

HB1855 Support

NATIONAL ASSOCIATION OF WATER COMPANIES

PENNSYLVANIA CHAPTER

Chair

David Lewis
Columbia Water Company
220 Locust Street
P.O. Box 350
Columbia, PA 17512-0350
Phone: 717-684-2188
dlewis@pa.net

Vice Chair

William C. Kelvington
Pennsylvania American Water
800 West Hershey Park Drive
Hershey, PA 17033
Phone: 717-531-3370
William.kelvington@amwater.com

Secretary

JT Hand
The York Water Company
130 East Market Street
P.O. Box 15089
York, PA 17401-1219
Phone: 717-845-3601
jth@yorkwater.com

Treasurer

Kathy Miller
The York Water Company
130 East Market Street
P.O. Box 15089
York, PA 17401-1219
Phone: 717-845-3601
kathym@yorkwater.com

Past Chair

Kathy L. Pape
Pennsylvania American Water
800 West Hershey Park Drive
Hershey, PA 17033
Phone: 717-531-3200
Kathy.Pape@amwater.com

Governmental Relations

Erik A. Ross
Gmerek Government Relations, Inc.
212 Locust Street
Suite 600
Harrisburg, PA 17101
Phone: 717-234-8525
Cell: 717-919-3534
eross@ggrgov.com

Counsel

Michael D. Klein
Dewey & LeBoeuf LLP
1101 New York Avenue NW
Suite 1100
Washington, DC 20005-4213
Phone: 202-346-8154
mklein@dl.com

www.nawc.org/

December 8, 2011

The Robert W. Godshall
Chairman
House Consumer Affairs Committee
PO Box 202053
Harrisburg, PA 17120-2053

RE: House Bill 1855 – Water Well Construction Standards

Dear Chairman Godshall:

The National Association of Water Companies (NAWC) www.nawc.org/ represents all aspects of the private water service industry including ownership of regulated drinking water and wastewater utilities and the many forms of public-private partnerships and management contract arrangements. The Pennsylvania Chapter consists of 10 member companies that provide safe and adequate drinking water service to approximately 3.1 million Pennsylvanians in 485 communities over 39 counties. In addition, three of our member companies provide wastewater service to approximately 155,000 Pennsylvanians in 24 communities over 7 counties.

The Chapter strongly **supports** House Bill 1855 (Miller-R), which was referred to the House Consumer Affairs Committee on December 7, 2011. The Chapter respectfully requests the committee's consideration of this important legislation.

House Bill 1855 amends Title 27 (Environmental Resources), in conservation and natural resources, providing for water well construction standards. Specifically, the legislation provides the statutory authority authorizing the Environmental Quality Board (EQB) to establish water well construction standards through the adoption of rules and regulations of the DEP that are generally consistent with the National Groundwater Association construction standards.

Establishing water well construction standards is an important component of the Commonwealth's water resource protection program. Two independent statewide advisory committees have made strong recommendations to do so. In 2008, the Statewide Water Resources Committee reported its top legislative recommendation was to "...establish statewide private water well construction standards." In July of 2011, the Marcellus Shale Advisory Commission issued its recommendations which included the establishment of construction

The Honorable Robert W. Godshall
December 8, 2011
Page 2

standards for new private water wells to ensure the delivery of safe drinking water to its residents.

Some 20,000 new water wells are drilled each year in Pennsylvania, but the Commonwealth is one of the few states without private well regulations. More than 3 million Pennsylvanians rely on about 1 million private wells for drinking water. Improperly constructed water wells can lead to poor water quality by providing pathways for bacteria and contaminants such as naturally occurring shallow methane gas to migrate into water supplies. Ensuring that the well is constructed properly from the start will help to prevent water quality problems in the future.

It is important to note that this legislation would merely establish construction standards, including the decommissioning of abandoned wells, to be followed by water well drillers and owners. Nothing in this legislation requires the metering of homeowner wells. In fact, Section 3118 (b)(f) of Act 220 of 2002, known as the Water Resources Planning Act, specifically prohibits DEP or EQB from requiring the metering of homeowner wells.

The Chapter thanks you for considering our comments on this most important legislation to our members and their customers. If you should need any additional information or have any questions, please do not hesitate to contact me.

