



Cedar Stream Whole House Carbon NEC1

The Cedar Stream Whole House Filtration System is designed for the removal of chemicals, chlorine, chloramines, chlorinated organic compounds, VOC's and THMs.

FILTRATION SYSTEM BENEFITS

Chlorine, Chloramines & Organic Compounds

The liquid form of Chlorine is a water additive used by municipal water systems to control microbes and bacteria. Chlorine is a powerful oxidant and when utilized in water treatment it and some of its compounds can cause many problems. Chlorine levels can be consumed through drinking water, absorbed through your skin bathing, and through ingestion of chlorine gas in the shower which all cause health issues.

One can absorb up to eight glasses of water in a ten minute shower with studies linked to measurable increases in certain types of cancer. Studies also show up to 2/3 of harmful exposure to chlorine is through absorption by the skin during showering.

Chloramine is formed when the municipality combines free chlorine with ammonia to stabilize the chlorine. The Ontario Drinking Water Guideline (MAC) maximum acceptable concentration for Chloramines is 3.0 mg/L.





Volatile Organic Chemicals (VOC's)

VOC	Health Effect	VOC	Health Effect
Benzene	Cancer	Ethylbenzene	Cancer
Carbon	Cancer	Pentachlorophenol	Cancer
Dichlorobenzene	Kidney Damage	Styrene	Liver,
Dichloroethane	Cancer	Toluene	Cancer
Dichloroethene	Liver,	Dichloropropane	Cancer
Trichloroethane	Liver, Nerve	Dichloromethane	Cancer
Trichloroethylene	Cancer	Dichlorobenzene	Liver, Kidney, Blood
Vinyl Chloride	Cancer	Hexachlorobenzene	Cancer
Dibromochloro-	Cancer	Trichlorobenzene	Liver, Kidney
Ethylene Dibromide	Cancer	Trichloroethane	Kidney Damage

Trihalomethanes (THMs)

Trihalomethanes (THMs) are chemical compounds in which three of the four hydrogen atoms of methane (CH_4) are replaced by halogen atoms which find many uses in industry as solvents or refrigerants. They result from the reaction of chlorine with organic matter already present in the water being treated. The THMs produced have been associated through epidemiological studies with adverse health effects. There are set limits on the amount permissible in drinking water, however trihalomethanes are only one and it has not yet been clearly demonstrated which of these are most plausible candidate for causation of these health effects. The Ontario Drinking Water Guideline (MAC) maximum acceptable concentration for trihalomethanes (THMs) is 0.10 mg/L based on a four quarter moving annual average of tests results.

THMs are the most widely occurring synthetic organics found in chlorinated drinking water. The four most commonly detected THMs are chloroform, bromodichloromethane, chlorodibromomethane, and bromoform.



NEC1 Carbon Filter Operating Parameters

Continuous Flow, gpm: 8.0
Peak Flow, gpm: 10.0
Media Capacity, ft³: 1.0
Support Bed, lbs: 15.0
Coconut Shell Carbon Qty, ft³: 1.0
Distributor Size, in: 1.05

Miscellaneous Design Data

Mineral Tank Size, in: 9x48
Tank Area, ft²: 0.442
Freeboard, in: 15.0
Bypass Valve, in: 1.0
Operating Pressure, psi: 20-125
Operating Temperature, ° F: 40-110
Shipping Weight, lbs: 95
Space Req'd in, L x W x H: 12" X 16" x 56"