

**Public Water System list of drinking water contaminants for Compliance Monitoring listed by contaminant(s) or analyses groups**

Public Water Systems conducting water quality monitoring for constituents under the Safe Drinking Water Act State and State of Vermont Water Supply Rule, Chapter 21, are required to have all samples analyzed by a laboratory certified for drinking water analyses by the Vermont Department of Health Laboratory. A list of Laboratories Certified for Drinking Water Analyses may be found at the Vermont Department of Health website <http://healthyvermonters.org/hs/lab/watertest.shtml>

Several of the contaminants are grouped according to the test method used by the laboratory. Following is a list of contaminants or analyses broken out by group according to test methods used. Laboratories are required to be certified for all contaminants in a group before they will receive an "X" for that group as listed on the Vermont Department of Health, Laboratories Certified for Drinking Water Analysis, lab table. If the lab table indicates partial certification and you would like a list of the specific certified contaminants, please contact the Vermont Department of Health Laboratory Certification Officer at 1(800) 660-9997 or (802) 863-7335 or the laboratory. The table below contains a brief explanation of these groups.

- BACT. . . . . Total Coliform and Fecal Coliform
- IOC. . . . . Primary Inorganic Chemicals (See Attached List)
- ASB. . . . . Asbestos
- VOC. . . . . Volatile Organic Chemicals (See Attached List)
- THM. . . . . Trihalomethanes (See Attached List)
- HAA5 . . . . . Haloacetic Acids
- SOC-A. . . . . Synthetic Organic Chemicals Sub Group A, EDB and DCBP
- SOC-B. . . . . Synthetic Organic Chemicals Sub Group B, (See Attached List)
- SOC-C. . . . . Synthetic Organic Chemicals Sub Group C, (See Attached List)
- SOC-D. . . . . Synthetic Organic Chemicals Sub Group D, (See Attached List)
- RAD. . . . . Radonulides: Gross Alpha, Total Radium - Radium 226 & 228, and Uranium
- MPA. . . . . Micro Particulate Analysis using EPA "Consensus Method for Determining Groundwater Under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA). No lab certification or approval applicable.

Tables 6-3 & 6-4 Contaminant standards for **Small Scale** water systems identified in the VT. Water Supply Rule include: Arsenic, Chloride, Nitrate, Sodium, Total Coliform, Iron, Manganese, and Odor.

## VERMONT WATER SUPPLY DIVISION CONTAMINANT LIST

### Table of Constituents for Compliance Monitoring by contaminant(s) or analyses groups

Group	Constituents	Limit-Milligrams/liter(mg/l) (unless otherwise noted)
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<b>BACT</b>	Total Coliform Bacteria and FecalColiform/ <i>Escherichia (E. coli)</i>	Absent
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**IOC**      **PRIMARY IOCs**

Arsenic	0.010
Barium	2
Cadmium	0.005
Chromium	0.1
Fluoride	4.0 (mg/l)
Mercury	0.002
Nitrate	10.0
Nitrite	1.0
Total nitrate & nitrite	10.0
Selenium	0.05
Antimony	0.006
Beryllium	0.004
Nickel	0.01
Cyanide	0.2
Thallium	0.002
Lead	0.015
Copper	1.3

**SECONDARY IOCS** – The Vermont Department of Health certifies in-state and out-of-state laboratories for secondary contaminants if they are accredited under the National Environmental Laboratory Accreditation Conference (NELAC) standards. The Vermont Water Supply Division may accept test results from a laboratory which is not Vermont certified for secondary contaminants but would prefer public water systems in Vermont to use a lab which is certified.

Aluminum	0.05
Chloride	250
Color	15 color units
Copper <sup>(also primary std)</sup>	1.0
Corrosivity	Non-corrosive
Fluoride <sup>(also primary std)</sup>	2.0
Foaming agents/surfactants	0.5
Iron	0.3
Manganese	0.05
Odor	3 threshold odor number
pH	6.5 - 8.5
Silver	0.1
Sodium	250
Sulfate	250
TDS	500
Zinc	5.0

<b>ASB</b>	Asbestos	7 million fibers/liter(longer than 10 um)
	(Monitoring for asbestos is required for those systems that have asbestos/cement pipes in their distribution system).	

