



Registered Water Treatment Systems for Arsenic Reduction

In Iowa, to legally sell, lease, rent, or advertise the sale, lease, or rent of a water treatment device or system with a claim that the device or system will treat a health-related parameter the following must occur:

1. The product must be performance tested by a third-party testing agency or by the manufacturer, as approved by IDPH, and must meet the performance testing requirements specified in the testing protocol for the contaminants advertised as reduced.
2. The product must be registered with the Iowa Department of Public Health (IDPH) in accordance with Iowa Administrative Code 641 Chapter 14.
3. Before the consummation of a sale, the buyer must be provided with a copy of "Water Treatment Systems-A Consumer Information Pamphlet" as published by IDPH and a copy of the performance data sheet (PDS) for the product.
4. The seller may not make any false or deceptive claims about the product (Iowa Code 714.16).

Arsenic may be present in ground water as trivalent arsenic (also known as As(III), As(+3), and arsenite), pentavalent arsenic (also known as As(V), As(+5), and arsenate) or a combination of both. The level of arsenic is either expressed in parts per million (PPM) or parts per billion (PPB). Typically systems are tested and certified to reduce pentavalent arsenic or both pentavalent and trivalent arsenic at source water levels of either ≤ 50 PPB or ≤ 300 PPB to a finished water level of < 10 PPB. (US EPA arsenic standard for drinking water is 0.010 PPM or 10 PPB to protect consumers served by public water systems from the effects of long-term, chronic exposure to arsenic).

It is important to know which types of arsenic are present in your water and at what levels so that the appropriate treatment system can be selected. The reduction of trivalent arsenic in drinking water is generally more difficult than pentavalent arsenic therefore an additional treatment step may be necessary. It is recommended that a water sample be collected and analyzed by a certified lab to determine which forms of arsenic are present in your water and at what levels. A listing of Iowa certified labs can be found at the following State Hygienic Laboratory (SHL) website:

http://www.shl.uiowa.edu/labcert/idnr/reports/public/facility_form.xml.

If you are connected to a public water supply check with your water provider for their arsenic testing results or with the Iowa Department of Natural Resources, Water Supply Section at (515) 725-0282.

The tables on the following pages list the water treatment systems currently registered in Iowa that have been tested and certified to reduce pentavalent arsenic or both pentavalent and trivalent arsenic at source water levels of ≤ 50 PPB or ≤ 300 PPB to a level < 10 PPB in the finished water.

- Table 1 contains a listing of water treatment systems tested to reduce Pentavalent Arsenic at source water levels of ≤ 50 PPB
- Table 2 contains a listing of water treatment systems tested to reduce Pentavalent Arsenic at source water levels of ≤ 300 PPB
- Table 3 contains a listing of water treatment systems tested to reduce Pentavalent and Trivalent Arsenic at source water levels of ≤ 50 PPB

NOTE: There are currently no devices registered that will reduce both pentavalent and trivalent arsenic at source water levels of between > 50 PPB and ≤ 300 PPB

For questions regarding the IDPH water treatment system registration program or registered systems, please contact the department at (515) 281-5894, or visit <http://www.idph.state.ia.us/EHS/WaterTreatmentSystems.aspx>.

Table 1: Pentavalent Arsenic ≤50 PPB

WTD #:	Primary Model Name:	Model # (s):	Manufacturer:	Technology Fields:
20526	Culligan Aqua-Clear Advanced Drinking Water System	RO30	Culligan International	reverse osmosis
20527	Culligan Aqua-Clear Advanced Drinking Water System	RO30 + TD	Culligan International	reverse osmosis carbon block
20528	Culligan Aqua-Clear Advanced Drinking Water System	RO50	Culligan International	reverse osmosis
20529	Culligan Aqua-Clear Advanced Drinking Water System	RO50 + TD	Culligan International	reverse osmosis carbon block
20533	Culligan Aqua-Clear Advanced Drinking Water System	RO30/PER	Culligan International	reverse osmosis anion exchange
20534	Culligan Aqua-Clear Advanced Drinking Water System	RO30/PER/TD	Culligan International	reverse osmosis anion exchange carbon block
20537	Culligan Aqua-Clear Advanced Drinking Water System	RO50/PER	Culligan International	reverse osmosis anion exchange
20538	Culligan Aqua-Clear Advanced Drinking Water System	RO50/PER/TD	Culligan International	reverse osmosis anion exchange carbon block
20289	GE Profile Reverse Osmosis System	PNRQ20Fxxx, PNRQ21Lxxx, (xxx = color/finish)	General Electric Co. (3M Purification)	reverse osmosis carbon block
20596	GE Profile Reverse Osmosis System	PXRQ15xxx (xxx = color/finish)	General Electric Co. (3M Purification)	reverse osmosis
20036	Multi-Pure CB Drinking Water System	MP880SB	Multi-Pure Corporation	carbon block
20658	Aquaperform Drinking Water System (under sink)	MP880EL	Multi-Pure Corporation	carbon block
20589	DuPont QuickTwist Reverse Osmosis Filtration System	WFRO60	Protect Plus, LLC	reverse osmosis