Very truly yours,



David Lewis
Chair

CC: Chairman Preston
Representative Miller



THE COUNTY OF CHESTER



COMMISSIONERS

Terence Farrell
Kathi Cozzone
Ryan A. Costello

MARGARET C. RIVELLO, M.B.A.
County Health Director

CHESTER COUNTY HEALTH DEPARTMENT

Chester County Government Services Center
Water and Sewage Division
601 Westtown Road, Suite 288
West Chester, PA 19380-0990
610-344-6526 FAX: 610-344-5934
www.chesco.org/health

January 6, 2012

Honorable Robert W. Godshall
Consumer Affairs Committee
150 Main Capitol Building
P.O. Box 202053
Harrisburg, PA 17120-2053

Re: House Bill 1855

Dear Mr. Godshall:

Please accept this letter of support for efforts to establish statewide water well construction standards through House Bill 1855. The bill would "provide the statutory authority for DEP to require the Environmental Quality Board to establish statewide private water well construction standards through the adoption of rules and regulations generally consistent with the National Groundwater Association construction standards."

As you may not know, Chester County has operated a water well program since 1983 that includes permitting for private water supplies, minimum construction standards, minimum well yields, licensing requirements for well drillers and pump installers, and water quality requirements for private wells. The permitting requirements cover private water supply wells, monitoring wells, and geothermal wells. The regulations were developed through a collaborative effort between representatives of the health department and private well drillers and installers.

We believe that statewide, minimum water well construction standards are extremely important to preserve and protect the water quality in our Commonwealth. While we support your effort to provide minimum well construction standards, we ask that the regulations be drafted in such a way that they would not supersede our established regulations and well program here in Chester County.

Sincerely,

Margaret C. Rivello, M.B.A.
County Health Director
Chester County Health Department



CA

HB 1855

Pennsylvania State Association of Boroughs

2941 North Front Street, Harrisburg, PA 17110

Phone: 717-236-9526 www.boroughs.org Fax: 717-236-8164

President Ronald E. Evanko	First Vice President Betty Ann Moyer	Second Vice President Kathleen N. DePuy	Past President James W. Felmlee	Executive Vice President Thomas A. Klaum
-------------------------------	---	--	------------------------------------	---

January 3, 2012

PA House Consumer Affairs Committee

Rep. Bob Godshall, Chairman

150 Main Capitol Bldg.

PO Box 202053

Harrisburg, Pa 17120-2053

Dear Chairman Godshall:

I am writing you today at the request of Rep. Ron Miller regarding House Bill 1855 which has been referred to your committee on Consumer Affairs. PSAB is grateful for the opportunity to comment on this bill which addresses private water well construction standards. We understand that the bill is scheduled for a committee vote on January 10, 2012. In light of this timeframe, we would offer several observations regarding the issue reflecting PSAB's support for sensible standards regulating private water well construction.

In the PSAB 2011 Municipal Policy Statement, under Chapter 7-*Environmental Quality* the association membership asserts "Because of local governments' vital interest in their water supplies, their views must be respected when any decisions are made that will affect their water resources". This interest was demonstrated in 2004 as PSAB had supported loosely aligned legislation dealing with water well driller licensing. That legislation, HB2619 sponsored by Rep. Mary Ann Dailey implemented a program which would license drillers of water wells. While the proposed legislation from Rep. Miller deals with water well construction standards, PSAB believes it is a step worth considering in hopes of guaranteeing quality water resources.

Additionally, HB1855 grants the Environmental Quality Board as well as DEP, the powers of establishing rules and regulations necessary to implement standards. In this case, PSAB would insist on an active review process in developing rules implementing the program. While specific language is absent from the current bill the adoption of such a provision may be something the committee might consider. In all, the association seeks to limit unintended consequences such as any mandates when the language is finalized and enacted into law.

In closing, thank you for the opportunity to comment on House Bill 1855 and as the language moves through the legislative process it is PSAB's hope to preserve our commonwealth's water supply by effective implementation of private water well construction standards. Should you wish to further discuss our perspective on the bill or address any questions this letter may have prompted do not hesitate to contact me Ed Troxell, Director of Government Affairs at 717-236-9526x21 during normal business hours or email at etroxell@boroughs.org. Thank you.

