

Comparison of Part 620 Numerical Groundwater Quality Standards, effective March 28, 2025, to Previous Standards

Items in Bold represent updates

CASRN	Constituent	Previous Class I GQS mg/L	Previous Class I Part 620 Section	Updated Class I GQS mg/L	Updated Class I Part 620 Section	Previous Class II GQS mg/L	Previous Class II Part 620 Section	Updated Class II GQS mg/L	Updated Class II Part 620 Section
<u>Inorganics</u>									
7429-90-5	Aluminum	----	---	1.9	620.410(a)	---	---	5	620.420(a)(2)
7440-36-0	Antimony	0.006	620.410(a)	0.006	620.410(a)	0.024	620.420(a)(1)	0.024	620.420(a)(1)
7440-38-2	Arsenic	0.01	620.410(a)	0.01	620.410(a)	0.2	620.420(a)(1)	0.2	620.420(a)(1)
7440-39-3	Barium	2.0	620.410(a)	2	620.410(a)	2.0	620.420(a)(1)	2.0	620.420(a)(1)
7440-41-7	Beryllium	0.004	620.410(a)	0.004	620.410(a)	0.5	620.420(a)(1)	0.5	620.420(a)(1)
7440-42-8	Boron	2.0	620.410(a)	2	620.410(a)	2.0	620.420(a)(2)	2	620.420(a)(2)
7440-43-9	Cadmium	0.005	620.410(a)	0.005	620.410(a)	0.05	620.420(a)(1)	0.05	620.420(a)(1)
16887-00-6	Chloride	200.0	620.410(a)	200	620.410(a)	200.0	620.420(a)(2)	200	620.420(a)(2)
7440-47-3	Chromium (total)	0.1	620.410(a)	0.1	620.410(a)	1.0	620.420(a)(1)	1.0	620.420(a)(1)
7440-48-4	Cobalt	1.0	620.410(a)	0.0012	620.410(a)	1.0	620.420(a)(1)	1	620.420(a)(1)
7440-50-8	Copper	0.65	620.410(a)	0.5	620.410(a)	0.65	620.420(a)(2)	0.5	620.420(a)(2)
143-33-9	Cyanide	0.2	620.410(a)	0.2	620.410(a)	0.6	620.420(a)(1)	0.6	620.420(a)(1)
7681-49-4	Fluoride	4.0	620.410(a)	4	620.410(a)	4.0	620.420(a)(1)	4	620.420(a)(1)
7439-89-6	Iron	5.0	620.410(a)	5	620.410(a)	5.0	620.420(a)(2)	5.0	620.420(a)(2)
7439-92-1	Lead	0.0075	620.410(a)	0.0075	620.410(a)	0.1	620.420(a)(1)	1.0	620.420(a)(1)
7439-93-2	Lithium	----	---	0.04	620.410(a)	---	---	2.5	620.420(a)(1)
7439-96-5	Manganese	0.15	620.410(a)	0.15	620.410(a)	10.0	620.420(a)(2)	10	620.420(a)(2)
7487-94-7	Mercury (mercuric chloride)	0.002	620.410(a)	0.002	620.410(a)	0.01	620.420(a)(1)	0.01	620.420(a)(1)
7439-98-7	Molybdenum	----	---	0.308	620.410(a)	---	---	0.308	620.420(a)(1)
7440-02-0	Nickel	0.1	620.410(a)	0.077	620.410(a)	2	620.420(a)(2)	2	620.420(a)(2)
14797-55-8	Nitrate as N	10.0	620.410(a)	10	620.410(a)	100.0	620.420(a)(1)	100	620.420(a)(1)
14797-73-0	Perchlorate	0.0049	620.410(a)	0.0081	620.410(a)	0.0049	620.420(a)(1)	0.0081	620.420(a)(1)
7440-14-4	Radium-226 (units of pCi/L)	20.0	620.410(a)	—	---	---	---	---	---
15262-20-1	Radium-228 (units of pCi/L)	20.0	620.410(a)	—	---	---	---	---	---
