

Performance Data for the OptimH2O™ Drinking Water System: Model AQ-RO-3					
Replacement	Operating pressure range	Operating temp range	Recovery Rating	Efficiency Rating	Daily Produc- tion (DPR)
AQ-RO3-RO, AQ-RO3-Carbon, AQ-RO3-Claryum	40-100 psi 275-689 kPa	40-90° F 4.44-32.2° C	29.43%	17.91%	13.32 gallons 50.4 liters
Manufactured by: Aguasana, Inc. 6310 Midway Road · Haltom City, Texas 76117 · 866.662.6885					

Testing Performed under NSF/ANSI Standards 42 and 53 and in accordance with the California Department of Health Services Drinking Water Treatment Device Program. This system has been tested according to NSF/ANSI 42, 53, 58, 401 @ P473 for reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42, 53, 58, 401 @ P473.

NSF/ANSI 42	reduction	Overall % reduction	Results
Chlorine Reduction, Free Available	<0.5 mg/l	97.66%	Pass
Chloramine Reduction, Free Available	<0.5 mg/l	97.66%	Pass
Particulate Reduction	85%	99.9%	Pass
NSF/ANSI 53	Required reduction	Overall % reduction	Results
Cyst Live Cryptosporidium & Giardia	99-95%	>99.99%	Pass
Mercury Reduction pH 8.5	<2 ug/L	>95.8%	Pass
Mercury Reduction pH 6.5	<2 ug/L	>96.5%	Pass
Lead Reduction pH 6.5	<10 ug/L	>99.4%	Pass
Lead Reduction pH 8.5	<10 ug/L	>99.3%	Pass
MTBE Reduction	<5 ug/L	86.6%	Pass
Turbidity	<0.5 NTU	99.1%	Pass
VOC Surrogate Test	95%	99.4%	Pass
Asbestos Reduction	99%	>99%	Pass

NSF/ANSI 58	Maximum Concentration	Minimum Reduction	Overall % Reduction	Results
Arsenic Pentavalent	0.30 ^{mg} / ±10%	80.0%	97.6%	Pass
Barium	10.0 ^{mg} / ±10%	80.0%	95.2%	Pass
Cadmium	0.30 ^{mg} / ±10%	83.3%	95-3%	Pass
Chromium Hexavalent	0.30 ^{mg} / ±10%	66.7%	97.0%	Pass
Chromium Trivalent	0.30 ^{mg} /(±10%	66.7%	96.6%	Pass
Copper	0.30 ^{mg} / ±10%	56.7%	96.6%	Pass
Fluoride	8.0 ^{mg} / ±10%	81.2%	95.7%	Pass
Lead	0.15 ^{mg} /L ±10%	93.3%	96.6%	Pass
Nitrate/Nitrite	30.0 ^{mg} /(±10%	66.70%	82.40%	Pass
Radium 226/228	25 ^{pCi} /(±10%	80.0%	80.0%	Pass
Selenium	0.10 ^{mg} /_ ±10%	50.0%	97.9%	Pass
TDS	750 ^{mg} / ±10%	75.0%	95.0%	Pass
Turbidity	11 ± NTU	95.4%	99.1%	Pass

NSF/ANSI 401	Maximum Concentration	Minimum Reduction	Overall % Reduction	Results
Atenolol	30 ng/L	94.2%	94.2%	Pass
Bisphenol A	300 ng/L	98.80%	98.9%	Pass
Carbamazepine	200 ng/L	98.6%	98.6%	Pass
DEET	200 ng/L	98.7%	98.7%	Pass
Estrone	20 ng/L	96.30%	96.5%	Pass
Ibuprofen	60 ng/L	95.3%	95.4%	Pass
Linuron	20 ng/L	96.6%	96.6%	Pass
Meprobamate	60 ng/L	94.7%	94.7%	Pass
Metolachlor	200 ng/L	98.6%	98.6%	Pass
Naproxen	20 ng/L	96.3%	96.4%	Pass
Nonyl phenol	200 ng/L	97.50%	97.5%	Pass
Phenytoin	30 ng/L	95.50%	95.6%	Pass
TCEP	700 ng/L	98%	98%	Pass
ТСРР	700 ng/L	97.8%	97.8%	Pass
Trimethoprim	20 ng/L	96.7%	96.7%	Pass

NSF P473	Influent challenge concentration	Maximum permissible product water concentration	Overall % reduction	Results
Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS)	1.5 ±10% ug/L	0.07 ug/L	96%	Pass

Do not use with water that is microbiologically unsafe or of unknown water quality without adequate disinfection before or after the system.



