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COMMONWEALTH OF PENNSYLVANIA
HOUSE OF REPRESENTATIVES

ENVIRONMENTAL RESOURCES & ENERGY COMMITTEE

STATE CAPITOL
HARRISBURG, PA

RYAN OFFICE BUILDING
ROOM 205

WEDNESDAY, APRIL 17, 2013
9:00 A.M.

PRESENTATION ON HB 343

BEFORE:

- HONORABLE RON MILLER, MAJORITY CHAIRMAN
- HONORABLE MARTIN T. CAUSER
- HONORABLE BECKY CORBIN
- HONORABLE ELI EVANKOVICH
- HONORABLE MATTHEW GABLER
- HONORABLE TIMOTHY KRIEGER
- HONORABLE JIM MARSHALL
- HONORABLE DONNA OBERLANDER
- HONORABLE JEFFREY P. PYLE
- HONORABLE CHRIS ROSS
- HONORABLE THOMAS SANKEY
- HONORABLE BRYAN BARBIN
- HONORABLE FRANK FARINA
- HONORABLE JARET GIBBONS
- HONORABLE JORDAN HARRIS
- HONORABLE STEVE MCCARTER
- HONORABLE PAM SNYDER

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CHAIRMAN MILLER: Let's call the Environmental Resources & Energy Committee to order. We have one bill that we're having a hearing on today. It's House Bill 343. We're going to dispense with roll call and just go around the room and let the members introduce themselves so the presenters know who's here. Would you please start, Representative.

REPRESENTATIVE CORBIN: Representative Becky Corbin, 155th District, Chester County.

REPRESENTATIVE MCCARTER: Steve McCarter, House District 154, Montgomery County and a little bit of Philadelphia.

REPRESENTATIVE CAUSER: Marty Causer, the 67th District, McKean, Potter and Cameron Counties.

REPRESENTATIVE BARBIN: Bryan Barbin. I represent Cambria County.

REPRESENTATIVE GABLER: Matt Gabler, 75th District, Elk and Clearfield Counties.

REPRESENTATIVE SANKEY: Tommy Sankey, Clearfield County, 74th.

REPRESENTATIVE SNYDER: Pam Snyder, 50th District, Greene, Fayette and Washington.

REPRESENTATIVE MARSHALL: Jim Marshall, 14th District, Beaver County.

1 REPRESENTATIVE ROSS: Chris Ross from Chester
2 County.

3 REPRESENTATIVE PYLE: Jeff Pyle, 60th Legislative,
4 Armstrong and Indiana Counties.

5 CHAIRMAN MILLER: And I am Representative Ron
6 Miller, Chair of the Environmental Resources & Energy
7 Committee. We will be having committee members coming in and
8 out. There's other meetings going on today, but we will get
9 started.

10 Let me just say that this bill's been around for a
11 while. We tried in some past sessions, unsuccessfully, to get
12 this bill to move. Millions of people in this Commonwealth
13 rely on water wells for their drinking water, yet Pennsylvania
14 is one of only two states in the nation that don't have minimum
15 standards for construction and maintenance of water wells,
16 including abandonment, when we're going to abandon a water
17 well.

18 Improperly-installed water wells can lead to all
19 kinds of issues. We believe that part of the reason that we
20 have some issues periodically in the Marcellus region is
21 because of improperly-installed water wells. I've run into
22 issues in my district with contamination from agricultural
23 operations, where basically, when you take a hard look at it,
24 the wells were not installed properly. The casing, the
25 grouting, they're just not constructed properly to protect

1 against any type of contamination.

2 And studies have shown the importance of proper
3 construction of water wells. One recent study conducted by the
4 Center for Rural Pennsylvania concluded that a voluntary
5 approach, which we have tried to encourage proper well
6 construction, in the absence of standards just has not worked.
7 It's been unsuccessful, which demonstrates the need for
8 statewide regulations for well construction. And as I
9 mentioned before, abandoned water wells continue to be ---
10 raise safety concerns and they act as a conduit to conduct
11 pollution into the aquifers. And we all expect that, when we
12 have well water, that that well water will be safe. So we need
13 to make sure that we adequately cap and plug these abandoned
14 wells. Therefore, in an effort to address some of these
15 issues, House Bill 343 requires our Environmental Quality Board
16 to adopt minimum standards for water well construction and
17 decommissioning of abandoned wells. Accordingly, today's
18 hearing will allow us to properly vet this proposal. We've
19 discussed it before, but there's new people on the Committee,
20 new people in the House, and I think it's well worth going over
21 this subject in detail.

22 So I would like to call upon our first presenter,
23 Bryan Swistock, Senior Water Resources Extension Associate,
24 Penn State University. Please have a seat. When you're ready,
25 you may proceed.

1 MR. SWISTOCK: Good morning. Chairman Miller,
2 Chairman Vitali, and members of the Committee, I'm Bryan
3 Swistock. I'm a Water Resources Extension Associate in the
4 College of Agricultural Sciences at Penn State. I thank you
5 for the opportunity to provide comments on House Bill 345, on
6 water well construction standards.

7 For the past 25 years, I've been actively involved
8 in both research and outreach programs related to private water
9 wells in this state. Our current efforts in this area were
10 largely founded in research and extension work started in the
11 early 1980s by my predecessor, who was Dr. William Sharpe, also
12 at Penn State. He and his colleagues at that time recognized
13 that private water wells are a critical part of the water
14 infrastructure in Pennsylvania, providing drinking water to, as
15 you said, millions of rural homes, farms and businesses.

16 I really --- I'm going to address some of the
17 research that you touched on, and I really want to acknowledge
18 the Center for Rural Pennsylvania and also the Water Resources
19 Center at Penn State. Without both of those, we'd had a lot of
20 difficulty doing much research on private water wells, as
21 funding can be difficult to find for them. Those two sponsors
22 really have been very gracious in providing the support that
23 we've needed to do our research. Other funders, like the
24 Pennsylvania Ground Water Association and the Pennsylvania
25 Department of Environmental Protection, along with colleagues

1 at many other agencies and institutions across the state, have
2 also supported our outreach efforts in private water supplies.

3 As you said, Pennsylvania's currently one of the few
4 states that do not have statewide requirements for construction
5 of private water wells. In the absence of both regulatory
6 protections and unbiased assistance, Penn State has really
7 devoted a considerable amount of research and extension efforts
8 to meet the demands of private well owners interested in
9 properly constructing and managing their drinking water
10 supplies. Our statewide team of water resources extension
11 educators, specialists and trained Master Well Owner volunteers
12 interact with thousands of private well owners each year, each
13 of whom have questions related to things like the well
14 construction, water testing and very often solving water
15 problems that they have found.

16 Over the past three decades, we've conducted
17 numerous research projects on various aspects of water quality
18 that have included thousands of private water wells. The
19 largest was a two-year study of over 700 water wells throughout
20 the state which was just published earlier this year in the
21 Journal of Environmental Health. We also recently concluded a
22 study of over 200 water wells in the Marcellus gas drilling
23 region, with funding from the Center for Rural Pennsylvania.

24 Our research has consistently found that
25 approximately 40 percent of the private water wells in

1 Pennsylvania fail to meet at least one safe drinking water
2 standard. The most frequently detected pollutant with
3 potential health effects is coliform bacteria, which typically
4 we find in about one-third of the water wells that we test,
5 although in some regions of the state it can be considerably
6 higher than that. The presence of these bacteria indicates the
7 potential for disease-causing bacteria to occur in drinking
8 water. E. coli bacteria, which originate from either animal or
9 human waste and thus represent a more serious health risk, were
10 found in 14 percent of the water wells in our recent study.

