether	28.00	8-hour	1.786E-03
Phenyl glycidyl ether	24.00	8-hour	1.531E-03
Phenyl mercaptan	8.00	8-hour	5.103E-04
Phenylhydrazine	80.00	8-hour	5.103E-03

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Phenylphosphine	1.00	1-hour	4.479E-05
Phenytoin and sodium salt of phenytoin	BACT		5.100E-07
Phorate	0.20	8-hour	1.276E-05
Phosgene	1.60	8-hour	1.021E-04
Phosphine	1.60	8-hour	1.021E-04
Phosphoric acid	4.00	8-hour	2.551E-04
Phosphorus oxychloride	2.40	8-hour	1.531E-04
Phosphorus pentachloride	4.00	8-hour	2.551E-04
Phosphorus pentasulfide	4.00	8-hour	2.551E-04
Phosphorus trichloride	6.00	8-hour	3.827E-04
Phosphorus	0.40	8-hour	2.551E-05
Phthalic anhydride	24.00	8-hour	1.531E-03
Picloram	40.00	8-hour	2.551E-03
Picric acid	0.40	8-hour	2.551E-05
Pindone	0.40	8-hour	2.551E-05
Piperazine dihydrochloride	20.00	8-hour	1.276E-03
Platinum Metal	4.00	8-hour	2.551E-04
Platinum Soluble salts, as Pt	0.01	8-hour	5.103E-07
Polybrominated biphenyls (PBBs)	BACT		1.276E-04
Polychlorinated biphenyls (PCBs)	BACT		1.276E-04
Ponceau 3R	BACT		5.100E-07
Ponceau MX	BACT		5.100E-07
Potassium hydroxide	8.00	1-hour	3.583E-04
Procarbazine	BACT		5.100E-07
Procarbazine hydrochloride	BACT		5.100E-07
Progesterone	BACT		5.100E-07
Propargyl alcohol	8.00	8-hour	5.103E-04
Propionic acid	120.00	8-hour	7.654E-03
Propoxur	2.00	8-hour	1.276E-04
Propyl alcohol	2000.00	8-hour	1.276E-01
Propylene dichloride	1400.00	8-hour	8.930E-02
Propylene glycol dinitrate	1.20	8-hour	7.654E-05
Propylene glycol monomethyl ether	1440.00	8-hour	9.185E-02
Propylene imine	20.00	8-hour	1.276E-03
Propylene oxide	200.00	8-hour	1.276E-02
Propylthiouracil	BACT		5.100E-07

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Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Pyrethrum	20.00	8-hour	1.276E-03
Pyridine	60.00	8-hour	3.827E-03
p-Cresidine	BACT		5.100E-07
p-Nitroaniline	12.00	8-hour	7.654E-04
p-Nitrochlorobenzene	12.00	8-hour	7.654E-04
p-Nitrosodiphenylamine	BACT		5.100E-07
p-Phenylene diamine	0.40	8-hour	2.551E-05
p-tert-Butyltoluene	240.00	8-hour	1.531E-02
p-Toluidine	36.00	8-hour	2.296E-03
Quinone	1.60	8-hour	1.021E-04
Reserpine	BACT		5.100E-07
Resorcinol	180.00	8-hour	1.148E-02
Rhodium Metal and Insoluble compounds, as Rh	4.00	8-hour	2.551E-04
Rhodium, Soluble compounds, as Rh	0.04	8-hour	2.551E-06
Ronnel	40.00	8-hour	2.551E-03
Rosin core solder pyrolysis products, as formaldehyde	0.40	8-hour	2.551E-05
Rotenone	20.00	8-hour	1.276E-03
Saccharin	BACT		5.100E-07
Safrole	BACT		5.100E-07
sec-Amyl acetate	2660.00	8-hour	1.697E-01
sec-Butyl acetate	3800.00	8-hour	2.424E-01
sec-Butyl alcohol	1220.00	8-hour	7.782E-02
sec-Hexyl acetate	1200.00	8-hour	7.654E-02
Selenium compounds, as Se	0.80	8-hour	5.103E-05
Selenium hexafluoride	0.80	8-hour	5.103E-05
Selenium sulfide	BACT		5.103E-05
Sesone	40.00	8-hour	2.551E-03
Silicon tetrahydride	28.00	8-hour	1.786E-03
Silver Metal	0.40	8-hour	2.551E-05
Silver Soluble compounds, as Ag	0.04	8-hour	2.551E-06
Sintered calcium chromate	BACT		1.276E-05
Sintered chromium trioxide	BACT		1.276E-05

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Sodium arsenate	0.80	8-hour	5.103E-05
Sodium arsenite	0.80	8-hour	5.103E-05
Sodium azide	1.20	1-hour	5.375E-05
Sodium bisulfite	20.00	8-hour	1.276E-03
Sodium dichromate	BACT		1.276E-05
Sodium fluoroacetate	0.20	8-hour	1.276E-05
Sodium hydroxide	8.00	1-hour	3.583E-04
Sodium metabisulfite	20.00	8-hour	1.276E-03
Sodium saccharin	BACT		5.100E-07
Spironolactone	BACT		5.100E-07
Sterigmatocystin	BACT		5.100E-07
Stibine	2.00	8-hour	1.276E-04
Streptozotocin	BACT		5.100E-07
Strontium chromate	BACT		1.276E-05
Strychnine	0.60	8-hour	3.827E-05
Styrene, monomer	860.00	8-hour	5.486E-02
Styrene oxide	860.00	8-hour	5.486E-02
Subtilisins (Proteolytic enzymes as 100% pure crystalline enzyme)	2.40E-04	1-hour	1.075E-08
Sulfallate	BACT		5.100E-07
Sulfotep	0.80	8-hour	5.103E-05
Sulfur monochloride	24.00	8-hour	1.531E-03
Sulfur pentafluoride	1.00	8-hour	6.379E-05
Sulfur tetrafluoride	1.60	8-hour	1.021E-04
Sulfuric acid	4.00	8-hour	2.551E-04
Sulfuryl fluoride	80.00	8-hour	5.103E-03
Sulprofos	4.00	8-hour	2.551E-04
Tantalum	20.00	8-hour	1.276E-03
Tellurium hexafluoride, as Te	0.80	8-hour	5.103E-05
Tellurium and compounds, as Te	0.40	8-hour	2.551E-05
Temephos	40.00	8-hour	2.551E-03
TEPP	0.20	8-hour	1.276E-05
Terphenyls	20.00	1-hour	8.959E-04
tert-Butyl acetate	3800.00	8-hour	2.424E-01
tert-Butyl alcohol	1200.00	8-hour	7.654E-02

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
tert-Butyl chromate as Cr	0.40	1-hour	1.792E-05
Testosterone and its esters	BACT		5.100E-07
Tetrachloronaphthalene	8.00	8-hour	5.103E-04
Tetraethyl lead, as Pb	0.40	8-hour	2.551E-05
Tetrahydrofuran	2360.00	8-hour	1.505E-01
Tetramethyl lead, as Pb	0.60	8-hour	3.827E-05
Tetramethyl succinonitrile	12.00	8-hour	7.654E-04
Tetranitromethane	32.00	8-hour	2.041E-03
Tetrasodium pyrophosphate	20.00	8-hour	1.276E-03
Tetryl 6.00	8-hour	3.827E-04	
Thallium Soluble compounds, as Tl	0.40	8-hour	2.551E-05
Thioacetamide	BACT		5.100E-07
Thioglycolic acid	16.00	8-hour	1.021E-03
Thiourea	BACT		5.100E-07
Thiram	20.00	8-hour	1.276E-03
Thorium dioxide	BACT		5.100E-07
Tin, organic compounds, as Sn	0.40	8-hour	2.551E-05
Tin, oxide, metal and inorganic compounds except SnH4, as Sn	8.00	8-hour	5.103E-04
Titanium dioxide	20.00	8-hour	1.276E-03
Toluene 2,4-Diisocyanate (TDI)	0.16	8-hour	1.021E-05
Toluene	1500.00	8-hour	9.568E-02
Toxaphene (Polychlorinated camphenes)	BACT		1.276E-04
Trans-2[(Dimethylamino)-methyliminol]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole	BACT		5.100E-07
Treosulphan	BACT		5.100E-07
Tributyl phosphate	10.00	8-hour	6.379E-04
Trichloroacetic acid	28.00	8-hour	1.786E-03
Trichloroethylene	1080.00	8-hour	6.889E-02
Trichloronaphthalene	20.00	8-hour	1.276E-03
Triethylamine	160.00	8-hour	1.021E-02
Trimellitic anhydride	0.16	8-hour	1.021E-05
Trimethyl benzene	500.00	8-hour	3.189E-02
Trimethyl phosphite	40.00	8-hour	2.551E-03
Trimethylamine	96.00	8-hour	6.124E-03

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Triorthocresyl phosphate	0.40	8-hour	2.551E-05
Triphenyl amine	20.00	8-hour	1.276E-03
Triphenyl phosphate	12.00	8-hour	7.654E-04
Tris (2,3-dibromopropyl) phosphite	BACT		5.100E-07
Tris (2,3-dibromopropyl)phosphate	BACT		5.100E-07
Tris(1-aziridinyl)phosphine sulfide (Thiotepa)	BACT		5.100E-07
Tris(aziridinyl)-para-benzoquinone (Triaziquone)	BACT		5.100E-07
Trypan blue (commercial grade)	BACT		5.100E-07
Tungsten, as W, Insoluble compounds	20.00	8-hour	1.276E-03
Tungsten, as W, Soluble compounds	4.00	8-hour	2.551E-04
Uracil mustard	BACT		5.100E-07
Uranium Compounds, as U	0.80	8-hour	5.103E-05
Urethane	BACT		5.100E-07
Valeraldehyde	700.00	8-hour	4.465E-02
Vanadium, as V_2O_5, Respirable dust and fume	0.20	8-hour	1.276E-05
Vinyl acetate	120.00	8-hour	7.654E-03
Vinyl bromide	80.00	8-hour	5.103E-03
Vinyl cyclohene dioxide	240.00	8-hour	1.531E-02
Vinyl toluene	960.00	8-hour	6.124E-02
Vinylidene chloride	80.00	8-hour	5.103E-03
Warfarin	0.40	8-hour	2.551E-05
Xylene (o-, m-, p-isomers)	1740.00	8-hour	1.110E-01
Xylidine	40.00	8-hour	2.551E-03
Yttrium	4.00	8-hour	2.551E-04
Zinc beryllium silicate	BACT		5.103E-07
Zinc chloride fume	4.00	8-hour	2.551E-04

APPENDIX B TO 401 KAR 63:022

Threshold Ambient Limits and Significant Emission Levels of Toxic Air Pollutants (Continued)

Substance	Y*	Average Time	Significant Levels (M)** Pounds Per Hour
Zinc chromate	BACT		1.276E-05
Zinc oxide Fume	20.00	8-hour	1.276E-03
Zirconium compounds, as Zr	20.00	8-hour	1.276E-03

***Threshold Ambient Limit, TAL, mg/m^3 = $\frac{Y}{T}$**

Where T = Hours of emission of the substance per week from the source, except that T = 40 if the hours per week of emission are less than 40.

****The Significant Levels (M) may be adjusted for the height of release, H, and hours of emission, T, using the procedures in Appendix C.**

APPENDIX C TO 401 KAR 63:022

Correction Factors for Height of Release and Hours of Emission

Minimum Height of Release (H) (meters)	(feet)	Height of Release Correction Factor (K)
1	3.3	1
2	6.6	4
3	9.9	12
4	13.1	24
5	16.4	41
6	19.7	62
7	23.0	89
8	26.2	121
9	29.5	159
10	32.8	204
15	49.2	489
20	65.6	901
25	82.0	1429
30	98.4	2037
35	114.8	2738
40	131.2	3535
45	147.6	4418
50	164.0	5394
55	180.4	6405
60	196.9	7494
65	213.3	8622

The Significant Level (L) in Section 1(2)(d) shall be calculated from the formula:

$$L = M \times K \times \frac{168}{T}$$

Where:

L = **Adjusted significant level (lbs/hr).**

M = **Significant level (lbs/hr) for the substance as listed in Appendix B.**

K = **Height of release correction factor from the table above. H is the minimum height of release of the substance from the source. When H is between two (2) values, the lower number shall be used.**

T = **Hours of emission of the substance per week from the source, except that T = 40 if the hours per week of emission are less than 40.**