

How Do the Underground Injection Control Regulations Protect Groundwater ?

The Underground Injection Control (UIC) program protects Underground Sources of Drinking Water (USDWs) from endangerment by setting minimum geologic and engineering requirements for injection wells. These requirements vary according to the well class (Class I – VI). All injection wells must be authorized under either general rules or specific permits. Well owners and operators may not site, construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity that endangers USDWs. The purpose of the UIC requirements is to:

- Ensure that injected fluids stay within the well and the intended/permitted injection zone; or,
- Mandate that fluids that are directly or indirectly injected into a USDW do not cause a public water system to violate drinking water standards or otherwise adversely affect public health.

References:

- Information regarding the Texas Commission on Environmental Quality (TCEQ) Underground Injection Control Permits and Registrations can be found at https://www.tceq.texas.gov/permitting/waste_permits/uic_permits/uic.html.
- TCEQ's Oil & Gas Facilities: Compliance Resources webpage (<http://www.tceq.texas.gov/assistance/industry/oilgas.html>) covers regulations on air, water, and waste related to the oil and gas industry in Texas. This webpage also includes links to other resources such as TCEQ publication RG-482, *Common Environmental Requirements for Regulated Oil and Gas Operations*, which discusses TCEQ regulations for upstream oil and gas sites, as well as the appropriate regulatory contacts for various oil and gas activities in Texas.
- For RRC Injection and Disposal Wells Frequently Asked Questions (FAQs), go to <http://www.rrc.texas.gov/about-us/resource-center/faqs/oil-gas-faqs/faq-injection-and-disposal-wells/>.
- The RRC's Injection/Disposal Well Permitting, Testing, and Monitoring Manual can be found at <http://www.rrc.texas.gov/oil-gas/publications-and-notices/manuals/injectiondisposal-well-manual/>.
- The U.S. Environmental Protection Agency (EPA) Protecting Underground Sources of Drinking Water from Underground Injection (UIC) website is <https://www.epa.gov/uic>.
- Drawings of the different UIC well types can be found on each of their individual webpages (Class I – VI) at https://www.epa.gov/uic/general-information-about-injection-wells#how_protect.
- The U.S. EPA Safe Drinking Water Act website is <http://www.epa.gov/lawsregs/laws/sdwa.html>.
- The Ground Water Protection Council website providing information and links relating to wells, underground injection practices, and groundwater protection is <http://www.gwpc.org>.

- The Texas Groundwater Protection Committee (TGPC) Oil, Gas, and Mining webpage (<http://tgpc.state.tx.us/oil-gas-mining/>) has additional information and links on this subject.

For additional Frequently Asked Questions (FAQs) related to groundwater quantity, groundwater quality, septic systems, water wells, administrative entities, and publications, visit the TGPC's FAQ webpage at <http://tgpc.state.tx.us/frequently-asked-questions-faqs/>.