

S2.4.4 TECHNOLOGIES FOR TRACE CONTAMINANT REMOVAL IN DRINKING WATER SUPPLIES

Peter Cartwright, Cartwright Consulting

Pharmaceutical and Personal Care Products (PPCPs) have probably been in our drinking water almost as long as humans have been on this earth. These (mainly) organic chemicals enter our water supplies every time we wash our hands, take a bath or shower, wash dishes or laundry - almost every time we turn on a faucet or flush the toilet. Many of the pharmaceuticals we take are not completely metabolized and enter the sewer or septic system. Biodegradable organics are adequately broken down during sewage treatment, but this treatment has little effect on the 80,000 chemicals estimated to be in our drinking water.

Obviously, virtually all industrial and agricultural operations contribute to this looming drinking water issue, also.

Although the concentrations of these contaminants are tiny and no link to human health has yet been established, with the constantly growing population, it is probably only a matter of time.

This presentation addresses the kinds and sources of these chemicals, and offers suggestions as to the likely technologies appropriate for their removal.