

## On-Site Rule Revision Issue: O&M-Enhanced Designs

(WAC 246-272A-0238 Design requirements—Facilitate operation, monitoring and maintenance.)

### Issue statement

The 2017 Onsite Rule Review process identified the need for OSS designs to better facilitate routine operation and maintenance. Section 0238 is intended to require these considerations. DOH has identified an issue of OSS designs with disinfection units being permitted and installed without a freefall sampling port despite it being required in the Proprietary Product RS&G. This prevents verification of these systems' efficacy in the field. The proposed revisions further highlight the requirement to design OSS to facilitate routine operation and maintenance, and add the requirement for a freefall sampling port following disinfection units. This will ensure public health is protected by ensuring that OSS are maintainable and that disinfection units can be sampled and field-verified.

Lid and tank safety was also identified in the 2017 Onsite Rule Review process and is a longstanding concern expressed by DOH, LHJs, industry, and the public. There have been several incidences of people falling into sewage tanks in Washington over the last several years. Many of these incidences have involved children. Tragically at least one has resulted in a fatality. Proposed revisions seek to improve lid and access safety elements in OSS designs by further highlighting the requirements for sewage tank accesses to be secure and focusing more attention on children.

### Recommended Rule Language

BLUE = Additions      RED = Deletions  
to existing rule language

## WAC 246-272A-0238

### Design requirements—Facilitate operation, monitoring and maintenance.

(1) The OSS must be designed to facilitate routine operation, monitoring and maintenance according to the following criteria:

(a) For gravity systems, septic tank access for maintenance and inspection at finished grade is required. If effluent filters are used, access to the filter at finished grade is required. The local health officer may allow access for maintenance and inspection of a system consisting of a septic tank and gravity flow SSAS to be a maximum of six inches below finished grade provided a marker showing the location of the tank access is installed at finished grade.

(b) For all other systems, service access and monitoring ports at finished grade are required for all system components. Specific component requirements include:

(i) Septic tanks must have service access manholes and monitoring ports for the inlet and outlet. If effluent filters are used, access to the filter at finished grade is required;

(ii) Surge, flow equalization or other sewage tanks must have service access manholes;

(iii) Other pretreatment units (such as aerobic treatment units and packed-bed filters) must have service access manholes and monitoring ports;

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As recommended by the Policy Subcommittee, Meeting #6, 2/21/19

(iv) Pump chambers, tanks and vaults must have service access manholes;

(v) Disinfection units must have service access and be installed to facilitate complete maintenance and cleaning, ~~including an easy access, freefall sampling port;~~ and

(vi) Soil dispersal components shall have monitoring ports for both distribution devices and the infiltrative surface.

(c) For systems using pumps, clearly accessible controls and warning devices are required including:

(i) Process controls such as float and pressure activated pump on/off switches, pump-run timers and process flow controls;

(ii) Diagnostic tools including dose cycle counters and hour meters on the sewage stream, or flow meters on either the water supply or sewage stream; and

(iii) Audible and visual alarms designed to alert a resident of a malfunction. The alarm must be placed on a circuit independent of the pump circuit.

(2) All accesses must be designed to allow for routine monitoring and maintenance and shall be secured to minimize injury or unauthorized access in a manner approved by the local health officer.

**Comment [SJJ(1):** Table this until we decide on field verification

## Supporting Information

[Proprietary Product RS&G](#)