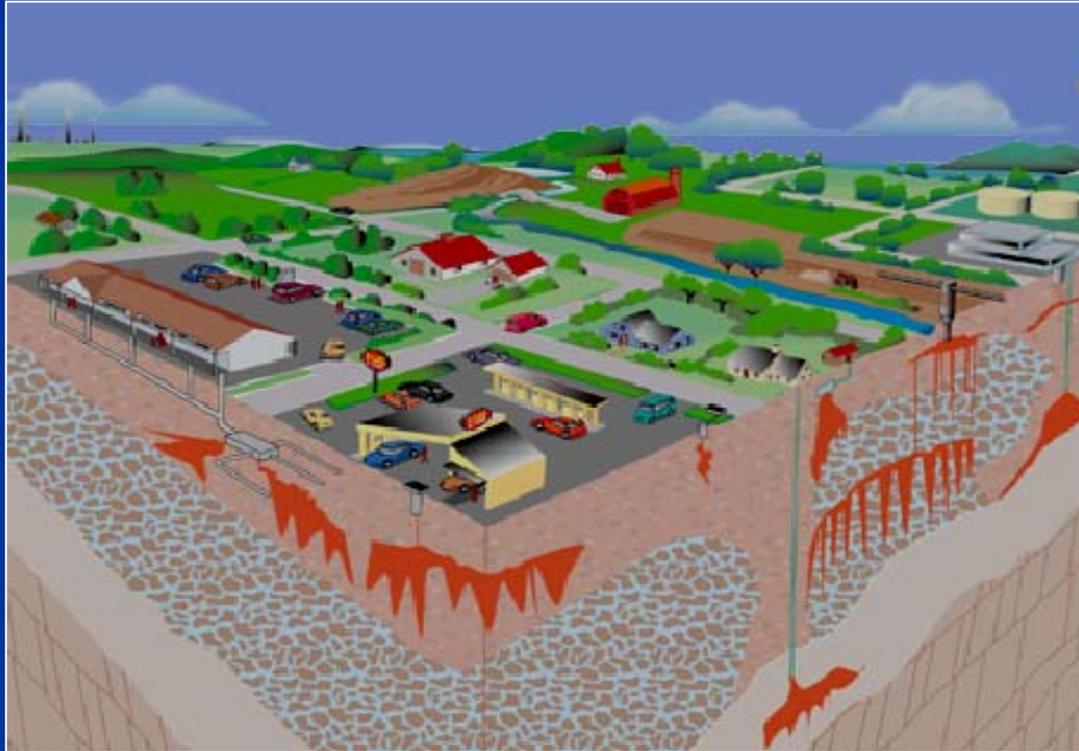


Underground Injection Control (UIC) Program Rules



What we will cover today

- What is a UIC well and what are they used for?
- Why was the UIC program formed?
- What state regulations are open for revision?
- Why are we revising the UIC rule,?
- What do I have to do if I own or manage a UIC well?
- Proposed UIC rule revision schedule
- Questions?

What is a UIC well?

- A UIC well is a man made structure used to discharge fluids into the ground.
- It has to be deeper than wide at the land surface or a subsurface distribution system or an improved sinkhole.