7440-14-4	Radium (combined 226+228) (units of pCi/L)	----	---	5	620.410(a)	---	---	5	620.420(a)(2)
7782-49-2	Selenium	0.05	620.410(a)	0.02	620.410(a)	0.05	620.420(a)(2)	0.02	620.420(a)(2)
7440-22-4	Silver	0.05	620.410(a)	0.058¹	620.410(a)	---	---	0.058	620.420(a)(2)
14808-79-8	Sulfate	400.0	620.410(a)	400	620.410(a)	400.0	620.420(a)(2)	400	620.420(a)(2)

CASRN	Constituent	Previous Class I GQS mg/L	Previous Class I Part 620 Section	Updated Class I GQS mg/L	Updated Class I Part 620 Section	Previous Class II GQS mg/L	Previous Class II Part 620 Section	Updated Class II GQS mg/L	Updated Class II Part 620 Section
7440-28-0	Thallium	0.002	620.410(a)	0.002	620.410(a)	0.02	620.420(a)(1)	0.02	620.420(a)(1)
---	TDS (total dissolved solids)	1,200	620.410(a)	1,200	620.410(a)	1,200	620.420(a)(2)	1,200	620.420(a)(2)
7440-62-2	Vanadium	0.049	620.410(a)	0.00027	620.410(a)	0.1	620.420(a)(1)	0.1	620.420(a)(1)
7440-66-6	Zinc	5.0	620.410(a)	1.2	620.410(a)	10.0	620.420(a)(2)	10	620.420(a)(2)
Organics									
83-32-9	Acenaphthene	0.42	620.410(b)	0.23	620.410(b)	2.1	620.420(b)(1)	1.2	620.420(b)(1)
67-64-1	Acetone	6.3	620.410(b)	3.5	620.410(b)	6.3	620.420(b)(1)	3.5	620.420(b)(1)
15972-60-8	Alachlor	0.002	620.410(b)	0.002	620.410(b)	0.010	620.420(b)(1)	0.01	620.420(b)(1)
116-06-3	Aldicarb	0.003	620.410(b)	0.003	620.410(b)	0.015	620.420(b)(1)	0.015	620.420(b)(1)
120-12-7	Anthracene	2.1	620.410(b)	1.2	620.410(b)	10.5	620.420(b)(1)	6	620.420(b)(1)
1912-24-9	Atrazine	0.003	620.410(b)	0.003	620.410(c)(2)	0.015	620.420(b)(1)	0.015	620.420(c)(2)
319-84-6	<i>alpha</i> -BHC (<i>alpha</i> -benzene hexachloride)	0.00011	620.410(b)	0.000012	620.410(b)	0.00055	620.420(b)(1)	0.00006	620.420(b)(1)
71-43-2	Benzene	0.005	620.410(b)	0.005	620.410(b)	0.025	620.420(b)(1)	0.025	620.420(b)(1)
56-55-3	Benzo(a)anthracene	0.00013	620.410(b)	0.00025¹	620.410(b)	0.00065	620.420(b)(1)	0.0012	620.420(b)(1)
205-99-2	Benzo(b)fluoranthene	0.00018	620.410(b)	0.00025¹	620.410(b)	0.0009	620.420(b)(1)	0.0012	620.420(b)(1)
207-08-9	Benzo(k)fluoranthene	0.00017	620.410(b)	0.0025¹	620.410(b)	0.006	620.420(b)(1)	0.012	620.420(b)(1)
50-32-8	Benzo(a)pyrene	0.0002	620.410(b)	0.0002	620.410(b)	0.002	620.420(b)(1)	0.002	620.420(b)(1)
65-85-0	Benzoic acid	28.0	620.410(b)	15	620.410(b)	28.0	620.420(b)(1)	15	620.420(b)(1)
78-93-3	2-Butanone (methyl ethyl ketone)	4.2	620.410(b)	2.3	620.410(b)	4.2	620.420(b)(1)	2.3	620.420(b)(1)
1563-66-2	Carbofuran	0.04	620.410(b)	0.04	620.410(b)	0.2	620.420(b)(1)	0.2	620.420(b)(1)
