

Revised June 2025

## **Requirement for Documentation When Using Alternative Methods for Determining Hydraulic Linear Loading Rate**

The Delaware Public Health District (DPHD) is not obligated to accept designs that utilize alternative Hydraulic Linear Loading Rates (HLLR). DPHD favors the use of the standard Ohio Administrative Code (OAC) 3701-29-15 loading rates when applicable. Alternative HLLR may only be considered when the standard loading rates are not viable, and site constraints (such as space limitations) are a factor.

Please note that the soil loading rate (which determines the total square footage of the system) is not subject to modification and must be determined using the established table in the Ohio Sewage Code. Alternative methods may only be applied to determining the hydraulic linear loading rate (HLLR), which establishes the required length of the soil absorption component parallel to surface contours.

Per the Ohio Administrative Code 3701-29-15 (N)(2)(i), any alternative method for determining the Hydraulic Linear Loading Rate (HLLR) must be detailed in the system design and approved by the Board of Health.

### **Submission Requirements**

Effective immediately, any alternative method proposed for determining HLLR must be accompanied by additional information to the specific system design. This must include:

1. A statement that an alternative HLLR is being utilized along with a detailed narrative/summary providing a thorough explanation (in layman's terms preferably) of how the alternative HLLR was determined.
2. A complete citation of the research source(s), including author names, publication year, and document title.
3. A step-by-step breakdown of how the calculations are applied to the specific site conditions, including slope, texture, grade, and limiting layers that may influence the HLLR.
4. Justification or reasoning for why this method is appropriate in comparison to the standard table used for HLLR determination.

### **Approval Considerations**

- All alternative HLLR designs will require case-by-case approval and may cause delays if further research, follow-up, or revisions are required.
- Replacement areas must utilize the standard OAC 3701-29-15 table used for HLLR, unless proper justification or reasoning is provided.
- Any approvals granted are subject to final review and acceptance by DPHD.

Proper documentation of the research and application allows DPHD to verify whether calculations are being applied correctly for all relevant site conditions. Simply submitting generated calculations without justification is not sufficient and will not be accepted.

This policy applies to all proposed systems using an alternative method for determining HLLR and ensures all approvals remain consistent with Ohio sewage code requirements.