

Technical Memorandum #10



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Subject: Underground Injection Control
Project 14505
No.:

This memo summarizes the Washington Department of Ecology's (Ecology) stormwater Underground Injection Control (UIC) guidelines which are in reference to Washington's State Regulation Chapter 173-218 WAC and the Ecology document titled *Guidance for UIC Wells that Manage Stormwater*, December 2006, Publication Number 05-10-067.

The UIC program was delegated to Ecology by the EPA in 1984 and the most recent revision was in February, 2006. The program requires UICs to be registered, whether they are used or not, and either rule-authorized (RA) or covered by a state waste discharge permit prior to being operated. Ecology noted that typically developers register UICs prior to construction by submitting the appropriate registration form with their development submittal documents to ensure UICs will be approved.

Washington UIC registration deadlines follow:

- UICs constructed on or after February 3, 2006 are considered new and must be registered prior to use.
- If UICs were in use on February 3, 2006 then:
 - If the owner has 50 or less UICs, all UICs must be registered by February, 2009.
 - If the owner has more than 50 UICs, all UICs must be registered by February, 2011.

There are three registration categories based on the UIC owner, and three corresponding registration forms, the categories are:

- Municipal Stormwater County and City
 - Facilities owned by municipalities for managing public runoff
- Non-Municipal Stormwater

- Privately owned facilities such as home owner association facilities that manage private runoff
- Industrial or Commercial
 - Private facilities that manage runoff from industrial and commercial sites.

New UICs

After registration, new UICs need to be rule-authorized or permitted. Ecology makes the decision that a UIC is either rule-authorized or needs a permit based on whether the UIC meets the non-endangerment standard. UICs that automatically meet the non-endangerment standards have a separate registration form. A UIC Well Closure Notification form is required prior to closing a UIC.

There are two ways for a registrant of a new UIC to show compliance with the non-endangerment standard therefore allowing the UIC to be rule-authorized. The first method is to use the presumptive approach and the other is using the demonstrative approach.

The presumptive approach requires following Ecology guidelines in the Ecology document titled *Guidance for UIC Wells that Manage Stormwater* and selecting and designing treatment BMPs from Ecology's Stormwater Management Manual for Western Washington or Eastern Washington or equivalent manual in combination with vadose zone properties. The correct combination of vadose zone treatment and treatment BMPs selected and designed from the Ecology manuals will be presumed to meet treatment requirements of the non-endangerment standard. The presumptive approach may not be used when best management practices do not exist to remove or reduce a contaminant, the vadose zone has no treatment capacity and/or the storm water quality is such that a best management practice does not exist to reduce or eliminate the concentration (WAC 173-218-090(1)(i)(D)).

The demonstrative approach requires documentation of a site-specific analysis that demonstrates that the proposed discharge will comply with ground water quality standards. To be eligible for rule-authorization using the demonstrative approach treatment BMPs can be selected and designed from sources other than Ecology. BMPs designed from other sources must be demonstrated to and approved by Ecology to meet the non-endangerment standard.

Existing UICs

For existing UICs (constructed before February 3, 2006) the requirements are different as existing facilities are grandfathered in with respect to the rules effective February 3, 2006. Once registered, an assessment of existing UICs must be completed to determine if they are a high threat to groundwater. Existing UICs found to be a high threat to groundwater must be retrofitted with treatment BMPs to meet treatment standards. The assessment consists of gathering information about the UIC such as land use around the UIC and whether or not the UIC is located in a groundwater protection area.

If existing or new UICs are located or are to be located in a groundwater or wellhead protection area more stringent requirements may apply and must be met.

Proof of Registration and RA/Permit

At this time there is no formal procedure or method for municipalities to receive information from Ecology to ensure UICs have been registered and RA/permitted. Should Clark County want to ensure UICs are registered and RA/permitted prior to approving the operation of a UIC in the County's jurisdiction, it is recommended to request the developer to provide a copy of the documentation provided by Ecology to the developer stating UICs are registered and RA/permitted.

Ecology does send periodic emails with information on newly registered privately owned UICs to some municipalities. This provides a tool for the municipalities to track private UICs within their boundaries.