ILLINOIS POLLUTION CONTROL BOARD
June 18, 2026

IN THE MATTER OF:	)	
	)	
PROPOSED AMENDMENTS TO	)	R22-18(A)
GROUNDWATER QUALITY	)	(Rulemaking – Public Water Supplies)
35 ILL. ADM. CODE 620	)	

ADDENDUM A

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE F: PUBLIC WATER SUPPLIES
CHAPTER I: POLLUTION CONTROL BOARD

PART 620
GROUNDWATER QUALITY

SUBPART A: GENERAL

Section

SUBPART B: GROUNDWATER CLASSIFICATION

Section

SUBPART C: NONDEGRADATION PROVISIONS FOR APPROPRIATE GROUNDWATERS

Section

SUBPART D: GROUNDWATER QUALITY STANDARDS

SUBPART E: GROUNDWATER MONITORING AND ANALYTICAL PROCEDURES

SUBPART F: HEALTH ADVISORIES

AUTHORITY: Implementing and authorized by Section 8 of the Illinois Groundwater

Protection Act [415 ILCS 55/8] and authorized by Section 27 of the Illinois Environmental Protection Act [415 ILCS 5/27].

SOURCE: Adopted in R89-14(B) at 15 Ill. Reg. 17614, effective November 25, 1991; amended in R89-14(C) at 16 Ill. Reg. 14667, effective September 11, 1992; amended in R93-27 at 18 Ill. Reg. 14084, effective August 24, 1994; amended in R96-18 at 21 Ill. Reg. 6518, effective May 8, 1997; amended in R97-11 at 21 Ill. Reg. 7869, effective July 1, 1997; amended in R01-14 at 26 Ill. Reg. 2662, effective February 5, 2002; amended in R08-18 at 36 Ill. Reg. 15206, effective October 5, 2012; amended in R08-18(B) at 37 Ill. Reg. 16529, effective October 7, 2013; amended in R22-18 at 49 Ill. Reg. 4488, effective March 28, 2025; amended in R25-23 at 49 Ill. Reg. 12696, effective September 23, 2025; amended in R22-18(A) at 50 Ill. Reg. _____, effective _____.

SUBPART D: GROUNDWATER QUALITY STANDARDS

Section 620.410 Groundwater Quality Standards for Class I: Potable Resource Groundwater

a) Inorganic Chemical Constituents
Except due to natural causes or as provided in Section 620.450, concentrations of the following chemical constituents must not be exceeded in Class I groundwater:

CASRN	Constituent	Standard (mg/L) [a,b]
7429-90-5	Aluminum	1.9[c]
7440-36-0	Antimony	0.006[d]
7440-38-2	Arsenic[e]	0.01[d]
7440-39-3	Barium	2.0[d]
7440-41-7	Beryllium	0.004[d]
7440-42-8	Boron	2.0[f]
7440-43-9	Cadmium	0.005[d]
16887-00-6	Chloride	200[g]
7440-47-3	Chromium (total)	0.1[d]
7440-48-4	Cobalt	0.0012[c]
7440-50-8	Copper	0.5[h]
143-33-9	Cyanide	0.2[d]
7681-49-4	Fluoride	4[d]
7439-89-6	Iron	5[g]
7439-92-1	Lead	0.0075[i]
7439-93-2	Lithium	0.04[j]
7439-96-5	Manganese	0.15[k]
7487-94-7	Mercury (mercuric chloride)	0.002[d]
7439-98-7	Molybdenum	0.308[c]
7440-02-0	Nickel	0.077[c]
14797-55-8	Nitrate as N	10[d]
14797-73-0	Perchlorate	0.0081[c]
7440-14-4	Radium (combined 226+228)	5[d]

7782-49-2	Selenium	0.02[f]
7440-22-4	Silver	0.058[c]
14808-79-8	Sulfate	400[g]
	TDS (total dissolved solids)	1,200[g]
7440-28-0	Thallium	0.002[d]
7440-62-2	Vanadium	0.00027[c]
7440-66-6	Zinc	1.2[c]

Constituent Name and Groundwater Quality Standard Notations

[a] The standard unit for radium (combined 226+228) is picocuries per liter (pCi/L).

