

Appendix I
Hazardous Air Pollutants
Sorted by CAS Number

CAS Number	Chemical Name	VOC	Reporting Level (Lbs/Year)
1146	Nickel Refinery Dust ^[8]	No	80
14333	Sodium Cyanide ^[8]	No	100
50000	Formaldehyde	Yes	1,000
50328	Benzo(a)pyrene	Yes	20
51285	2,4-Dinitrophenol	Yes	1,000
51796	Ethyl Carbamate (Urethane)	No	800
53703	Dibenz(a,h)anthracene	Yes	20
53963	2-Acetylaminofluorine ^[8]	Yes	10
56235	Carbon Tetrachloride	Yes	1,000
56382	Parathion	Yes	100
56553	Benz(a)anthracene	Yes	20
57147	1,1-Dimethyl Hydrazine	Yes	16
57578	beta-Propiolactone	Yes	100
57749	Chlordane	Yes	20
57976	7,12-Dimethylbenz(a)anthracene	Yes	0
58899	Lindane (all isomers)	No	20
59892	N-Nitrosomorpholine	Yes	1,000
60117	4-Dimethyl Aminoazobenzene	Yes	1,000
60344	Methyl Hydrazine	Yes	60
60355	Acetamide	Yes	1,000
62384	Phenyl Mercuric Acetate ^[8]	No	20
62533	Aniline	Yes	1,000
62737	Dichlorvos	Yes	200
62759	N-Nitrosodimethylamine	Yes	2
63252	Carbaryl ^[8]	No	2,000
64675	Diethyl Sulfate	Yes	1,000
67561	Methanol	Yes	2,000
67663	Chloroform	Yes	900
67721	Hexachloroethane	No	2,000
68122	Dimethyl Formamide	Yes	1,000
71432	Benzene	Yes	1,000
71556	Methyl Chloroform (1,1,1-Trichlorethane)	No	2,000
72435	Methoxychlor	Yes	2,000
74839	Methyl Bromide (Bromomethane)	Yes	2,000
74873	Methyl Chloride (Chloromethane)	Yes	2,000
74884	Methyl Iodide (Iodomethane)	Yes	1,000
74908	Hydrogen Cyanide	No	0
75003	Ethyl Chloride (Chloroethane)	Yes	2,000

75014	Vinyl Chloride	Yes	200
75058	Acetonitrile	Yes	1,000
75070	Acetaldehyde	Yes	2,000
75092	Methylene Chloride (Dichloromethane)	No	2,000
75150	Carbon disulfide	Yes	1,000
75218	Ethylene Oxide	Yes	100
75252	Bromoform	Yes	2,000
75343	Ethylidene Dichloride (1,1-Dichloroethane)	Yes	1,000
75354	Vinylidene Chloride (1,1-Dichloroethylene)	Yes	400
75445	Phosgene	Yes	100
75558	1,2-Propylenimine (2-Methyl aziridine)	Yes	6
75569	Propylene Oxide	Yes	2,000
75741	Tetramethyl Lead ^[8]	No	20
76448	Heptachlor	Yes	20
77474	Hexachlorocyclopentadiene	Yes	100
77781	Dimethyl Sulfate	Yes	100
78002	Tetraethyl Lead ^[8]	No	20
78591	Isophorone	Yes	2,000
78875	Propylene Dichloride (1,2-Dichloropropane)	Yes	1,000
79005	1,1,2-Trichloroethane	Yes	1,000
79016	Trichloroethylene	Yes	2,000
79061	Acrylamide	Yes	20
79107	Acrylic Acid	Yes	600
79118	Chloroacetic Acid	Yes	100
79345	1,1,2,2-Tetrachloroethane	Yes	300
79447	Dimethyl Carbamoyl Chloride	Yes	20
79469	2-Nitropropane	Yes	1,000
80626	Methyl Methacrylate	Yes	2,000
82688	Pentachloronitrobenzene (Quintobenzene)	Yes	300
84742	Dibutylphthalate	Yes	2,000
85449	Phthalic Anhydride	No	2,000
87683	Hexachlorobutadiene	Yes	900
87865	Pentachlorophenol	Yes	700
88062	2,4,6-Trichlorophenol	Yes	2,000
90040	O-Anisidine	Yes	1,000
91203	Naphthalene	Yes	2,000
91225	Quinoline ^[8]	Yes	12
91941	3,3-Dichlorobenzidine ^[8]	Yes	200
92524	Biphenyl ^[8]	Yes	2,000
92671	4-Aminobiphenyl ^[8]	Yes	1,000
92875	Benzidine ^[8]	Yes	0.6
92933	4-Nitrobiphenyl ^[8]	Yes	1,000
94757	2,4-D, Salts, Esters (2,4-Dichlorophenoxy acetic acid)	Yes	2,000
95476	o-Xylenes ^[8]	Yes	2,000

