


RADON

Insight Into the Regulation:

The USEPA has proposed a Maximum Contaminant Level (MCL) of 300 picocuries per liter (pCi/L) for a radon standard. This proposed standard would apply to community water systems serving 25 or more people using groundwater or a groundwater/surface water mix as a drinking water source. An MCL Goal (MCLG) of zero has been proposed. There is currently no regulation for radon in drinking water.

In addition to the MCL, and Alternate MCL (AMCL) of 4,000 pCi/L has been proposed. Systems would be eligible to comply with the AMCL as opposed to the MCL under either of these two circumstances:

1. The Primacy Agency adopts a State-wide Multi-media Mitigation (MMM) program, which the community adopts; or
2. The community develops, receives Primacy Agency approval of, and implements it's own MMM program.



ANTICIPATED SCHEDULE
 Rule Proposed: November 1999
 Final Rule: May 2009 (Anticipated)
 Compliance Date: May 2011 (Anticipated)

Where Does Radon Occur?

Radon is a naturally occurring gas formed from the radioactive decay of uranium-238. Indoor radon is commonly from soil gas beneath the house entering the basement. Approximately 1 to 2 percent of human exposure from radon comes from drinking water.

Exposure to radon in drinking water is via two routes: inhalation and ingestion. Radon in groundwater and subsequently in drinking water drawn from groundwater sources can be either ingested or released into the air while showering or running tap water. It is estimated that every 10,000 pCi/L of radon in drinking water released to the air increases the indoor air radon concentration by 1 pCi/L.

What are the Health Effects?

Although smoking is a much greater cause of lung cancer, radon is classified as a known carcinogen and has been identified as a cause of lung cancer. Ingested radon will readily absorb into the blood stream and tissues and travel throughout the body. Radon ingestion is suspected to slightly increase the incidence of stomach, intestine, and liver cancer.