[b] The inorganic groundwater quality standards are based on total metal analyses for the evaluation of human health effects.

[c] The standard is calculated using the Human Threshold Toxicant Advisory Concentration (HTTAC) procedures at Appendix A.

[d] The standard is based on the Maximum Contaminant Level (MCL), promulgated by USEPA, Office of Water, and Illinois Primary Drinking Water Standards specified in 35 Ill. Adm. Code 611.

[e] The constituent meets the definition of a "carcinogen" in Section 620.110.

[f] The standard is based on beneficial use for irrigation of crops, per "Water Quality Criteria", by National Academy of Sciences, incorporated by reference in Section 620.125.

[g] The standard is the 95% confidence concentration stated in the Agency's "Integrated Water Quality Report and Section 303(d) List", incorporated by reference in Section 620.125.

[h] The standard is based on beneficial use for watering livestock, per "Water Quality Criteria", by National Academy of Sciences, incorporated by reference in Section 620.125.

[i] The standard is 50% of the USEPA "action level" of 0.015 mg/L for lead. The USEPA action level applies at the service connection. The standard is reduced by 50% as a safety margin, based on the assumption that 50% of water would be treated.

[j] The standard is the "LLOQ" or "LCMRL" as defined in Section 620.110.

[k] The standard is promulgated at 35 Ill. Adm. Code 611.300.

b) Organic Chemical Constituents

Except due to natural causes or as provided in Section 620.450 or subsection (c) of this Section, concentrations of the following organic chemical constituents must not be exceeded in Class I groundwater:

CASRN	Constituent	Standard (mg/L)
83-32-9	Acenaphthene	0.23[a]
67-64-1	Acetone	3.5[a]
15972-60-8	Alachlor[b]	0.002[c]
116-06-3	Aldicarb	0.003[c]
120-12-7	Anthracene	1.2[a]
319-84-6	*alpha*-BHC (*alpha*-benzene hexachloride)[b]	0.000012[d]
71-43-2	Benzene[b]	0.005[c]
56-55-3	Benzo(a)anthracene[e]	0.00025[d]
205-99-2	Benzo(b)fluoranthene[e]	0.00025[d]
207-08-9	Benzo(k)fluoranthene[e]	0.0025[d]
50-32-8	Benzo(a)pyrene[e]	0.0002[c]
65-85-0	Benzoic acid	15[a]
78-93-3	2-Butanone (methyl ethyl ketone)	2.3[a]
1563-66-2	Carbofuran	0.04[c]
75-15-0	Carbon disulfide	0.38[a]
56-23-5	Carbon tetrachloride[b]	0.005[c]
12789-03-6	Chlordane[b]	0.002[c]
108-90-7	Chlorobenzene	0.1[c]
67-66-3	Chloroform[b]	0.07[f]
218-01-9	Chrysene[e]	0.025[d]
94-75-7	2,4-D (2,4-dichlorophenoxy acetic acid)	0.07[c]
75-99-0	Dalapon	0.2[c]
53-70-3	Dibenzo(a,h)anthracene[e]	0.0001[g]
96-12-8	1,2-Dibromo-3-chloropropane (dibromochloropropane)[e]	0.0002[c]
1918-00-9	Dicamba	0.12[a]
95-50-1	*o*-Dichlorobenzene (1,2-dichlorobenzene)	0.6[c]
106-46-7	*p*-Dichlorobenzene (1,4-dichlorobenzene)[b]	0.075[c]
75-71-8	Dichlorodifluoromethane	0.77[a]
75-34-3	1,1-Dichloroethane	0.77[a]
107-06-2	1,2-Dichloroethane[b]	0.005[c]
75-35-4	1,1-Dichloroethylene	0.007[c]
156-59-2	*cis*-1,2-Dichloroethylene	0.07[c]
156-60-5	*trans*-1,2-Dichloroethylene	0.1[c]
75-09-2	Dichloromethane (methylene chloride)[e]	0.005[c]
78-87-5	1,2-Dichloropropane[b]	0.005[c]
117-81-7	Di(2-ethylhexyl)phthalate[b]	0.006[c]
84-66-2	Diethyl phthalate	3.1[a]