75-15-0	Carbon disulfide	0.7	620.410(b)	0.38	620.410(b)	3.5	620.420(b)(1)	1.9	620.420(b)(1)
56-23-5	Carbon tetrachloride	0.005	620.410(b)	0.005	620.410(b)	0.025	620.420(b)(1)	0.025	620.420(b)(1)
12798-03-6	Chlordane	0.002	620.410(b)	0.002	620.410(b)	0.01	620.420(b)(1)	0.01	620.420(b)(1)
108-90-7	Chlorobenzene	0.1	620.410(b)	0.1	620.410(b)	0.5	620.420(b)(1)	0.5	620.420(b)(1)
67-66-3	Chloroform	0.07	620.410(b)	0.07 ¹	620.410(b)	0.35	620.420(b)(1)	0.35	620.420(b)(1)
218-01-9	Chrysene	0.012	620.410(b)	0.025¹	620.410(b)	0.06	620.420(b)(1)	0.12	620.420(b)(1)
94-75-7	2,4-D (2,4-dichlorophenoxy acetic acid)	0.07	620.410(b)	0.07	620.410(b)	0.35	620.420(b)(1)	0.35	620.420(b)(1)
75-99-0	Dalapon	0.2	620.410(b)	0.2	620.410(b)	2.0	620.420(b)(1)	2.0	620.420(b)(1)
53-70-3	Dibenzo(a,h)anthracene	0.0003	620.410(b)	0.0001	620.410(b)	0.0015	620.420(b)(1)	0.0005	620.420(b)(1)
96-12-8	1,2-Dibromo-3-chloropropane (dibromochloropropane)	0.0002	620.410(b)	0.0002	620.410(b)	0.002	620.420(b)(1)	0.002	620.420(b)(1)
1918-00-9	Dicamba	0.21	620.410(b)	0.12	620.410(b)	0.21	620.420(b)(1)	0.12	620.420(b)(1)
95-50-1	<i>o</i> -Dichlorobenzene (1,2-dichlorobenzene)	0.6	620.410(b)	0.6	620.410(b)	1.5	620.420(b)(1)	1.5	620.420(b)(1)

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106-46-7	<i>p</i> -Dichlorobenzene (1,4-dichlorobenzene)	0.075	620.410(b)	0.075	620.410(b)	0.375	620.420(b)(1)	0.375	620.420(b)(1)
75-71-8	Dichlorodifluoromethane	1.4	620.410(b)	0.77	620.410(b)	7.0	620.420(b)(1)	3.9	620.420(b)(1)
75-34-3	1,1-Dichloroethane	1.4	620.410(b)	0.77	620.410(b)	7.0	620.420(b)(1)	3.9	620.420(b)(1)
107-06-2	1,2-Dichloroethane	0.005	620.410(b)	0.005	620.410(b)	0.025	620.420(b)(1)	0.025	620.420(b)(1)
75-35-4	1,1-Dichloroethylene	0.007	620.410(b)	0.007	620.410(b)	0.035	620.420(b)(1)	0.035	620.420(b)(1)
156-59-2	<i>cis</i> -1,2-Dichloroethylene	0.07	620.410(b)	0.07	620.410(b)	0.2	620.420(b)(1)	0.2	620.420(b)(1)
156-60-5	<i>trans</i> -1,2-Dichloroethylene	0.1	620.410(b)	0.1	620.410(b)	0.5	620.420(b)(1)	0.5	620.420(b)(1)
75-09-2	Dichloromethane (methylene chloride)	0.005	620.410(b)	0.005	620.410(b)	0.05	620.420(b)(1)	0.025	620.420(b)(1)
78-87-5	1,2-Dichloropropane	0.005	620.410(b)	0.005	620.410(b)	0.025	620.420(b)(1)	0.025	620.420(b)(1)
117-81-7	Di(2-ethylhexyl)phthalate	0.006	620.410(b)	0.006	620.410(b)	0.06	620.420(b)(1)	0.06	620.420(b)(1)
84-66-2	Diethyl phthalate	5.6	620.410(b)	3.1	620.410(b)	5.6	620.420(b)(1)	3.1	620.420(b)(1)