95487	o-Cresol ^[8]	Yes	1,000
95534	o-Toluidine	Yes	1,000
95807	2,4-Toluene Diamine	Yes	20
95954	2,4,5-Trichlorophenol	Yes	1,000
96093	Styrene Oxide	Yes	1,000
96128	1,2-Dibromo-3-chloropropane	Yes	20
96457	Ethylene Thiourea	No	600
98077	Benzotrichloride	Yes	12
98828	Cumene	Yes	2,000
98862	Acetophenone	Yes	1,000
98953	Nitrobenzene	Yes	1,000
100027	4-Nitrophenol	Yes	2,000
100414	Ethyl Benzene	Yes	2,000
100425	Styrene	Yes	1,000
100447	Benzyl Chloride	Yes	100
101144	4,4-Methylene Bis (2-chloroaniline) ^[8]	No	200
101688	Methylene Diphenyl Diisocyanate (MDI) ^[8]	No	100
101779	4,4'-Methylenedianiline	No	1,000
106423	p-Xylenes ^[8]	Yes	2,000
106445	p-Cresol ^[8]	Yes	1,000
106467	1,4-Dichlorobenzene(p)	Yes	1,000
106503	p-Phenylenediamine	Yes	2,000
106514	Quinone	Yes	2,000
106887	1,2-Epoxybutane	Yes	1,000
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	Yes	1,000
106934	Ethylene dibromide (Dibromoethane)	Yes	100
106945	1-Bromopropane (1-BP) (N-Propyl Bromide) (nPB)	Yes	
106990	1,3-Butadiene	Yes	70
107028	Acrolein	Yes	40
107051	Allyl Chloride	Yes	1,000
107062	Ethylene Dichloride (1,2-Dichloroethane)	Yes	1,000
107131	Acrylonitrile	Yes	300
107211	Ethylene Glycol	Yes	2,000
107302	Chloromethyl Methyl Ether	Yes	100
108054	Vinyl Acetate	Yes	1,000
108101	Methyl Isobutyl Ketone	Yes	2,000
108316	Maleic anhydride	No	1,000
108383	m-Xylenes ^[8]	Yes	2,000
108394	m-Cresol ^[8]	Yes	1,000
108864	2-Methoxy Ethanol ^[8]	No	2,000
108883	Toluene	Yes	2,000
108907	Chlorobenzene	Yes	2,000
108952	Phenol	Yes	100
110543	Hexane	Yes	2,000
110805	2-Ethoxy Ethanol ^[8]	No	2,000