84-74-2	Di-*n*-butyl phthalate	0.38[a]
99-65-0	1,3-Dinitrobenzene	0.001[g]
121-14-2	2,4-Dinitrotoluene[b]	0.001[g]
606-20-2	2,6-Dinitrotoluene[b]	0.0001[g]
88-85-7	Dinoseb	0.007[c]
123-91-1	1,4-Dioxane (*p*-dioxane)[b]	0.00078[d]
145-73-3	Endothall	0.1[c]
72-20-8	Endrin	0.002[c]
100-41-4	Ethylbenzene[b]	0.7[c]
106-93-4	Ethylene dibromide (1,2-dibromoethane)[b]	0.00005[c]
206-44-0	Fluoranthene	0.15[a]
86-73-7	Fluorene	0.15[a]
58-89-9	*gamma*-HCH (*gamma*-Hexachlorocyclohexane, lindane)[b]	0.0002[c]
13252-13-6	HFPO-DA (hexafluoropropylene oxide dimer acid GenX)	0.000010[c]
2691-41-0	HMX (octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine)	0.77[a]
76-44-8	Heptachlor[b]	0.0004[c]
1024-57-3	Heptachlor epoxide[b]	0.0002[c]
77-47-4	Hexachlorocyclopentadiene	0.05[c]
193-39-5	Indeno(l,2,3-c,d)pyrene[e]	0.00025[d]
98-82-8	Isopropylbenzene (cumene)[b]	0.38[a]
93-65-2	MCPP (mecoprop)	0.1[g]
1634-04-4	MTBE (methyl tertiary-butyl ether)	0.038[a]
72-43-5	Methoxychlor	0.04[c]
90-12-0	1-Methylnaphthalene	0.27[a]
91-57-6	2-Methylnaphthalene	0.015[c]
95-48-7	2-Methylphenol (*o*-cresol)	0.19[a]
91-20-3	Naphthalene	0.077[a]
98-95-3	Nitrobenzene	0.0077[a]
1336-36-3	PCBs (polychlorinated biphenyls as decachloro-biphenyl)[b]	0.0005[c]
375-73-5	PFBS (perfluorobutanesulfonic acid)	0.002[c]
355-46-4	PFHxS (perfluorohexanesulfonic acid)	0.000010[c]
375-95-1	PFNA (perfluorononanoic acid)	0.000010[c]
335-67-1	PFOA (perfluorooctanoic acid)[b]	0.000004[bc]
1763-23-1	PFOS (perfluorooctanesulfonic acid)	0.000004[bc]
87-86-5	Pentachlorophenol	0.001[c]
108-95-2	Phenol	0.1[h]
1918-02-1	Picloram	0.5[c]
129-00-0	Pyrene	0.12[a]
121-82-4	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)	0.062[a]

122-34-9	Simazine	0.004[c]
100-42-5	Styrene	0.1[c]
118-96-7	TNT (2,4,6-trinitrotoluene)	0.0077[a]
93-72-1	2,4,5-TP (silvex)	0.05[c]
127-18-4	Tetrachloroethylene[b]	0.005[c]
108-88-3	Toluene	1[c]
8001-35-2	Toxaphene[b]	0.003[c]
120-82-1	1,2,4-Trichlorobenzene	0.07[c]
71-55-6	1,1,1-Trichloroethane	0.2[c]
79-00-5	1,1,2-Trichloroethane	0.005[c]
79-01-6	Trichloroethylene[e]	0.005[c]
75-69-4	Trichlorofluoromethane	1.2[a]
99-35-4	1,3,5-Trinitrobenzene	0.46[a]
75-01-4	Vinyl chloride[e]	0.002[c]
1330-20-7	Xylenes	10[c]

Constituent Name and Groundwater Quality Standard Notations

[a] The standard is the Human Threshold Toxicant Advisory Concentration (HTTAC), calculated using procedures specified in Appendix A.

