



DIVISION OF WATER, WATERSHED MANAGEMENT
BRANCH, GROUNDWATER SECTION

KENTUCKY DRILLER QUARTERLY

Kentucky Driller Quarterly

Kentucky Ground Water Association Tradeshow and Drillers Workshop

On March 1st and 2nd 2012 the Kentucky Ground Water Association held its annual tradeshow and drillers workshop in Louisville, Kentucky. David Jackson, Scotty Robertson and Susan Mallette represented the Division of Water. David gave a talk on the *Need For Regulation of Geothermal Drillers* and taught a course to assist drillers in passing the national Groundwater Association (NGWA) Well Driller examinations. Ninety-four drillers turned in proof of training cards for the workshop.

Scotty Robertson the new DOW Water Well Certification Program Coordinator was present to meet the drilling community.

Joe Moffitt attended the tradeshow for the first time as a monitoring well driller. Joe was given a lifetime membership to the KGWA and was awarded a plaque with a hand pump on it by the KWGA in appreciation of his service to the drilling community along with a fishing pole and tackle box as a retirement gift.



Alan Burgess Presenting Certificate to Joe Moffitt

HB 561 Geothermal Well Driller Certification

Representative Leslie Combs (D) for Hazard District 94 introduced into Commonwealth of Kentucky House of Representatives in Frankfort, Kentucky on March 1, 2012 a bill to amend **KRS 223.400**. **KRS 233.400** is the statute that currently requires certification of water well and

monitoring well drillers in Kentucky. **HB561** proposed to amend **KRS 223.400** to require certification of geothermal well drillers and to promulgate constructions standards and practices regulations for Closed Loop Geothermal Wells. Rep. Combs introduced HB 561 to the Tourism Development & Energy (H) committee on March 5, 2012. HB561 was posted in the committee on March 19, 2012 and on March 22 the committee reported favorably for the 1st reading to the Calendar. On March 23, HB561 had its 2nd reading to Rules committee. A floor amendment was filed on March 27 and it was recommitted to Appropriations & Revenue (H).

Water Well Driller Certifications

The number of Kentucky water well driller certifications for the 2011/2012 period was higher than previous years. Monitoring well drillers increased significantly this past year. Listed below is a comparison of the number of certifications thus far this year and past years.

Year	Total	Breakdown
2008/2009	135	(W 32, M 50, C 53)
2009/2010	130	(W 32, M 52, C 46)
2010/2011	151	(W 34, M 72, C 45)
2011/2012	163	(W 36, M 76, C 51)

W= Water Well, M = Monitoring Well,
C=Combined Water and Monitoring Well

Complaints and Regulation Violations

The DOW sent letters to three drillers this quarter for violating 401 KAR 6:320 for drilling wells on expired certifications. All three drillers have since come into compliance with the regulations. Remember if you are drilling, modifying or abandoning monitoring or water wells your certification must be up-to-date. One Driller was cited for installing a well within regulated setback limits for a Septic System. The driller had to abandon and replace the well at his expense. Be sure to verify the well location relative to setback distances prior to drilling the well. If these distances can't be met, then apply

for a variance by suggesting a more protective well installation solution and get approval before drilling the well.

Well Site Field Audits

Scotty Robertson began conducting field audits of water and monitoring well drillers this quarter. One audit has been completed thus far. These field audits are not intended to be regulatory inspections. The primary purpose is to observe the well drilling operations and to address any problems the driller may have related to the certification program. Mr. Robertson is seeking volunteers to be audited. If you would like to volunteer to be audited please contact him if you would like to schedule a time to meet at your well site.



Driller Certification Renewal Time Again

This is a reminder that your 2011/2012 certification expires May 31, 2012. Certification renewal begins June 1, 2012 and continues through August 31, 2012. During

this time period we highly recommend that you renew your certification online. To do so your liability insurance, surety bond and five hours of training must be up to date.

If you attended the KGWA Tradeshow in March 2012 and turned in your proof of training card our database has been updated for your training. If you have not sent in a updated copy of your proof of liability insurance you must do so before you can renew on line.

You can renew online by going to <http://water.ky.gov> and then choose **Programs > Well Drillers Certification Program**. You will not be able to renew online if your training, insurance, or bond is not current. Look for the ePay example below on the well driller web page.

If you are having trouble paying online please contact Jo Blanset at jo.blanset@ky.gov for assistance.



Online well record submittal is available on line also.



Annual Certification Training Requirements

Any other training for annual certification requirements must be preapproved by the Water Well Driller Certification Program to receive credit.

To receive preapproval for training, submit a course description of the classes you plan to take. Upon completion of the training, submit a proof of attendance and a training certificate from the training organization. **You will not receive credit for training that is not properly documented.** You are not required to have preapproval for training received at the annual Kentucky Ground Water Association's Driller Workshop.

If you have questions concerning the application process, exam requirements, certification renewals, wallet cards, liability insurance, surety bonds, etc., contact Scotty Robertson at 502-564-3410, ext. 4943, or e-mail scotty.robertson@ky.gov

If you have technical questions related to well construction, abandonment, groundwater, well variance request, training, etc. contact Scotty Robertson at 502-564-3410, ext. 4943, or e-mail scotty.robertson@ky.gov.