The AQ-RO3 has been tested and certified by NSF International against NSF/ANSI Standards 42, 53 and 401 in model AQ-RO-3 for the reduction claims specified on the Performance Data Sheet as verified and substantiated by test data and at nsf.org.

Organic chemicals inclu	ded by surroga	te testing		
VOCs (by surrogate testing using	Drinking water regulatory level	Influent/ Unfiltered	Effluent/ Filtered	Percent Reduction
alachlor	0.002	0.050	0.001	>08%
atrazine	0.002	0.100	0.002	>07%
benzene	0.005	0.081	0.001	>00%
carbofuran	0.005	0.001	0.001	>00%
carbon totrachlorido	0.04	0.190	0.001	09970
chlorobenzene	0.005	0.070	0.001	>00%
chloropicrin	_	0.015	0.0003	00%
	-	0.015	0.0002	99%
dibromochloropropane (DBCP)	0.0002	0.052	0.00002	>99%
o-dichlorobenzene	0.6	0.080	0.001	>99%
p-dichlorobenzene	0.075	0.040	0.001	>98%
1,2-dichloroethane	0.005	0.088	0.0048	95%
1,1-dichloroethylene	0.007	0.083	0.001	>99%
cis-1,2-dichloroethylene	0.07	0.170	0.0005	>99%
trans-1,2-dichloroethylene	0.1	0.086	0.001	>99%
1,2-dichloropropane	0.005	0.080	0.001	>99%
cis-1.3-dichloropropylene	-	0.079	0.001	>99%
dinoseb	0.007	0.170	0.0002	99%
endrin	0.002	0.053	0.00059	99%
ethylbenzene	0.7	0.088	0.001	>99%
ethylene dibromide (FDB)	0.00005	0.044	0.00002	>00%
haloacetonitriles (HAN)				
Bromochloroacetontrile	_	0.022	0.0005	98%
Dibromoacetontrile	_	0.024	0.0006	98%
Dichloroacetontrile	_	0.0096	0.0002	98%
Irichloroacetontrile	-	0.015	0.0003	08%
haloketones (HK)	-	0.015	0.0003	98%
haloketones (HK)	-	0.015	0.0003	98%
haloketones (HK) 1,1-dichloro-2-propanone	- -	0.015	0.0003	98% 99% 96%
haloketones (HK) 1,1-dichloro-2-propanone 1,1,1-trichloro-2-propanone heptachlor (H-34, Heptox)	- - 0.0004	0.015 0.0072 0.0082 0.025	0.0003 0.0001 0.0003 0.00001	98% 99% 96%
Inchioroacetontrile haloketones (HK) 1,1-dichloro-2-propanone 1,1,1-trichloro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide		0.0072 0.0082 0.025 0.0107	0.0003 0.0001 0.0003 0.00001 0.0002	98% 99% 96% >99% 98%
rrichioroacetontrile haloketones (HK) 1,1-dichloro-2-propanone 1,1,1-trichloro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide bexachlorobutadiene	 0.0004 0.0002	0.0072 0.0082 0.025 0.0107	0.0003 0.0001 0.0003 0.00001 0.0002 0.001	98% 99% 96% >99% 98%
Iricnioroacetontrile haloketones (HK) 1,1-dichloro-2-propanone 1,1,1-trichloro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorocyclopentadiene hexachlorocyclopentadiene		0.0072 0.0082 0.025 0.0107 0.044 0.060	0.0003 0.0001 0.0003 0.00001 0.0002 0.001 0.00002	98% 99% 96% >99% 98% >98% >98%
Irrichioracetontrile haloketones (HK) 1;1-dichloro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorobutadiene hexachlorocyclopentadiene lindane		0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055	0.0003 0.0001 0.0003 0.00001 0.0002 0.001 0.00002 0.00001	98% 99% 96% >99% 98% >98% >99% >99%
Irrichioracetontrile haloketones (HK) 1,1-dichloro-2-propanone heptachlor epoxide heptachlor epoxide hexachlorobutadiene hexachlorobutadiene indane methoxychlor.		0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055	0.0003 0.0001 0.0003 0.00001 0.0002 0.0001 0.00002 0.00001	98% 99% 96% >99% 98% >98% >99% >99%
Irrcnioracetontrile haloketones (HK) 1,1,-tirlchloro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorobutadiene hexachlorobutadiene lindane methoxychlor pentachloroophenol	 0.0004 0.0002 0.05 0.0002 0.04 0.001	0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.096	0.0003 0.0001 0.0003 0.00001 0.0002 0.0001 0.00002 0.0001 0.0001	98% 99% 96% >99% 98% >98% >99% >99% >99%
