A-57: Underground Injection Control (UIC)

Stormwater runoff (rainwater and snow melt) is the largest source of pollution to our lakes, streams and Puget Sound. King County requires businesses to implement measures to protect our shared waters. If the requirements below do not prevent pollution, additional measures are necessary.

Underground injection control (UIC) wells, also referred to as injection wells, are structures built to allow fluids to flow into the ground. UIC wells have many uses including, management of stormwater, remediation of groundwater contamination, and replenishment of aquifers. While UIC wells may have many uses, all have a shared characteristic, the depth of a UIC well is greater than the largest surface dimension/area. The most common UIC wells in Washington are drywells but other examples include drainfields, infiltration trenches containing perforated pipes, stormwater chambers, and temporary injection points.

Authorized by Chapter 173-218 WAC, the Washington State Department of Ecology administers the Underground Injection Control program to protect groundwater quality by regulating:

- well construction and location,
- volume and quality of the fluids injected,
- discharge prohibitions, and
- the hydrogeologic setting of the well.

All UIC wells receiving stormwater, except those located on tribal lands and UIC wells at single-family homes receiving only residential roof runoff or used to control basement flooding, must be registered with the state of Washington. The majority of UIC wells receiving stormwater runoff can be authorized by the UIC program without requiring individual permits, provided that standards established by the program are being met.

To learn more about the UIC program and to register a UIC well online, please visit https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/underground-injection-control-program

Required BMPs

- All UIC wells, new or existing, must be registered except:
    - UIC wells at single-family homes (or duplexes) receiving only stormwater runoff from residential roofs,
    - Non UIC wells, such as: infiltration ponds, dispersion systems, or infiltration trenches that do not contain perforated pipe,
    - Storm drain components that contain perforated pipe BUT are intended to convey storm-water to a surface water body. This configuration is not a UIC well, or
    - UIC wells used only to control basement flooding.

- UIC wells may not receive stormwater from the activities and conditions listed below:
    - Vehicle maintenance, repair, and service (BMP activity sheet A-18)
    - Commercial or fleet vehicle washing (BMP activity sheet A-13)
    - Airport/airplane deicing
    - Storage of treated lumber (BMP activity sheet A-23)
    - Storage or handling of hazardous materials (BMP activity sheet A-56)
    - Generation, storage, transfer, treatment, or disposal of hazardous wastes (BMP activity sheet A-10)
    - Handling of radioactive materials
    - Solid waste handling facilities, including compost and biosolid facilities, except for those that recycle only glass, paper, plastic, or cardboard
    - Concrete recycling facilities that generate, store, or handle crushed concrete (BMP activity sheet A-19)
    - Asphalt recycling facilities that generate, store, or handle crushed asphalt (BMP activity sheet A-19)
    - Firefighting training facilities (BMP activity sheet A-50)
    - Industrial areas where mechanical maintenance activities occur
    - Industrial or commercial areas that have outdoor processing, handling, or storage of raw solid materials or finished products unless the facility has specific management plans for proper storage and spill prevention, control, and containment appropriate to the types of materials handled at the facility.
    - Contaminated sites when the stormwater would increase the mobility of the contaminants at the site. For example, a drywell could not be used upgradient of or over the contaminant plume at a leaking underground storage tank site. The stormwater could increase the movement of the contaminants.
    - Process water from the production area of an animal feeding operation.
    - Land use, activity, or infiltration determined to be a significant contributor of pollutants to waters of the State or a site release of hazardous substances from historical or current activities resulting in contamination of soil, groundwater, surface water, if the groundwater is in direct communication with surface water, or sediment, which is prohibited under the Model Toxics Control Act (Chapter 173-340 WAC) and Sediment Management Standards (Chapter 173-204 WAC).
- Properties with the activities or conditions mentioned above may allow UIC wells to handle some of the stormwater runoff that will be generated. Stormwater from any portion of the property that does not come in contact with the areas associated with the above-mentioned activities or conditions may be allowed to be discharged to a UIC well.

Additional Information

- Washington State Department of Ecology, Underground Injection Control Program, https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/underground-injection-control-program
- Chapter 173-218 WAC, Underground Injection Control Program, https://app.leg.wa.gov/WAC/default.aspx?cite=173-218

For more information or assistance contact the King County Stormwater Services at 206–477–4811 and visit kingcounty.gov/stormwater.