11 While these bacteria can be related to various land
12 uses near water wells, they can also occur from surface water,
13 insects, or small mammals entering poorly-constructed wells.
14 This surface contamination can be prevented by extending a
15 properly-sized well casing above the ground, installing a
16 cement-like grout seal around the casing, and fitting the top
17 of the casing with a vermin-proof or sanitary well cap. Our
18 study found that 12 percent of the water wells did not have a
19 casing above ground, 84 percent lacked a sanitary well cap, and
20 82 percent had no obvious evidence of a grout seal around the
21 well casing. More importantly, this same research showed a
22 statistical correlation between water well construction and the
23 occurrence of both coliform bacteria and E. Coli bacteria in
24 the water well. The prevalence of bacterial contamination in
25 water wells with sanitary construction was about one-half of

1 the rates found in water wells which lacked any sanitary
2 construction component. While proper well construction did not
3 completely eliminate water quality problems, it clearly played
4 a role in the occurrence of surface contaminants, like coliform
5 bacteria in water wells.

6 An earlier, small-scale study that we conducted in
7 conjunction with the U.S. Geological Survey found that some
8 bacterial contamination in water wells could be removed simply
9 by having a water well professional disinfect the well and
10 replace loosely-fitted well caps with sealed, sanitary well
11 caps. I can personally attest to the value of a sealed,
12 sanitary well cap from experience on my own water well. Nearly
13 15 years ago, our family purchased a rural home with a deep
14 well that lacked a sanitary well cap. The well was tested and
15 found to be bacterially contaminated. Hundreds of dollars were
16 spent during the real estate transaction to install a UV light
17 system or ultraviolet light system to disinfect the water to
18 acceptable bacteria standards. Not long after moving into the
19 home, we discovered that the bacteria were originating from
20 mice which were entering the well through a loose well cap and
21 nesting on the pit-less adapter about three feet below the
22 ground surface. I'll add at that point that my wife was not
23 very happy about living in the countryside. We were able to
24 permanently solve our bacteria problem by removing the mice. I
25 no longer needed the ultraviolet light system to disinfect the

1 water.

2 Unfortunately, our bacteria problem and similar
3 problems with many health-related pollutants in water wells are
4 often only discovered after proper testing by state-accredited
5 laboratories and proper interpretation of those water test
6 records. Several of our projects have shown that homeowners
7 with water wells that fail at least one health-based drinking
8 water standard are typically unaware that their water is
9 unsafe. Just as one example, of the 203 water wells that
10 contained unsafe levels of coliform bacteria in our recent
11 study, only 11 percent were aware of this problem before our
12 study occurred. We found that about one-third of the water
13 well owners have never had their water tested properly by a
14 state-accredited laboratory, especially before the increased
15 testing in response to Marcellus Shale drilling or also in
16 regions where that drilling is no occurring. Clearly, the lack
17 of voluntary water testing is one impediment to the recognition
18 of existing water quality problems.

19 Our recent study of over 200 water wells near
20 Marcellus gas drilling sites found that even water well owners
21 who had extensive water testing done before gas drilling were
22 often unaware of existing water quality issues in their water
23 well. In this case, it appeared that water supply owners were
24 having difficulty understanding complex water test reports. In
25 addition to the obvious health risks associated with

1 unknowingly drinking contaminated water, uninformed homeowners
2 may also fall victim to unscrupulous business practices. Given
3 this low awareness of existing water quality issues among water
4 well owners, practices such as proper well construction can
5 prevent water contamination --- which can prevent water
6 contamination are critical to protect the health of rural
7 residents utilizing these water supplies.

8 Private water wells are pervasive across the
9 landscape of Pennsylvania, serving an important source of water
10 for rural and suburban homes and farms. The groundwater
11 aquifers that they access are a shared resource that does not
12 recognize political or property boundaries. Our research has
13 shown that inadequate water well construction is a contributing
14 factor to the failure of some private water wells to meet safe
15 drinking water standards in this state. This, along with the
16 fact that many health-related pollutants have no obvious
17 symptoms in water, water well owners often do not adequately
18 test their water supply, and those who do may not understand
19 the water test results, leads to a significant potential health
20 risk among millions of rural residents, farmers and businesses
21 that access the shared groundwater resource. Our research has
22 also found that about two-thirds of water well owners who were
23 made aware of these issues were supportive of statewide
24 regulations for water well construction, even if it added more
25 than \$500 to the cost of a new water well.

1 I thank you for the opportunity to discuss our
2 research experiences relevant to private water wells. I'd be
3 happy to answer any questions. And I will add in your
4 testimony there, there are some citations for some of the
5 reports that I've reference here today.

6 CHAIRMAN MILLER: Thank you very much. Are there
7 questions for Mr. Swistock at this time? Yes, Representative
8 Barbin.

9 REPRESENTATIVE BARBIN: Thank you. And I appreciate
10 your testimony today. I do think it's an important issue. How
11 far down do we generally go with --- what is a deep water well
12 depth.

13 MR. SWISTOCK: Well, it does vary quite a bit around
14 the state, but our research found that the average water well
15 was about 170 feet deep. But you can find water wells that are
16 600, 700, 800 feet, even deeper than that, oftentimes depending
17 on elevation, if they're up on a hill somewhere.

18 REPRESENTATIVE BARBIN: What --- if you had an
19 optimum level of like construction of the water well, and I'm
20 assuming you're talking about the groundwater and like 0 to 700
21 feet.

22 MR. SWISTOCK: Yes.

23 REPRESENTATIVE BARBIN: What would the optimum
24 construction be for a water well to ensure that there was no
25 permeability to the groundwater sources.

1 MR. SWISTOCK: Well, we really look for five
2 features, and that's what we looked at in our study. First of
3 all, we want to just see a casing. And we want to see that
4 casing extend aboveground about a foot and also extend down to
5 the bedrock, whatever depth that might be. And that can vary,
6 depending on the area. We also want to see a sanitary or
7 vermin-proof cap on top of that well. We want to see a grout
8 or cement-like seal around the casing, down to the bedrock.
9 And we also would like to see the ground just gently sloping
10 away from the well to prevent ponding of surface water around
11 that casing. So those are sort of the five things that we
12 would always look for.

13 REPRESENTATIVE BARBIN: When you say you're going
14 down to the bedrock, does that mean you're going like 70 feet,
15 50 feet?

16 MR. SWISTOCK: That could be typical in some places.
17 And I can just give you my example, it can be much different
18 than that. I have about 400 feet of casing because it's a very
19 unusual setting. So that's --- that is very unusual. Fifty
20 (50) feet might be much more typical, though.

21 REPRESENTATIVE BARBIN: And when you do a casing,
22 what do you mean by a casing? Is like steel --- a steel pipe
23 that goes down and concrete around it.

24 MR. SWISTOCK: Yeah. Typically, steel would be
25 used, although PVC plastic, is sometimes used, a very thick

1 grade PVC plastic. The typical well would be six inches --- or
2 roughly six inches in diameter. Those are typical aspects.

3 REPRESENTATIVE BARBIN: Is there any standard for
4 ensuring that the concrete that goes along with whatever that
5 piping or steel is is --- doesn't break apart or doesn't
6 release.

7 MR. SWISTOCK: Well, there are proper practices, and
8 I might defer to the next speaker, who's much --- a well
9 driller and can talk about this in a lot more detail, but ---.