Irrichioracetontrile haloketones (HK) 1,1,4-tichioro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorobutadiene hexachlorocyclopentadiene lindane methoxychlor pentachlorophenol simazine		0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.096 0.120	0.0003 0.0001 0.0003 0.00001 0.0002 0.0001 0.00001 0.0001 0.0001 0.0001	98% 99% 96% >99% 98% >98% >99% >99% >99% >99%
Irrichioracetontrile haloketones (HK) 1,1,1-clichioro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorobutadiene hexachlorocyclopentadiene lindane methoxychlor pentachlorophenol simazine styrene		0.0015 0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.055 0.050 0.096 0.120 0.150	0.0003 0.0001 0.0003 0.0002 0.001 0.00002 0.0001 0.0001 0.001 0.001 0.001	99% 99% 96% >99% 98% >98% >98% >99% >99% >99% >99%
Irrichioracetontrile haloketones (HK) 1,1-dichloro-2-propanone heptachlor epoxide hexachlorobutadiene hexachlorobutadiene hexachlorobutadiene indane methoxychlor pentachlorophenol simazine styrene 1,2-2-tetrachloroethane		0.015 0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.050 0.120 0.150 0.081	0.0003 0.0001 0.0003 0.0002 0.0001 0.0001 0.0001 0.0001 0.0001 0.0004 0.0005	99% 99% 96% >99% 98% >98% >99% >99% >99% >99% >99%
Irrcnioracetontrile haloketones (HK) 1,1,-tirchloro-2-propanone heptachlor epoxide heptachlor epoxide hexachlorobutadiene hexachlorobutadiene hexachlorobutadiene indane methoxychlor pentachlorophenol simazine styrene 1,1,2,2-tetrachloroethne tetrachloroethviene		0.015 0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.050 0.120 0.150 0.081	0.0003 0.0001 0.0003 0.0002 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001	98% 99% 96% >99% 98% >98% >99% >99% >99% >99% >99%
Iricnioracetontrile haloketones (HK) 1,1,-trichloro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorocyclopentadiene lindane methoxychlor pentachlorophenol simazine styrene 1,1,2,2-tetrachloroethane tetrachloroethylene toluene		0.015 0.0072 0.025 0.0107 0.044 0.060 0.055 0.050 0.050 0.050 0.120 0.150 0.081 0.078	0.0003 0.0001 0.0002 0.0001 0.0002 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001	98% 99% 99% 98% >99% 98% >99% >99% >99%
Irrichioracetontrile haloketones (HK) 1,1,1-dichioro-z-propanone heptachior (H-34, Heptox) heptachior epoxide hexachiorobutadiene hexachiorobutadiene hexachioroyclopentadiene lindane methoxychior pentachiorophenol simazine styrene 1,1,2,2-tetrachioroethane tetrachioroethylene toluene toluene		0.015 0.0072 0.0082 0.025 0.0107 0.044 0.050 0.050 0.050 0.050 0.050 0.120 0.150 0.081 0.081 0.078	0.0003 0.0001 0.0003 0.0001 0.0002 0.0001 0.00001 0.0001 0.0001 0.001 0.001 0.001 0.001	98% 99% 99% 98% >99% >99% >99% >99% >99%
Irrichioracetontrile haloketones (HK) 1,1-dichloro-2-propanone heptachlor epoxide hexachlorobutadiene hexachlorobutadiene hexachlorobutadiene hexachlorobutadiene hexachlorophenol simazine styrene 1,1,2,2-tetrachloroethane tetrachloroethylene toluene 2,4,5 TP (silvex)		0.015 0.0072 0.0082 0.025 0.0107 0.044 0.055 0.055 0.050 0.096 0.120 0.150 0.081 0.081 0.078 0.0270	0.0003 0.0001 0.0002 0.0001 0.0002 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	99% 99% 99% 98% 98% >98% >99% >99% >99%
Irrcinoracetontrile haloketones (HK) 1,1,-tirciholro-2-propanone heptachlor cP-3-propanone heptachlor cP-3-propanone heptachlor cp-3-propanone hexachlorobutadiene hexachlorobutadiene hexachlorobutadiene hexachlorobutadiene jentachlorophenol simazine styrene 1,1,2,2-tetrachloroethane tetrachloroethylene toluene 2,4,5-TP (silvex) tribromoacetic acid 1,2,2-trichlorobenzene		0.015 0.0072 0.0082 0.025 0.0107 0.044 0.050	0.0003 0.0001 0.0003 0.00001 0.0002 0.0001 0.0001 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	99% 96% 39% 98% 398% 398% 399% 399% 399% 399%