84-74-2	Di- <i>n</i> -butyl phthalate	0.7	620.410(b)	0.38	620.410(b)	3.5	620.420(b)(1)	1.9	620.420(b)(1)
99-65-0	1,3-Dinitrobenzene	0.0007	620.410(c)	0.001	620.410(b)	0.0007	620.420(c)	0.001	620.420(b)(1)
121-14-2	2,4-Dinitrotoluene	0.0001	620.410(c)	0.001¹	620.410(b)	0.0001	620.420(c)	0.005	620.420(b)(1)
606-20-2	2,6-Dinitrotoluene	0.00031	620.410(c)	0.0001	620.410(b)	0.00031	620.420(c)	0.005	620.420(b)(1)
88-85-7	Dinoseb	0.007	620.410(b)	0.007	620.410(b)	0.07	620.420(b)(1)	0.07	620.420(b)(1)
123-91-1	1,4-Dioxane (<i>p</i> -dioxane)	0.0077	620.410(b)	0.00078	620.410(b)	0.0077	620.420(b)(1)	0.00078	620.420(b)(1)
145-73-3	Endothall	0.1	620.410(b)	0.1	620.410(b)	0.1	620.420(b)(1)	0.1	620.420(b)(1)
72-20-8	Endrin	0.002	620.410(b)	0.002	620.410(b)	0.01	620.420(b)(1)	0.01	620.420(b)(1)
100-41-4	Ethylbenzene	0.7	620.410(b)	0.7	620.410(b)	1.0	620.420(b)(1)	1.0	620.420(b)(1)
106-93-4	Ethylene dibromide (1,2-dibromoethane)	0.00005	620.410(b)	0.00005	620.410(b)	0.0005	620.420(b)(1)	0.0005	620.420(b)(1)
206-44-0	Fluoranthene	0.28	620.410(b)	0.15	620.410(b)	1.4	620.420(b)(1)	0.75	620.420(b)(1)
86-73-7	Fluorene	0.28	620.410(b)	0.15	620.410(b)	1.4	620.420(b)(1)	0.75	620.420(b)(1)
58-89-9	<i>gamma</i> -HCH (<i>gamma</i> -hexachlorocyclohexane, lindane)	0.0002	620.410(b)	0.0002	620.410(b)	0.001	620.420(b)(1)	0.001	620.420(b)(1)
13252-13-6	HFPO-DA (Hexafluoropropylene Oxide Dimer Acid, GenX)²	----	620.410(b)	0.000010	620.410(b)	---	---	0.000010	620.420(b)(1)
2691-41-0	HMX (octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine)	1.4	620.410(c)	0.77	620.410(b)	1.4	620.420(c)	3.9	620.420(b)(1)
76-44-8	Heptachlor	0.0004	620.410(b)	0.0004	620.410(b)	0.002	620.420(b)(1)	0.002	620.420(b)(1)
1024-57-3	Heptachlor epoxide	0.0002	620.410(b)	0.0002	620.410(b)	0.001	620.420(b)(1)	0.001	620.420(b)(1)
77-47-4	Hexachlorocyclopentadiene	0.05	620.410(b)	0.05	620.410(b)	0.5	620.420(b)(1)	0.5	620.420(b)(1)
193-39-5	Indeno(1,2,3- <i>c,d</i>)pyrene	0.00043	620.410(b)	0.00025	620.410(b)	0.0022	620.420(b)(1)	0.0012	620.420(b)(1)
98-82-8	Isopropylbenzene (cumene)	0.7	620.410(b)	0.38	620.410(b)	3.5	620.420(b)(1)	1.9	620.420(b)(1)
93-65-2	MCPP (Mecoprop)	0.007	620.410(b)	0.1	620.410(b)	0.007	620.420(b)(1)	0.1	620.420(b)(1)

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1634-04-4	MTBE (methyl tertiary-butyl ether)	0.07	620.410(b)	0.038	620.410(b)	0.07	620.420(b)(1)	0.5	620.420(b)(1)
