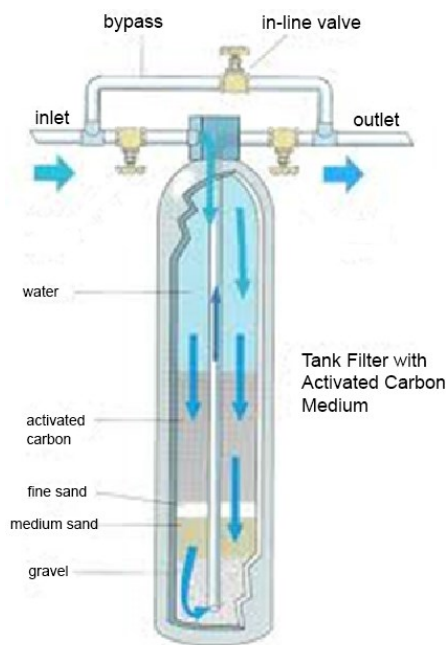


Granular Activated Carbon (GAC) Unit

A GAC unit absorbs radon and other volatile organic compounds from well water.

A granular activated carbon system absorbs radon and other volatile organic compounds (VOCs) from the well water. When water containing high concentrations of radon is passed through a bed of activated carbon, the radon is adsorbed onto the carbon, thereby, affecting a separation of radon from the water. When used appropriately, properly installed and maintained regularly, this system will yield approximately 90%+/- radon reduction. The EPA recommends that this system only be used when radon in water content is less than 10,000 pCi/L. When carbon becomes fully loaded with the contaminant it can no longer adsorb it. For this reason, it is necessary to service GAC systems by changing the media in the tanks. The rebed of the tank used in a GAC system must be serviced to help ensure that the system will continue to reduce water radon concentrations to target levels. This also safeguards against possible contaminant buildup on the tanks.





Granular Activated Carbon (GAC) Unit

Radon Information Sheet

WHAT IS RADON?

Radon is a naturally occurring radioactive gas being created by the breakdown of uranium in soil and rock beneath the earth's surface. It is odorless and colorless and present at low levels even in the outside air we breathe. As radon gas moves toward the surface it can enter through the cracks and openings within the foundations of homes and other structures and become trapped. Radon may also be contained in well water, and released into the air by everyday usage such as showering, laundry, etc., particularly if the source is a private well. Think of a well as an easy underground pathway for the gas to follow.

SHOULD I BE CONCERNED?

As a radioactive gas, radon has been identified as a human health hazard by the (EPA) United States Environmental Protection Agency. Inhalation of radon gas leads to an increased risk of lung cancer, and in fact the Surgeon General has warned that radon is the second leading cause of cancer in the United States today. Only smoking causes more lung cancer deaths.

HOW DO I KNOW IF I HAVE IT?

As indicated, radon occurs naturally in the air both inside and outside your home. It is the concentration level present in your home that will determine if action should be taken to reduce the level to the EPA guidelines. Testing is the only way to accurately measure the radon level in the water and air. Radon testing is relatively inexpensive and can be done quickly.

WHAT CAN I DO?

Radon is a fixable problem. Even very high levels in the water and air can be reduced to acceptable levels through a variety of methods.

AIR RADON

In most cases, systems using vent pipes and fans have proven to be the most effective in reducing air radon levels. These systems are called "sub slab" depressurization or active soil depressurization (ASD) units. Our systems pull radon gas from beneath the concrete basement floor before it enters the home and exhaust it to the outside away from living areas. CT DEP recommends treating radon in air if the level is above 4 pCi/l.

WATER RADON

Aeration systems are the most effective at removing water radon before it enters the home through the supply lines to various plumbing fixtures. This is called point of entry treatment. Our system involves mixing the water with air to cause release of the radon gas, which is then vented to the outside. Another acceptable way to remove the water radon is thru a Granular Activated Carbon (GAC) unit. This system can be used if radon levels are below 10,000 pCi/l. A post-mitigation test will be conducted to insure the effectiveness of the system. CT DEP recommends treating radon in water if the level is above 5,000 pCi/l.