



CLASS V UIC STUDY FACT SHEET

CARWASH WELLS WITHOUT UNDERCARRIAGE WASHING OR ENGINE CLEANING

What is a carwash well?

Carwash wells are Class V underground injection control (UIC) wells used to dispose of washwater at facilities that wash only the exterior of vehicles (sometimes called “wand washes”). These are typically located at coin-operated, manual carwashes where people use hand-held hoses to wash vehicles. Even though the term “carwash” is used, the category includes wells that receive used washwater at facilities designed for washing all kinds of vehicles, including cars, vans, trucks, buses, boats on trailers, etc.

What types of fluids are injected into carwash wells?

Fluids that primarily contain detergents, road salts, sediments, and incidental contaminants that may be washed from a vehicle’s exterior.

Do injectate constituents exceed drinking water standards at the point of injection?

Available sampling data indicate that the concentrations of antimony, arsenic, beryllium, cadmium, lead, and thallium in the injectate typically exceed primary drinking water standards and health advisory levels. Available data also show that ethylene glycol, methylene chloride, naphthalene, and tetrachloroethene also have exceeded primary drinking water standards or health advisory levels, indicating that degreasers may be working their way into the washwater at some facilities. The pH, aluminum, iron, and manganese levels in the injectate have exceeded secondary drinking water standards.

What are the characteristics of the injection zone of a carwash well?

Carwash wells are used in a variety of geological settings.

Are there any contamination incidents associated with carwash wells?

Two possible contamination incidents involving carwash wells have been reported in HI. The nature and extent of contamination are unknown, but both wells were closed.

Are carwash wells vulnerable to spills or illicit discharges?

Although there are only two reported contamination incidents associated with carwash wells, there is concern over the potential for such wells to be vulnerable to spills or illicit discharges. Because an attendant is not usually on site, individuals may wash their engines or undercarriages using degreasers, wash the exterior of their vehicles with chemicals other than common soap solutions, or may pour used oil, antifreeze, or other hazardous materials down these drains.

How many carwash wells exist in the United States?

There are up to 4,651 documented carwash wells and approximately 7,200 estimated carwash wells in the United States. However, there is significant uncertainty regarding these estimates because, in some cases, it is difficult to distinguish carwash wells from other kinds of commercial or industrial wells.

Where are carwash wells located within the United States?

Although carwash wells are documented in 14 states, 99 percent of the documented wells and 98 percent of the estimated wells are located in 9 states: AL, MS, NY, WA, MD, IA, WV, CA, and ME.

How are carwash wells regulated in states with the largest number of this type of well?

Permit by rule: WV
Report discharge: CA
Individual permit: AL, MS, NY, WA, MD, NH, and ME
Ban: IA

Where can I obtain additional information on carwash wells?

For general information, contact the Safe Drinking Water Hotline, toll-free 800-426-4791. The Safe Drinking Water Hotline is open Monday through Friday, excluding federal holidays, from 9:00 a.m. to 5:30 p.m. Eastern Standard Time. For technical inquiries, contact Amber Moreen, Underground Injection Control Program, Office of Ground Water and Drinking Water (mail code 4606), EPA, 401 M Street, SW, Washington, D.C., 20460. Phone: 202-260-4891. E-mail: moreen.amber@epa.gov. The complete Class V UIC Study (EPA/816-R-99-014, September 1999), which includes a volume addressing carwash wells without undercarriage washing or engine cleaning (Volume 4), can be found at <http://www.epa.gov/OGWDW/uic/cl5study.html>.
