DRINKING WATER CONTAMINATION

Drinking water can be contaminated from a variety of sources and by a variety of contaminants. Contaminants can come from runoff from precipitation, spills of hazardous chemicals, leaking underground storage tanks, animal wastes, leachate from landfills, excess fertilization of farmland and other sources. Groundwater protection from pollution is especially important since groundwater is a major source of drinking water. Individuals can pollute their own drinking water from wells if they overuse pesticides on their lawns, dump even small amounts of petroleum products, flush household chemicals into a septic field, or fail to keep their septic systems functioning properly.

WELLHEAD CONTAMINATION

Wellhead contamination is the contamination of a well from pollutants that come from around the well itself. Wellhead pollution protection requires the protection of the area around the well from pollutants that could affect the groundwater and therefore, the well water supply. A wellhead protection area (WHPA) can be established for any type of aquifer and can include the well's cone of depression, recharge area, and surrounding aquifer. A growing number of states and communities are starting to create wellhead protection areas to guard against contamination of well water. These areas may be large or small, depending on the characteristics of the aquifer and the potential hazards that could threaten groundwater. States and communities can apply for wellhead protection grants from EPA and other organizations to protect groundwater supplies.