

## **Backflow Valve Update # 4**

April 26, 2010

This *Update* is devoted to a discussion of who is ultimately responsible for insuring that safe drinking water is delivered to a customer's premises and is the Florida Department of Environmental Protection (DEP) compromising that responsibility in their regulations.

This series of *Backflow Valve Updates*<sup>1</sup> is in lieu of the DEP's providing periodic status reports on their revision of 62-550 & 62-555 (backflow valves and cross-connections) regulations.<sup>2</sup>

The following discussion is not intended to detract from the seriously brilliant effort by DEP to revise their out-of-date regulations.

However, the continued inclusion of the old-fashioned and dangerous RP valves<sup>3</sup> in DEP's current and revised regulations raises a number of questions.

When a utility is given a "franchise" to supply water to a community, it accepts the responsibility to deliver a safe product to its customers. Here is how the Director of the Hillsborough County Water Resource Services expressed that responsibility:

"... as system operators we have the safety and well being of our customers at the top of our list. Thus, we fully accept the responsibility to police our operating systems and stand accountable for the system's operation. ... I would not expect our customers or other external agencies to be responsible for the operational issues, to include water quality, safety, etc., associated with the operation of the County's potable water system."<sup>4</sup>

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<sup>1</sup> Previous *Updates* are available at [www.backflowvideos.org](http://www.backflowvideos.org)

<sup>2</sup> The DEP is aware of the contents of this *Update* and any corrections that they supplied have been incorporated. As a citizen, I do not speak for the DEP.

<sup>3</sup> To conserve space in this *Update*, the acronym "PR" is used to represent Reduced Pressure Zone backflow valves (known as RPs & RPZs) and Double-check valves, both of which provide direct access to the public water supply for use by terrorists, pranksters and disgruntled people.

<sup>4</sup> Email from Paul Vanderploog, Director, Hillsborough County Water Resource Services to David Brown, 10/10/2007.

**First**, there appears to be a lot of legal liability surrounding backflow incidents. The DEP held a public workshop in Sanford, FL on February 18, 2009. The DEP's John Sowerby gave a presentation in which he stated, in connection with the reporting of backflow incidents, that:

“I know that we have a lot of water system personnel in the audience. Don't be offended but it's obvious that there is a dis-incentive for water systems to make public these incidents even when they're aware of them because of **liability** and consumer confidence issues.”<sup>5</sup>

**Second**, officials at all levels<sup>6</sup> are very much aware that RPs are dangerous devices to have in residential areas. A number of government officials were very upset by my questioning the wisdom of putting RPs on lawns in residential areas. These officials exchanged a number of internal emails<sup>7</sup> and resorted to other actions directed at me because of my concerns about the dangers of RPs. The pattern that emerged was that county and state officials publicly preached the safety of RPs while using every conceivable tactic to squelch any comments about their vulnerabilities and dangers.

**Third**, at the moment, the DEP's proposed regulations provide utilities with a menu of devices and measures to prevent backflow. By continuing to include residential RPs in that menu, which are owned and maintained by homeowners on the homeowner's side of the property line, DEP is putting utilities at risk by permitting devices which the DEP (and other agencies) know to be unsafe and that put citizens' lives in peril.

**And fourth**, the DEP's regulations do not require utilities to provide and maintain any infrastructure devices in the utility's easement to protect all citizens from deadly chemicals or biotoxins emanating from a neighbor's property, either inadvertently or intentionally. Such emanations then propagate through the utility's infrastructure and are delivered to all residents in the neighborhood.

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<sup>5</sup> To hear the actual audio of Sowerby's making that statement, go to [www.backflowvideos.org](http://www.backflowvideos.org) - click on "Dishonest Water Utility Employees".

<sup>6</sup> These officials include employees of the Hillsborough County Water Resource Services, Hillsborough County Administrator's Office, the Florida Department of Health and the Florida Department of Environmental Protection.

<sup>7</sup> A number of their internal emails are included in *Update #2*, starting on page 7.

An example of an infrastructure device that does protect all citizens in a neighborhood is an AMR (Automatic Meter Reading water meter) with a Dual-check valve located just outside of each property. An AMR records the amount of forward **and backflow** every 15 minutes, or oftener, and transmits the data to a passing vehicle or instantly to a central antenna. AMRs are typically warranted for 20 years and empirical testing by Palm Beach County has shown that Dual-check valves still protect against backflow even after ten or more years. Contrast that with an RP which is so delicate, so unreliable and so prone to failure that it must be tested annually. A neighbor's RP that has been failing for the better part of a year doesn't exactly conjure up images of a safe drinking water supply for the rest of the neighborhood.

### **Three Concerns:**

Given the official internal emails and actions at all levels of government that acknowledged that residential RPs are dangerous, is the DEP putting itself in legal jeopardy by listing RPs as an option?

Is the DEP putting utilities and counties in legal jeopardy by allowing RPs?

In fact, does DEP even have the legal authority to downgrade the responsibility vested in utilities to provide safe drinking water, by giving the utilities the option of specifying RPs located on private property that are owned and maintained by the homeowner, instead of requiring the more reliable AMRs with a Dual-check valve located in the utility's easement and therefore under the legal and actual control of the utility?

Again, I appreciate your positive responses to these *Backflow Valve Updates*.

Thank you,

A handwritten signature in black ink that reads "David Brown". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

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