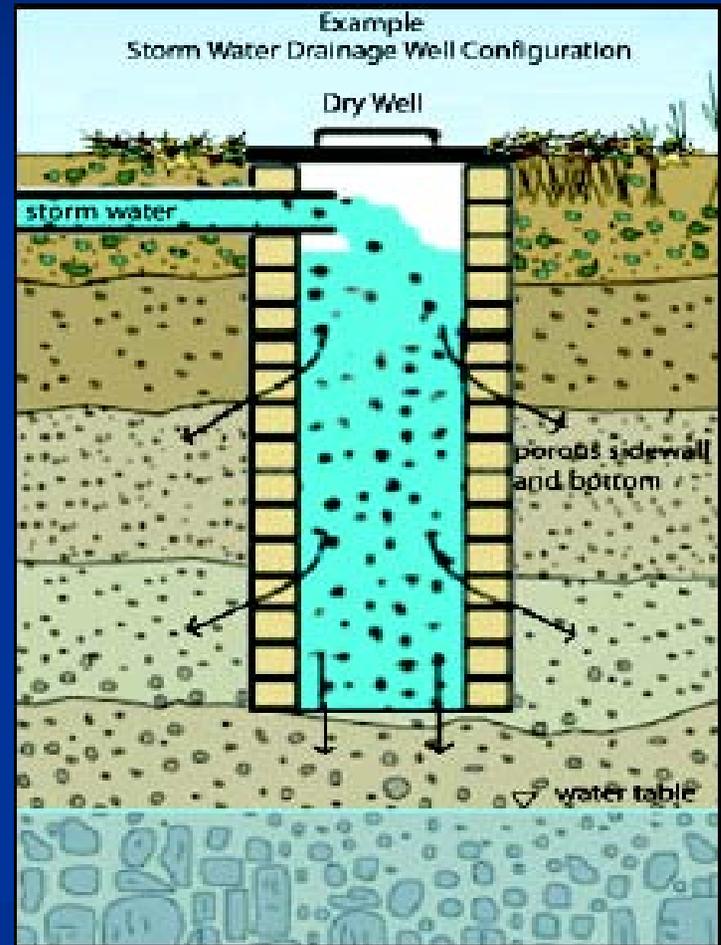
Why are UIC wells regulated?

- In the past, industries injected waste into UIC wells and caused water quality problems.
- In 1974, Congress passed the Safe Drinking Water Act and required EPA to create the UIC Program to protect drinking water sources by controlling discharges to UIC wells.

What are UIC wells used for?

- There are 5 Classes of UIC wells defined by USEPA (see draft rule 218-040).
- In Washington, the majority of UIC wells are Class V wells. Examples are dry wells, french drains, drainfields, boreholes, and infiltration trenches with perforated pipe

In WA UIC wells are used to dispose of storm water



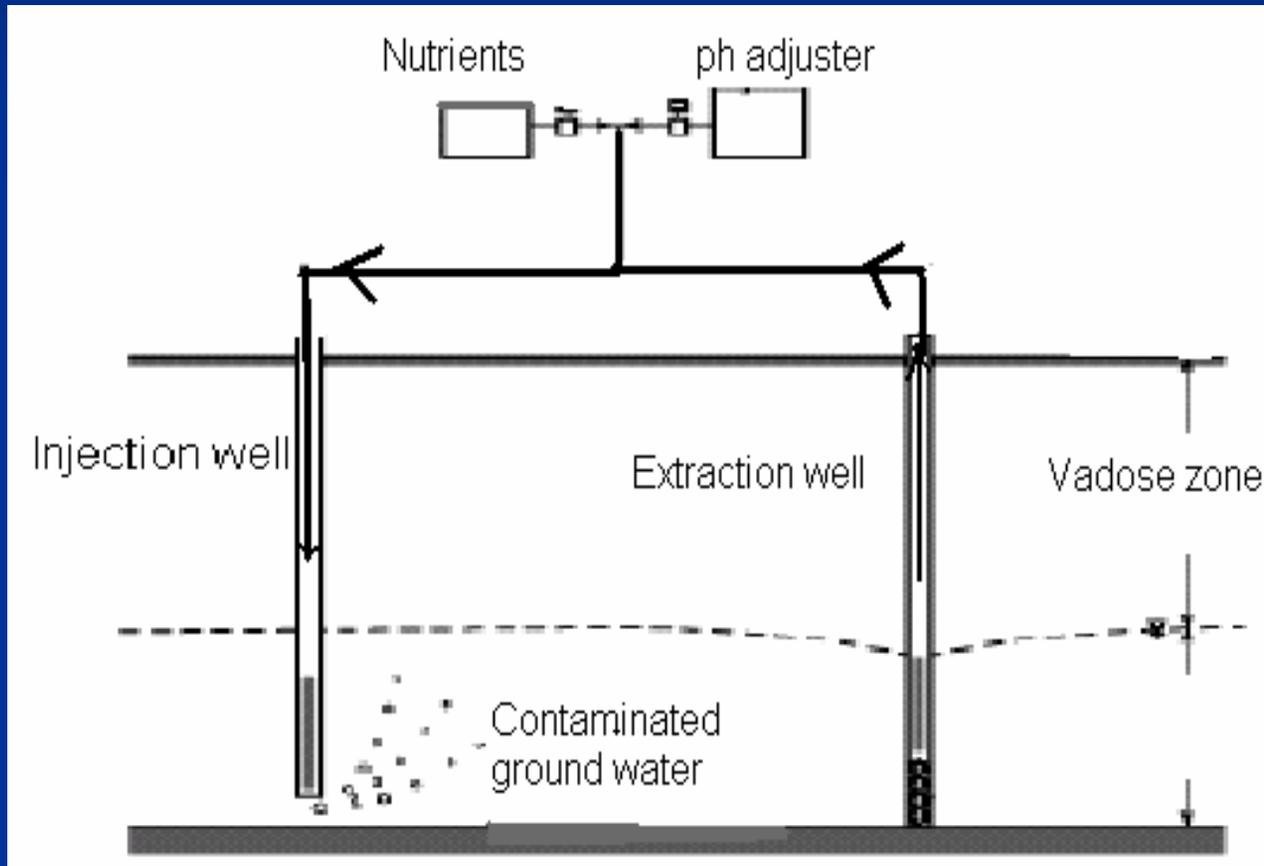
**Used to dispose of sanitary waste,
(Large on-site septic systems)**



