The West Virginia Public Service Commission’s Stormwater Task Force under the Chairmanship of Director Amy L. Swann of the PSC’s Water and Wastewater Division is charged with the task of developing proposed rules for the regulation of stormwater utilities that are regulated by the Commission. The Task Force is comprised of members from all areas of the State of West Virginia, including representatives from the West Virginia Department of Environmental Protection (DEP), West Virginia Bureau for Public Health (BPH), West Virginia Department of Highways (DOH), Morgantown Utility Board, Berkeley County Public Service Sewer District, Mason County Public Service District, West Virginia National Environmental Services, and the development community. Additionally, certain members of the PSC’s Legal, Financial and Engineering Staff serve on the Task Force.

To date, three (3) Task Force meetings have been held. The Clean Water Act of 1972 (1972 Act) amended the Clean Water Act to prohibit unlawful discharge of pollutants into the waters of the United States, unless permitted by the National Pollutant Discharge Elimination System (NPDES). The 1972 Act recognized that in order to improve poor water quality, it was essential to reduce the pollutants contained in industrial wastewater and sewage discharges.

After the implementation of the requirements of the NPDES permitting, it became evident that other sources of water quality impairment such as stormwater runoff and discharge from impervious sources, too, played a major role in poor water quality.

In 1987, the Clean Water Act was further refined to take into account the impact of and address a way of dealing with the impact of stormwater discharges on water quality. The modifications to the Clean Water Act called for phasing-in a national program to address stormwater discharges. Under Phase I, NPDES permits were required for industrial activity, such as construction activity affecting 5 acres of land or greater, as well as medium to large Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas with populations of 100,000 persons or greater. Phase II requires NPDES permits for urbanized areas with populations between 10,000 to 100,000 persons, construction areas affecting 1-5 acres and impervious surfaces. Because West Virginia has no municipalities with populations of 100,000 or greater, Phase II’s implementation is now impacting West Virginia’s MS4 communities.

As noted previously, Stormwater management is both necessary and important because it impairs our waters and because of the impact of runoff issues regarding flooding. Furthermore, since every single person contributes to the stormwater problem, everyone ought to be a part of the stormwater management solution. Stormwater infiltration is due in large part to runoff and discharges from impervious sources which contain pollutants that may and do impair water quality. Impervious sources include parking lots, rooftops, paved streets, etc., from which pollutants...
The West Virginia Bureau for Public Health (BPH) has revised the current regulations to meet new needs identified by the certified operators of West Virginia; improve compliance with minimum federal operator requirements; and, clarify ‘gray’ areas of existing regulations that often required internal interpretation and handling within the BPH Environmental Engineering Division Certification and Training Section. Revisions were submitted to the WV State Legislature for consideration during the 2007 session. The revised rule was passed on March 10, 2007 and became effective April 18, 2007.

So what does this mean to operators? Overall, the content has changed minimally. BPH recognizes the importance of professionals in the drinking water industry and looks forward to working with each an every individual operator and system to successfully implement these new requirements in a reasonable timeframe. Periodic rule review and revision enables West Virginia to retain primary enforcement for the Safe Drinking Water Act. Without Public Water Supply (PWS) Operator regulations and the BPH certification program, one of the important barriers to preventing contamination of public water systems has been compromised. As always, the Certification and Training Section looks forward to working with each of you in implementing the new regulation and appreciates all of your good work.

A summary of the modifications are as follows:

1. Operator Certification Classifications
   - A Water Distribution (WD) operator certification has been added to ensure decisions made in the distribution system that may affect water quality are done under the direction of a qualified, certified operator. Development of a WD training course and exam where only distribution activities are taught and tested, will eliminate the problem of a person having to study unneeded and unnecessary material in order to proficiently perform their job function. Requirements for WD operator certification are based on current EPA guidelines related to operator education, examination, experience, and continued training.
   - A separate fluoride certification is no longer required by operators employed by a PWS that uses fluoride treatment. This training and information will be added to the Class I course so all operators can obtain basic knowledge of fluoride treatment for operation at all systems.

2. Public Water System (PWS) Classification
   - The classification of PWSs has been changed from a point rating table to a descriptive definition based on source, population served, and treatment requirements. In general, the system complexity will continue to determine the required operator classification. All PWSs will be reclassified as part of the sanitary survey conducted by District Office staff. This timeframe enables existing staff to reevaluate each system. Exceptions will be made if requested in writing or if other problems arise. If reclassification occurs, systems must communicate with BPH to ensure proper operator coverage.
   - A classification for a WD system has been added and is defined as a PWS that obtains all of its water from another PWS (also known as a purchase system), and is not owned or operated by the supplying PWS.

