# **Health Effects of Water Pollutants**

Multi-Pure Drinking Water Systems reduce a wide range of contaminants of health concern. Below is a summary of the tested contaminants and their noted health effects. Please check Performance Data Sheet for specific claims for your model.

### **Contaminants Reduced by Multi-Pure Drinking Water Systems**

CONTAMINANT	HEALTH EFFECTS
ARSENIC RULE	
Arsenic V *	Cancer risk/cardiovascular and dermal effects
PESTICIDES	
2,4-D**	Nervous system, Liver and kidney damage
Carbofuran (Furadan)**	Nervous system, kidney, reproductive system, and liver
	damage; anemia, leukemia
Chlordane	Nervous system and muscle damage; cancer
cis-1,3-Dichloropropylene**	Bladder and kidney damage
Endrin**	Nervous system, kidney, liver, heart damage; anemia, cancer
Heptachlor**	Cancer
Heptachlor Epoxide**	Cancer
Lindane**	Nervous system, liver, kidney damage
Methoxychlor**	Nervous system, kidney, liver damage; anemia, cancer
Toxaphene	Endocrine Distruptor, cancer
HERBICIDES	
Alachlor**	Cancer; nervous system damage
Atrazine**	Cancer; nervous system and mammary glands damage
Dinoseb**	Thyroid, reproductive organ damage
Pentachlorophenol**	Liver and kidney damage; cancer
2,4,5-TP (Silvex)**	Nervous system, liver, and kidney damage; cancer
Simazine**	Nervous system damage; cancer
CHEMICALS	
Benzene**	Cancer, leukemia, and anemia
Carbon Tetrachloride**	Cancer
Chlorobenzene (Monochlorobenzene)**	Nervous system, kidney, liver damage
DBCP (Dibromochloropropane)**	Reproductive system damage; cancer
o-Dichlorobenzene**	Cancer, Kidney, liver, and lung damage
p-Dichlorobenzene (para-Dichlorobenzene)**	Cancer
1,2-Dichloroethane (1,2-DCA)**	Cancer
trans-1,2-Dichloroethylene**	Liver, kidney, nervous, circulatory system damage
1,1-Dichloroethylene (1,1-DCE)**	Cancer, kidney, and liver damage
cis 1,2-Dichloroethylene**	Liver, kidney, nervous & circulatory system damage
1,2-Dichloropropane**	Nervous system, kidney, and liver damage
Ethylbenzene**	Nervous system, liver, and kidney damage
EDB (Ethylene Dibromide)**	Reproductive and other organ damage
Hexachlorobutadiene (Perchlorobutadiene)**	Pending study

reduce Arsenic V (Continued on next page)