Dispose of commercial and industrial waste fluids



Used at contaminated ground water clean-up sites



Why is the UIC Program regulating stormwater discharges to UIC wells?

- Aquifers need recharge from stormwater but ground water quality can be affected when stormwater runoff carries pollutants into the subsurface.
- Stormwater management can reduce the potential for contamination to reach a ground water aquifer.

What state rules that address UIC wells are open for revision?

- UIC Program Rules (major change)
- State Waste Discharge Program Rules (minor change)

State Waste Discharge Program proposed revision

We are proposing to delete a sentence
to allow UIC wells in a State Waste
Discharge Permit.

Why are we revising the UIC Program rule?

- In the late 1990's the Environmental Protection Agency (EPA) revised the Federal UIC rule for Class V wells and then published the changes in 1999. Federal changes were made to better protect underground sources of drinking water.
- Ecology must update state rule in order to continue to administer the UIC program. (State program began in 1984)

What do I have to do if I own or manage a UIC well?

- Meet the rule requirements:
 - All UIC wells must be registered and
 - Meet the non-endangerment standard.

OR

- A permit will be needed to operate a well.

NOTE: Ecology believes most UIC wells will not need a permit.

Registration

- UIC wells must be registered with Ecology or EPA.
- Registration forms available from Ecology.
- Form may be revised after UIC rule is finalized.

NOTE: UIC wells used at single family homes or at CERCLA facilities do not have to register (exempt).

Registration form asks for information about:

- **Site** – name, address, nature of business and best management practices
- **Owner and who operates site**
- **UIC wells on site**– how many, type, what goes in the well and from where, approximate depth, latitude and longitude of each well, approximate ground water table elevation if known
- **Additional information if Class V UIC well is used at a clean up site**

**Proposed requirements to meet the
non-endangerment standard
(see draft 218-080 through -100)**



Non-endangerment standard (see draft section -080)

- A UIC well must be constructed, operated maintained and decommissioned in a manner that protects ground water quality;
- Must be in compliance with state law and the Ground Water Quality Standards

Specific requirements for the non-endangerment standard (see draft rule 218-090)

- UIC Wells used to manage stormwater
 - New wells, 218-090(1)
 - Existing wells, 218-090(2)
 - 0-50 UIC wells on site
 - 50 or more UIC wells on site
 - Use, store, or handle hazardous substances
- UIC Wells **not** used to manage stormwater, 218-090(3)

Proposed requirements for NEW UIC wells used for stormwater management, 218-090(1)

- Apply **presumptive or demonstrative** approach, to protect ground water quality;
- Provide separation between bottom of well and top of ground water table;
- Meet local ground water protection program requirements

Presumptive and Demonstrative approach

- Presumptive approach, means if the stormwater management practices are applied to a UIC well it will be presumed the Ground Water Quality Standards will be met,
- To meet the demonstrative approach the owner must demonstrate the site practices will meet the Ground Water Quality Standards.

