

MEMORANDUM

DATE: August 2, 2023

TO: Thurston County Drainage Manual Users

FROM: Tim Wilson, Thurston County Drainage Manual Administrator *TMW*

SUBJECT: Clarification for the acceptance and use of emerging technologies for new development and redevelopment

SUMMARY

Effective immediately, the Thurston County Drainage Design and Erosion Control Manual (DDECM) Administrator modifies DDECM Volume V, Chapter 9.5 to clarify requirements for the review, acceptance and use of emerging stormwater technologies in new development and redevelopment projects.

BACKGROUND

The DDECM establishes requirements and provides guidance on measures necessary to control the quantity and quality of stormwater runoff produced by new development and redevelopment such that they contribute to the protection of beneficial uses of receiving waters in Thurston County. Traditional Best Management Practices (BMPs) such as wet ponds and biofiltration swales may not be appropriate in many situations due to size and space restraints or their inability to remove target pollutants. Because of this, the stormwater treatment industry emerged to develop new manufactured stormwater treatment devices.

Manufactured treatment devices (also known as proprietary treatment devices) are emerging technologies that are new to the stormwater marketplace. These devices include both permanent and construction site treatment technologies. Many of these devices have not undergone complete performance testing, so Ecology has established a program to evaluate the capabilities of these devices.

Ecology's Technology Assessment Protocol – Ecology (TAPE) program developed "use level designations" to assess levels of development for manufactured treatment devices. There are three use level designations:

- Pilot use designation (PULD)
- Conditional use level designation (CULD)
- General use level designation (GULD)

In addition to Ecology certification, prior approval from the County is required for installation of manufactured treatment devices with General Use Level Designations (GULD). Manufactured treatment devices with Pilot (PULD) or Conditional (CULD) Use Level Designations are not acceptable for use. DDECM Volume V, Chapter 9.5 provides requirements for the acceptance and use of proposed emerging technologies in new development and redevelopment which state these technologies must be:

- Approved and listed on Ecology's website,

- Proposed for use in accordance with Ecology's approval conditions,
- Appropriate to the development site, and
- Approved by the Administrator or designee.

The Drainage Manual Administrator in consultation with staff in the Storm and Surface Water Utility has determined clarification is needed for the submittal requirements to request approval for the acceptance and use of emerging technologies.

CONCLUSIONS

Commencing immediately, new development and redevelopment projects proposing the use of emerging technologies must submit a written request for Administrator approval. The request shall include (but is not limited to) the following:

1. Technical memorandum or written statement outlining why traditional treatment BMPs are not feasible and why the manufactured treatment device is suitable for the proposed project.
2. Supporting documentation showing the device has received a GULD for the applicable performance goal it is required to achieve. Devices having a PULD or CULD are not acceptable.
3. Plans showing the location where the device will be installed and note stating the device will be installed per the manufacturer's written recommendations. The plans shall also include the manufacturer's cut sheet(s).

In addition to the above requirements, the Administrator is authorized to request additional information or impose additional controls beyond those specified in the DDECM. In doing so, the Administrator shall act reasonably, exercising best professional judgement based on available information.