10 REPRESENTATIVE BARBIN: That's fine. I appreciate
11 your --- and thank you, Mr. Chairman.

12 CHAIRMAN MILLER: Thank you. Representative Pyle.

13 REPRESENTATIVE PYLE: Yeah, this is just a quick
14 question. Central western PA, I know we draw from the
15 Catasaquua ---

16 MR. SWISTOCK: Okay.

17 REPRESENTATIVE PYLE: --- aquifer. I'm curious as
18 to the depth of that thing.

19 MR. SWISTOCK: I can't answer that. I don't know
20 exactly the depth of that aquifer.

21 REPRESENTATIVE PYLE: I'm just wondering if we're
22 going to be dropping 600 and 700-foot wells according to this
23 new regulation. And we are quite rural. There's only very few
24 that are serviced by municipal sources. Just curious. Thanks,
25 Chairman.

1 CHAIRMAN MILLER: Representative Ross.

2 REPRESENTATIVE ROSS: Yeah. I think, based on my
3 own experience at having to have wells drilled at different
4 areas, depending on the geology, that really is the key factor
5 as to how deep you have to drill. And some areas produce a lot
6 of water volume at a relatively low level. But one thing that
7 --- you know, I've been a supporter of trying to get some good
8 standards on well drilling because I see it as a problem for
9 the individual homeowner. You've raised a question which I
10 wasn't aware of before, which is the possibility of the
11 coliform bacteria actually spreading through the aquifer to
12 infect other people's wells. So even if you have done a good
13 job, if we don't have standards here then for other folks in
14 the neighborhood, we can wind up still having problems in our
15 own wells because of the promotion of the coliform bacteria
16 through the underground aquifer; is that correct?

17 MR. SWISTOCK: Yeah. I think that's one of the
18 general concerns, is that this is a shared resource. You're
19 poking a hole down into it. You're not adequately sealing that
20 hole, so you're allowing surface contaminants to move down
21 that, along the casing, for example, if there's a lack of a
22 grout seal. And then what happens to that once it gets into
23 the aquifer, with bacteria, there's not been actually a lot of
24 research to show the movement of how easily they could move
25 from well to well, but it wouldn't be hard to imagine wells

1 that are in close proximity to be contaminated by a nearby well
2 that had poor construction.

3 REPRESENTATIVE PYLE: Well, I think it's one thing
4 if we're not taking care of ourselves, but if we're promoting a
5 problem that's going to get into our neighbors, who have
6 otherwise taken proper precautions, I think that increases the
7 need for this legislation. Thank you.

8 CHAIRMAN MILLER: Representative McCarter.

9 REPRESENTATIVE MCCARTER: Yes. Thank you, Doctor.
10 The reference you make to the recent study of the 203 water
11 wells, is --- I didn't see that referenced back in your other
12 reports. Is that available online.

13 MR. SWISTOCK: I think --- the 203 I think refers to
14 the study of 700 water wells. And that was referring to the
15 ones that actually had bacteria as a part of that study. So
16 that's actually referenced. That's the Journal of
17 Environmental Health. That would be the last reference there.
18 That was just published in 2013.

19 REPRESENTATIVE MCCARTER: Okay. So it is available.

20 MR. SWISTOCK: Yes.

21 REPRESENTATIVE MCCARTER: Thank you.

22 MR. SWISTOCK: That was a Center --- that was
23 actually a Center for Rural Pennsylvania project, which was
24 just recently published.

25 REPRESENTATIVE MCCARTER: Thank you.

1 CHAIRMAN MILLER: Representative Harris.

2 REPRESENTATIVE HARRIS: All right. Thank you for
3 your testimony. And forgive the naivete of the question. I'm
4 a city boy.

5 MR. SWISTOCK: Uh-huh (yes).

6 REPRESENTATIVE HARRIS: So when we're talking about
7 water, I turn on my faucet, and that's the extent of my
8 knowledge on this. So I'm learning a lot. So I appreciate
9 your information. How much does something like this cost?
10 Like, what's the price range for a homeowner to have to get the
11 casing and whatnot done in the water well.

12 MR. SWISTOCK: And again, I might defer to Bill to
13 answer that since he's probably more up on the construction
14 costs, but I know at the time we did that last study we did a
15 little bit of research on, for example, grouting costs, and
16 that's where we came up with a \$500 figure to put into the
17 questions that we ask homeowners as to whether that would be an
18 acceptable amount of money in addition to spend to get a
19 properly-constructed well. That seemed like a pretty good
20 average at the time, but I guess I'd defer to Bill if he thinks
21 that's still accurate or not.

22 REPRESENTATIVE HARRIS: And the second question is
23 how long does something like that last? So if you did it today
24 on your well, on your property, approximately how long could
25 that possibly last a family.

1 MR. SWISTOCK: Well, I think the intent is that it
2 would last the life of whoever is living in that home,
3 certainly. Things happen to wells and sometimes they don't
4 last that long, but I think the intent would be that they would
5 last for decades for sure.

6 REPRESENTATIVE HARRIS: Okay. Thank you, Mr.
7 Chairman.

8 CHAIRMAN MILLER: Thank you. Seeing no other ---.

9 REPRESENTATIVE GABLER: Thank you. One other quick
10 follow-up. Can you estimate for us how many abandoned wells
11 there actually are ---

12 MR. SWISTOCK: No.

13 REPRESENTATIVE GABLER: --- in Pennsylvania.

14 MR. SWISTOCK: I have no idea of exactly how many
15 abandoned wells. We've never tried to estimate that, and I've
16 never seen an estimate for Pennsylvania. I know --- I'm a
17 hunter, and so I run onto them all the time.

18 REPRESENTATIVE GABLER: Tens of thousands, I mean,
19 is a fair figure.

20 MR. SWISTOCK: I would --- if I were guessing, I
21 would say so, yes. But that's a guess.

22 REPRESENTATIVE GABLER: Thank you.

23 CHAIRMAN MILLER: I believe maybe our next presenter
24 might have a better feel for that, but maybe not. We'll see.
25 Well, thank you very much for your testimony.

1 MR. SWISTOCK: Okay. Thank you.

2 CHAIRMAN MILLER: Our next presenter is Kelly
3 Heffner, Deputy Secretary of Water Management, Department of
4 Environmental Resources. Welcome.

5 MS. HEFFNER: Good morning, and thank you. I should
6 open with I can't answer any of those questions that were
7 pushed to the driller, so ---.

8 CHAIRMAN MILLER: Is the mic on.

9 MS. HEFFNER: I believe so.

10 CHAIRMAN MILLER: Okay. Just pull it a little
11 closer.

12 MS. HEFFNER: All right. Again, good morning,
13 Chairman Miller, Chairman Vitali and members of the Committee.
14 Thank you very much for the invitation to present testimony on
15 House Bill 343 regarding water well construction standards.

16 Sorry for a little bit of repetition on the same
17 studies, but I believe that that just shows that that's good,
18 important information that's --- that's been collected and
19 presented.

20 In October 2011, the study done by the Center for
21 Rural Pennsylvania, a bipartisan, bicameral legislative agency
22 that serves as a resource for rural policy within the
23 Pennsylvania General Assembly, estimated that there are one
24 million private water wells in Pennsylvania, with over three
25 million residents using these water wells as their primary

1 water supply.

2 Approximately 13,000 to 15,000 new residential wells
3 are drilled in Pennsylvania every year. When you take into
4 account geothermal wells, the total number of wells drilled
5 annually increases to approximately 20,000. The National
6 Groundwater Association, as well as the Center for Rural
7 Pennsylvania, their studies state that Pennsylvania and Alaska
8 are the only two states that do not have construction standard
9 established for private water wells.