Questions?

Requirements for EXISTING UIC wells used for stormwater management, 218-090(2)

Own or operate less than or equal to 50 wells

- Register wells within 3 years after rule is adopted
- Complete a UIC well assessment within 5 years from rule adoption
- Correct the use of a UIC well that poses a public health hazard or if well is prohibited

Requirements for Existing UIC wells used for stormwater management, 218-090(2)

Own or operate more than 50 wells:

- Register wells within 5 years from adoption of rule
- Complete **well assessment** within 7 years from adoption of rule.
- Correct the use of a UIC well that poses a public health hazard or if the well is prohibited.

What is a well assessment?

- Evaluate the potential risks to ground water from the use of UIC wells.
- Identify UIC wells that are a high threat to ground water by using the presumptive or demonstrative approach, or another method.
- Include schedule for retrofitting wells considered to be a high threat.

Well assessments for industrial facilities or facilities that handle hazardous substances 218-090(2)(c)

Facilities with NPDES permits:

- NPDES permitted industrial facilities can apply the Industrial Stormwater Pollution Prevention Plan (SWPPP) requirements to their UIC wells.
- Must retrofit high threat wells or close prohibited UIC wells.

Well assessments for industrial facilities or facilities that handle hazardous substances 218-090(2)(c)

For facilities that **DO NOT** have an NPDES Permit:

- Apply the industrial stormwater pollution plan requirements to UIC wells to fulfill the well assessment requirement; or
- Provide documentation with registration such as a site drainage map for the UIC wells; or
- Complete a no-exposure certification form for discharges to UIC wells.

What does “retrofit” mean?

- If a high threat or prohibited UIC well is identified, the owner must reduce the pollutant load from the UIC well by:
 - revising the source control at the site; or
 - upgrading the well – add catch basin or spill control device; or
 - adding pretreatment; or
 - closing the UIC well.

Questions?

Proposed requirements for UIC wells NOT USED for stormwater management, 218-090(3)

- New UIC wells not used for stormwater must:
 - Have a separation between the bottom of the well and the top of the aquifer (some exceptions).
 - Meet other state and local requirements for ground water protection.
- Existing wells not used for stormwater:
 - Existing wells not registered must meet requirements for new wells.
 - Registered existing wells are considered grandfathered in but must complete a survey provided by Ecology.

Questions?

Class V wells that automatically meet the non-endangerment standard, 218-100

The fluids discharged to the UIC well meet the Ground Water Quality Standards, such as:

- Aquifer recharge wells
- Heat pump return flow wells that do not add products to the return water
- UIC wells receiving water from non pollutant generating surface

Other proposed changes

- Decommissioning (Closure) standards for all UIC wells, 218-120.
- Added or changed definitions, 218-030, such as: AKART, high threat to ground water, non-endangerment standard, subsurface distribution system, retrofit and UIC well.
- Banned UIC wells, 218-040, such as motor vehicle waste disposal wells and large capacity cesspools.

Rule Revision Timeline

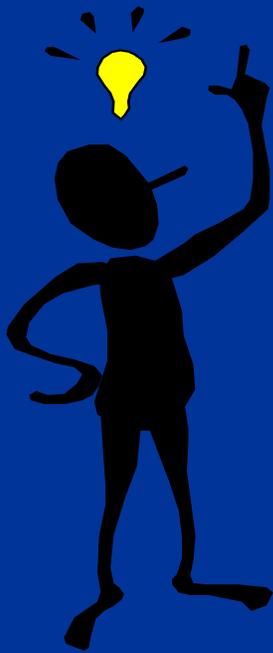


To summarize

- Majority of UIC wells will **not** need a permit.
- Rule requirements are: register all UIC wells and meet the non-endangerment standard.
- New stormwater management wells use best management practices to meet requirement.
- Existing stormwater management wells are grandfathered in unless they cause or contribute to a water quality problem.
- Non stormwater manage wells are either grandfathered in (registered) or must meet the requirements for new wells (not registered).

How can you help ?

- Comment on draft rule language
- Send your comments by email to maha461@ecy.wa.gov



Or, mail your comments directly to
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Any Questions?