

Huang, Wen

From: Dizelos, George <George.Dizelos@montgomerycountymd.gov>
Sent: Monday, August 20, 2018 9:50 AM
To: Huang, Wen
Cc: alan.soukup; Edwards, Stan; Kamazani, Nasser; Jones, Jessica N (DEP); DEP AskDEP
Subject: Contact MC DEP [#5398]

Good Morning Wen Huang,

I am an environmental planner with the Department of Environmental Protection's Water and Wastewater Policy Group. I have received your information request through our AskDEP system. Please refer to the information below. If you have any additional questions, please contact Nasser Kamazani at Nasser.Kamazani@montgomerycountymd.gov or by phone at (240) 777-7717.

Please let me know if I can be of further service,

Thank You,

Montgomery County supports the non-residential re-use of roof drainage (rainwater), foundation drainage, cooling condensate, and other unpolluted sources of water for re-use in non-residential buildings for flushing of toilets and urinals, mechanical systems and equipment cooling. This water is non-potable and when collected for re-use in non-residential building it must be treated to ensure it is not a vector for disease organisms and does not foul dedicated toilet facilities and piping. Accordingly, the collection, handling and treatment of this water is addressed by Montgomery County. The guidelines for collecting and treatment of this non-potable water is contained in the Washington Suburban Sanitary Commission's (WSSC) Plumbing & Fuel Gas Code (Plumbing Code).

Even though WSSC issues plumbing permits and recommend water quality standards for non-potable water, they are not responsible for the operation and maintenance and the use of non-potable water that is reused for sanitary facilities in buildings. Accordingly, Montgomery County will have the responsibility to review the proposed non-potable water collection, handling and treatment to ensure that it meets non-potable water quality standards for in-building uses. For that purpose, Montgomery County Department of Environmental Protection (DEP) has been given the authorization to review and approve the use of non-potable water re-use systems prior to receiving WSSC plumbing permits.

Montgomery County DEP would require the following items to be submitted for review and approval:

- Layout sketch or plans for the non-potable water collection, handling, treatment and use.
- Quantity of water to be collected for treatment
- Estimated supplemental potable water use and interconnection location
- Method of initial water containment and overflow discharge handling
- Plans of the collection and treatment processes to meet the minimum water quality standards as defined by Maryland Department of the Environment (MDE) in their Class IV effluent water quality standards (see below). These plans must be designed by a registered professional engineer. Water Quality Standards for Non-Potable Water Reuse are included in the following Table.

Table 1- Guidelines for Use Class IV Reclaimed Water: High Potential for Human Contact

Parameter	Class IV Water Quality Requirements
Biochemical Oxygen Demand (BOD) (monthly average)	10 mg/l

Turbidity/Suspended Solids	2 NTU
E. coli (monthly median)	1 MPN/100 ml
Fecal Coliform (monthly median)	2.2 MPN/100 ml
pH (any time)	6.5 – 8.5 s.u.
Total Nitrogen (monthly average)	10 mg/l
Total Residual Chlorine	1.5 – 4.0 mg/l measured at the treatment system outlet * * MDE standards (not included here) for designated sampling points in the distribution pipe is not relevant to these in-building systems.

- Provide a listing of the rainwater harvest/process equipment
- Provide information on the operator/maintenance personnel
- Provide a monitoring plan and on-site records location for County inspection

After the above items are submitted and reviewed, DEP will contact you for any questions or materials needed to complete the approval process. Once your proposed water re-use project is approved, WSSC will be notified to proceed with the issuance of the plumbing permit for the system. Please submit the above listed items to:

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