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DRAFT Meeting Highlights
Residential Graywater Advisory Committee
October 16, 2019 1:00 pm - 3:00 pm
MDE 1800 Washington Blvd. Baltimore, MD 21230
Patuxent Conference Room (6th floor)

In addition to meeting highlights, this document includes the following cumulative list of follow-up for action or possible future attention.

FOLLOW-UP ITEMS: (Cumulative Listing)

A. Work Tasks:

1. Flow-chart associated with approvals. WSSC offered to develop an initial draft.
2. Invite graywater system vendors to brief the Committee. MDE will organize.

B. Regulation-oriented Issues:

1. Clarification or removal of Sec. 2(2)(b).
2. How explicit to be on different levels of approval, e.g., One or two approvals? Plumbing approval for interior and health department approval for irrigation? Nature of the approval: Registration, general permit, individual permit, other?
3. How explicit to be in specifying what entities at the local level have an approval and oversight role.
4. What level of specificity about plumbing details should be included in the regulation?
5. Page 13, E7 - Suggested removal of gravity-only system element.

C. Regulation Implementation Issues:

D. Possible Topics of Recommend by the Committee:

1. Consideration of laundry water in statute
2. Consideration of commercial and residential building reclaimed water systems in statute

E. Questions for Review by Assistant Attorney General:

1. Can regulations be formulated to allow local authorities to opt-in to adopting a graywater program?
2. Can regulations be formulated to allow local authorities to opt-in to parts of a graywater program, e.g., adopting outdoor irrigation but not indoor toilet flushing?
3. Confirm that regulations can define different types of graywater, based on level of treatment, in addition to the definition in statute.
4. Would it be allowable to adopt regulations for irrigation apart from toilet flushing, to be done at a later time?

DRAFT

Attendees Present:

Gary Anotonides, Ches. Env. Prot. Assn
Zohreh Movahed, CWEA Water Reuse Committee
Tom Buckley, WSSC Water
Joseph Radtka, MD State Board of Plumbing
Mike Moulds, Kent County DPW/MACO
Matt Cummers, Calvert County Health Dept.
Mike Marmer, WSSC Water
Matt Rowe, MDE
Jim George, MDE
Jenny Willoughby, City of Frederick, MML
Ching Tien, MDE
Ed Stone, MDE
Nony Howell, MDE

Attendees on the Phone:

Dave Duree – Advanced Systems, Drip Irrigation
Rachel Goldstein – UMD
Claire Welty – UMBC
Barry Glotfelty – Frederick Co. Health Dept.

Meeting Highlights

1. Welcome and Introductions
2. Governance: Our goal will be to strive for consensus and document any dissent. It remains an open question whether or not the Committee will generate written recommendations.
3. Overview Orientation to the Straw Regulation - Presentation led by Jim George (MDE)

Question: Who would oversee – state or counties?

Answer: The draft regulation envisions local governments issuing approvals. This is consistent with similar activities associated with plumbing code and on-site waste disposal. The later has similarities to subsurface irrigation with graywater. It is recognized that county organizational structures differ; therefore, the MDE is open to advice from the Committee.

Outline of Regulations:

1. Preamble
2. Purpose and Policy
3. Applicability
4. Definitions
5. General Requirements
6. Graywater Quality Standards (Type 1 through 3)
7. Graywater Reuse and Disposal System Design and Construction
8. Approvals: 3 levels

MDE used Oregon regulation as the template for the discussion draft regulations.

DRAFT

The proposed regulations differ from the Oregon regulations in proposing a technology based approach, which are presumed to meet specific levels of quality based on certified technologies and operations and maintenance practices. The intent is to limit the burden of water quality sampling.

3 levels of approval: MDE is seeking Committee guidance on what approval instruments would be used at the local level; however, other frameworks have used system registration, general permit, and individual permits depending on the potential public health and environmental impact risks. Oregon uses general and individual permits; however, no registration option. Santa Barbara County, CA has a registration option.

Question raised about county represented on the Advisory Committee since local health departments are an arm of the State. This relates to the earlier question about how local approval and implementation oversight would work. WSSC identified three potential entities to be involved the Local Health (monitoring and reporting), Local Environmental (Irrigation), and plumbing inspections. Current regulations are currently not very explicit on this.

Presently the regulations do not include an explicit delegation process largely due to MDE's desire to receive advice from the Committee on this issue. Point raised that plumbing codes are local – it is also closely tied to septic systems when decommission to septic system. Makes logical sense that approvals and oversight it would remain local. Point raised that the treatment part of the equation is something health departments are equipped to do, not plumbers. Water quality is a separate issue from the plumbing. Matt Rowe suggested a flow chart for approvals and WSSC agreed to take a crack at that. Specify treatment process to achieve the water quality threshold.

Nony Howell pointed out a definitional issue of sewage and graywater possibly needing clarification.

Barry G. (Frederick) posed a question of whether one or two approvals would be necessary.

Tien (MDE) raised the possibility of considering two situations: Indoor vs outdoor, which could determine how approvals are approached: Indoor aligning with plumbing authority and outdoor aligning with Health Department.

A concern was raised about addressing the single family residential setting first, because it can be the most challenging in some ways, .e.g., in contrast to commercial settings or residential buildings that typically have facility managers who can be trained and take responsibility for operations and maintenance. A question was raised about whether the Committee should advise on amendments to the legislation. The legislation defines graywater as untreated; the draft regulation defines graywater in terms of three “types” of graywater, from on treatment other than coarse filtering (Type 1), to two additional levels of treatment. It's unclear whether this is consistent with the language of the statute.

The group discussed the observation that type 3 quality and use for toilet flushing poses complicated issues of oversight in a single residential setting. Some participants pointed out that this could lead to problems if homeowners do not perform system maintenance. Enforcement and compliance in a private home would be challenging. Expense and logistical practicality are also barriers. The group discussed the possibility of moving quickly to adopt the Type 1 and Type 2 uses. The question of recommending the addition of commercial decentralized systems to the statute was also touched upon.

DRAFT

Zohreh M. indicated a lack of clarity on how to interpret Sec. 2(2)(b).

WSSC suggested MDE might want to put explicit plumbing detail in the reg to avoid it getting out of synch with plumbing code as it changes over time.

Page 13, E7 gravity only system does not make sense for systems that have storage in a basement due to the need to pump the water above grade. Diversion valve, page 12 item C. Diversion only maybe applies to Type 1 graywater. There was a general sense among the group that discharges should be automatic; however, the overflow also addresses this. The notion of using soil moisture sensors as part of an automated discharge was also raised.

Tien recommended to define surface irrigation. Maybe to say surface drip irrigation. Spray irrigation is more involved due to risk associated with aerosols.

Nony Howell said might need consultation with local governments. A question was raised about whether the law allows local jurisdictions to opt out.

Matt Cummers noted that he is aware of only four systems that meet NSF 350 standards; the under-the-sink unit that appeared in a presentation during the September Committee meeting does not meet NSF 350 standards. Participants were wary of a system that requires occasional disinfection tablets to be placed in them; however, people manage swimming pools in a similar manner.

It was suggested that we might want to research and invite vendor(s) to present to the Committee.

Next Meeting: Avoid 3rd Wednesday and 3rd Thursday of the month.