[b] The constituent meets the definition of a "carcinogen" in Section 620.110.

[c] The standard is based on the Maximum Contaminant Level (MCL), promulgated by USEPA, Office of Water, and Illinois Primary Drinking Water Standards in 35 Ill. Adm. Code 611.

[d] The standard is the Human Nonthreshold Toxicant Advisory Concentration ("HNTAC"), calculated using procedures specified in Appendix A.

[e] The constituent meets the definition of a "mutagen" in Section 620.110.

[f] The standard is based on the Maximum Contaminant Level Goal ("MCLG"), promulgated by USEPA, Office of Water.

[g] The standard is the "LLOQ" or "LCMRL" as defined in Section 620.110.

[h] The standard is based on 35 Ill. Adm. Code 302.208.

c) Complex Organic Chemical Mixtures

1) Concentrations of the following chemical constituents must not be exceeded in Class I groundwater:

CASRN	**Constituent**	**Standard (mg/L)**
71-43-2	Benzene[a]	0.005[b]
	Total BETX	11.705[c]

Constituent Name and Groundwater Quality Standard Notations

[a] The constituent meets the definition of a "carcinogen" in Section 620.110.

[b] The standard is based on the Maximum Contaminant Level (MCL), promulgated by USEPA, Office of Water, and Illinois Primary Drinking Water Standards at 35 Ill. Adm. Code 611.

[c] The standard is the total combined standard of benzene, ethylbenzene, toluene, and xylenes.

2) Atrazine and Metabolites

Concentrations of the following chemical constituents must not be exceeded in Class I groundwater.

CASRN	Constituent	Standard (mg/L)
1912-24-9	Atrazine	0.003[a]
	Total Atrazine and Metabolites	0.003
6190-65-4	DEA (desethyl-atrazine)	
1007-28-9	DIA (desisopropyl-atrazine)	
3397-62-4	DACT (diaminochlorotriazine)	

Groundwater Quality Standard Notation

[a]The standard is based on the Maximum Contaminant Level (MCL), promulgated by USEPA, Office of Water, and Illinois Primary Drinking Water Standards at 35 Ill. Adm. Code 611.

d) pH

Except due to natural causes, a pH range of 6.5 - 9.0 units must not be exceeded in Class I groundwater.

e) Beta Particle and Photon Radioactivity

1) Except due to natural causes, the average annual concentration of beta particle and photon radioactivity from man-made radionuclides must not exceed a dose equivalent to the total body or any internal organ greater than 4 mrem/year in Class I groundwater. If two or more radionuclides are present, the sum of their dose equivalent to the total body or any internal organ must not exceed 4 mrem/year in Class I groundwater except due to natural causes.

2) Except for the radionuclides specified in subsection (e)(3), the concentration of man-made radionuclides causing 4 mrem total body or organ dose equivalent must be calculated on the basis of a 2 liter per day drinking water intake using the 168-hour data in compliance with the procedure specified in NCRP Report Number 22, incorporated by reference in Section 620.125(a).

3) Except due to natural causes, the average annual concentration assumed to produce a total body or organ dose of 4 mrem/year of the following chemical constituents must not be exceeded in Class I groundwater:

CASRN	Constituent	Critical Organ	Standard (pCi/L)
10028-17-8	Tritium	Total Body	20,000
10098-97-2	Strontium-90	Bone Marrow	8.0

~~f) No facility that is subject to 35 Ill. Adm. Code 811 or 814 must comply with any requirement or standard of those rules to the extent it incorporates or is otherwise based on any of the following constituents or their standards under this Section:~~