3. System Requirements
   - PWS owners must notify the BPH: within 10 days of any employment status changes (existing regulations required this information within 5 days); within 24 hours if any operator terminates employment for any reason; and, by July 15th every year with a personnel status report on an approved form to be provided by the BPH. Additionally, owners are now responsible for the application and renewal of Operator in Training (OIT) certification on behalf of OIT applicants. Owners must also post a copy of the certified operators’ renewal card, in addition to the current certification, in a conspicuous location at the system.

4. Operator Requirements
   - The revised regulations include continuing education hour (CEH) requirements for the WD (6 hours) and OIT (6 hours) classifications.
   - The revised regulations also clarify that it is the duty of each certified operator to obtain the necessary amount of appropriate CEHs and retain documentation of attendance required for the renewal.
   - All certified operators must now ensure renewal applications are submitted no earlier than 60 days prior to expiration to facilitate proper data management and timely processing.
   - All continuing education units (CEUs) used for
advancement must also now be pre-approved by the Commissioner for relevancy so that the applicant knows beforehand the courses are enough, or if additional course work will be needed.

- All operator certifications now require renewal every 2 years. Although this is not new for all certifications, it adds clarification that OITs are also renewable.
- OITs are required to attempt the Class I or WD exam at least once during each two (2) year renewal cycle.
- OIT minimum education requirements can now be waived by the Commissioner, in writing, to a minimum age of 16 and completion of the 10th grade with a current school transcript and 2.0/4.0 grade point average. The intent of this change is to allow interested students to receive water treatment related training earlier in their academic career paths and help promote awareness of the water treatment field.
- The experience requirements for all certifications are now measured in hours instead of years to help improve proper credit with a variety of employment schedules.
- The new regulations require all PWSs, excluding 1D systems, with only 1 certified operator to automatically designate them as the Chief Operator. For better support and preparation, the new regulations require current and new Chief Operators to attend a course approved by BPH for training as a Chief Operator within two years of the effective date of this rule (before April 18, 2009).

5. Compliance and Enforcement

- The process for compliance and enforcement actions is more clearly defined as notification via certified mail with the action proposed, effective date, reason, and length of time of the proposed action.
- The revised regulation also enables the Commissioner to establish an Advisory Board consisting of at least five (5) certified operators and a designated chairman.

Please note that this article is only a brief summary and is not a substitute for reading the revised Public Water Systems Operator Regulations (Title 64 Series 4) entirely. Contact the WV Secretary of State for a copy of the new regulation or download it from http://www.wvsos.com/csr/verify.asp?TitleSeries=64-04. If you have additional questions, contact the certification and training unit at 304-558-2981.

---

**Employee Corner**

Please welcome our new employee, Bonnie Boston. Bonnie began working with the PSC on April 16 as a Utilities Analyst in the Water and Wastewater Division, Assistance Section. Previously, Bonnie worked at Verizon (for more years than she wants to admit) as a Finance Specialist; and when Verizon moved her job out of state and she opted to stay here. Bonnie has an Associates Degree in Accounting from the University of Charleston.

"My roots are firmly in West Virginia and I wanted to stay here where I can enjoy the company of my daughter, Karen, and my two grandsons," Bonnie said. Jacob is a lively two-year old and Josh is a beautiful newborn baby, born April 23. She often visits her son, Alan, and his wife, Mary, in Columbus, Ohio. Bonnie likes traveling to just about anywhere . . . beaches, Alaska, Broadway, Las Vegas . . . she loves them all. Bonnie also likes gardening and reading.
Has anyone ever asked you this question but could not provide an answer? We are asking water system staff this question and can find the help they need. The Office of Environmental Health Services (OEHS) is providing an informal, informative public water system forum, CAPDEV (Capacity Assistance Partnership Developing Essential Viability). CAPDEV provides a public water system venue where you can gather information and discuss drinking water issues, problems, and potential solutions. CAPDEV’s mission is helping you provide safe drinking water using knowledge, mentoring, and cooperation. Helping water systems develop essential viability includes discussing and sharing managerial, financial, and technical ideas every viable water system employee uses each day.