111422	Diethanolamine	Yes	2,000
111444	Dichloroethyl Ether (Bis(2-chloroethyl)ether)	Yes	60
114261	Propoxur (Baygon)	No	2,000
117817	Bis(2-ethylhexyl)phthalate (DEHP)	Yes	2,000
118741	Hexachlorobenzene	No	20
119904	3,3'-Dimethoxybenzidine ^[8]	Yes	100
119937	3,3'-Dimethyl Benzidine ^[8]	Yes	16
120809	Catechol	Yes	2,000
120821	1,2,4-Trichlorobenzene	Yes	2,000
121142	2,4-Dinitrotoluene	Yes	20
121448	Triethylamine	Yes	2,000
121697	N,N-Dimethylaniline	Yes	1,000
122667	1,2-Diphenylhydrazine	Yes	90
123319	Hydroquinone	Yes	1,000
123386	Propionaldehyde	Yes	2,000
123911	1,4-Dioxane (1,4-Diethyleneoxide)	Yes	2,000
126998	Chloroprene	Yes	1,000
127184	Tetrachloroethylene (Perchloroethylene)	No	2,000
130618	Cadmium Oxide ^[8]	No	20
131113	Dimethyl Phthalate	Yes	2,000
132649	Dibenzofurans ^[8]	No	2,000
133062	Captan	No	2,000
133904	Chloramben	No	1,000
140885	Ethyl Acrylate	Yes	1,000
151508	Potassium Cyanide ^[8]	No	100
151564	Ethyleneimine (Aziridine)	Yes	6
156627	Calcium Cyanamide	No	2,000
189559	1,2:7,8-Dibenzopyrene	Yes	20
193395	Ideno(1,2,3-cd)pyrene	Yes	20
205992	Benzo(b)fluoranthene	Yes	20
218019	Chrysene	Yes	20
225514	Benz(c)aridine	Yes	20
302012	Hydrazine	No	8
334883	Diazomethane	Yes	1,000
463581	Carbonyl Sulfide	Yes	2,000
510156	Chlorobenzilate ^[8]	Yes	400
532274	2-Chloroacetophenone	Yes	60
534521	4,6-Dinitro-o-cresol, and Salts	No	100
540841	2,2,4-Trimethylpentane	Yes	2,000
542756	1,3-Dichloropropene	Yes	1,000
542881	Bis(chloromethyl)ether	Yes	0.6
584849	2,4-Toluene Diisocyanate	Yes	100
593602	Vinyl Bromide (bromoethene)	Yes	600
624839	Methyl Isocyanate	Yes	100
680319	Hexamethylphosphoramide	No	20

684935	N-Nitroso-N-methylurea	Yes	0
748794	Mercuric Chloride ^[8]	No	20
822060	Hexamethylene,-1,6-diisocyanate	No	20
1120714	1,3-Propane Sultone	No	30
1308389	Trivalent Chromium Compounds (Chromium Oxide)	No	2,000
1309644	Antimony Trioxide ^[8]	No	1,000
1319773	Cresols/Cresylic Acid (isomers and mixture) ^[8]	Yes	1,000
1330207	Xylenes (isomers and mixture) ^[8]	Yes	2,000
1332214	Asbestos	No	0
1336363	Polychlorinated Biphenyls (Aroclors, PCBs)	Yes	18
1345046	Antimony Trisulfide ^[8]	No	100
1582098	Trifluralin	No	2,000
1634044	Methyl Tert Butyl Ether	Yes	2,000
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin ^[8]	No	0.0012
3547044	P,p'-Dichlorodiphenyl Ethane (DDE) ^[8]	Yes	20
7439921	Lead and Compounds (except those specifically listed) ^[5]	No	20
7439965	Manganese and Compounds (except those specifically listed) ^{[5] [8]}	No	800
7439976	Elemental Mercury ^[8]	No	20
7440020	Nickel Compounds (except those specifically listed) ^{[5] [8]}	No	1,000
7440360	Antimony Compounds (except those specifically listed) ^{[5] [8]}	No	2,000
7440382	Arsenic and Inorganic Arsenic Compounds ^[8]	No	10
7440417	Beryllium Compounds (except Beryllium Salts) ^{[5] [8]}	No	16
7440439	Cadmium Compounds (except those specifically listed) ^{[5] [8]}	No	20
7440473	Chromium Compounds (except Hexavalent and Trivalent) ^{[5] [8]}	No	2,000
7440484	Cobalt Compounds (except those specifically listed) ^{[5] [8]}	No	100
7488564	Selenium Sulfide (mono and di) ^[8]	No	100
7550450	Titanium Tetrachloride	No	100
7647010	Hydrochloric Acid	No	2,000
7664393	Hydrogen Fluoride (Hydrofluoric Acid)	No	100
7723140	Phosphorous	No	100
7782492	Selenium and Compounds (except those specifically listed) ^{[5] [8]}	No	100
7782505	Chlorine	No	100
7783075	Hydrogen Selenide ^[8]	No	100
7783702	Antimony Pentafluoride ^[8]	No	100
7784421	Arsine ^[8]	No	10
7803512	Phosphine	No	2,000
8001352	Toxaphene (Chlorinated Camphene)	No	20