~~CASRN~~	~~Constituent~~
~~13252-13-6~~	~~HFPO-DA (hexafluoropropylene oxide dimer acid GenX)~~
~~375-73-5~~	~~PFBS (perfluorobutanesulfonic acid)~~
~~355-46-4~~	~~PFHxS (perfluorohexanesulfonic acid)~~
~~375-95-1~~	~~PFNA (perfluorononanoic acid)~~
~~335-67-1~~	~~PFOA (perfluorooctanoic acid)~~
~~1763-23-1~~	~~PFOS (perfluorooctanesulfonic acid)~~

(Source: Amended at 50 Ill. Reg. _____, effective _____)

Section 620.420 Groundwater Quality Standards for Class II: General Resource Groundwater

a) Inorganic Chemical Constituents

1) Except due to natural causes or as provided in Section 620.450 or subsection (a)(3) or (e) of this Section, concentrations of the following chemical constituents must not be exceeded in Class II groundwater:

CASRN	Constituent	Standard (mg/L)[a]
7440-36-0	Antimony	0.024[b]
7440-38-2	Arsenic[b]	0.2[d]
7440-39-3	Barium	2.0[e]
7440-41-7	Beryllium	0.5[f]
7440-43-9	Cadmium	0.05[g]
7440-47-3	Chromium (total)	1.0[g]
7440-48-4	Cobalt	1[d]
143-33-9	Cyanide	0.6[d]
7681-49-4	Fluoride	4[e]
7439-92-1	Lead	1.0[d]
7439-93-2	Lithium	2.5[f]
7487-94-7	Mercury (mercuric chloride)	0.01[d]
7439-98-7	Molybdenum	0.308[e]
14797-55-8	Nitrate as N	100[d]
14797-73-0	Perchlorate	0.0081[e]
7440-28-0	Thallium	0.02[h]
7440-62-2	Vanadium	0.1[d]

Constituent Name and Groundwater Quality Standard Notations

[a] The inorganic groundwater quality standards are based on total metal analyses for the evaluation of human health effects.

[b] A treatment factor of 4 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the effectiveness to treat the constituent in the groundwater at an 75% removal efficiency rate for the constituent.

[c] The constituent meets the definition of a "carcinogen" in Section 620.110.

[d] The standard is based on beneficial use for watering livestock, per "Water Quality Criteria", by National Academy of Sciences, incorporated by reference in Section 620.125.

[e] The Class II standard is equal to the Class I groundwater quality standard.

[f] The standard is based on beneficial use for irrigation of crops, per "Water Quality Criteria", by National Academy of Sciences, incorporated by reference in Section 620.125.

[g] The standard is based on beneficial use for watering livestock and irrigation of crops, per "Water Quality Criteria", by National Academy of Sciences, incorporated by reference in Section 620.125.

[h] A treatment factor of 10 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the effectiveness to treat the constituent in the groundwater at an 90% removal efficiency rate for the constituent.

2) Except as provided in Section 620.450 or subsection (a)(3) or (e) of this Section, concentrations of the following chemical constituents must not be exceeded in Class II groundwater:

CASRN	**Constituent**	**Standard (mg/L)[a,b]**
7429-90-5	Aluminum	5[c]
7440-42-8	Boron	2[d]
16887-00-6	Chloride	200[e]
7440-50-8	Copper	0.5[c]
7439-89-6	Iron	5[e]
7439-96-5	Manganese	10[d]
7440-02-0	Nickel	2[d]
7440-14-4	Radium (combined 226+228)	5[f]
7782-49-2	Selenium	0.02[d]
7440-22-4	Silver	0.058[f]
14808-79-8	Sulfate	400[e]
	TDS (total dissolved solids)	1,200[e]
7440-66-6	Zinc	10[d]

Constituent Name and Groundwater Quality Standard Notations

[a] The standard units for radium (combined 226+228) is picocuries per liter (pCi/L).

[b] The inorganic groundwater quality standards are based on total metal analyses for the evaluation of human health effects.

[c] The standard is based on beneficial use for watering livestock and irrigation of crops, per "Water Quality Criteria", by National Academy of Sciences, incorporated by reference in Section 620.125.

