



## **Penn State Harrisburg Small Public Water Systems Technology Assistance Center**

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### **Disinfection Byproduct Removal Using Point-Of-Use Carbon Filters**

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#### **Sources of Disinfection Byproducts**

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Disinfection byproducts (DBPs) are a group of organic and inorganic compounds formed during water disinfection. Trihalomethanes (THMs), including chloroform, bromodichloromethane, chlorodibromomethane, and bromoform, and haloacetic acids (HAAs), including monochloroacetic acid, monobromoacetic acid, dichloroacetic acid, dibromoacetic acid, and trichloroacetic acid, are two groups of regulated organic DBPs in drinking water. Both THMs and HAAs occur in the finished water at levels between several to several hundreds of  $\mu\text{g/L}$ .

#### **Health Effects**

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Exposures to THMs and HAAs may cause bladder, rectal and/or colon cancers. Other potential risks include spontaneous abortion,