10 In the absence of statewide standards, smaller
11 government units will take in the responsibility. For example,
12 three counties have developed and implemented well construction
13 standards; those are Bucks, Chester and Montgomery. And
14 recently, several municipalities in the central region of the
15 state have passed well bore ordinances, which capture both
16 water well construction and geothermal well construction.

17 I think you've heard contamination of private wells
18 can occur naturally or through human impacts. For example,
19 leaching of elements like iron or arsenic from bedrock can
20 occur naturally, while leaching of bacteria from septic systems
21 is a result of human influence. Treatment systems are
22 available to address most types of contamination. However, the
23 first line of defense should always be prevention. A
24 properly-sited and constructed well can prevent most human
25 influences, such as contaminated surface water, from

1 contaminating the groundwater. Each well creates an
2 opportunity for surface water pollution to find its way into
3 groundwater and for pollution to travel from one aquifer to
4 another underground. Several studies have documented the
5 occurrence of various water contaminants in private water
6 systems. Large-scale national and statewide studies typically
7 report that about 15 to 50 percent of private water systems
8 fail at least one safe drinking water standard. And the Center
9 for Rural Pennsylvania study states that 40 percent of private
10 wells already exhibit a failure of some Drinking Water Act
11 parameter. Pennsylvania is fortunate to have an ample supply
12 of clean water. We should have adequate measures in place to
13 help protect that valuable resource. Proper well construction
14 would be one piece of the puzzle to providing further
15 protection of groundwater.

16 DEP believes that House Bill 343 is a step in the
17 right direction toward establishing statewide standards for
18 water well construction. Previous legislative attempts to
19 establish water well construction standards have proven
20 unsuccessful. Legislation was introduced in the House in 2001
21 and opponents mounted a large misinformation campaign that
22 purported that the legislation would give DEP the power to put
23 meters on homeowners' wells and charge for water use and that
24 DEP inspectors would be trespassing on citizens' properties,
25 demanding compliance. This was not the case; however, it

1 resulted in a larger letter-writing campaign to the legislators
2 that stopped the legislation from proceeding forward.

3 So DEP wants to be clear what this legislation is
4 and is not. This legislation does not give DEP or the
5 Commonwealth the authority to charge a fee for private water
6 usage. It does not give the power to install water meters on
7 private wells. And it does not grant the power for DEP or the
8 Commonwealth to shut a person's well off or regulate the amount
9 of water a private well owner can use. What this legislation
10 does do is establish the basis for water well construction
11 standards to be developed through a public rule-making process;
12 thereby, closing potential sources of contamination to
13 groundwater.

14 In addition to identifying what this legislation is
15 and isn't, it is also important to look at what is already in
16 place and what is needed to improve a well driller program
17 going forward. Currently, under Act 610 of 1956, the Well
18 Drillers' Licensing Act, water well drillers are required to
19 register for a license with the Department of Conservation and
20 Natural Resources and also complete a drilling record for
21 submittal to the same department. However, there are no
22 minimum requirements to obtain a license. One needs to fill
23 out a form and purchase a drilling rig and can go to work. DEP
24 would respectfully recommend that the legislation consider the
25 possibility of including minimum requirements for licensing,

1 along with possibly continuing education requirements. There
2 are many good operators in the Commonwealth, and we should
3 utilize them as a resource to assist the further development of
4 Pennsylvania's well driller program. Again, Pennsylvania is
5 extremely fortunate to have an ample supply of clean water,
6 both surface water and groundwater. And legislation that
7 established water well construction standards and raises the
8 bar on the importance and competence of the professionals in
9 the industry will help protect our valuable water resources for
10 generations to come. Again, thank you for allowing me to
11 present testimony, and I would be happy to answer any questions
12 that you may have.

13 CHAIRMAN MILLER: Thank you for your testimony. And
14 thank you for the --- highlighting what it does not do. I felt
15 bad many years ago for former Representative Mary Ann Dailey,
16 who had this legislation, because the misinformation was
17 just --- it was very hard to deal with. And as you noted, we
18 couldn't get out in front of it and we couldn't pass the
19 legislation at the time. I'm hopeful at this hearing and as we
20 move forward, we can manage that issue. Representative Ross.

21 REPRESENTATIVE ROSS: At the risk of opening that
22 can of worms again, do you have any suggestions as to what to
23 do with the existing wells that may well be polluted.

24 MS. HEFFNER: Off the cuff, we may want to consider
25 some sort of program that assists in sampling, but we would

1 want to do that taking advantage of the other resources that
2 are already available. The gentleman from the Extension --- I
3 mean, there's a lot of good opportunities and a lot of good
4 programs for folks to sample their wells. And hand in hand
5 with that goes education. Again, the Extension does a great
6 job with that. And you know, in the event that this is
7 successful, I think it provides an opportunity potentially for
8 the Department to think about some sort of education pieces as
9 well.

10 REPRESENTATIVE ROSS: And would there be --- has
11 there been, I should say, perhaps any consideration of some
12 form of certification when a property is transferred through
13 sale or gift, prior to the transfer or as part of the transfer,
14 for some form of certification of the well.

15 MS. HEFFNER: We haven't discussed or considered
16 that.

17 REPRESENTATIVE ROSS: Thanks.

18 CHAIRMAN MILLER: Representative Causer.

19 REPRESENTATIVE CAUSER: Thank you, Mr. Chairman.

20 When I look at this bill, I mean, on the surface it seems like
21 something that could be valuable in that we all want safe water
22 and we want wells to be drilled properly. My concern is the
23 regulations that will be drafted in response to any legislation
24 like this, and also the enforcement. And you touched on that a
25 little bit. How would the Department enforce such a thing in

1 that, you know, the first thing that is going to be a concern
2 to many people in rural areas is the fact that, you know, you
3 may have DEP folks coming on their property to inspect their
4 water well?

5 MS. HEFFNER: Again, just brainstorming in an
6 attempt to answer your question, I mean, we haven't ---
7 certainly haven't sat and thought about the development of
8 regulations or any subsequent compliance policy ahead of this.
9 I think the good news is that the legislation speaks to using
10 the national groundwater standards as a jumping off point and
11 the fact that we would move through EQB and through our typical
12 rulemaking process, again, gives the opportunity for
13 legislative involvement and public comment. And on the
14 compliance side, I mean, one of the things --- again, this is
15 brainstorming, but one of the things that could be immediately
16 available is simply getting a copy of that drilling log, the
17 drilling report, and just generally looking it over. And in
18 the event we don't see any anomalies, there would be no reason
19 for us to visit the site.

20 REPRESENTATIVE CAUSER: While I appreciate that
21 information, I --- just a brief comment, Mr. Chairman. I have
22 some serious concerns with this, especially with the
23 regulations that may be developed as a result of it. I've seen
24 numerous examples of where we've given DEP or the EQB the
25 opportunity to write regulations, and if we give the Department

1 a centimeter, they'll take a half mile in writing these
2 regulations. And there are numerous examples. When you look
3 at the small convention of well drillers in Pennsylvania, the
4 Department has gone way far in their regulations. Anybody
5 remember outdoor wood burners? The Department has gone way,
6 way over the top with that. Regulations dealing with cleaning
7 out streams, way, way overregulation. So there are numerous
8 examples of where the regulatory climate has --- has really
9 gone awry, and so I have serious concerns about that and ---
10 but I appreciate you coming here today and explaining the
11 Department's position. Thank you, Mr. Chairman.