[d] The standard is based on beneficial use for irrigation of crops, per "Water Quality Criteria", by National Academy of Sciences, incorporated by reference in Section 620.125.

[e] The standard is the 95% confidence concentration stated in the Agency's "Integrated Water Quality Report and Section 303(d) List", incorporated

by reference in Section 620.125.

[f] The Class II standard is equal to the Class I groundwater quality standard.

3) The standard for any inorganic chemical constituent specified in subsection (a)(2) and barium specified in subsection (a)(1) does not apply within fill material or within the upper 10 feet of parent material under fill material on a site not within the rural property class for which the conditions of subsection (a)(3)(A) or (a)(3)(B) are met. For pH, the standard specified in subsection (d) does not apply to groundwater within fill material below 5 feet of land surface or within the upper 10 feet of parent material under fill material on a site not within the rural property class for which the conditions of subsection (a)(3)(A) or (a)(3)(B) are met.

A) Before November 25, 1991, surficial characteristics have been altered by placing the fill material so as to impact the concentration of any parameter (constituent or pH) specified in this subsection (a)(3), and any on-site groundwater monitoring of the parameter is available for review by the Agency.

B) On November 25, 1991, surficial characteristics are in the process of being altered by placing the fill material, in a reasonably continuous manner to completion, so as to impact the concentration of any parameter (constituent or pH) specified in this subsection (a)(3), and any on-site groundwater monitoring of the parameter is available for review by the Agency.

4) For subsection (a)(3), the term "fill material" means clean earthen materials, slag, ash, clean demolition debris, or similar materials.

b) Organic Chemical Constituents

1) Except due to natural causes or as provided in Section 620.450 or subsection (b)(2) or (e) of this Section, concentrations of the following organic chemical constituents must not be exceeded in Class II groundwater:

CASRN	**Constituent**	**Standard (mg/L)**
83-32-9	Acenaphthene	1.2[a]
67-64-1	Acetone	3.5[b]
15972-60-8	Alachlor[c]	0.01[a]
116-06-3	Aldicarb	0.015[a]
120-12-7	Anthracene	6[a]

319-84-6	*alpha-BHC* (*alpha*-benzenehexachloride)[c]	0.00006[a]
71-43-2	Benzene[c]	0.025[a]
56-55-3	Benzo(a)anthracene[d]	0.0012[a]
205-99-2	Benzo(b)fluoranthene[d]	0.0012[a]
207-08-9	Benzo(k)fluoranthene[d]	0.012[a]
50-32-8	Benzo(a)pyrene[d]	0.002[e]
65-85-0	Benzoic acid	15[b]
78-93-3	2-Butanone (methyl ethyl ketone)	2.3[b]
1563-66-2	Carbofuran	0.2[a]
75-15-0	Carbon disulfide	1.9[a]
56-23-5	Carbon tetrachloride[c]	0.025[a]
12789-03-6	Chlordane[c]	0.01[a]
108-90-7	Chlorobenzene	0.5[a]
67-66-3	Chloroform[c]	0.35[a]
218-01-9	Chrysene[d]	0.12[a]
94-75-7	2,4-D (2,4-dichloroohenoxy acetic acid)	0.35[a]
75-99-0	Dalapon	2.0[e]
53-70-3	Dibenzo(a,h)anthracene[d]	0.0005[a]
96-12-8	1,2-Dibromo-3-chloropropane[d]	0.002[e]
1918-00-9	Dicamba	0.12[b]
95-50-1	*o*-Dichlorobenzene (1,2-dichlorobenzene)	1.5[f]
106-46-7	*p*-Dichlorobenzene (1,4-dichlorobenzene)[c]	0.375[a]
75-71-8	Dichlorodifluoromethane	3.9[a]
75-34-3	1,1-Dichloroethane	3.9[a]
107-06-2	1,2-Dichloroethane[c]	0.025[a]
75-35-4	1,1-Dichloroethylene	0.035[a]
156-59-2	*cis*-1,2-Dichloroethylene	0.2[g]
156-60-5	*trans*-1,2-Dichloroethylene	0.5[a]
75-09-2	Dichloromethane (methylene chloride)[d]	0.025[a]
78-87-5	1,2-Dichloropropane[b]	0.025[a]
117-81-7	Di(2-ethylhexyl)phthalate[b]	0.06[e]
84-66-2	Diethyl phthalate	3.1[b]
84-74-2	Di-*n*-butyl phthalate	1.9[a]
99-65-0	1,3-Dinitrobenzene	0.001[b]
121-14-2	2,4-Dinitrotoluene[c]	0.005[a]

