Attachment 4A
Meeting Summary
JOINT MEETING OF
DIRECTORS OF UTILITIES COMMITTEE
DIRECTORS OF HEALTH
June 3, 2015
Virginia Beach

The June 3, 2015 joint Meeting of the Directors of Utilities Committee and the Health Directors was held at the Chesapeake Bay Foundation's Brock Environmental Center in Virginia Beach. The agenda was amended to allow discussion of business in the order listed below.

1. Potable Use of Harvested Rainwater

The Brock Environmental Center uses rainwater for all its water needs, including drinking water. Mr. Paul Willey, Chesapeake Bay Foundation (CBF), briefed the group on the Center's rainwater harvesting system and the design and approval process for permitting a rainwater harvesting system for potable use. A copy of the presentation slides is included as Attachment 1C.

The Brock Environmental Center has the first code compliant public drinking water system supplied by rainwater in the lower 48 states. It was designed to meet the standards of the Living Building Challenge (LBC), a green building certification program, which requires the facility to have "net zero" impact on the environment and use rainwater for indoor water supply.

CBF worked with the VDH Office of Drinking Water to permit the drinking water system. The system is designed to meet the Center's water demands through a 21-day drought. Indoor potable water demands are much lower than conventional buildings due to the use of composting toilets. The system's rainwater treatment process consists of a spun fiber cartridge, a charged membrane filter, UV treatment, and chlorine treatment to provide for particle removal and cyst and virus inactivation. Tanks beneath the building provide storage capacity. An ozone pump is also run 4 to 6 hours a day, depending on the amount of pollen in the rainwater. Turbidity meters are run as needed and water is directed back into the system to avoid waste. Water sampling is conducted for bacteria and nitrate, as required for transient non-community systems. A consultant is currently serving as the certified water system operator; a CBF staff member will eventually become the certified operator.

CBF worked with the City of Virginia Beach Health Department to permit the disposal of greywater and leachate from the building. Greywater is directed to a portion of the outdoor landscaping with a root-fed dosing system. Because of the location in the flood plain, black water leachate cannot be composted or disposed of via surface application. Leachate from the composting toilets is captured in a holding tank before it is trucked to the Nansemond Wastewater Treatment Plant. CBF had initially estimates that 1,300 gallons of leachate would be transported to the Nansemond Plant a maximum of 4 times

per year, but these estimates appear to be very conservative based on leachate generated to date. There is an alarm system that notifies CBF staff of holding tank levels, and there is an overflow connection to the sewer line as a precaution.

ACTION: No action.

2. Tour of the Brock Environmental Center

The group toured the facility and was briefed on the building's sustainable design features.

ACTION: No action.

3. Summary of the May 6, 2015 Meeting of the Directors of Utilities Committee

There were no comments on, or revisions to the summary of the May 6, 2015 meeting of the Directors of Utilities Committee.

ACTION: The May 6, 2015 meeting summary was approved.

4. Summary of December 3, 2014 Joint Meeting of the Directors of Utilities Committee and Health Directors

There were no comments on, or revisions to the summary of the December 3, 2014 joint meeting of the Directors of Utilities Committee and Health Directors.

ACTION: The June 4, 2014 meeting summary was approved.

5. Public Comment

There were no public comments.

6. Regulatory Update

Mr. Dan Horne, VDH Office of Drinking Water (ODW) Southeast Virginia Field Office Director, provided an update on regulatory issues, including the content and schedule for proposed revisions to the Waterworks Regulations, and EPA's cyanobacteria health advisories and forthcoming guidance documents. A copy of Mr. Horne's summary is provided as Attachment 1D and is outlined below:

- **Proposed revisions to the Waterworks Regulations**: The direct incorporation of the federal Revised Total Coliform Rule is being accomplished though the "APA exempt" process. Input from the Regulatory Advisory Panel (RAP) is being incorporated prior to initial APA review in late June 2015. VDH anticipates that internal review will be completed in September 2015, followed by publication of

the proposed regulations in the Virginia Register in October/November 2015, and the implementation of regulations in January 2016.

The general revisions to the Waterworks Regulations will follow the full APA process. VDH is preparing to publish the NOIRA in December 2015. The proposed regulations will replace the entire existing regulations. Following internal VDH review in February 2016, the agency anticipates presenting the proposed regulations to the Board of Health in March 2016 and publication in the Virginia Register for public comment in April 2016.

- **Cyanobacteria**: Concern continues to mount regarding the potential harmful side effects of cyanobacteria. The EPA held a stakeholders meeting on May 11, 2015 to gather input on guidance documents that are expected to be released soon. EPA health advisories were issued on May 6, 2015 for two cyanotoxins (microcyctin and cylindrospermopsin) that identify trigger levels of toxins at which the EPA expects waterworks and states to take action. The AWWA issued a free 18-page guide for water managers; a technical resource document is pending publication.

Mr. Horne also briefed the group on the ODW's partial reorganization effective July 1, 2015. The ODW will be providing more information and contact information to water systems.

ACTION: No action.

7. *Legionella* and Drinking Water Systems

Ms. Ana Colón, VDH Regional Epidemiologist, and Mr. Dan Horne, VDH ODW Southeast Virginia Field Office Director, provided presentations on *Legionella* occurrence in the region and in Virginia and concerns related to drinking water, including regulatory implications of secondary treatment systems marketed to large facilities like hospitals and hotels. Copies of the presentation slides are included as Attachments 1E and 1F.