Irrichioracetontrile haloketones (HK) 1,1,-tirichioro-2-propanone heptachior cy-propanone heptachior - 2-propanone heptachior - 2-propanone heptachior - 2-propanone heptachior - 2-propanone hexachiorobutadiene hexachiorobutadiene hexachiorobutadiene hexachiorobutadiene jentachiorophenol simazine styrene 1,1,2-2-tetrachioroethane tetrachioroethylene toluene 2,4,5-TP (silvex) tribromoacetic acid 1,2,4-trichiorobenzene 1,1,2-trichiorobenzene		0.015 0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.056 0.120 0.120 0.150 0.081 0.078 0.078 0.078 0.078	0.0003 0.0001 0.0003 0.0002 0.0001 0.0002 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	99% 99% 99% 99% 98% 98% 99% 99% 99% 99%
Irrichioracetontrile haloketones (HK) 1,1,4-tichioro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorobutadiene hexachlorobutadiene hexachlorocyclopentadiene lindane methoxychlor pentachloropenol simazine styrene 1,1,2,2-tetrachloroethane tetrachloroethylene toluene 2,4,5-TP (silvex) tribromoacetic acid 1,2,4-trichlorobetnae 1,1,2-trichloroethane		0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.050 0.020 0.120 0.120 0.150 0.081 0.078 0.078 0.078 0.042 0.160 0.084 0.0150	0.0003 0.0001 0.0003 0.0001 0.0002 0.001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	99% 96% 96% >99% 98% >98% >99% >99% >99% >99% >99%
Irrichiorofacetontrile haloketones (HK) 1,1-dichloro-2-propanone heptachlor epoxide hexachloroty-2-propanone heptachlor epoxide hexachloroty-2-propanone hexachloroty-2-propanone hexachloroty-2-propanone hexachloroty-2-propanone hexachloroty-2-propanone hexachloroty-2-propanone simazine styrene 1,12,2-terachloroethane toluene 2,4,5-TP (silvex) triloromacetic acid 1,2,4-trichloroethane 1,12-trichloroethane 1,12-trichloroethane		0.015 0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.050 0.050 0.050 0.050 0.051 0.051 0.081 0.081 0.081 0.078 0.270 0.042 0.042 0.042 0.042 0.042 0.042 0.042 0.042 0.042 0.042	0.0003 0.0001 0.0003 0.0001 0.0002 0.0001 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.005 0.0046 0.0005	99% 96% 96% >99% 98% >99% >99% >99% >99% >99% >99%
Iricnioracetontrile haloketones (HK) 1,1,-trichloro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorocyclopentadiene lindane methoxychlor pentachlorophenol simazine styrene 1,1,2,2-tetrachloroethane tetrachloroethylene 2,4,5-TP (silvex) tribromacetic acid 1,2,4-trichlorobenane 1,1,2-trichloroethane 1,1,2-trichloroethane trichloroethylene Trihalomethanes (THMS)		0.015 0.0072 0.0082 0.025 0.0107 0.055 0.055 0.056 0.056 0.026 0.120 0.120 0.120 0.078 0.079 0.078 0.079 0.0780 0.0780000000000	0.0003 0.0003 0.0003 0.0001 0.0002 0.0001 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 Effluent/	99% 96% 399% 398% 399% 399% 399% 399% 399% 399