606-20-2	2,6-Dinitrotoluene[c]	0.005[a]
88-85-7	Dinoseb	0.07[e]
123-91-1	1,4-Dioxane (*p*-dioxane)[c]	0.00078[b]
145-73-3	Endothall	0.1[b]
72-20-8	Endrin	0.01[a]
100-41-4	Ethylbenzene[c]	1.0[h]
106-93-4	Ethylene dibromide (1,2-dibromoethane)[c]	0.0005[e]
206-44-0	Fluoranthene	0.75[a]
86-73-7	Fluorene	0.75[a]
58-89-9	*gamma*-HCH (*gamma*-hexachlorocyclohexane, lindane)[c]	0.001[a]
13252-13-6	HFPO-DA (hexafluoropropylene oxide dimer acid GenX)	0.000010[b]
2691-41-0	HMX (octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine)	3.9[a]
76-44-8	Heptachlor[c]	0.002[a]
1024-57-3	Heptachlor epoxide[c]	0.001[a]
77-47-4	Hexachlorocyclopentadiene	0.5[e]
193-39-5	Indeno(1,2,3-c,d)pyrene[d]	0.0012[a]
98-82-8	Isopropylbenzene (cumene)[c]	1.9[a]
93-65-2	MCPP (mecoprop)	0.1[b]
1634-04-4	MTBE (methyl tertiary-butyl ether)	0.5[e]
72-43-5	Methoxychlor	0.2[a]
90-12-0	1-Methylnaphthalene	1.35[a]
91-57-6	2-Methylnaphthalene	0.075[a]
95-48-7	2-Methylphenol (*o*-cresol)	0.19[b]
91-20-3	Naphthalene	0.39[a]
98-95-3	Nitrobenzene	0.0077[b]
1336-36-3	PCBs (polychlorinated biphenyls as decachloro-biphenyl)[c]	0.0025[a]
375-73-5	PFBS (perfluorobutanesulfonic acid)	0.002[b]
355-46-4	PFHxS (perfluorohexanesulfonic acid)	0.000010[b]
375-95-1	PFNA (perfluorononanoic acid)	0.000010[b]
335-67-1	PFOA (perfluorooctanoic acid)[c]	0.000004[b]
1763-23-1	PFOS (perfluorooctanesulfonic acid)[c]	0.000004[b]
87-86-5	Pentachlorophenol	0.005[a]

108-95-2	Phenol	0.1[i]
1918-02-1	Picloram	5.0[e]
129-00-0	Pyrene	0.6[a]
121-82-4	RDX (hexahydro-l,3,5-trinitro-l,3,5-trianzine)	0.062[b]
122-34-9	Simazine	0.04[e]
100-42-5	Styrene	0.5[a]
118-96-7	TNT (2,4,6-trinitrotoluene)	0.039[a]
93-72-1	2,4,5-TP (silvex)	0.25[a]
127-18-4	Tetrachloroethylene[c]	0.025[a]
108-88-3	Toluene	2.5[f]
8001-35-2	Toxaphene[c]	0.015[a]
120-82-1	1,2,4-Trichlorobenzene	0.7[e]
71-55-6	1,1,1-Trichloroethane	1[a]
79-00-5	1,1,2-Trichloroethane	0.05[e]
79-01-6	Trichloroethylene[d]	0.025[a]
75-69-4	Trichlorofluoromethane	6[a]
99-35-4	1,3,5-Trinitrobenzene	2.3[a]
75-01-4	Vinyl chloride[d]	0.01[a]
1330-20-7	Xylenes	10[b]

Constituent Name and Groundwater Quality Standard Notations

[a] A treatment factor of 5 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the effectiveness to treat the constituent in the groundwater at an 80% removal efficiency rate for the constituent.