Sincerely,

Edward C. Troxell

Director, PSAB Government Affairs

1/5/12 XC: Colin & Amanda 100 Years of Excellence!



PCPG

Pennsylvania Council of Professional Geologists
116 Forest Drive • Camp Hill, PA 17011
Phone (717) 730-9745 • pcpog.org

January 5, 2011

Via First Class U.S. Mail

The Hon. Robert W. Godshall
Chairman
House Consumer Affairs Committee
150 Main Capitol Building
P.O. Box 202053
Harrisburg, PA 17120-2053

Re: House Bill 1855 – Water Well Construction Standards

Dear Chairman Godshall:

The Pennsylvania Council of Professional Geologists (PCPG) is a diverse group of over 450 licensed geologists and professional scientists who advocate the use of sound science in the: (a) responsible exploration and development of natural resources; (b) formulation of public policy; (c) protection of human health and the environment; (d) establishment and evaluation of environmental regulatory programs; and (e) the dissemination of accurate information. Many of PCPG's members provide environmental consulting services to public and private entities concerning water resource development, protection of public and private water supplies and the investigation and remediation of groundwater quality problems in the Commonwealth.

PCPG has long recognized the need for private water well construction regulations to protect human health and safety and Pennsylvania's valuable water resources. Accordingly, PCPG has consistently advocated for the development of private water well construction standards in the Commonwealth and strongly supports House Bill 1855 (Miller-R) which bill was referred to the House Consumer Affairs Committee on December 7, 2011. PCPG respectfully requests the committee's consideration of this very important health and safety and water resources protection legislation.

More than 3 million rural and suburban residents in Pennsylvania rely on a private well for drinking water and about 20,000 new wells are drilled each year in the Commonwealth.¹ Among our sister states, only Michigan has a larger population served by private water supplies. Yet Pennsylvania is one of only two states that do not have statewide regulations concerning

¹ *Drinking Water Quality in Rural Pennsylvania and the Effect of Management Practices*, Bryan R. Swistock, M.S., Stephanie Clemens, M.S. and William E. Sharpe, Ph.D., School of Forest Resources and Institutes of Energy and the Environment, Pennsylvania State University, sponsored by a grant from the Center for Rural Pennsylvania, a legislative agency of the Pennsylvania General Assembly (January 2009).

private well location, construction, testing and treatment. Some local governments in Pennsylvania (county or municipal) have developed and implemented well permitting, construction and/or testing requirements, but no uniform statewide standards exist.

Poorly constructed water wells pose a human health and safety risk not only to those persons that rely on them for water supply, but to others as well. Poorly constructed wells can be pathways for the introduction and spread of contaminants to human and ecological receptors through local aquifers, surface waters and other valuable water resources of the Commonwealth. Common contaminants related to poor well construction include, but are not limited to, nitrates and coliform bacteria.

Past studies show that the lack of statewide water well construction standards adversely affects Pennsylvania residents. The January 2009 study funded by the Center for Rural Pennsylvania found that of approximately 622 homeowner wells studied:

- Only 16% had a sanitary well cap to prevent the introduction of surface contaminants;
- Roughly 9% of the wells had missing well caps or miscellaneous types of caps (coffee cans, cement, ceramic, etc.);
- Only 18% were found to have cement or grout around the casing to prevent the introduction of surface contaminants;
- Of the five recommended well construction features, 54% were found to have two or fewer of the recommended features; and
- Roughly 41% of the wells tested failed to meet at least one of the health-based drinking water standard, coliform bacteria being the most frequently detected contaminant.

A more recent study funded by the Center for Rural Pennsylvania found similar results.² Of the 233 homeowner wells in the 2011 study:

- Only 20% of the wells had a sanitary well cap;
- 13% percent had no visible casing above ground;
- Only 8% had an obvious grout seal; and

² *The Impact of Marcellus Gas Drilling on Rural Drinking Water Supplies*, by Elizabeth W. Boyer, Ph.D., Bryan R. Swistock, M.S., James Clark, M.A., Mark Madden, B.S., and Dana E. Rizzo, M.S., Pennsylvania State University, funded by a grant from the Center for Rural Pennsylvania (October 2011).



