

DRAFT

**DRAFT Meeting Highlights**  
**Residential Graywater Advisory Committee**  
**June 23, 2020 1:30 pm - 4 pm**  
**Virtual Meeting via Google Hangouts & Phone Line**

**Participants:**

Barry Glotfelty, Frederick Co. Environmental Health Dept., MACHO  
Dave Duree, Advanced Systems, Drip Irrigation  
Ching Tien, MDE  
Gary Anotonides, Ches. Env. Prot. Assn  
Heidi Benham, Montgomery County  
Jim George, MDE  
Linda Kobylski, Montgomery County, Dept of Permitting Services, Div of Land Development  
Mary Dewa, MDE  
Massoud Negahban-Azar, UMD  
Matthew Cummers, Calvert Co. Environmental Health Dept., MACHO  
Matt Rowe, MDE  
Mike Harmer, WSSC Water  
Mike Moulds, Kent County DPW/MACO  
Nasser Kamazani, Montgomery County  
Nick Kana Ziont, Montgomery County  
Nony Howell, MDE  
Robert Mitchell, Worcester Co. Environmental Health Dept., MACHO  
Tom Buckley, WSSC Water  
Zohreh Movahed, CWEA Water Reuse Committee

1. Review Past Highlights, Announcements, Meeting Overview - (10 min)
  - a. Past Highlights:
    - i. An Overview Table was shared at the last meeting.
    - ii. List of Issues, shared with the Committee, serves as a tracking tool.
    - iii. The comment period on Version 2 Regulation was extended until end of May
    - iv. These Meeting Highlights take on more importance as we document the consensus of the Committee on the path to wrapping up our work together.
  - b. Poll of Committee on Graywater Issues: A poll was sent out to Committee members at the end of May that solicited responses to fifteen questions. The questions were phrased as proposals; each had a section for comments. Four possible responses were offered, which were designed to test consensus: 1. Support, 2. No Opinion, 3. Disagree but Stand-Aside, 4. Disagree and require more discussion.

- c. Today's Meeting Overview: Focus discussion on Poll issues for which there was one or more disagreement. Time permitting, we can discuss issues of interest to Committee members.

### 3. Graywater Issue Poll Results and Discussion

- a. Poll Issues with at least one dissenting opinion: (Issue # is in relation to the poll)

- i. (Issue 2) Single Residential Toilet flushing

- Commenter position (WSSC): Concerns expressed about public health, likely lack of maintenance, high-cost of NSF 350 requirement could make unapproved alternatives look attractive. These systems could be (will be?) prohibited by Montgomery County, thus prohibiting WSSC to perform plumbing approval. Some concerns were expressed about the International Plumbing Code.

Suggestion from a WSSC staff member that all elements of graywater should be coordinated by a single local entity, E.g., the division responsible for building codes. Others from Frederick, Calvert and Mont. Cos. disagreed, saying this is an organizational matter to be determined by each local government.

- Note that the graywater law calls for residential toilet flushing, and the International plumbing code, adopted by Maryland, allows it.

- ii. (Issue 4) Approving Authority & Designee

- Commenter position: Env. Health should not review/approve NSF 350 graywater treatment systems inside of buildings; that should be part of plumbing responsibility.
- Key topic of concern: Toilet flushing with graywater in multi-unit residential buildings. The basis of concern is the limited capacity for some local governments to administer oversight of the treatment systems, which will be operated by building managers. It's all very new and has public health implications. A question of consistency with the 2018 law was raised. The law states, "Graywater originates from a residence on the site on which the graywater is to be applied." Although this appears to be related to irrigation, the concept could also logically apply to toilet flushing with water comingled from multiple residential units.
- Irrigation: The question of whether or not a graywater system is technically a OSDS came up. If it is an OSDS, then current regulation prohibits them in S1 sewer planning areas.
- Appeal Rights: The question of the process was raised. It was suggested that the process be through MDE. Some concern was expressed about counties looking bad.

- iii. (Issue 5) Plumbing Codes Statement in the Regulation, ie, that local jurisdictions have the necessary plumbing code authority to implement the regulation.
  - One basis of objection was that the IPC code goes beyond capabilities of some plumbing inspections offices. In response, it was noted that a goal of MDE is to advance Maryland's technical and administrative capacity in reusing water. This suggests that training might be a necessary element of implementation.
  
- iv. (Issue 9) Site & Soil Evaluations
  - One Committee member noted that the law expects some degree of site evaluation, because it makes reference to maintaining 5-feet of separation from the groundwater table. Private consultants could be used. In some cases, existing data could be used.
  - Details could be handled in a guidance document.
  - General agreement among Committee members that soils need some kind of evaluation; however, a perc test is not necessary. Also need to identify distances for various setbacks.
  - The group was informed that the Version 3 Draft Reg does not require a Perc Test, but the Approving Authority may request one.

Flow: Discussion turned to graywater flow estimates. The Version 2 regulation based irrigation design on daily average flow estimates, but allowed for maximum flows of twice the average. Several Committee members objected, saying the design needs to accommodate the maximum flow. This led to a discussion of the flow estimate approach. In the end, several options were developed for MDE to resolve. One member suggested that continuing to rely on the International Plumbing Code provides consistency and a reputable source.

- v. (Issue 11) Wastewater Strength
  - The concern remained somewhat unclear despite discussion. One suggestion was that larger systems (multi-unit residential on septic) could be required to take a grab sample of the onsite sewage disposal system effluent annually. This would come under the OSDS permit, which would need to be coordinated with the graywater system. Given that a graywater system in a multi-unit building would likely be installed only for new construction, this could be coordinated at that time. It was also suggested that the inclusion of a graywater system should not reduce the sizing requirements for an OSDS, because if the graywater system was ever removed, the OSDS would need to accommodate the full flow.

- vi. (Issue 14) Storage Tank Overflow by Gravity
  - Jim George, MDE, Requested Clarification: How to avoid overflow onto the basement floor if power goes out or pump clogs/backs-up? Committee participants suggested the use of “Highwater-level alarm system”. Also, piping can provide some additional storage. Although the risk cannot be eliminated, advocates suggest that the risk of overflow is outweighed by the benefits of allowing systems in situations where a pump is needed.

**Wrap-up and Next Steps:**

- MDE will take into account the poll findings, today’s discussion, comments provided by Committee members on the Version 2 Reg and internal deliberations to revise the regulation.
- Jim George acknowledged that implementation of the regulation will entail significant effort and could benefit from advice from interested Advisory Committee members.
- No future meeting date was set.