

THE UNDERGROUND INJECTION CONTROL PROGRAM

30 Years Protecting Ground Water Through the Safe Drinking Water Act







Class I

Isolating hazardous, industrial and municipal waste through deep injection.

US facilities produce billions of gallons of hazardous, industrial and municipal waste every year. Some of this waste is injected deep below any drinking water source, protecting the public.

In the 30 years of the SDWA, Class I wells have isolated more than 4 trillion gallons of waste fluid – the amount of water that flows down the Mississippi River into the Gulf of Mexico every 17 days.



Class II

Preserving drinking water resources by injecting oil and gas production waste.

Each gallon of oil produced in the US results in an average of ten gallons of wastewater (brine). Most brine, about 1 trillion gallons a year, is injected back into oil-bearing formations, preserving streams and rivers, and shallow drinking water resources.

In the 30 years of the SDWA, Class II wells have injected 30 trillion gallons of brine, which would fill enough 55 gallon oil drums to stretch from Earth to Mars 10 times.



Class III

Minimizing environmental impacts from solution mining operations.

Solution mining operations produce 50% of the salt used in the US as well as uranium, copper and sulfur. These injection wells provide needed minerals while limiting the impact to the environment.

In the 30 years of the SDWA, Class III wells have safely mined 330 million tons of salt, or enough salt to fill a salt shaker 7 times higher than the Statue of Liberty.





Preventing ground water contamination by prohibiting the shallow injection of hazardous waste (except as part of an authorized cleanup).

Shallow injection wells used by large and small businesses to dispose of hazardous and radioactive waste threaten drinking water resources. About 50% of Americans rely on ground water for drinking water, and the need for safe, reliable sources in the future is increasing. Therefore, Class IV injection is prohibited outside approved remediation programs.

* Few states authorize Class IV wells, therefore, they are not shown on the map.



Class V



Managing the injection of all other fluids to prevent contamination of drinking water resources.

More than 600,000 shallow injection wells are used for disposal, ground water storage and prevention of salt water intrusion. When properly managed, these wells offer communities an option for wastewater disposal.

In the 30 years of the SDWA, the Class V Program has *identified and managed more than 300,000 injection wells*. The challenge for the future is to identify the remaining wells and work with their owners to keep injection safe.