12 CHAIRMAN MILLER: Thank you. Representative Barbin.

13 REPRESENTATIVE BARBIN: Thank you, Mr. Chairman. I
14 have a slightly different approach than the Representative
15 that's just spoken. There are only two things that you have to
16 have to live. One of them's clean water. We're made up of 70
17 percent of water. And the other's air. I commend you on
18 trying to protect the water for everyone by recognizing the
19 fact that there is contamination that's coming in from these
20 water wells. And I think the purpose of the bill is a really
21 good bill. I think, as with anything that we do when we
22 regulate, you can always start slow and add as necessary. An
23 example of this would be you don't have to mandate a particular
24 standard as long as there's a disclosure that there may be an
25 issue, because then private parties take care of the problem.

1 The idea is the information. And the information allows the
2 parties to adjust their contract as they see fit.

3 One place that I looked at this bill that I'm a
4 little worried about, because I do think if there is
5 contamination from water wells to the groundwater as a
6 possibility, then I really think for the benefit of the
7 Commonwealth as a whole, we really should be looking at this
8 exception that allows water well not to include those places
9 where we might store petroleum or natural gas materials, okay.
10 And I say that because I don't know all of the science behind
11 how methane gas or anything else can migrate into groundwater,
12 but I do know that 20 miles south of my district there are two
13 injection wells. And if it is a problem for water wells with
14 E. Coli contamination, then to me you have to ask the question
15 how much more of a --- of a problem would it be if we continue
16 to allow injection wells to receive materials that we really
17 don't know what is in the material? So if it's a problem for
18 well waters and there is some sort of migration because of the
19 geology of the rocks, then we really ought to be moving slowly
20 on injection wells. I think we have four of them. There's two
21 in Somerset, just below Cambria, and I know there's a couple
22 more in Clearfield, just above me. But if it is a big problem
23 for water wells, it has to be a bigger problem for injection
24 wells. And if we're going to do this, which I heartily agree
25 with, we should do it, because it protects everybody's right,

1 we should also be including in this water standard a standard
2 if we are going to have injection wells. Thank you, Mr.
3 Chairman. And thank you, Deputy Secretary.

4 CHAIRMAN MILLER: Representative Corbin.

5 REPRESENTATIVE CORBIN: Thank you, Mr. Chairman.

6 Thank you for your testimony. Would this legislation allow for
7 a statewide registry of private wells, such as exists in other
8 states? And has the Department entertained any kind of idea
9 about periodic inspections of private wells.

10 MS. HEFFNER: I can say your second part first. We
11 haven't thought about what a set of regs would look like, other
12 than, you know, like I said, you know, understanding that the
13 legislation suggests, you know, groundwater, you know, a
14 jumping off point. So we haven't considered, you know, what a
15 compliance plan would look like or what an inspection program
16 might look like. We haven't done that yet.

17 I think in terms of your question about the
18 registry, I'm not --- I'm not exactly sure that it would be a
19 big listing. We would be hopefully getting copies of --- of
20 the --- you know, the drilling log or the final assessment. So
21 there would be a collection of that information. I just don't
22 know that we would convert it to --- you know, there are people
23 who are good at computer things, not me, but they might be able
24 to.

25 REPRESENTATIVE CORBIN: The reason I asked about

1 that is there could be some useful --- usefulness to have
2 something like that in the case there were a problem where you
3 needed to inspect other wells or get in --- you know, in the
4 case of any contamination. Thank you.

5 CHAIRMAN MILLER: Thank you. Representative Gabler.

6 REPRESENTATIVE GABLER: Yeah. I just wanted to
7 note, due to the previous gentleman from Cambria mentioning an
8 unrelated topic, I've done some extensive research, because
9 it's been a concern to me, on the question of injection wells.
10 And one thing we need to keep in mind before we entertain that
11 topic at all is that the Federal EPA has primacy over that
12 issue. DEP does not have the staff, nor the expertise to
13 handle that issue. And specifically, the EPA's primacy is
14 everything below the ground. And I've been doing some research
15 on exactly what we could do at the state level above the
16 ground, and I think that's an open discussion for another time.
17 But I think it's important that we keep the issues separate,
18 that the EPA does very strongly regulate, and they already have
19 standards on that side of things. And we're talking about
20 different stratas of --- very, very different stratas and very
21 different depths.

22 One question, Secretary, that I wanted to ask is do
23 you think that there's any --- any room for other ways to
24 entertain addressing problems that you have identified in your
25 testimony with regard to private water wells? For example, if

1 the concern is that private water well owners do not know about
2 their water quality, you know, is there perhaps maybe a free
3 market approach that we could take that would involve requiring
4 disclosure and testing of water quality at the time that a
5 property is sold? Do you think there's any --- any room for
6 addressing the issue in --- in that sort of realm rather than
7 trying to create a new regulatory structure within --- within a
8 state department?

9 MS. HEFFNER: I think --- I think the way I'll
10 handle that is --- is I believe when --- I mean, I've --- I've
11 purchased my own home, so I absolutely believe that when
12 someone goes out to purchase something, that it's very
13 appropriate for them to have the most current best information
14 in order to make an informed decision.

15 REPRESENTATIVE GABLER: Thank you.

16 CHAIRMAN MILLER: Thank you. Seeing no other
17 questions, thank you for your testimony.

18 MS. HEFFNER: Thank you, sir.

19 CHAIRMAN MILLER: Next we will hear from Jim
20 LaRegina, PA Council of Professional Geologists. Good morning,
21 sir.

22 MR. LAREGINA: Good morning. Thank you, Chairman
23 Miller, ladies and gentlemen of the Committee. My name is Jim
24 LaRegina. I'm a Registered Professional Geologist here in
25 Pennsylvania. I'm here on behalf of the Pennsylvania Council

1 of Professional Geologists, where I'm a current member of the
2 Board of Directors and a former past president.

3 I've been in the business for almost 35 years.
4 Started out with the Pennsylvania Department of Environmental
5 Resources, now the Department of Environmental Protection, and
6 I've been in private consulting ever since. So a lot of the
7 questions I'm hearing here about, you know, how does the
8 Department operate, should we inspect, perhaps I can answer
9 some of those questions later in terms of our experiences on
10 the consulting side and how the market kind of regulates
11 things.

12 But PCPG is a diverse group of environmental
13 professionals and about 450 licensed geologists. And we use
14 sound science to assist in the responsible exploration and
15 development of natural resources, the formulation of public
16 policy, protection of human health and the environment,
17 establishing and evaluating environmental regulatory programs,
18 and disseminating accurate information. Many of our members
19 are environmental consultants that provide services to the
20 public and private entities in the areas of water resource
21 development, protection of public and private water supplies,
22 as well as investigating and remediating contaminated
23 groundwater problems here in the Commonwealth. So my views
24 today are those of PCPG and not those of my employer.

25 We've long recognized the need for private well ---

1 for private well construction regulations to protect human
2 health and Pennsylvania's valuable water resources.
3 Accordingly, PCPG has consistently advocated for the
4 development of private water well standards like those which
5 House Bill 343 is proposing to enable, and enable the House
6 Committee on Environmental Resource and Energy. PCPG
7 respectfully requests the Committee's consideration of this
8 important health and safety water resource protection and
9 legislation.