Irrcinoracetontrile haloketones (HK) 1,1,-tirciholro-2-propanone heptachlor epoxide heptachlor epoxide hexachlorocyclopentadiene lindane methoxychlor pentachlorophenol simazine styrene 1,1,2,-tetrachloroethane tetrachloroethylene toluene 2,4,5-TP (silvex) tribromacetic acid 1,2,4-trichloroethane 1,1,2-trichloroethane 1,1,2-trichloroethane trichloroethylene Trihalomethanes (THMs) Bromodichloromethane (THM)	- - - 0.0004 0.0002 - 0.005 0.002 0.04 0.001 0.004 0.001 0.004 0.11 - - 0.005 1 0.005 1 0.005 - 0.005 1 0.005 - 0.005 0.0002 0.004 0.001 0.005 0.002 0.001 0.005 0.005 0.001 0.005 0.0	0.015 0.0072 0.0082 0.025 0.0107 0.044 0.050 0.050 0.050 0.050 0.050 0.081 0.078 0.081 0.078 0.081 0.078 0.084 0.050 0.084 0.050 0.084 0.050 0.084 0.050 0.084 0.050 0.084 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.051 0.051 0.051 0.051 0.051 0.051 0.051 0.051 0.051 0.051 0.051 0.051 0.050 0.051 0.050 0.051 0.051 0.051 0.051 0.051 0.051 0.051 0.052 0.050 0.051 0.051 0.052 0.050 0.050 0.051 0.052 0.050 0.051 0.050 0.051 0.050 0.051 0.050 0.051 0.0500 0.050 0.0500 0.0500000000	0.0003 0.0001 0.0003 0.0001 0.0002 0.0001 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.0005 0.0005 0.0005 0.0005 0.0005 0.0000 Fifluent/ Fifluered	99% 99% 99% 96% 399% 398% 399% 399% 399% 399% 399% 399
Irichioroacetontrile haloketones (HK) 1,1,-trichioro-2-propanone heptachior epoxide heptachior epoxide hexachiorobutadiene hexachiorocyclopentadiene lindane methoxychior pentachiorophenol simazine styrene 1,1,2-tetrachioroethane tetrachioroethylene toluene 2,4,5-TP (silvex) tribromacetic acid 1,2,4-trichioroethane trichioroethylene Trihalomethanes (THMS) Bromodichioromethane (THM)		0.015 0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.055 0.050 0.036 0.036 0.038 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.078 0.079 0.084 0.078	0.0003 0.0003 0.0003 0.0002 0.0001 0.0001 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.005 0.001 0.005 0.0	99% 98% 99% 96% >99% 98% >99% >99% >99% >99% >99% >99%
Irrichioroacetontrile haloketones (HK) 1,1,-trichloro-2-propanone heptachlor epoxide hexachlorokytole hexachlorokytole hexachlorobutadiene hexachlorocyclopentadiene lindane methoxychlor pentachlorophenol simazine styrene 1,1,2,2-tetrachloroethane tetrachloroethylene toluene 2,4,5-TP (silvex) tribromacetic acid 1,2,4-trichlorobethane 1,1,2-trichlorobethane 1,1,2-trichloroethane trichloroethylene Trihalomethanes (THMS) Bromodichloromethane (THM)		0.015 0.0072 0.0082 0.0107 0.0107 0.044 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.081 0.081 0.081 0.078 0.042 0.042 0.042 0.042 0.150 0.042 0.150 0.042 0.150 0.042 0.150 0.044 0.055 0.044 0.055 0.021 0.051 0.020 0.021 0.020 0.022 0.020 0.022 0.020 0.022 0.020 0.022 0.020 0.022 0.020 0.022 0.020 0.022 0.030 0.022 0.030 0.020 0.030 0.020 0.030 0.020 0.030 0.030 0.020 0.0300 0.0300 0.0300 0.0300 0.0300 0.0300 0.0300 0.0300 0.0300 0.0300 0.0300000000	0.0003 0.0003 0.0003 0.0002 0.0001 0.00001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.0005 0.0005 0.0005 0.0005 0.0005	99% 99% 96% 399% 398% 399% 399% 399% 399% 399% 399
Irichioroacetontrile haloketones (HK) 1,1,-trichloro-2-propanone heptachlor (H-34, Heptox) heptachlor epoxide hexachlorobutadiene hexachlorobutadiene hexachlorobutadiene hexachlorobutadiene hexachloropenol simazine pentachloropenol simazine styrene 1,1,2-tetrachloroethane tetrachloroethylene toluene 2,4,5-TP (silvex) tribromacetic acid 1,2,4-trichloroethane 1,1,2-trichloroethane 1,1,2-trichloroethane 1,1,2-trichloroethane Trihalomethanes (THMS) Bromodichloromethane (THM) Chlorodibromomethane (THM)		0.0072 0.0082 0.025 0.0107 0.044 0.060 0.055 0.050 0.056 0.056 0.120 0.056 0.031 0.038 0.078 0.081 0.078 0.078 0.078 0.078 0.078 0.070 0.042 0.150 0.084 0.150 0.084 0.150 0.084 0.150 0.084 0.150 0.084 0.084 0.055	0.0003 0.0001 0.0003 0.0001 0.0002 0.0001 0.0001 0.0001 0.0001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.0005 0.0005 0.0005 0.0005 0.0005	99% 98% 99% 96% >99% >98% >99% >99% >99% >99% >99% >99