Some anticipated CAPDEV outcomes are:

◊ One-Stop Information Help Desk
◊ Recognition Awards
◊ Mentoring Sessions
◊ Shared Services
◊ Continuing Education Hours
◊ Increased Public Awareness

Participants helping determine meeting outcome are:

◊ Managers, support staff, operators, etc.
◊ Public Service Districts, Municipalities, Associations, etc
◊ Various government and assistance agencies

State-wide CAPDEV meetings create water system staff networking opportunities. Most meetings begin at noon with a complimentary (free) lunch. The agenda topics and other discussions start after lunch. Meeting duration, including lunch, is typically about three hours. You will meet and get to know your drinking water neighbors. Attendee’s names and contact information are listed on our webpage (see below). Your input determines agenda and discussion items. Pertinent issues arise during the meeting and are not predetermined. Drinking water system technical, managerial, and financial successes and difficulties are open for discussion.

Past meeting discussion examples include:

◊ Capacity Development Assessments
◊ Capital Improvement Planning/Asset Management Guidance
◊ CAPDEV Webpage
◊ Utility Management Institute/Utility Management Professional Certification
◊ Employee/Operator/Manager Pay and Benefit Survey
◊ Operator Awards Webpage
◊ Continuing Education Hours
◊ Developing and Maintaining Reserves
◊ Improving Bill Collections
◊ Maintain viability and keep your system running
◊ Improving Public Awareness

Attendees are asked:

◊ What assistance tools do you need?
◊ What assistance tools do you have or can you share?
◊ How can viable water systems assist struggling water systems?

Past CAPDEV meetings were:

◊ September 2006 Canaan Valley State Park
◊ December 2006 Flatwoods, WV
◊ March 2007 Charleston, WV

Future, scheduled CAPDEV meeting are:

◊ June 2007 Flatwoods, WV
◊ September 2007 Snowshoe, WV

Meeting and other CAPDEV initiative information is available on our website (http://www.wvdhhr.org/oehs/eed/i&cd/). Jan Griffith, Environmental Resources Specialist III, facilitates the meetings. You can contact Jan at: 304-558-6762 or jgriffith@wvdhhr.org. This is a no cost, win/win initiative. Please take this opportunity to share your drinking water expertise and find the drinking water help you need.
For several years, the DEP has been attempting to initial a low interest loan program for on site septic system repairs. Current negotiations with the Housing Development Fund are in the works to operate a low interest loan program for homeowners to repair their septic system. The county sanitarians will advise potential homeowners of the program and who to contact. This program is for those homeowners who are not anticipated to be connected to a centralized system within five years. We hope to have the documents ready for distribution by July and the program running by the end of the summer.

The Intended Use Plan for FY2008 and Priority list are under development and will be available for review and comments by the middle June. If you want a copy of these documents, please contact Gale Burdette at 926-0499, ext. 1606. A public meeting will be announced and held on these documents discussing the program’s goals for 2008.

Once again, the Clean Watershed Needs Survey will begin collecting information on the system needs in West Virginia existing as of January 1, 2008 and have not been funded. This includes upgrades, extensions, repairs, etc. Information is gathered through priority list applications, Infrastructure applications, engineering reports, and other sewer applications from RUS, ARC, EDA, etc. etc. In addition to the traditional needs of wastewater, NPS issues are also addressed, agriculture, on site, forestry, brownfields, abandoned mines, etc., (if the problem addresses water quality issues). If there is a chance that you may have other types of document information, please contact Carrie Grimm of our office at 926-0499, ext. 1605.

Tapper Says:
1. As required by West Virginia Code §16-13A-4, all districts must certify to the Public Service Commission the number of customers being served as of July 1 of each year. The Certification of Customer Form should be returned to the PSC by July 15.
2. If you received a paper copy of the performance measures in the mail earlier this month, they should be completed and returned to the Public Service Commission no later than July 1, 2007
3. Annual Reports are due to the PSC 90 days after close of books, i.e. fiscal year ending June 30, Annual Report due September 30; calendar year ending December 31, Annual Report due March 31, etc.

Happy Fourth of July!!!
The question is simple enough but a review of many systems shows a variety of innovative ways to minimize the percentage allotted to this category. There have been many misconceptions on how to report the real unaccounted for water (UAW). Some are due to confusing advice from water operators, regulators or managers with the desire to make a system appear much better than it should if the correct calculation were reported.

There are two primary schools of thought for calculating UAW. The first which is favored by associations made up of water utilities is to consider accounted for water any amount which can reasonably be assigned to a specific defined category. The obvious categories are: water sales, filter backwash, plant clean up, fire use, street cleaning, line flushing, known and defined slow meters due for replacement and any other public use or legitimate system maintenance function. However, some also consider “known” leaks, whether repaired or ongoing, as a deduct from water produced or purchased. The discharge of a full tank of water due to a deliberate water contamination problem would be considered a legitimate deduct as it is a system maintenance/safety function. Some would consider the loss of a full tank of water due to a line failure also as a full deduct against water produced since it was a “known” amount.