10 As you've heard earlier, there's --- there's
11 numerous statistics that the Department and Mr. Swistock have
12 talked about in their studies regarding some of the data on
13 Pennsylvania. Three million rural and suburban residents in
14 Pennsylvania rely on private wells for drinking water supply,
15 with 20,000 new wells drilled each year in the Commonwealth.
16 Michigan is the only other state that has a larger population
17 served by private wells. Yet Pennsylvania is only one of two
18 states nationwide that do not have water well construction
19 standards, although, as the Department's pointed out, some
20 local governments now have enabled private water well
21 construction standards. But as you've heard,
22 poorly-constructed water wells do pose a risk to human health
23 and safety, not only to those that rely on the water but to
24 others as well, as groundwater is a shared resource.
25 Poorly-constructed wells can be pathways for the introduction

1 and spread of contaminants to humans and ecological receptors
2 through the local aquifers, surface water and other valuable
3 water resources of the Commonwealth. Common contaminants
4 include nitrates and coliform bacteria, which are typically
5 looked for in some property transaction types, but there are
6 other contaminants that it may be necessary to look for.

7 Past studies show that statewide construction
8 standards adversely affect Pennsylvania's residents. There's
9 been various studies in 2009 and in 2011 by the Center for
10 Rural Pennsylvania. And I don't want to reiterate some of
11 those facts. You've heard those. But you know, upwards of 40
12 percent of the wells that have been tested have failed. And a
13 lot of them are missing key components like just a simple
14 sanitary cap to keep surface contaminants out or a cement grout
15 seal to keep contaminants from infiltrating down the sides of
16 the well casing. But according to a 2001 --- 2011 study, most
17 of the wells in the study lacked just the basic construction
18 standards reflective of statewide water well regulations, which
19 would contribute to the impairment of certain water quality
20 problems.

21 PCPG also notes the importance of water well
22 construction standards for resource protection. Human health
23 and safety is also a recommendation of two independent
24 statewide advisory councils. In December of 2008, the
25 Statewide Water Resources Committee listed first among its

1 recommended legislative priorities for implementing the state
2 water plan to enact legislation to establish statewide private
3 water well construction standards. Additionally, in July of
4 2011, the Marcellus Shale Advisory Commission reported and
5 unanimously adopted and recommended among its comprehensive
6 strategic proposals for the responsible and environmentally
7 sound development of Marcellus Shale. The Commonwealth should
8 enact legislation establishing construction standards for new
9 private wells to ensure the delivery of safe drinking water to
10 its residents.

11 Given the important human health and safety and
12 water resource protection considerations, PCPG recommends that
13 House Bill 345 --- 343, excuse me, apply to any and all water
14 wells drilled and/or constructed in the Commonwealth, including
15 irrigation wells, industrial supplied production or processed
16 water wells, groundwater de-watering wells and water wells
17 instructed for the purpose of investigating and remediating
18 groundwater quality problems. However, there are wells that
19 are excluded, namely those that are covered by the Oil and Gas
20 Act or the Safe Drinking Water Act. But improperly
21 constructed, any of the four mentioned wells, irrigation,
22 industrial production, groundwater de-watering wells, all have
23 the potential to allow for the introduction of contaminants or
24 the spread of contaminants to human and/or ecological receptors
25 via the groundwater.

1 PCPG also understands that House Bill 343 is
2 intended to provide the Department of Environmental Protection
3 with the authority to develop and the Environmental Quality
4 Board with the authority to adopt the rules and regulations to
5 establish statewide private water well construction and
6 de-commissioning standards to be met by water well drillers and
7 water well owners. PCPG recommends that such rules and
8 regulations be generally consistent with water well
9 construction standards established or recommended by the
10 National Groundwater Association, consistent with Section
11 311.8(b)(f) of the Act 220, known as the Water Resources
12 Planning Act, which the section prohibits DEP or the EQB from
13 requiring the metering of homeowner wells. House Bill 343 does
14 not authorize any metering of homeowner wells, rather its scope
15 is appropriately limited to the development of construction and
16 decommissioning of private water wells.

17 For the Committee's consideration, PCPG has a few
18 general comments on the proposed text of 343. As noted above,
19 PCPG believes water well construction standards are necessary
20 to protect human health and the Commonwealth's valuable water
21 resources. And thanks to the Committee for considering PCPG's
22 statement of support and comments on the bill. If you have any
23 questions, I'd be happy to answer.

24 CHAIRMAN MILLER:

25 Thank you for your testimony. I will start with my

1 first question, because you used a type of well here in your
2 testimony that I'm not familiar with. What's a groundwater
3 de-watering well.

4 MR. LAREGINA: De-watering well --- primarily on a
5 construction site, where you're doing some construction, maybe
6 some foundation work, below the water table. You preemptively
7 go in, put in a series of wells to actually reduce the
8 groundwater table so that you can construct under dry
9 conditions rather than trying to construct it under the water
10 table.

11 CHAIRMAN MILLER: Thank you for that explanation.
12 Do we have other questions? Representative Ross.

13 REPRESENTATIVE ROSS: Based on your experience, I
14 was wondering if you could give us a little bit of guidance of
15 the types of pollutants that you would be most worried about
16 promulgating down through an improperly grouted or improperly
17 capped well into the groundwater supply, with a risk of
18 polluting neighboring wells. Would coliform be in that
19 category? Would there be other chemicals? What would you
20 worry about if you knew your neighbor had a well that was
21 improperly constructed, grouted or capped.

22 MR. LAREGINA: A lot of that depends on the --- you
23 know, the setting of the well, the surrounding land use.
24 Obviously, in an agricultural area, you'd be looking at
25 coliform bacteria. If there's any, you know, manures used,

1 there's nitrates associated with manure usage, potentially
2 pesticides that could be used. In the old days, in PennDOT
3 salt domes --- before they had the salt domes, there were wells
4 contaminated with chloride from just the solution of the salt
5 and runoff from snow melt water on highways, things like that,
6 proximity to any kind of industrial establishment. There's
7 volatile organic compounds. There's fuel oil compounds that
8 could be in there. So again, it depends on what your
9 surrounding environment, your land uses, are like.

10 REPRESENTATIVE ROSS: And following up on that
11 again, thinking about the pollution going in one well and
12 promulgating out, what --- what range of worry would you have
13 and how far would it typically go toward potentially polluting
14 other people's wells who may be properly constructed? Would
15 you worry about a hundred yards? Would you worry about a
16 quarter of a mile? Would you worry about some pollutants more
17 than others.

18 MR. LAREGINA: That's all --- that would be a
19 site-specific type situation. It's hard to put a handle on
20 that.

21 REPRESENTATIVE ROSS: But you would worry about it.

22 MR. LAREGINA: Well, it would be a concern, sure.
23 But I think, too, we're not looking at these wells as being ---
24 it was talked about earlier, injection wells, where the, you
25 know, contaminants are actually going down the wells. It's

1 sealing the wells to prevent contaminants that can get down the
2 periphery of the well and into the water.

3 CHAIRMAN MILLER: Representative McCarter.

4 REPRESENTATIVE MCCARTER: Yes. Thank you, Mr.
5 Chair. Going back to the --- following up on Representative
6 Ross' questions, the situation again, going back to abandoned
7 wells, of which, again, no one seems to have a good figure, the
8 possibility of their pollution traveling to other wells or into
9 the other parts of the system, do you consider that to be a
10 major threat, even more so than the active wells.

11 MR. LAREGINA: Well, the point of that it's not so
12 much they are points of pollution, they're potential conduits
13 for --- for pollution. So certainly not knowing where they
14 are, they can present a risk of contamination. But again, you
15 know, it's a guess as to how many there are out there. And
16 some of them are just found by happenstance. I mean, if you're
17 physically looking to do some type of development, you may go
18 out and look for that. But by and large, it's going to be
19 tough to find.