72-43-5	Methoxychlor	0.04	620.410(b)	0.04	620.410(b)	0.2	620.420(b)(1)	0.2	620.420(b)(1)
90-12-0	1-Methylnaphthalene	----	620.410(b)	0.27	620.410(b)	---	---	1.35	620.420(b)(1)
91-57-6	2-Methylnaphthalene	0.028	620.410(b)	0.015	620.410(b)	0.14	620.420(b)(1)	0.075	620.420(b)(1)
95-48-7	2-Methylphenol (<i>o</i> -cresol)	0.35	620.410(b)	0.19	620.410(b)	0.35	620.420(b)(1)	0.19	620.420(b)(1)
91-20-3	Naphthalene	0.14	620.410(b)	0.077	620.410(b)	0.22	620.420(b)(1)	0.39	620.420(b)(1)
98-95-3	Nitrobenzene	0.014	620.410(c)	0.0077¹	620.410(b)	0.014	620.420(c)	0.0077	620.420(b)(1)
1336-36-3	PCBs (polychlorinated biphenyls as decachloro-biphenyl)	0.0005	620.410(b)	0.0005	620.410(b)	0.0025	620.420(b)(1)	0.0025	620.420(b)(1)
375-73-5	PFBS (perfluorobutanesulfonic acid)²	----	620.410(b)	0.002	620.410(b)	---	---	0.002	620.420(b)(1)
355-46-4	PFHxS (perfluorohexanesulfonic acid)²	----	620.410(b)	0.000010	620.410(b)	---	---	0.000010	620.420(b)(1)
375-95-1	PFNA (perfluorononanoic acid)²	----	620.410(b)	0.000010	620.410(b)	---	---	0.000010	620.420(b)(1)
335-67-1	PFOA (perfluorooctanoic acid)²	----	620.410(b)	0.000004	620.410(b)	---	---	0.000004	620.420(b)(1)
1763-23-1	PFOS (perfluorooctanesulfonic acid)²	----	620.410(b)	0.000004	620.410(b)	---	---	0.000004	620.420(b)(1)
87-86-5	Pentachlorophenol	0.001	620.410(b)	0.001	620.410(b)	0.005	620.420(b)(1)	0.005	620.420(b)(1)
108-95-2	Phenol	0.1	620.410(b)	0.1	620.410(b)	0.1	620.420(b)(1)	0.1	620.420(b)(1)
1918-02-1	Picloram	0.5	620.410(b)	0.5	620.410(b)	5.0	620.420(b)(1)	5.0	620.420(b)(1)
129-00-0	Pyrene	0.21	620.410(b)	0.12	620.410(b)	1.05	620.420(b)(1)	0.6	620.420(b)(1)
121-82-4	RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)	0.084	620.410(c)	0.062	620.410(b)	0.084	620.420(c)	0.062	620.420(b)(1)
122-34-9	Simazine	0.004	620.410(b)	0.004	620.410(b)	0.04	620.420(b)(1)	0.04	620.420(b)(1)
100-42-5	Styrene	0.1	620.410(b)	0.1	620.410(b)	0.5	620.420(b)(1)	0.5	620.420(b)(1)
118-96-7	TNT (2,4,6-trinitrotoluene)	0.014	620.410(c)	0.0077	620.410(b)	0.014	620.420(c)	0.039	620.420(b)(1)
93-72-1	2,4,5-TP (silvex)	0.05	620.410(b)	0.05	620.410(b)	0.25	620.420(b)(1)	0.25	620.420(b)(1)
127-18-4	Tetrachloroethylene	0.005	620.410(b)	0.005	620.410(b)	0.025	620.420(b)(1)	0.025	620.420(b)(1)
108-88-3	Toluene	1.0	620.410(b)	1.0	620.410(b)	2.5	620.420(b)(1)	2.5	620.420(b)(1)
8001-35-2	Toxaphene	0.003	620.410(b)	0.003	620.410(b)	0.015	620.420(b)(1)	0.015	620.420(b)(1)
120-82-1	1,2,4-Trichlorobenzene	0.07	620.410(b)	0.07	620.410(b)	0.7	620.420(b)(1)	0.7	620.420(b)(1)
