



## **Underground Injection Control Program: Class V Injection Well Types**

*Typically, Class V injection wells are shallow wells used to place a variety of non-hazardous fluids directly below the land surface into or above formations that contain underground sources of drinking water (USDW). Class V wells include, but are not limited to:*

- (1) Air conditioning return flow wells used to return to the supply aquifer, the water used for heating or cooling in a heat pump.
- (2) Large capacity cesspools including multiple dwelling, community or regional cesspools, or other devices that receive sanitary wastes, containing human excreta, which have an open bottom and sometimes have perforated sides. The UIC requirements do not apply to single-family residential cesspools nor to non-residential cesspools which receive solely sanitary wastes and have the capacity to serve fewer than twenty persons a day.
- (3) Cooling water return flow wells used to inject water previously used for cooling.
- (4) Drainage wells used to drain surface fluid, primarily storm runoff, into a subsurface formation.
- (5) Dry wells used for the injection of wastes into a subsurface formation.
- (6) Recharge wells used to replenish the water in an aquifer.
- (7) Salt water intrusion barrier wells used to inject water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water.
- (8) Sand backfill and other backfill wells used to inject a mixture of water and sand, mill tailings or other solids into mined out portions of subsurface mines whether what is injected is a radioactive waste or not.
- (9) Septic system wells used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank. The UIC requirements do not apply to single-family residential septic system wells, nor to non-residential septic system wells which are used solely for the disposal of sanitary waste and have the capacity to serve fewer than twenty persons a day.
- (10) Subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with the overdraft of fresh water.
- (11) Injection wells associated with the recovery of geothermal energy for heating, aquaculture and production of electric power.
- (12) Radioactive waste disposal wells other than Class IV or Class I wells that inject radioactive material listed in 10 CFR part 20, "Appendix B," "Table ii," Column 2.
- (13) Wells used for solution mining of conventional mines such as stopes leaching.
- (14) Wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts.
- (15) Injection wells used in experimental technologies.
- (16) Injection wells used for in-situ recovery of lignite, coal, tar sands, and oil shale.

- (17) Motor vehicle waste disposal wells that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop (e.g. transmission and muffler repair shop), or any facility that does any vehicular repair work. Fluids disposed in these wells may contain organic and inorganic chemicals in concentrations that exceed the maximum contaminant levels (MCLs) established by the primary drinking water regulations. These fluids also may include waste petroleum products and may contain contaminants, such as heavy metals and volatile organic compounds, which pose risks to human health, safety or the environment.
- (18) Wells used to inject fluids for the remediation of contaminated soils or ground water.

## Contact

To determine if the well is a Class V well and if a permit is required for the discharge or to request an application for a Class V permit to drill (install) and a Class V permit to operate, please contact UIC staff at (614) 644-2752. For additional Class V information, please visit [www.epa.ohio.gov/ddagw/uic.aspx](http://www.epa.ohio.gov/ddagw/uic.aspx).