20 REPRESENTATIVE MCCARTER: Is there anything in terms
21 of standards --- I know in terms of some of the work that I've
22 done in the past in coming across abandoned wells, in areas
23 that are being developed as an example, what is the current
24 practice in terms of what happens to those wells in terms of
25 areas being developed.

1 MR. LAREGINA: In terms of development, we would
2 always recommend to our clients that they properly abandon the
3 well if they were to find that on their property. And I
4 believe, under the oil and gas program, that anybody who is
5 putting in a new well now, if they uncover or discover wells on
6 their properties, it becomes their responsibility. They take
7 ownership of it and they're required to properly abandon that
8 well.

9 REPRESENTATIVE MCCARTER: So there is regulation on
10 that already.

11 MR. LAREGINA: I believe in the oil and gas program.
12 That's a little bit out of my ---.

13 REPRESENTATIVE MCCARTER: Just in oil and gas. But
14 a property owner or someone developing houses on an old tract,
15 as an example, and finding 30 or 40 wells in that particular
16 area, there's nothing that covers that, is there?

17 MR. LAREGINA: I do not believe so, no.

18 REPRESENTATIVE MCCARTER: Thank you.

19 CHAIRMAN MILLER: Thank you. Any other questions?
20 Thank you for your testimony.

21 MR. LAREGINA: Thank you.

22 CHAIRMAN MILLER: Next we have Dan Wise, the PA
23 Builders Association. Welcome, Dan.

24 MR. WISE: Good morning. I'd like to thank Chairman
25 Miller and the members of the Committee for the opportunity to

1 testify this morning. Let me just say that we found out this
2 morning on the way in that our testimony had been bounced back
3 from our email server at PBA, so we will be providing you with
4 a copy as soon as we get back to the office.

5 CHAIRMAN MILLER: I appreciate that. Thank you.

6 MR. WISE: My name is Dan Wise. I'm a small builder
7 located in central PA. Own Wise Construction based in
8 Boalsburg. And I also serve as Chairman of the Pennsylvania
9 Builders Uniform Construction Code Task Force. And it's in
10 that capacity I'm pleased to address you this morning regarding
11 House Bill 343.

12 PBA understands the goals and we support the goals
13 of House Bill 343 and its predecessor bill, 1855, from the
14 previous session. Virtually everything that we design and
15 build incorporate practices that protect Pennsylvania's
16 environmental quality before, during and after construction.
17 And certainly ensuring the supply and quality and safety of
18 drinking water is one of the most important. However, with the
19 previous incarnation of this bill, we believe that there's a
20 better approach to keep small, private wells under the UCC, the
21 Pennsylvania Uniform Construction Code, and we have the
22 following additional concern. As noted, and I think there's
23 been some conversation about addressing this, the bill has no
24 impact on any of the older existing wells throughout the state
25 that have been over the past 200 years or more in which

1 potential problems with bacteria and everything that's been
2 outlined are much more common than wells that have been drilled
3 and constructed to today's industry standards.

4 Pennsylvania well drillers are currently licensed
5 under the Department of Conservation and Natural Resources and
6 have guidelines established by the DCNR and the DEP that are
7 commonly used in the industry. Additionally, water wells in
8 Pennsylvania are currently regulated. They are regulated under
9 the Pennsylvania Uniform Construction Code, the International
10 Residential Construction Code and the International Plumbing
11 Code. And I don't get to say this next statement very often,
12 but PBA, State Building Code officials, and the ICC all agree
13 that the language found in the UCC, the IRC and the IPC are a
14 reasonable baseline to define the relevant standards for safe
15 drinking water and reasonable well construction.

16 Any attempt to further regulate the wells would
17 require an amendment to the Pennsylvania UCC, and we have
18 previously offered language in House Bill 1855 that would have
19 strengthened the standards already found in the UCC to increase
20 the protection for Pennsylvania residents who rely on well
21 water for their homes. We are not agreeable to any language
22 that gives DEP the authority to develop a presently unknown set
23 of standards to be written sometime in the future for well
24 construction in Pennsylvania. The most likely result in such
25 an effort would be increased cost for Pennsylvanians who rely

1 on well water for their homes. At the same time, DEP officials
2 have on previous occasions acknowledged that they don't have
3 the resources to enforce such standards if they were to be
4 developed. By allowing the Department of Labor and Industry to
5 regulate this procedure for residential projects only, it can
6 be incorporated into the normal permit and inspection process
7 that is already in place at no additional expense.

8 We believe that a better solution for Pennsylvania's
9 residential water wells is to keep them under the UC regula ---
10 UCC regulations and work to develop enhanced standards for
11 water well quality, well construction and decommissioning that
12 could be amended into the existing House Bill 343 to replace
13 the current standards in the UCC. These standards would be
14 developed from existing experts and respected sources in the
15 field, including the National Groundwater Association. And
16 it's important to note that the National Groundwater
17 Association is currently working with ANSI, the American
18 National Standards Institute, to develop an ANSI and GWA well
19 --- water well construction standard. These standards would be
20 enforced by certification from the well driller that all
21 requirements have been met, which would be part of the well
22 completion report. The well completion report would then be
23 included with the final inspection presented to the building
24 --- the code official prior to the Certificate of Occupancy for
25 the homeowner. So it's a seamless transition of this assurance

1 that the standards have been met. And as a practitioner of
2 sustainable construction, one of the key components when we
3 finish a project is we hand a manual off to the homeowner that
4 has all this type of information at their --- in their hands,
5 as far as not only wells but other components of the house.
6 But PBA's proposed solution would ensure well construction
7 standards and water quality standards that protect this
8 invaluable resource and provide a process and procedure to
9 provide a smooth, efficient flow to the Pennsylvania housing
10 consumers.

11 On behalf of the PBA and the more than 225,000
12 members and employees it represents, I thank you again for the
13 opportunity to testify today. And I'd be happy to take any of
14 your questions.

15 CHAIRMAN MILLER: Thank you, Mr. Wise. I would
16 start with one question, if I might. Development of the ANSI
17 standard, do you have any feel for where that might be? What
18 kind of a timeline might we be looking at.

19 MR. WISE: It is currently in the works right now.
20 And I would expect that it would --- properly within the next
21 three to six months, that we will see it. There's a
22 possibility that it will be presented to --- the 2015 ICC
23 hearings are ongoing right now, and there's a good chance ---
24 this is being developed to be considered at those hearings. So
25 it is imminent. You can't --- the ANSI process is a, you know,

1 kind of ---

2 CHAIRMAN MILLER: Understood.

3 MR. WISE: --- marches to its own drummer, which is
4 a good thing, but it's actively being developed as we speak.

5 CHAIRMAN MILLER: Representative Snyder.

6 REPRESENTATIVE SNYDER: Thank you, Mr. Chairman. I
7 want to make sure I'm understanding this perfectly. We live on
8 a 55-acre farm. I had a well for many years. We got public
9 water about eight years ago. Right now my daughter is going to
10 build a house on our farm, and we've had the Building Code
11 officer out, the sewage enforcement officer out. Are you
12 telling me that, if she needed a well, that could have been
13 done under that same program through the UCC Code? Am I ---

14 MR. WISE: Yes.

15 REPRESENTATIVE SNYDER: --- understanding you
16 correctly? So if she needed a well drilled to build her house,
17 what would have happened as we're going through our process
18 with our township.

19 MR. WISE: That --- that would have been part of the
20 inspection and the drilling of the well. And the examination
21 of the well drillers' report would have fallen to the --- would
22 have been the responsibility of the Building Code official to
23 come out and just review that report to make certain that it
24 has met the standards.