CONTAMINANT	HEALTH EFFECTS
Hexachlorocyclopentadiene** meta-Xylene** Methyl Tert Butyl Ether (MTBE) o-Xylene (Ortho-Xylene)** para-Xylene ** Polychlorinated biphenyls (PCBs) Styrene** 1,1,2,2-Tetrachloroethane** Tetrachloroethylene** Toluene (Methylbenzene)** 1,2,4-Trichloroethane (1,1,1-TCA)** 1,1,2-Trichloroethane** Trichloroethylene (TCE)**	Kidney and stomach damage Nervous system, liver, kidneys, lungs, and mucous membranes Lymphoma, leukemia, testicular tumors, thyroid tumors, kidney tumors Nervous system, liver, kidneys, lungs, and mucous membranes Nervous system, liver, kidneys, lungs, and mucous membranes Endocrine Distruptor; cancer Nervous system, kidney, and liver damage Pending study Nervous system damage; cancer Nervous system, liver, and kidney damage Liver and kidney damage Nervous system and liver damage Kidney, liver, and Nervous system damage Cancer
DISINFECTION BY-PRODUCTS (DBPs; VOCs) Chloropicrin** Haloacetonitriles** Bromochloroacetonitrile** Dibromoacetonitrile** Dichloroacetonitrile** Trichloroacetonitrile**	Pending study. Fumigant; soil insecticide; war gas Pending study
Haloketones (HK)**  1,1-Dichloro-2-Propanone**  1,1,-Trichloro-2-Propanone**  Tribromoacetic Acid**  Trihalomethanes (THMs; TTHMs)**  Bromodichloromethane**  Bromoform**  Chloroform**  Dibromochloromethane**	Pending study  Cancer and other effects; reproductive problems Cancer, liver, kidney and reproductive problems Cancer, nervous system, liver, and kidney effects Cancer, liver, kidney, and reproductive effects Nervous system, liver, kidney, reproductive effects
CYSTS Cryptosporidium Giardia	Gastroenteric diseases Gastroenteric diseases
HEAVY METALS	
Lead	Nervous system and kidney damage; highly toxic to infants and pregnant women Kidney, nervous system disorders
INORGANICS Asbestos Turbidity	Cancer Interferes with disinfection, related to disinfection by-products
AESTHETIC TREATMENT	
Chlorine	None Known; however, creates disinfection by-products that have been linked to cancer
Chloramine	None Known; however, consumers advised not to use water that contains chloramines for home dialysis machines or aquariums & ponds
Particulate Matter	None Known
	(Continued on next page)

## **CONTAMINANT**

## **HEALTH EFFECTS**

#### **INORGANICS**

(Reduced Only by Multi-Pure's MP750Plus RO)

Barium Cadmium Copper Fluoride

Hexavalent Chromium

Nitrate/Nitrite

Perchlorate (man-made anion)

Radium 226/228

Selenium

Total Dissolved Solids (TDS)

Trivalent Chromium

Circulatory/gastrointestinal effects

Liver/kidney/bone/circulatory effects Gastrointestinal/liver/kidney effects

Skeletal effects

Cancer and damage to mucous membranes Methemoglobinemia (blue baby syndrome) Interferes with the function of the thyroid

Cancer

Nervous system/kidney/liver/circulatory effects

Aesthetic effect

Cancer and damage to mucous membranes

\*\*These contaminants are all reduced by our VOC reducation claim. A VOC reduction claim by the manufacturer means the system reduces the concentration of all of the following contaminants:

#### **Volatile Organic Chemicals (VOC):**

Alachlor Atrazine Benzene

Bromodichloromethane (TTHM)

Bromoform (TTHM)
Carbofuran
Carbon Tetrachloride
Chlorobenzene
Chloroform (TTHM)
Chloropicrin

2,4-D
Dibromochloromethane (TTHM)
Dibromochloropropane (DBCP)

Dibromochloropropane (DBCP) o-dichlorobenzene p-dichlorobenzene 1,2-dichloroethane 1,1-dichloroethylene cis-1,2-dichloroethylene Trans-1,2-dichloroethylene 1,2-dichloropropane cis-1,3-dichloropropylene

Dinoseb Endrin Ethylbenzene

Ethylene Dibromide (EDB)

Haloacetonitriles (HAN):

bromochloroacetonitrile dibromoacetonitrile dichloroacetonitrile trichloroacetonitrile Haloketones (HK):

1,1-dichloro-2-propanone 1,1,1-trichloro-2-propanone

Heptachlor

Heptachlor Epoxide Hexachlorobutadiene Hexachlorocyclopentadiene

Lindane Methoxychlor Pentachlorophenol

Simazine Styrene

1,1,2,2,-Tetrachloroethane Tetrachloroethylene (PCE)

Toluene

2,4,5-TP (silvex)
Tribromoacetic acid
1,2,4-trichlorobenzene
1,1,1trichloroethane
1,1,2-trichloroethane
Trichloroethylene (TCE)
Trihalomethanes (TTHMs)

Xylenes (total)

The VOC claim is tested using chloroform as a surrogate for all of the contaminants.