Table 2: Pentavalent Arsenic ≤300 PPB

WTD #:	Primary Model Name:	Model #(s):	Manufacturer:	Technology Fields:
20422	AquaPure Reverse Osmosis Drinking Water Appliance	APRO5500	3M Purification Inc.	reverse osmosis
20638	RainSoft Ultrefiner II - FMV	Ultrefiner II - FMV	Aquion, Inc.	reverse osmosis carbon block
20568	ecopure Reverse Osmosis Filter System	ECOP30	EcoWater Systems	reverse osmosis
20564	EcoWater Reverse Osmosis Drinking Water System	HERO-375-xx	EcoWater Systems	reverse osmosis
20565	EcoWater Reverse Osmosis Drinking Water System	ERO-375-xx (xx = color/finish)	EcoWater Systems	reverse osmosis
20587	EcoWater Reverse Osmosis Filter System	ERO-175	EcoWater Systems	reverse osmosis
20566	North Star Reverse Osmosis Filter System	NSRO42C4	EcoWater Systems	reverse osmosis
20588	GE Reverse Osmosis Filtration System	GXRM10RBL	General Electric Company	reverse osmosis
20049	Millennium R.O. Drinking Water System	MRO-35	Hellenbrand Water Conditioners	carbon block reverse osmosis
20147	AquaKinetic Drinking Water System	A200	Kinetico Incorporated	reverse osmosis
20512	Kinetico K5 Drinking Water Station w/WOW tank	K5	Kinetico Incorporated	reverse osmosis
20517	Kinetico K5 Drinking Water Station w/standard tank	K5	Kinetico Incorporated	reverse osmosis
20050	Microline Reverse Osmosis Drinking Water System	T.F.C.-435	Microline	reverse osmosis
20051	Microline Reverse Osmosis Drinking Water System	T.F.C.-335	Microline	reverse osmosis
20632	Multi-Pure MP750 Plus RO	MP750 Plus RO	Multi-Pure Corporation	reverse osmosis carbon block media filtration
20670	Pentair Undersink Reverse Osmosis System	PB4RO-75	Pentair Residential Filtration, LLC	reverse osmosis carbon block GAC
20061	Micromax Drinking Water Appliance	6500 TFC	Puronics Water Systems	reverse osmosis
20570	Kenmore Ultra Filter 450	625.381560	Sears Brand Management	reverse osmosis
20571	Kenmore Ultra Filter 650	625.385560	Sears Brand Management	reverse osmosis
20695	Pura Quick Change RO Drinking Water System	QCRO4V-50	WaterGroup Companies, Inc.	reverse osmosis carbon block
20047	Eclipse Reverse Osmosis Drinking Water System Ultrawater 35 RO Drinking System	WRO-35 RO25	Water-Right, Inc. (formerly sold by WaterCare Corp.)	reverse osmosis reverse osmosis
20399	Whirlpool Reverse Osmosis Filter System	WHER25	Whirlpool Corporation (EcoWater Systems/Ecodyne)	reverse osmosis

Table 3: Pentavalent and Trivalent Arsenic ≤50 PPB

WTD #:	Primary Model Name:	Model #(s):	Manufacturer:	Technology Fields:
20531	Culligan Aqua-Clear Advanced Drinking Water System	RO30/AS3	Culligan International	reverse osmosis anion exchange
20532	Culligan Aqua-Clear Advanced Drinking Water System	RO30/TD/AS3	Culligan International	reverse osmosis anion exchange carbon block
20535	Culligan Aqua-Clear Advanced Drinking Water System	RO50/AS3	Culligan International	reverse osmosis anion exchange
20536	Culligan Aqua-Clear Advanced Drinking Water System	RO50 /TD/AS3	Culligan International	reverse osmosis anion exchange carbon block
20552	Culligan Smart Gold Filter Arsenic 10 inch	Arsenic 10"	Culligan International	media filtration
20553	Culligan Smart Gold Filter Arsenic 12 inch	Arsenic 12"	Culligan International	media filtration
20554	Culligan Smart Gold Filter Arsenic 14 inch	Arsenic 14"	Culligan International	media filtration

For More Information:

State Hygienic Lab (SHL) has information about private wells and well sampling on the web at <http://www.shl.uiowa.edu/env/privatewell/ordering.xml> along with a booklet entitled “Well Water Quality and Home Treatment Systems” available for viewing and download at the following location: <http://shl.uiowa.edu/env/privatewell/homewater.pdf>.

Information for consumers on drinking water treatment units and certification visit the NSF website:

<http://www.nsf.org/consumer-resources/what-is-nsf-certification/water-filters-treatment-certification>

and for information on arsenic reduction you can view or download their fact sheet located at:

http://www.nsf.org/newsroom_pdf/DW_2014_Arsenic_fact_sheet.pdf

Information about arsenic can be found at the following locations;

- Iowa Department of natural Resources: <http://www.iowadnr.gov/InsideDNR/RegulatoryWater/PrivateWellProgram.aspx>
- U.S. Environmental Protection Agency: <http://water.epa.gov/lawsregs/rulesregs/sdwa/arsenic/index.cfm>.
- The Centers for Disease Control: <http://www.cdc.gov/healthywater/drinking/private/wells/disease/arsenic.html>
- Agency for Toxic Substances and Disease Registry, Toxicological Profile on Arsenic: <http://www.atsdr.cdc.gov/phs/phs.asp?id=18&tid=3>