

**Virginia Department of Health (VDH)  
Rainwater Harvesting and Reuse Workgroup  
December 17, 2018, Meeting Summary**

**Meeting Location:**

James Madison Building  
5th Floor Main Conference Room  
109 Governor Street  
Richmond, Virginia 23219

Remote Locations:     Some attendees participated via conference call

**List of Attendees:**

Dave Sample – Virginia Tech (Call in)  
Skip Harper – Dept of Housing and Community Development (Call in)  
Angela King – Virginia Coastal Policy Center (Call in)  
Bob Endelman – VDH, Office of Drinking Water (Call in)  
Anthony Creech – VDH, Office of Environmental Services  
Lance Gregory – VDH, Office of Environmental Services  
Matt Wells – WestRock  
Robert Cooper – DEQ, Stormwater Management  
Tyrone Jarvis – Go Green Automotive Care  
Benjamin Sojka – Rainwater Management Solutions  
Dave Tiller – VDH, Office of Environmental Health Services  
Scott Vogel – VDH, Office of Environmental Health Services  
Michelle Ashworth – Virginia Municipal Stormwater Association  
Nelson Daniel - VDH, Office of Drinking Water  
Mary Mahony – VDH, Office of Drinking Water  
Craig Tolson – Home Builders Association of Virginia (Call in)  
Michael Redifor – Newport News Code Compliance  
Seana Ankers – Mission H2O

**Administrative and Introduction**

Mr. Creech discussed HB 192 which amended the code to require the Board of Health to create gray water and rainwater use regulations, to describe conditions and use categories for households and businesses, to define gray water. The amendment also states that the regulations shall “not apply to water not for human consumption” from facilities under Virginia Pollutant Discharge Elimination System permits or General Virginia Pollution Abatement permits.

The Department in conjunction with DEQ will promote the use rainwater as a method reduce the burden on water systems. Possibly as an independent use as water source.

Mr. Creech summarized that we are at the very beginning of the process and that VDH wishes to separate gray water from rainwater for the purpose of this work group – Rainwater and gray water are two separate unique issues and gray water will be discussed later. The focus is rainwater harvesting and reuse. The workgroup agreed with this approach.

Virginia Coastal Policy Center has conducted some initial background research and provided a spreadsheet summarizing code, regulation and guidance on rainwater harvesting and reuse in 50 United States

Mr. Creech asked that the group let VDH know of other groups who may be interested to get a good mix industry, citizens, regulatory agencies. He also said to let VDH know of special needs to access building and future meeting

Mr. Creech and Mr. Gregory discussed travel reimbursement – generally other state employees won't seek reimbursement but for other and those that have incurred expenses there is a mechanism for reimbursement. Participants can get the paperwork set up now to make it easier for this meeting and the next meeting.

## **Goals and Ground Rules**

Mr. Creech discussed the general work group process and goals. Meetings are open to public, subject to FOIA requests, minutes are posted on Town Hall, and agendas are available within 7 days but usually much further ahead of time. The goal of the group is to assist with development of proposed regulations and develop a Notice of Intended Regulatory Action (NOIRA). It should be a good draft so it will get things moving through approval process.

Mr. Creech reviewed expectations and instructions that the work groups are advisory and work collaboratively. Mr. Creech reviewed a Summary of Reg. Process by J. Hilbert on PowerPoint. The slides covered were page 3, 4, 8, 10, 11, 13, 17, 20, 21, 22, 23, 24, 26, 32, 33, 34, 36, 40. VDH will seek answers to questions about HB 192 scope of statute and obtain further interpretations and clarifications from the AG's office.

Mr. Creech emphasized that there is a correlation (with gray water and rainwater) to other existing regulations and guidance. The proposed regulation must not conflict with other regulations.

Mr. Creech and Mr. Gregory summarized VDH Onsite Sewage and Water regulations. The Sewage Handling and Disposal Regulations and the Alternative Onsite Sewage Systems Regulations have a historic section that addresses cisterns. There are no cistern regulations but were recognized by some locations for those that have no other water sources. Situations include no public water supply, no water from wells in some areas of bedrock, no fractures, or locations

with prohibitions and separation distances that cannot be met. Provisions for cisterns mostly deal with hauling water.

Mr. Endelman summarized VDH Waterworks regulations as applicable. The waterworks regulations have clear backflow and cross-connection controls.

## **Discussion**

The group opened the discussion with questions to DEQ and ODW. Rainwater is not authorized as an approved source of water for human consumption.

Rainwater is not recognized under the Safe Drinking Water Act as a drinking water source. Storm water is defined/regulated by DEQ, storm water is rain and snowmelt that hits the ground. Rainwater is captured before it hits the ground. Critical not to intermingle DEQ regulations for stormwater vs. rainwater. See Stormwater Management Act, Reclamation Reuse, VPDES,

The stormwater management program was focused to manage phosphorus loads of proposed development, establish a threshold number, and reduce phosphorus load. One of 15 best management practices established by DEQ is to capture and reuse rainwater to prevent it from becoming storm water.

Mr. Gregory clarified the regulations we develop would not overlap or apply to VPDES systems.

The work group agree that there should be an avoidance of duplication and it is preferred that things are kept “as is” where there is already management. The bill says the regulation would not apply to pollution abatement or VPDES permits.

The Uniform State Wide Building Code was discussed as another place where regulations already apply. Builders Association wants to protect the consumer, keep voluntary options, prescriptive not requirements set, multiple options for home design, water savings credits where implemented, currently all varies across the state.

The USBC 2012 has definitions for graywater, reclaimed water, rainwater, storm water now waiting for the day regulations can use them.

Plumbing changes made in 2012 Code say rainwater should not be used for potable use unless approved by VDH. Currently VDH has no mechanism to approve it.

One challenge for development of a regulation involves handwashing sinks. Under current practice handwashing requires water for human consumption.

Rainwater harvesting is part of critical resource management.

Ideally, the group will take national standards and build state level regulations around them as the patron of the bill was envisioning.

Current definitions will be researched in current regulations and building code.

### **Decisions and Summary**

The work group agrees (by those who spoke) to limit scope to rainwater harvesting and reuse and leave gray water to be a separate project.