10025737	Chromic Chloride	No	100
10045940	Mercuric Nitrate ^[8]	No	0
10102188	Sodium Selenite ^[8]	No	100
10210681	Cobalt Carbonyl ^[8]	No	100
12035722	Nickel Subsulfide ^[8]	No	40
12108133	Methylcyclopentadienyl Manganese	No	100
13410010	Sodium Selenate ^[8]	No	100
13463393	Nickel Carbonyl ^[8]	No	0
14464461	Silica (Crystalline) ^[8]	No	0
14807966	Talc (containing Asbestos form fibers) ^[8]	No	0
18540299	Hexavalent Chromium and Compounds ^[8]	No	4
28300745	Antimony Potassium Tartrate ^[8]	No	1,000
62207765	Fluomine	No	100
65997173	Glass Wool ^[8]	No	0
66733219	Erionite ^[8]	No	0
99999918	Radionuclides (including radon) ^[4]	No	[7]
142844006	Ceramic Fibers ^[8]	No	0
-	Beryllium Salts ^[8]	No	0.04
-	Cyanide Compounds (except those specifically listed) ^{[1] [5] [8]}	No	2,000
-	Coke Oven Emissions	No	30
-	Glycol Ethers (except those specifically listed) ^{[2] [5] [8]}	No	0
-	Mineral Fiber Compounds (except those specifically listed) ^{[3] [5] [8]}	No	0
-	Mercury Compounds (except those specifically listed) ^{[5] [8]}	No	20
-	Rock Wool ^[8]	No	0
-	Slag Wool ^[8]	No	0
-	Polycyclic Organic Matter-POM (except those specifically listed) ^{[5] [8]}	Yes	20
-	Dioxins and Furans (TCDD equivalent) ^[6]	No	0

^[1] XCN where X=H or any other group where a formal dissociation may occur

^[2] Include mono-and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)_n-OR' where n=1, 2, or 3; R=alkyl or aryl groups, R'=R,H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH₂CH)_n-OH. Polymers are excluded from the glycol category. Ethylene glycol monobutyl ether is excluded from this category.

^[3] Includes glass microfibers, glass wool fibers, rock wool fibers and slag wool fibers, each characterized as "respirable" (fiber diameter < 3.5 micrometers) and possessing an aspect ratio (fiber length divided by fiber diameter) > 3.