The AQ-RO-3 has been tested and certified by NSF International against NSF/ANSI Standard 58 for the reduction claims specified on the Performance Data Sheet as verified and substantiated by test data and at nsf.org. This system has been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not remove other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sucient to ensure complete conversion of trivalent arsenic to pentavalent arsenic. Please see the *Arsenic Facts* section of this Performance Data Sheet for further information.

Arsenic Facts

Arsenic (abbreviated As) is found naturally in some well water. Arsenic in water has no color, taste, or odor. It must be measured by a laboratory test.

Public water utilities must have their water tested for arsenic. You can get the results from your water utility. If you have your own well, you can have the water tested. The local health department or the state environmental health agency can provide a list of certified labs. The cost is typically \$15 to \$30. Information about arsenic in water can be found on the Internet at the U.S. Environmental Protection Agency website: <u>epa.</u> <u>gov/safewater/arsenic.html</u>.

There are two forms of arsenic: **pentavalent arsenic** As(V), As(+5), and arsenate) and **trivalent arsenic** (also called As(III), As(+3), and arsenite). In well water, arsenic may be pentavalent, trivalent, or a combination of both. Special sampling procedures are needed for a lab to determine what type and how much of each type of arsenic is in the water. Check with the labs in your area to see if they can provide this type of service. Reverse osmosis (RO) water treatment systems do not remove trivalent arsenic from water very well. RO systems are very eective at removing pentavalent arsenic. A free chlorine residual will rapidly convert trivalent arsenic to pentavalent arsenic. Other water treatment chemicals such as ozone and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A combined chlorine residual (also called chloramine) may not convert all the trivalent arsenic. If you get your water from a public water utility, contact the utility to find out if free chlorine or combined chlorine is used in the water system. The

AQ-RO-3 system is designed to remove pentavalent arsenic. It will not convert trivalent arsenic to pentavalent arsenic. The system was tested in a lab. Under testing conditions, the system reduced [0.30 mg/L (ppm) or 0.050 mg/L (ppm)] pentavalent arsenic to 0.010 mg/L (ppm) (the USEPA standard for drinking water) or less. The performance of the system may be dierent at your installation.

Have the treated water tested for arsenic to check whether the system is working properly. The RO component of the AQ-RO-3 system must be replaced every 1-3 years to ensure that the system will continue to remove pentavalent arsenic. The component identification and locations where you can purchase the component are listed in the installation/operation manual.



Filter usage must comply with all state and local laws.



Testing was performed under standard laboratory conditions, actual performance may vary.

Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

See owner's manual for general installation conditions and needs plus manufacturer's limited warranty.

- All contaminants reduced by this filter are listed.
- Not all contaminants listed may be present in your water.
- Filter does not remove all contaminants that may be present in tap water.

- *Efficiency rating* means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage.
- Recovery rating means the percentage of the influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed.