Kansas Administrative Regulations

Department of Health and Environment

Article 19.—Ambient Air Quality Standards and Air Pollution Control—General Requirements.

28-19-201. General provisions; definitions; regulated compounds list.

As used in this regulation, "CAS Number" means chemical abstract service number.

(a) "Hazardous air pollutant" means one or more of the following chemical pollutants:

CAS Number	Chemical name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Amino biphenyl
62533	Aniline
90040	o-Anisidine
13 32214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl

117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl) ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane

84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidene
111444	Dichloroethylether(Bis(2-chlorethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N, N-Diethyl aniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3-Dimethyl benzidine
79447	Dimethyl carbamoylchloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinotrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethylene oxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)

107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen fluoride (Hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
78933	Methyl ethyl ketone (2-Butanone)
60344	Methyl hydrazine

74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis(2-chloroaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)

78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane
79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
580841	2,2,4-Trimethylpentane
108054	Vinyl acetate
593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixture)

95476	o-Xylenes
108383	m-Xylenes
106423	p-Xylenes
0	Antimony Compounds
0	Arsenic Compounds (inorganic, including arsine)
0	Beryllium Compounds
0	Cadmium Compounds
0	Chromium Compounds
0	Cobalt Compounds
0	Coke Oven Emissions
0	Cyanide Compounds [1]
0	Glycol ethers [2]
0	Lead Compounds
0	Manganese Compounds
0	Mercury Compounds
0	Fine mineral fibers [3]
0	Nickel Compounds
0	Polycylic Organic Matter [4]
0	Radionuclides (including radon) [5]
0	Selenium Compounds

NOTE: For all listings above that contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical as part of that chemical's infrastructure.

[1] X'CN where X = H' or any other group where a formal dissociation may occur, for example, KCN or $Ca(CN)_2$.

[2] Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol $R-(OCH_2CH_2)_n-OR'$ where

n = 1, 2, or 3

R = alkyl or aryl groups

R' = R, H, or groups that, when removed, yield glycol ethers with the structure: $R-(OCH_2CH)_n-OH$. Polymers are excluded from the glycol category.

[3] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral-derived fibers) of average diameter 1 micrometer or less.

[4] Includes organic compounds with more than one benzene ring, and that have a boiling point greater than or equal to 100°C.

[5] A type of atom that spontaneously undergoes radioactive decay.

(b) "Volatile organic compounds (VOC)" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions including any organic compound other than those that have been designated by the department as having negligible photochemical reactivity. For purposes of programs and plans implementing the national ambient air quality standards for ozone only, the following organic compounds have been designated by the department as having negligible photochemical reactivity:

(1) methane;

(2) ethane;

(3) 1,1,1-trichloroethane (methyl chloroform);

(4) methylene chloride;

(5) trichlorofluoromethane (CFC-11);

(6) dichloro-difluoromethane (CFC-12);

(7) chlorodifluoromethane (CFC-22);

(8) trifluoromethane (CFC-23);

(9) trichlorotrifluoroethane (CFC-113);

(10) dichlorotetrafluoroethane (CFC-114);

(11) chloropentafluoroethane (CFC-115);
(12) dichlorotrifluoroethane (HCFC-123);
(13) tetrafluoroethane (HCFC-134a);
(14) dichlorofluoroethane (HCFC-141b);
(15) chlorodifluoroethane (HCFC-142b);
(16) chlorotetrafluoroethane (HCFC-124);
(17) pentafluoroethene (HCFC-125);
(18) tetrafluoroethane (HCFC-134);
(19) trifluoroethane (HCFC-143a);
(20) difluoroethane (HCFC-152a);
(21) parachlorobenzotrifluoride (PCBTF);
(22) cyclic, branched, or linear, completely methylated siloxanes;
(23) acetone;
(24) The following classes of perfluorocarbon compounds:
(A) cyclic, branched, or linear, completely fluorinated alkanes;
(B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
(C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturation; and
(D) sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine;
(25) perchloroethylene;
(26) difluoromethane (HFC-32);
(27) ethylfluoride (HFC-161);
(28) 1,1,1,3,3,3-hexafluoropropane (HFC-236fa);
(29) 1,1,2,2,3-pentafluoropropane (HFC-245ca);
(30) 1,1,2,3,3-pentafluoropropane (HFC-245ea);
(31) 1,1,1,2,3-pentafluoropropane (HFC-245eb);
(32) 1,1,1,3,3-pentafluoropropane (HFC-245fa);
(33) 1,1,1,2,3,3-hexafluoropropane (HFC-236ea);
(34) 1,1,1,3,3-pentafluorobutane (HFC-365mfc);
(35) chlorofluoromethane (HCFC-31);

(36) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);

(37) 1-chloro-1-fluoroethane (HCFC-151a);

(38) 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane (C_4, F_9, OCH_3);

(39) 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$);

(40) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$);

(41) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$);

(42) decafluoropentane (HFC-43-10mee);

(43) 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HFC-225ca);

(44) 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HFC-225cb); and

(45) methyl acetate (HFC 43-10mee).

(Authorized by and implementing K.S.A. 1997 Supp. 65-3005; effective Oct. 10, 1997; amended Feb. 12, 1999.)

***** Authenticated Kansas Administrative Regulation *****