The second school of thought favored by AWWA and most regulatory bodies has a much simpler view of UAW. It is any water not sold or utilized for a legitimate public use or mandatory system maintenance operations. Or more simply, water produced minus the sum of water sold plus accounted for uses divided by water produced can be deceiving. If the consumption of the resale customers is large compared to your own customer uses, the resale quantity can dwarf your own internal system losses if those losses were measured against your own customer consumptions. A truer calculation is to remove the total resale quantity from both the water produced or purchased and from the water sold quantities. With that done, the resultant percentage is that which exists internal to your own system. The current equation is:

\[
UAW = \frac{(Water\ Produced - (Water\ sold + Accounted\ for\ water)) \times 100}{Water\ Produced}
\]

However, the revised equation with resale removed would be;

\[
UAW = \frac{((Water\ produced - Resale) - (Water\ sold + Accounted\ for\ water)) \times 100}{(Water\ Produced – Resale)}
\]

I’ll leave it to you to do the math but those of you with large resale customers should make your own calculation to see how your own system stacks up without the resale customers. The state of your own system affects the cost borne by all customers especially resale if the resale consumption is much larger than your own internal needs.

So you ask what does the PSC do with the information and which reporting method should be utilized? With respect to the PSC Annual Reporting requirements, the number for UAW which should be reported is the one defined by the AWWA. Unfortunately the calculation in the Annual Report does not distinguish between systems with or without resale customers. The calculation outlined in the Annual Report generally gives the best picture of conditions within most water systems where resale flows are small. When an engineer from the PSC comes to do a system analysis during a rate proceeding, UAW will be one of the issues reviewed very carefully. If UAW is large, it generally tells the engineer that system maintenance spending must be increased to reduce UAW and limit future rate increases due to ever increasing UAW.

UAW is also a component in rate setting when a class cost of service study is triggered by a protest from a resale customer when a rate increase is proposed by a water supplier. A certain portion of the cost of UAW is
assigned to the resale class through the Class Cost of Service template. It is very important to accurately report UAW when this study is done to insure costs are properly assigned. Consequently, removing “known leaks” from UAW can skew the cost assignment in the template.

Another reason to consider reducing UAW is its effect on the final cost of the water delivered to your customers. If your system has 35-40% UAW and you are a water producer and your real customer demand requires your plant to operate 7 hours per day, the 35% UAW will mean the plant must operate 9 ½ hours per day. This extra plant operating time is generally accomplished with overtime pay rates significantly adding to the cost of water. The smaller your high service pump flow rating (i.e. 75 GPM vs. 1000 GPM) the greater the impact on water cost due to the greater impact of the labor component. This makes plant operators very happy but customers pay the price.

So review your system with an eye on the real cost of UAW on your customers. Also, do not hesitate to ask the PSC or Rural Water for some assistance in reducing the cost of this parasitic part of your water system.

such as motor oil, trash on the street and stormwater run-off invade water sources such as creeks, lakes and watersheds.

In order to meet this important challenge, the West Virginia Public Service Commission must develop and implement rules for the stormwater utilities that it is permitted to regulate under the West Virginia Code, in order to protect water quality. Essential to this endeavor is to develop the appropriate rate mechanism, rules and

overall approach to seeing that the best management practices are employed by the regulated stormwater utilities under the PSC’s regulatory authority. The stormwater utility rules, once developed by the PSC, with the help and assistance of the previously mentioned stakeholders, will capsulize and promote solutions to the problems that threaten West Virginia’s water quality from the stormwater utility perspective.

I would like to thank James Kelsh, Attorney at Law, for his response to my Pipeline article (March-April 2007) on record retention.

Mr. Kelsh notes that the record retention recommendations of the national Association of Regulatory Utility Commissioners (NARUC) are incorporated in the reference in the PSC’s Rules for Electric Utilities but are not incorporated in the rules for water or sewer utilities. He states that, “all financial records of Public Service Districts are required to be kept and preserved for ten (10) years” as stated in West Virginia Code §16-13A-11. He also states, “The NARUC recommendation that insurance policies be retained for only three (3) years after expiration can be too short in some circumstances. Three years is an appropriate period for “claims made” policies: insurance policies that only cover claims made during the policy period. However, if a utility has a policy which covers events occurring during the policy period, the insurance policy should be retained for a much longer time. For these types of policies, the insured should retain a copy for fifty (50) years.