[b] The Agency's treatment efficiency determination demonstrates a treatment factor is not applicable for the constituent. The standard is equal to the Class I groundwater quality standard.

[c] The constituent meets the definition of a "carcinogen" in Section 620.110.

[d] The constituent meets the definition of a "mutagen" in Section 620.110.

[e] A treatment factor of 10 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the effectiveness to treat the constituent in the groundwater at a 90% removal efficiency rate for the constituent.

[f] A treatment factor of 2.5 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the

effectiveness to treat the constituent in the groundwater at a 60% removal efficiency rate for the constituent.

[g] A treatment factor of 3 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the effectiveness to treat the constituent in the groundwater at a 65% removal efficiency rate for the constituent.

[h] A treatment factor of 1.5 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the effectiveness to treat the constituent in the groundwater at a 30% removal efficiency rate for the constituent.

[i] The standard is based on 35 Ill. Adm. Code 302.208.

2) The standards for pesticide chemical constituents specified in subsection (b)(1) do not apply to groundwater within 10 feet of the land surface if the concentrations of the constituents result from applying pesticides in a manner consistent with the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.) and the Illinois Pesticide Act [415 ILCS 60].

c) Complex Organic Chemical Mixtures

1) Concentrations of the following organic chemical constituents must not be exceeded in Class II groundwater:

CASRN	**Constituent**	**Standard (mg/L)**
71-43-2	Benzene[a]	0.025[b]
	Total BETX	13.525[c]

Constituent Name and Groundwater Quality Standard Notations

[a] The constituent meets the definition of a "carcinogen" in Section 620.110.

[b] A treatment factor of 5 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the effectiveness to treat the constituent in the groundwater at an 80% removal efficiency rate for the constituent.

[c] The standard is the total combined Class II standard of benzene, ethylbenzene, toluene, and xylenes.

2) Atrazine and Metabolites

Concentration of the following chemical constituents must not be exceeded in Class II groundwater.

CASRN	Constituent	Standard (mg/L)
1912-24-9	Atrazine	0.015[a]
	Total Atrazine and Metabolites	0.015
6190-65-4	DEA (desethyl-atrazine)	
1007-28-9	DIA (desisopropyl-atrazine)	
3397-62-4	DACT (diaminochlorotriazine)	

Constituent Name and Groundwater Quality Standard Notations:

[a] A treatment factor of 5 is applied to the Class I groundwater quality standard. The constituent's treatment efficiency is based on the effectiveness to treat the constituent in the groundwater at an 80% removal efficiency rate for the constituent.

d) pH

Except due to natural causes, a pH range of 6.5 - 9.0 units must not be exceeded in Class II groundwater.

~~e) No facility that is subject to 35 Ill. Adm. Code 811 or 814 must comply with any requirement or standard of those rules to the extent it incorporates or is otherwise based on any of the following constituents or their standards under this Section:~~

~~CASRN~~	~~Constituent~~
~~13252-13-6~~	~~HFPO-DA (hexafluoropropylene oxide dimer acid GenX)~~
~~375-73-5~~	~~PFBS (perfluorobutanesulfonic acid)~~
~~355-46-4~~	~~PFHxS (perfluorohexanesulfonic acid)~~
~~375-95-1~~	~~PFNA (perfluorononanoic acid)~~
~~335-67-1~~	~~PFOA (perfluorooctanoic acid)~~
~~1763-23-1~~	~~PFOS (perfluorooctanesulfonic acid)~~

(Source: Amended at 50 Ill. Reg. _____, effective _____)