More cases of Legionnaires disease are being observed in recent years. *Legionella* is an aquatic organism that causes pneumonia-like symptoms. Middle-aged, elderly, COPD, smokers, alcoholics and those with weak immune systems are especially at risk. *Legionella* can regrow in building water systems, especially large systems where biofilms, dead ends, low chlorine residuals, and warm temperatures provide a suitable environment. Secondary treatment systems are being marketed to health care facilities, hotels, and other large facilities to reduce the risk of exposure to *Legionella*.

Under current regulations, if a water system customer like a hospital provides water treatment, the customer then becomes a regulated waterworks. The customer who installs the treatment system is unlikely to be aware of the regulations and is unlikely to

have an operator on staff to ensure proper maintenance. System failure can have significant impacts on at-risk populations and the general public at the facility.

The EPA is considering modifying the regulatory definition of "treatment" and has organized a task force to develop guidance documents for *Legionella*. The guidance will incorporate the results of studies regarding the effectiveness of various treatment methods. The VDH ODW is trying to assess the market penetration of these secondary treatment systems and is contacting system vendors. The agency is applying a risk-based approach to inventory facilities that have installed these systems. Hospitals and medical care facilities will be contacted first; hotels and other facilities or campuses with large distribution systems are of concern.

ACTION: No action.

8. Roundtable Discussion

The Directors of Utilities Committee and Health Directors had the opportunity to discuss matters of mutual interest. HRPDC staff briefed the group on a recently formed Mid-Atlantic Stakeholders Group for coastal issues, including beach closures, bacteria source tracking, and policy. HRPDC staff will share the future meeting information with the group. Virginia Beach Public Utilities summarized bacteria source tracking experience in Back Bay and concluded that much improvement is needed before biological source tracking methods can produce conclusive results.

ACTION: No action.

BREAK (5 minutes) The joint meeting of the Directors of Utilities Committee and Health Directors concluded at the break. After the break, Directors of Utilities Committee business was discusses.

9. Grease Haulers Letter

HRPDC staff presented a draft regional letter to be sent to grease haulers to encourage best practices in servicing food service establishments. The letter was drafted by the askHRgreen.org FOG Education Subcommittee for signature by HRSD and HRPDC. The Committee endorsed the letter.

ACTION: The Committee endorsed the regional letter to grease haulers.

10. Fats, Oils, and Grease (FOG) Ordinances

The Committee discussed the status of local fats, oils, and grease (FOG) ordinances. Based on a 2008, regional initiative to adopt local FOG ordinances, 9 localities have adopted ordinances and 6 localities have not. As FOG problems vary across localities, utilities have implemented or plan to implement programs as appropriate to address

commercial and residential FOG sources. Some localities have experienced significant benefits since adoption of the FOG ordinance. Some localities are moving toward ordinance development. Other localities have implemented cleaning schedules to suit their needs.

HRPDC staff has been contacted by a vendor selling a non-chemical treatment device for odor control and FOG. The vendor had heard from localities that they should contact the Capacity Team to present their product. Also, the vendor mentioned interest in finding partners for a demonstration project. The Committee agreed that this is should not be on the Capacity Team agenda and that the vendor should contact localities individually. HRPDC staff will forward the vendor contact and any information on potential demonstration projects to the Committee.

ACTION: No action.

11. Groundwater Update

The Committee discussed the structure of the state Groundwater Advisory Committee, which is anticipated to have two tiers. The first tier would be composed of approximately 20 members who would meet quarterly; the second tier would include working subcommittees. HRPDC staff noted that although the legislation establishing the committee included a moratorium on permits cuts until December 31, 2015, the Advisory Committee's report is not due until August 1, 2017.

The Committee discussed the expenditure of $10,000 of reserve funds to support the FY16 work plan for the Mission H2O Groundwater Subgroup. Committee members present voted in favor of approving the reserve fund expenditure.

ACTION: HRPDC staff will follow up with absent localities to complete the voting.

12. Staff Reports

Staff reports included the following items:

- **Dutch Dialogues:** The Committee was briefed on the Dutch Dialogues workshop in Hampton Roads, which will be held from June 19 through June 23, 2015. There are two case studies being conducted: Newmarket Creek Site (Hampton) and Tidewater Drive Site (Norfolk). HRPDC staff will distribute the agenda to the Committee.

- **Hampton Roads Water Quality Response Plan:** The annual update of the Emergency Contact list for the Hampton Roads Water Quality Response Plan is underway. (*The 2015 update was distributed on June 8, 2015*).

- **Safe Drinking Water Act (SDWA) Dashboard:** This new EPA website presents data about public water system violations and compliance status: http://echo.epa.gov/trends/comparative-maps-dashboards/drinking-water-dashboard.

- **Water Utility Response On-the-Go:** This EPA mobile website consolidates tools that water utility operators and their response partners may need during an emergency: http://watersgeo.epa.gov/responseotg/. Users can: identify and contact emergency response partners; monitor local and national severe weather; review and complete incident-specific checklists; and populate, save, and email generic damage assessment forms and FEMA Incident Command System forms.

13. Other Business

There was no discussion of other business.

ACTION: No action.