<b>HAA5</b>	<b>Total Haloacetic Acids</b>	0.060
	Monochloroacetic Acid	
	Dichloroacetic Acid	
	Trichloroacetic Acid	
	Monobromoacetic Acid	
	Dibromoacetic Acid	
<b>THMs</b>	<b>Total Trihalomethanes</b>	0.080
	Bromodichloromethane	
	Dibromochloromethane	
	Bromoform (tribromomethane)	
	Chloroform (trichloromethane)	
<b>VOC</b>	<b>Volatile Organic Chemicals</b>	
	Vinyl Chloride	0.002 (mg/l)
	Benzene	0.005
	Carbon tetrachloride	0.005
	1,2-Dichloroethane	0.005
	Trichloroethylene	0.005
	para-Dichlorobenzene	0.075
	1,1-Dichloroethylene	0.007
	1,1,1-Trichloroethane	0.2
	Cis-1,2-Dichloroethylene	0.07
	1,2-Dichloropropane	0.005
	Ethylbenzene	0.7
	Monochlorobenzene	0.1
	o-Dichlorobenzene	0.6
	Styrene	0.1
	Tetrachloroethylene	0.005
	Toluene	1
	trans-1,2-Dichloroethylene	0.1
	Xylenes (total)	10
	Dichloromethane	0.005
	1,2,4, Trichlorobenzene	0.07
	1,1,2-Trichloroethane	0.005
<b>SOC-A</b>	EPA method 504.1	
	Ethylene dibromide (EDB)	0.00005 (Testing required only for groundwater systems)
<b>SOC-B</b>	EPA methods 531.1, 531.2, or 6610	
	Carbofuran	0.04
	Oxamyl (Vydate)	0.2
<b>SOC-C</b>	EPA methods 515.1, 515.2, 515.3, 515.4 or 555	
	2,4,D	0.07
	2,4,5-TP (Silvex)	0.05

Dinoseb	0.007
Pentachlorophenol	0.001
Picloram	0.5

**SOC-D** EPA methods 515.1 +507+[508 or 508.1] or 525.2

Alachlor	0.002
Atrazine	0.003
Benzo(a)pyrene	0.0002
Chlordane	0.002
Di(2-ethylhexyl)adipate	0.4
Di(2-ethylhexyl)phthalate	0.006
Endrin	0.002
Heptachlor	0.0004
Heptachlor epoxide	0.0002
Hexachlorobenzene	0.001
Hexachlorocyclopentadiene	0.05
Lindane	0.0002
Methoxychlor	0.04
Polychlorinated biphenyls (PCBs)[screen]	
Simazine	0.004
Toxaphene	0.003

State waived contaminants

2,3,7,8-TCDD (Dioxin)	$3 \times 10^{-8}$ (EPA method 1613)
Endothall	0.1 (EPA method 548.1)
Glyphosate	0.7 (EPA method 547)
Diquat	0.02 (EPA method 549.2)
Dalapon	0.2 (Analyzed using HAA5 or SOC-C group methods)
Dibromochloropropane (DBCP)	0.0002 (EPA method 504.1)

**RAD Radonuclides**

Gross Alpha Activity (includes radium-226, excludes radon and uranium)	15 pci/l,(picocuries/liter)
Combined Radium - Radium 226 & 228, Uranium	5 pCi/l 20 ug/l

**Tables 6-3 & 6-4** Contaminant standards for **Small Scale** water systems identified in the VT. Water Supply Rule include:

- Arsenic,
- Chloride,
- Nitrate,
- Sodium,
- Total Coliform,
- Iron,
- Manganese, and
- Odor.

Honorable Jim Douglas, Governor    George Crombie, ANR Secretary    Jeffrey Wennberg, DEC Commissioner  
 This (fact sheet/form/application) and related environmental information are available electronically via the internet. For information visit us through the Vermont Homepage at <http://www.vermont.gov> or visit VT WSD directly at <http://www.vermontdrinkingwater.org>

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