- [4] A type of atom which spontaneously undergoes radioactive decay.
- [5] For this chemical group, specific compounds or subgroups are named specifically in this table. For the remainder of the chemicals in the chemical group, a single de minimis value is listed, and this value applies to the sum of the compounds in the group which are not named specifically.
- [6] The "toxic equivalency factor" method in EPA/625/3-89-016, [U.S. EPA (1989) Interim procedures for estimating risk associated with exposure to mixtures] should be used for PCDD/PCDF mixtures. A different de minimis level will be determined for each mixture depending on the equivalency factors which are compound specific.
- [7] The EPA relies on Subparts B and I, and Appendix E of 40 CFR Part 61 and assigns a de minimis level based on an effective dose equivalent of 0.3 millirem per year for a 7 year exposure period that would result in a cancer risk of 1 per million. The individual radionuclides subject to de minimis levels used for section 112(g) are also contained in 40 CFR Part 61.
- [8] Emissions from all substances in each set below should be aggregated for the purpose of determining major source status as described in Chapter 1, Section 001:
- Cresols/Cresylic Acid (isomers and mixture); m-Cresol; o-Cresol; p-Cresol
 - Xylenes (isomers and mixture); m-Xylenes; o-Xylenes, p-Xylenes
 - Antimony Compounds; Antimony Pentafluoride; Antimony Potassium Tartrate; Antimony Trioxide; Antimony Trisulfide
 - Arsenic and Inorganic Arsenic Compounds; Arsine
 - Beryllium Compounds (except Beryllium Salts); Beryllium Salts
 - Cadmium Compounds; Cadmium Oxide
 - Chromium compounds (except Hexavalent and Trivalent); Hexavalent Chromium compounds; Trivalent Chromium Compounds (Chromium Oxide)
 - Cobalt Compounds; Cobalt Carbonyl
 - Cyanide Compounds; Potassium Cyanide; Sodium Cyanide
 - Glycol Ethers; 2-Ethoxy Ethanol; 2-Methoxy Ethanol
 - Lead and Compounds; Tetraethyl Lead; Tetramethyl Lead
 - Mercury Compounds; Elemental Mercury; Mercuric Chloride; Mercuric Nitrate; Phenyl Mercuric Acetate
 - Mineral Fiber Compounds; Ceramic Fibers; Erionite; Glass Wool; Rock Wool;
 - Silica (Crystalline); Slag Wool; Talc (containing Asbestos form fibers);
 - Nickel Compounds; Nickel Carbonyl; Nickel Refinery Dust; Nickel Subsulfide
 - Polycyclic Organic Matter (POM); 2-Acetylaminofluorene; 4-Aminobiphenyl; Benzidine; Biphenyl; Carbaryl; Chlorobenzilate; Dibenzofurans; 3,3-Dichlorobenzidine; p,p'-Dichlorodiphenyl Ethane (DDE); 3,3-Dimethoxybenzidine; 3,3'-Dimethylbenzidine; 4,4-Methylene bis(2 Chloroaniline); Methylene Diphenyl Diisocyanate; 4-Nitrobiphenyl; Quinoline; 2,3,7,8-Tetrachlorodibenzo-p-dioxin
 - Selenium and Compounds; Hydrogen Selenide; Selenium Sulfide (mono and di); Sodium Selenate; Sodium Selenite

Appendix I

EPA Rulemakings

CFR:	40 C.F.R. 52.1420(c)
FRM:	89 FR 66609 (8/16/2024)
PRM:	89 FR 47504 (06/03/2024)
State Submission:	12/02/2022
State Final:	Title 129, Chapter 7 (9/28/2022)
APDB File:	NE-106; EPA-R07-OAR-2024-0025 effective 9/16/2024
Description:	This revision approves the state of Nebraska's request to revise and renumber Appendix II, Hazardous Air Pollutants, to Appendix I.

Difference Between the State and EPA-Approved Regulation

None

Note: All previous versions of the rule are obsolete; the record of prior rulemakings is shown below for historical purposes only.

CFR:	40 C.F.R. 52.1420(c)
FRM:	71 FR 38776 (07/10/2006)
PRM:	71 FR 38831 (07/10/2006)
State Submission:	10/20/2005
State Final:	05/07/2005
APDB File:	NE-58; EPA-R07-OAR-2006-0476
Description:	This revision revised the reference to glycol ethers to clearly state that ethylene glycol monobutyl ether is not included in the list of HAPs.

CFR:	40 C.F.R. 52.1420(c)
FRM:	65 FR 3130 (1/20/2000)
PRM:	65 FR 3168 (1/20/2000)
State Submission:	2/5/99
State Final:	9/7/97
APDB File:	NE-41
Description:	This rule approves this list of HAPs which is identical to the Clean Air Act Title III list as part of the SIP.