- Approximately 40% had at least one pre-existing water quality problem, most frequently the presence of coliform bacteria.

According to the 2011 study “Most of the private water wells in this study lacked recommended construction standards, presumably reflective of the lack of statewide water well construction regulations, which likely contribute to impairments of certain water quality standards.”

PCPG also notes that the importance of water well construction standards for water resource protection and human health and safety is reflected in the recommendations of two independent statewide advisory committees. In December 2008, the Statewide Water Resources Committee listed first among its recommended legislative priorities for implementing the State Water Plan: “Enact legislation...to establish statewide private water well construction standards.” Additionally, the July 2011 Marcellus Shale Advisory Commission report (unanimously adopted) recommended, among its comprehensive strategic proposals for the responsible and environmentally sound development of Marcellus Shale: “The Commonwealth should enact legislation establishing construction standards for new private water wells to ensure the delivery of safe drinking water to its residents.”

Given the important human health and safety and water resource protection considerations, PCPG recommends that House Bill 1855 apply to any and all water wells drilled and/or constructed in the Commonwealth, including, without limitation, irrigation wells, industrial supply, production or process water wells, groundwater dewatering wells and water wells installed for the purpose of investigating or remediating groundwater quality problems; excluding, however, those water wells for which well construction standards are already established under the authority of existing legislation such as the Oil and Gas Act or the Safe Drinking Water Act. Improperly constructed, any of the aforementioned types of water wells have the potential to allow for the introduction or spread of contaminants to human and/or ecological receptors and/or through groundwater.

PCPG understands that House Bill 1855 is intended to provide the Department of Environmental Protection (“DEP”) with the authority to develop, and the Environmental Quality Board (“EQB”) with the authority to adopt, rules and regulations to establish statewide private water well construction and decommissioning standards to be met by water well drillers and water well owners. PCPG recommends that such rules and regulations be generally consistent with water well construction standards established or recommended by the National Ground Water Association (“NGWA”). Consistent with Section 3118(b)(f) of Act 220 of 2002, known as the Water Resources Planning Act, which section prohibits DEP or the EQB from requiring the metering of homeowner wells, House Bill 1855 does not authorize any metering of homeowner wells, rather, it’s scope is appropriately limited to development of construction and decommissioning standards for private water wells.

For the Committee’s consideration, PCPG has a few general comments on the proposed text of House Bill 1855, which comments are included as Attachment “A” to this letter. As noted above, PCPG believes water well construction standards are necessary to protect human



health and safety and the Commonwealth's valuable water resources and thanks the Committee for considering PCPG's statement of support and comments on House Bill 1855.

If you have any questions concerning any of the above or need any additional information, please do not hesitate to contact me.

Sincerely,

Pennsylvania Council of Professional Geologists



Donald R. Wagner, P.G.
Chair, Government Affairs Committee

cc: Joseph Preston, Jr. – Democratic Chair
Representative Miller
Louis F. Vittorio, Jr., P.G. – President, PCPG



Attachment "A"

PCPG Comments on House Bill 1855

1. PCPG recommends that the scope of House Bill 1855 cover all private water wells the construction or decommissioning of which are not otherwise regulated under the authority of existing legislation. Water wells are drilled and constructed for a wide variety of purposes, including but not limited to potable supply, irrigation and commercial agricultural, industrial process, production and/or cooling water, groundwater dewatering, groundwater investigation or remediation, geothermal heat pumps, etc. Because each of these types of wells has the potential to serve as a conduit for the introduction or spread of contaminants into subsurface groundwater, PCPG believes House Bill 1855 should include all private water wells within its scope. The current definition of "water well" may need revision to ensure all such wells are included within the scope of the term.
2. As currently defined, a "water well owner" is the person who owns the land on which the water well is located. While that definition seems appropriate for most circumstances, PCPG notes that in some circumstances, the well owner may not be the owner of the land on which the well is located. By way of example, frequently during the investigation of a groundwater quality issue, persons responsible for investigating a source property may have need to install a groundwater monitoring or remediation well on a nearby property (after obtaining the landowner's permission). In that instance, the owner of the well would more reasonably be the person responsible for the investigation and/or remediation, not necessarily the owner of the land on which the monitoring or remediation well is located.
3. House Bill 1855 does not reference any specific standards or guidelines to be used as a reference in promulgating the private water well regulations. PCPG recommends that House Bill 1855 include a provision that the private well construction standards should be generally consistent with construction standards recommended by the National Ground Water Association.
4. Pursuant to the Engineer, Land Surveyor and Geologist Registration Law, Act 367 of 1945, as amended, to safeguard life, health or property and to promote the general welfare, it is unlawful for any person to practice or to offer to practice geology in this Commonwealth, unless he or she is licensed and registered under the laws of this Commonwealth as a professional geologist. Accordingly, to the extent that House Bill 1855 requires or involves the "practice of geology" with respect to water well location, logging, construction, reporting or decommissioning activities, PCPG recommends that the legislation or regulations adopted pursuant to the legislation require that any such activities that constitute the "practice of geology" be performed under the responsible charge of, and as applicable, documents and/or reports be sealed by, a professional geologist licensed and registered in this Commonwealth. Well drilling and completions should be performed by a well drilling contractors licensed and registered in this Commonwealth.



