

Design and Registration Requirements for Surface and Underground Stormwater Infiltration Facilities  
(including drywells)

May 23, 2016

Surface and underground stormwater infiltration facilities (including drywells) are regulated to prevent groundwater contamination by the Washington Department of Ecology under Chapter 90.48 of the Revised Code of Washington and Chapters 173-218 of the Washington Administrative Code. This document is intended to serve as guidance and a summary of the basic requirements for the design and registration of surface and underground stormwater infiltration facilities. It is not intended to be a complete or thorough compilation of all requirements of the Stormwater Management Manual for Eastern Washington (DOE Publ. No. 04-10-076, September 2004) or the Guidance for UIC Wells that Manage Stormwater (DOE Pub. No. 05-10-067, December 2006). All surface and underground stormwater infiltration facilities constructed in the City must meet the following design and registration requirements.

Category 1 – Drywells

- Are Underground Injection Control facilities (UICs)
- Must meet Guidance for UIC Wells that Manage Stormwater (UIC Guidance) unless retrofitting or reconstructing an existing drywell in place (retrofitting is the renovation of an existing structure or facility to meet changed conditions or to improve performance).
- Must be registered as Drywells (Tables 1 & 2 of UIC Registration Form)

Category 2 – Surface or Subsurface Infiltration Trenches with perforated pipe, drain tiles, or other similar devices; excavated holes deeper than longest surface dimension (length or width); OR subsurface infiltration galleries (e.g., underground arched-pipe structures to store and infiltrate stormwater).

- Are UICs
- Do not have to meet UIC Guidance
- If exempt under Stormwater Management Manual for Eastern Washington (SWMMMEW) Chapter 2.1.3, do not have to comply with SWMMMEW. Runoff treatment and flow control not required.
- If partially exempt under SWMMMEW Chapter 2.1.4, must comply with Core Elements 1 (Preparation of a Stormwater Site Plan) & 2 (Preparation of a Construction Stormwater Pollution Prevention Plan) only. Runoff treatment and flow control not required.
- If not exempt or partially exempt and exceeds new development or redevelopment thresholds under SWMMMEW Chapters 2.1.1 and 2.1.2, must comply with SWMMMEW (including Site Suitability Criteria in Chapter 5.4.3.)
- Must be registered as Infiltration Trenches
  - Tables 1 & 4 of UIC Registration Form if soil not considered treatment BMP
  - Tables 1 & 5 of UIC Registration Form if soil considered treatment BMP
  - If exempt or partially exempt from SWMMMEW, notify Ecology UIC Coordinator during registration process

Category 3 – Surface or Subsurface Infiltration Trenches, Basins, and Ponds without perforated pipe AND trench is not deeper than longest surface dimension (length or width).

- Same requirements as Category 2 apply except:
  - Are not UICs
  - Do not have to be registered

### Soil Suitability Criteria

The Soil Suitability Criteria in SWMMEW Chapter 5.4.3 applies to surface and subsurface infiltration facilities except drywells unless exempt or partially exempt under SWMMEW Chapters 2.1.3 and 2.1.4 OR project does not exceed new development or redevelopment thresholds under SWMMEW Chapters 2.1.1 and 2.1.2. Soil Suitability Criteria include, but are not limited to, infiltration rate < 2.4"/hr and Cation Exchange Capacity  $\geq$  5 meq which must be tested at the project site as part of the geotechnical evaluation.

### Exempt Projects

- Pothole and square cut patching
- Crack sealing
- Resurfacing with in-kind material with no expansion of road prism
- Overlaying existing asphalt or concrete with bituminous surface treatment (BST or chip seal), asphalt or concrete without expanding area of coverage
- Shoulder grading
- Reshaping/regarding drainage systems

### Partially Exempt Projects

- Removing and replacing concrete or asphalt roadway to base course or subgrade or lower without expanding or improving impervious surfaces
- Repairing roadway base or subgrade
- Overlaying existing gravel with BST, asphalt or concrete without expanding area of coverage OR overlaying existing BST with asphalt without expanding area of coverage if:
  - Urban Roads: Average Daily Traffic (ADT) < 7,500
  - Rural Roads, Freeways, Limited Access Control Highways: ADT < 15,000
  - Parking Areas: < 40 daily trip ends/1,000 sf building area OR < 100 total daily trip ends
- Safety Improvement Projects such as bike lanes, sidewalks, bus pullouts and other transit improvements that do not enhance traffic capacity except if project improves soft shoulder to curb and gutter with ADT  $\geq$  7,500.

### UIC Registration

All new UIC wells (except wells receiving residential roof runoff from a single family home or to control basement flooding at single family homes and duplexes) must be registered with the Washington Department of Ecology prior to being put into use. Registration is done on-line and requires a SecureAccess Washington (SAW) account. Instructions for signing up for a SAW account and a link to the UIC Well Registration website can be found at <http://www.ecy.wa.gov/programs/wq/grndwtr/uic/UIConlineregis.html>. Copies of registrations filed and accepted by Ecology must be provided to the City Stormwater Coordinator.

### Questions?

For more information, contact:

City of Walla Walla Stormwater Coordinator at 509.524.4669

or

City of Walla Walla Development Engineer at 509.527.4537