25 REPRESENTATIVE SNYDER: So therefore, it could make

1 perfect sense, rather than running this through the DEP, with
2 regulations that are yet to be written, to just making it part
3 of the township, a municipal package, through the UCC Code ---

4 MR. WISE: Correct.

5 REPRESENTATIVE SNYDER: --- and the UCC officer.

6 MR. WISE: Absolutely.

7 REPRESENTATIVE SNYDER: Thank you.

8 MR. WISE: And I might add, you know, just the
9 logistics of it, that you know, when the Building Code
10 official, he's out there --- he or she is out there to do the
11 inspection, to do the final CO, and then if they're waiting for
12 a DEP inspector to come to inspect the well and everything's
13 done but the well inspection, there's a fly in the --- a
14 potential fly in the ointment, where the homeowner could not
15 take possession of their house.

16 CHAIRMAN MILLER: Representative Ross.

17 REPRESENTATIVE ROSS: If I am understanding you
18 correctly, you are suggesting that there might be some
19 additional elements to the ANSI regulations that you think
20 might be desirable and perhaps would put us more in conformity
21 with some of the other suggestions that have been made to
22 review the well drilling process; is that correct.

23 CHAIRMAN MILLER: Oh, absolutely. We don't dispute
24 any of the efforts and comments made here today as far as what
25 needs to be protected, what elements are out, you know, what

1 the contaminants are and the construction standards outlined.

2 REPRESENTATIVE ROSS: And since you're a little more
3 familiar with the review of the International Building Code
4 process, correct me if I'm wrong, but I believe that the panel
5 that we had suggested and created when we adopted the Code
6 statewide made the recommendation after the last review that we
7 not even consider any of the 2015 Code changes. So we have the
8 opportunity to override, obviously, and intervene if we choose
9 to, but it sounds like we may very well want to actually take
10 legislative action to make sure this piece gets properly dealt
11 with, taking consideration of your suggestions as to how we
12 might actually implement that.

13 MR. WISE: Well, two comments. The Review and
14 Advisory Council voted not to adopt the 2012. The 2015 has not
15 yet been published. And that will undergo the review procedure
16 that's in place currently. But certainly legislative fixes are
17 not --- we're not setting the precedent. We have numerous ---
18 several elements of the Building Code that are in our
19 Construction Code via statute.

20 REPRESENTATIVE ROSS: So they didn't make a
21 recommendation not to move forward on any changes until a time
22 certain sometime in the future.

23 MR. WISE: The Review and Advisory Council? Well,
24 the Review and Advisory Council voted to stay with the 2009
25 Code and not the 2012. Now, when the 2015 comes out, then they

1 will be tasked with reviewing that under the same procedures
2 outlined in the legislation that established the council.

3 CHAIRMAN MILLER: Thank you. Any other questions?

4 Thank you.

5 MR. WISE: Thank you.

6 CHAIRMAN MILLER: Thank you for your testimony. Our
7 last testifier is Bill Reichart, the president of the
8 Pennsylvania Ground Water Association. I would note that
9 Bill's business is in my district, and I've been working with
10 bill and his father for many years now on this piece of
11 legislation. So Bill, when you're ready, please proceed.

12 MR. REICHART: Thank you, Chairman Miller and
13 members of the Committee still present.

14 CHAIRMAN MILLER: Understood.

15 MR. REICHART: I guess one of the good things about
16 going last is you get to kind of answer any unanswered
17 questions; however, you lose a portion of the audience.

18 The highlights, I guess, of my testimony, again, I'm
19 here more to fill in cracks and answer questions, but I am
20 William Reichart, II. I own and currently manage a
21 groundwater, well drilling and pump installation company in
22 southern York County that has been in existence since the year
23 1890, and thus making myself a sixth generation within the same
24 family, within the same industry. So I'm here representing
25 myself and can answer anything, I think, and all things well

1 related from a technical standpoint. I am also currently the
2 president of the Pennsylvania Ground Water Association, and as
3 such, representing the contractor side of the industry, as well
4 as scientific interests, as well as manufacturers and suppliers
5 within our industry. I'm here to report that Pennsylvania ---
6 the Pennsylvania Ground Water Association does give its
7 endorsement to House Bill 343.

8 I'd like to maybe go off of my written testimony,
9 again since that's been covered, and speak from the heart and
10 from the cuff and basically say to you that I think that this
11 issue and the bill itself is about protection of groundwater,
12 period. It does not so much matter whether the protection of
13 that groundwater has to do with the construction of a house out
14 in the country, the injection of whatever type of effluent in
15 whatever region of the Commonwealth, whether it's for
16 industrial, municipal, city use. The concept that I would like
17 to really communicate today is that all waters of the
18 Commonwealth of Pennsylvania are directly related to one
19 another.

20 Most folks look at the regulatory process, as far as
21 water in general is concerned, from two sides, surface water
22 and groundwater, and they miss or have a major disconnect
23 between the fact that there is a direct relationship between
24 the two. The water that falls from the sky through precipatory
25 events that runs into streams and lakes and eventually down

1 into one of the bays, is what we tend to think of as surface
2 water. The water that soaks through the subsurface gets into
3 the aquifer layers and can be encountered when one were to
4 drill and properly construct a well into an aquifer is viewed
5 as groundwater. The connection between the two is that your
6 surface sources have --- and your stream flow, they have what's
7 referred to as the basal component of stream flow. When we
8 really get another drought and things get dry and it hasn't
9 rained in a month, the reason that the stream still has water
10 flowing through it is because it is the groundwater or basal
11 flow component of that stream. So in essence, groundwater, in
12 a number of cases, will actually discharge to surface sources.

13 I guess, on a more practical standpoint, some of the
14 Committee members had questions about how far can contamination
15 extend from one problem, I'll say whether it be an
16 improperly-installed septic system, an injection well, an
17 improperly-constructed well. Agreeing with previous speakers'
18 comments that regional geology really plays a large hand and
19 factor into the answering of that question. However, from a
20 holistic standpoint, though, I think that is the mindset and
21 the umbrella of which all of this, again, protection of the
22 groundwaters and waters, in general, of the Commonwealth of
23 Pennsylvania, need to be viewed.

24 I definitely feel --- and again, as the Pennsylvania
25 Ground Water Association endorses, protection of those waters

1 in the matter that we're here to discuss today, through the
2 proper construction and eventually licensing of certified
3 contractors to perform the work, as well as having a minimum
4 bar of level of expectation of service that they need to
5 provide. So any questions?

6 CHAIRMAN MILLER: Well, I do have one. What is the
7 current licensing requirement.

8 MR. REICHART: Current licensing requirement, good
9 question. Through the Department of Conservation and Natural
10 Resources, I pay a fee per each well drilling unit, we call
11 them rigs, that I own and operate within the Commonwealth of
12 Pennsylvania. There is nothing which addresses who I have
13 running that equipment. There is nothing that addresses how
14 that equipment is to be run. Obviously, given some of the
15 earlier testimony, as well as some of my remarks, if done
16 improperly, it could lead to problems in environmental
17 degradation.

18 CHAIRMAN MILLER: Thank you. I thank you for your
19 testimony. I thank all the testifiers today for coming. We
20 will continue to look at this issue. We will look at the
21 development of the ANSI standards, see what time frame we might
22 see on those and what they might include, and we'll proceed
23 from here. Thank you, everyone, for attending. This meeting
24 is adjourned. Thank you.

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