5. PCPG is aware that at the local government level, some municipalities or counties have existing ordinances related to water well permitting, construction and/or testing and that the experience and insight of the local governments and existing permitting/construction standard ordinances may provide valuable assistance to the DEP when formulating statewide water well construction standards. However, consideration should be given as to the effect of House Bill 1855 on existing local government ordinances, at least to the extent any such ordinances are inconsistent with regulations ultimately promulgated under Section 3304 of the bill.



Colin Fitzsimmons - Support for HB 1855 (PN 2844)

From: "John J. Walliser" <jwalliser@pecpa.org>
To: "rgodhal@pahousegop.com"
 <rgodhal@pahousegop.com>, "jpreston@pahouse.net"
 <jpreston@pahouse.net>, Ronald Miller <rmiller@pahousegop.com>,
 ColinFitzsimmons <Cfitzsim@pahousegop.com>, "wkampf@pahousegop.com"
 <wkampf@pahousegop.com>, "jbrennan@pahouse.net"
 <jbrennan@pahouse.net>, "edepasqu@pahouse.net"
 <edepasqu@pahouse.net>, "bbarbin@pahouse.net" <bbarbin@pahouse.net>
Date: 1/6/2012 3:30 PM
Subject: Support for HB 1855 (PN 2844)
CC: Joe Deklinski <jdeklins@pahousegop.com>, Mark Brown
 <Mrbrown@pahousegop.com>, Paul King <pking@pecpa.org>

January 6, 2012

To: Members of the House Consumer Affairs Committee
From: Paul King, President, Pennsylvania Environmental Council
Re: Support for HB1855 (P.N. 2844)

On behalf of the Pennsylvania Environmental Council I wish to offer our support for House Bill 1855 (P.N. 2844), scheduled for consideration by the Consumer Affairs Committee on January 10, which would establish water well construction and decommissioning standards for water wells.

Beyond the immediate public health value of this legislation – underscored by recent flooding throughout Pennsylvania – there is considerable environmental interest as well. As you know the concern of well contamination from both past and current resource development activities has come to the forefront of public attention. Pennsylvania has an untold number of abandoned and unidentified oil and gaswells and mine sites. Each of these, in addition to new gas and oil wells being developed in Pennsylvania today, present potential water contamination pathways.

Having standards in place for water well construction sets an important initial preventative measure, and frankly allows for a much better understanding of what threats past and current activities to public and private water resource supplies.

We urge you to support this legislation. Thank you for your consideration.

Sent by John Walliser
 Vice President, Legal & Government Affairs
 Pennsylvania Environmental Council
 412-481-9400

• Northeast Driller •

Study looks at water quality in private wells near Marcellus drilling

FOR THE NORTHEAST DRILLER

A study of more than 200 drinking-water wells near Marcellus Shale natural-gas wells in 20 counties did not find statistically significant evidence of contamination from hydraulic fracturing — a process used by gas drillers to release natural gas using a high-pressure mixture of water, sand and chemical additives.

The study was conducted by researchers and extension educators in Penn State's College of Agricultural Sciences. The research was funded by the state General Assembly's Center for Rural Pennsylvania and the Pennsylvania Water Resources Research Center at Penn State.