71-55-6	1,1,1-Trichloroethane	0.2	620.410(b)	0.2	620.410(b)	1.0	620.420(b)(1)	1.0	620.420(b)(1)
79-00-5	1,1,2-Trichloroethane	0.005	620.410(b)	0.005	620.410(b)	0.05	620.420(b)(1)	0.05	620.420(b)(1)
79-01-6	Trichloroethylene	0.005	620.410(b)	0.005	620.410(b)	0.025	620.420(b)(1)	0.025	620.420(b)(1)
75-69-4	Trichlorofluoromethane	2.1	620.410(b)	1.2	620.410(b)	10.5	620.420(c)	6	620.420(b)(1)
99-35-4	1,3,5-Trinitrobenzene	0.84	620.410(c)	0.46	620.410(b)	0.84	620.420(c)	2.3	620.420(b)(1)
75-01-4	Vinyl Chloride	0.002	620.410(b)	0.002	620.410(b)	0.01	620.420(b)(1)	0.01	620.420(b)(1)

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1330-20-7	Xylenes	10.0	620.410(b)	10	620.410(b)	10.0	620.420(b)(1)	10	620.420(b)(1)
Complex Organic Chemical Mixtures									
71-43-2	Benzene	0.005	620.410(d)	0.005	620.410(c)(1)	0.025	620.420(d)	0.025	620.420(c)(1)
	Total BETX	11.705	620.410(d)	11.705	620.410(c)(1)	13.525	620.420(d)	13.525	620.420(c)(1)
Total Atrazine and Metabolites:									
1912-24-9	Atrazine	0.003	620.410(b)		620.410(c)(2)	0.015	620.420(b)(1)	0.015	620.420(c)(2)
6190-65-4	Desethyl-atrazine (DEA)	---	---			---	---		
1007-28-9	Desisopropyl-atrazine (DIA)	---	---			---	---		
3397-62-4	Diaminochlorotriazine (DACT)	---	---			---	---		
pH									
pH		Range of 6.5 - 9.5	620.410(e)	Range of 6.5 - 9.5	620.410(d)	Range of 6.5 - 9.5 within 5 ft of land surface	620.420(e)	Range of 6.5 - 9.5	620.420(d)
Beta Particle and Photon Reactivity									
10028-17-8	Tritium (units of pCi/L)	20,000	620.410(f)	20,000	620.410(e)	---	---	---	---
10098-97-2	Strontium-90 (units of pCi/L)	8.0	620.410(f)	8.0	620.410(e)	---	---	---	---

¹ 415 ILCS 58.5(d) of the *Illinois Environmental Protection Act* (Act), states, “No groundwater remediation objective adopted pursuant to this Section shall be more restrictive than the applicable Class I or Class III Groundwater Quality Standard adopted by the Board.” As a result of these updates, the Tier 1 Class I groundwater remediation objective at 35 IAC 742.Appendix B.Table E, is more restrictive than the applicable Class I groundwater quality standard. To comply with the Act, the appropriate Section 742 Tier 1 Class I groundwater remediation objective is the Part 620 Class I groundwater quality standard.

² Sections 620.410(f), and 620.420(e) state, “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:

<u>CASRN</u>	<u>Constituent</u>
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)”