Again, thank you Mr. Kelsh for your valuable remarks.
### Water and Wastewater Division

**Director**

Amy L. Swann, Director - 340-0481

Vickie Miller, Administrative Secretary - 340-0482

Edwina Strickland, Secretary I - 340-3749

#### CASE CONTROL SECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill Nelson, Chief Utilities Manager</td>
<td>340-0445</td>
</tr>
<tr>
<td>David Nelson II, Utility Analyst Supervisor</td>
<td>340-0475</td>
</tr>
<tr>
<td>Karen L. Buckley, Utility Analyst II</td>
<td>340-0470</td>
</tr>
<tr>
<td>Bob Cadle, Utility Analyst II</td>
<td>340-0419</td>
</tr>
<tr>
<td>Charles Knurek, Utility Analyst III</td>
<td>340-0460</td>
</tr>
<tr>
<td>Pete Lopez, Utility Analyst II</td>
<td>340-0823</td>
</tr>
<tr>
<td>Scott McNeely, Utility Analyst II</td>
<td>340-0397</td>
</tr>
<tr>
<td>Nathan Nelson, Utility Analyst II</td>
<td>340-0488</td>
</tr>
<tr>
<td>Michael Quinlan, Utility Analyst I</td>
<td>340-0869</td>
</tr>
<tr>
<td>C. Sue Stephenson, Utility Analyst I</td>
<td>340-0868</td>
</tr>
</tbody>
</table>

#### INFORMAL COMPLAINTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>James F. Aucremanne, Consumer Affairs Tech</td>
<td>340-0379</td>
</tr>
<tr>
<td>Sharra Huffman, Consumer Affairs Tech</td>
<td>340-0826</td>
</tr>
<tr>
<td>Melissa Nicely, Consumer Affairs Tech</td>
<td>340-0494</td>
</tr>
</tbody>
</table>

#### ASSISTANCE SECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geert F. Bakker, Chief Utilities Manager</td>
<td>340-0467</td>
</tr>
<tr>
<td>Elizabeth J. Perdue, Utility Analyst Supervisor</td>
<td>340-0870</td>
</tr>
<tr>
<td>Conrad Bramlee, Utility Analyst III</td>
<td>340-0471</td>
</tr>
<tr>
<td>Bonnie Boston, Utility Analyst I</td>
<td>340-0479</td>
</tr>
<tr>
<td>Susan L. Brown, Utility Analyst II</td>
<td>340-0422</td>
</tr>
<tr>
<td>Pina Sangani, Utility Analyst I</td>
<td>340-0769</td>
</tr>
<tr>
<td>Drema Witt, Admin. Service Asst.</td>
<td>340-0440</td>
</tr>
</tbody>
</table>

#### ENGINEERING DIVISION

**Director**

Earl Melton, PE, Director - 340-0392

Victoria Trent, Secretary - 340-0370

Lynn Pringle - 340-0395

#### CASE CONTROL SECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>David W. Dove, PE, Chief Utilities Manager</td>
<td>340-0436</td>
</tr>
<tr>
<td>Lisa Bailey, Technical Analyst I</td>
<td>340-0499</td>
</tr>
<tr>
<td>Audra Blackwell, Technical Analyst II</td>
<td>340-0448</td>
</tr>
<tr>
<td>Jonathan Fowler, PE, Engineer III</td>
<td>340-0491</td>
</tr>
<tr>
<td>David Holley, Technical Analyst I</td>
<td>340-0328</td>
</tr>
<tr>
<td>Joe Marakovits, Technical Analyst III</td>
<td>340-0443</td>
</tr>
<tr>
<td>Jim Spurlock, Technical Analyst II</td>
<td>340-0357</td>
</tr>
<tr>
<td>Sylvie Steranka, Technical Analyst I</td>
<td>340-0466</td>
</tr>
<tr>
<td>James C. Weimer, PE, Engineer I</td>
<td>340-0476</td>
</tr>
</tbody>
</table>

#### ASSISTANCE SECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Ellars, PE, Chief Utilities Manager</td>
<td>340-0331</td>
</tr>
<tr>
<td>Jeff Bennett, Utility Inspector II</td>
<td>340-0313</td>
</tr>
<tr>
<td>Ralph Clark, PE Engineer II</td>
<td>340-0455</td>
</tr>
<tr>
<td>Ingrid Ferrell, Technical Analyst III</td>
<td>340-0335</td>
</tr>
<tr>
<td>Dave Foster, Utility Inspector III</td>
<td>340-0398</td>
</tr>
<tr>
<td>Craig Miller, Utility Inspector II</td>
<td>340-0353</td>
</tr>
<tr>
<td>John Mottesheard, Engineering Tech.</td>
<td>340-0399</td>
</tr>
</tbody>
</table>