"This is the first project to provide an unbiased and large-scale study of water quality in private water wells used to supply drinking water to rural homes and farms both before and after the drilling of Marcellus gas wells nearby," said project leader Bryan Swistock, water resources extension specialist.

Conducted from February 2010 to July 2011, the study found methane in about a quarter of the water wells before any drilling occurred, but the concentrations were generally below advisory levels for treatment, Swistock said. The presence of methane can be naturally occurring or related to drilling activity.

"We really didn't see any significant changes in methane levels after drilling or hydraulic fracturing," he added.

There is no federal drinking water standard for methane as it can be ingested without harm, but high levels can cause an explosion hazard as the dissolved methane escapes from water.

Elevated levels of dissolved bromide were measured in some water wells and appeared to be a result of the gas-well drilling process and not hydraulic fracturing.

"Bromide was not detected in any of the water wells before drilling, but it did show up in several wells after drilling, which needs to be investigated further," Swistock said. The study's modest number of samples for methane and bromide and the relatively short length of the study speak

to the need for additional data collection and analysis, Swistock pointed out.

"Future research should look at a broader number of water contaminants over a longer period of time," Swistock said. "More detailed and longer-term studies are critical to ensuring that Pennsylvanians' private water supplies are protected."

Wells in the study were not randomly selected. Project publicity solicited participation from well owners who knew gas drilling was going to occur near them, and many responded by contacting Swistock or other project investigators working for Penn State Extension.

"Our network of Penn State Extension educators throughout the state was absolutely critical to the efficient completion of this project," Swistock said.

The first phase of the study included 48 private water wells located within about 2,500 feet of a Marcellus well pad. These wells were tested by Penn State researchers both before and after gas-well drilling. Twenty-six of the 48 were near Marcellus wells that were drilled and fracked, 16 sites had drilling but no fracking, and six sites were controls where no drilling or fracking occurred.

These wells were tested for 18 common water-quality parameters that could occur from gas-drilling activity, including chloride, barium, sodium, iron, manganese, methane, ethane, bromide, and oil and grease.

The second phase was comprised of 185 additional private water wells located within about 5,000 feet of a Marcellus well pad. Homeowners provided water test results collected by independent, state-accredited laboratories prior to Marcellus gas-well drilling. These tests then were compared with samples collected by Penn State personnel or by homeowners trained by Penn State personnel after gas drilling and hydraulic fracturing occurred.

Phase two included 173 sites near hydraulically fractured gas wells and 12 control sites where no drilling had occurred with five miles. These wells were tested for 14 common water quality parameters — methane, ethane, bromide and oil and grease were not included due to funding and sample-

collection constraints.

Separate statistical analyses of results from each phase of the project produced similar results, according to Swistock.

In addition to the increased bromide concentrations in some water wells, a small number of water wells examined in the study also appeared to be affected by disturbance due to drilling, as evidenced by sediment and/or increased levels of iron and manganese that were noticeable to the water supply owner and confirmed by water-testing results.

"While most water wells, even within 3,000 feet of a Marcellus well, did not have changes in water quality after drilling or hydraulic fracturing, that was the distance where we did sporadically measure increased bromide, sediment or metals. This seems to be the distance that we need to focus on for future testing and research," Swistock said.

In addition to future research directions, the study also identified critical education needs for owners of private water wells. Most water-well owners had difficulty interpreting detailed water-test reports that they received as part of pre-drilling surveys, according to the researchers.

"As a result, most homeowners with pre-drilling water-quality problems were unable to identify them even after receiving extensive water-testing reports," Swistock said. "There is a clear need to help homeowners understand pre-drilling problems, their risks and how to solve them."

Other investigators on this project were Dr. Elizabeth Boyer, associate professor of water resources and director of the Pennsylvania Water Resources Research Center in the School of Forest Resources; James Clark, extension educator based in McKean County; Mark Macdien, extension educator based in Sullivan County; and Dana Rizzo, extension educator based in Westmoreland County.

The full initial report and executive summary of this study are available on the Center for Rural Pennsylvania's website at <http://www.rural.palegislatore.us/>. The investigators currently are preparing this work to submit for publication in the peer-reviewed literature.