Down-Hole Well Camera Water Well Inspections

The Groundwater Section of the Kentucky Division of Water (DOW) continues to provide down-hole well camera inspections for Kentucky certified water well drillers and well owners. A well camera inspection can sometimes be useful to gain borehole information for constructing new water wells or for old wells that may need to be modified. While some well-related problems can be solved from the surface, many require observation of the drill hole itself.

DOW owns and operates a color, down-hole camera with 500 feet of cable. This is a powerful tool for assessing subsurface conditions within wells. The down-hole camera has been used to successfully diagnose numerous problems in wells across Kentucky.

An example of some of the well information that can be obtained with the well camera are:

- Cracked or broken casing.
- Casing leaking at the base due to a failed annulus seal.
- Identification of producing zones.
- Subsurface voids or fractures.
- Unstable formations.
- Inspection of well screens for damage or bio fouling.

The well pump needs to be removed from the well at least 24 hours prior to the well camera inspection to allow any sediment in the water to settle out in the well. The well

water must be relatively clear to view the aspects of the well construction through the water column in the well. If you have a need for this service, please contact Scotty Robertson or Rob Blair at 502-564-3410 or via email (scotty.robertson@ky.gov or robert.blair@ky.gov).

Attention:

If you have an e-mail address, please send it to us so that we can better provide you with information related to the driller certification program.

Also, please remember to give your water well customers a copy of the Water Well Owners Guide. This guide can be very useful to the water well owner in answering questions they may have concerning their well.

For water wells located in areas of the state where methane gas may be present, there is a section in the guide that explains how to vent a well. It is a requirement under 401 KAR 6:310 Section 1 (4) (c) that the certified driller provides this information to the well owner.

You can print copies of this guide by going to the Well Drillers Program Web site

www.water.ky.gov/gw/gwtech/gwdrill/.

Click on *Forms and Applications*, then click on *Well Driller Forms*, then click on *Water Well Owners Guide*.

Monitoring Well Abandonment Variance

Blanket Approval Provision
Abandonment Procedures
Monitoring Well Construction Practices and Standards

This driller’s notification addresses monitoring well abandonment procedures for direct push monitoring wells, temporary monitoring wells, and permanent monitoring wells installed in unconsolidated formations.

The Cabinet will grant a variance to the monitoring well abandonment requirements of 401 KAR 6:350, Section 11(2)(a), for the referenced wells, based upon one or more of the following criteria:

1. The monitoring well(s) to be abandoned has been constructed in a manner, and meets the definitions of a direct push well or a temporary well per 401 KAR 6:350 Sections 5 and 6.
2. The monitoring well(s) to be abandoned is constructed and completed in an unconsolidated formation with a total depth of less than or equal to 30 feet below ground surface. In addition the variance request shall adhere to the following:
3. Shall be accompanied by written approval of other permitting agencies, 401 KAR 6:350, Section 12, and
4. The variance request shall be submitted to the Cabinet by approved procedures per 401 KAR 6:350, Section 1(6) (a through e).

The approved procedures for abandonment of the referenced monitoring wells shall require the removal of all the casing and screen from the borehole. The resulting borehole shall then be filled and completed per 401 KAR 6:350, Section 11(2)(b through d).

If the entire length of casing and screen can not be pulled from the borehole, the well shall be abandoned per 401 KAR 6:350, Section 11(2)(a).

Groundwater & Water Well Search Information

The Kentucky Geological Survey has developed a user-friendly data base on groundwater located at: <http://www.uky.edu/KGS/> .

Select Search Databases and Publications, then select Groundwater Information.

Call 811 Before You Dig

In compliance with the Kentucky Dig Law KRS 367.4901 to KRS 367.4917, any activity that results in the movement, placement, probing, boring or removal of earth, rock or other material in or on the ground requires the excavator to contact the One Call Center with adequate information regarding the dig. Remember...It’s The Law!!! Kentucky 811 is open seven days a week, 24 hours a day to process locate requests or address questions regarding a locate request. The toll-free number is 800-752-6007 or 811 (the National Three Digit Call Before You Dig phone number).

Each excavator is required to provide no less than two business days' notice or no more than ten business days prior to commencing work. Kentucky 811 does not factor state and federal holidays in the Two Business Day Notice required by law. When a Locate Request is submitted and a holiday falls within the Two Business Day Notice, then the date the holiday is observed will not be considered in the Two Business Day Notice. To view the current year's holiday list that affects the Two Business Day Notice, visit the Kentucky 811 Web site at www.kentucky811.org.

Generic Groundwater Protection Plans

Pursuant to 401 KAR 5:037, certified well drillers are required to develop and implement a Groundwater Protection Plan (GPP) for protection of the groundwater.

Guidance for developing GPPs can be found at the Web site below. Drillers who drill water wells, irrigation wells, monitoring wells, closed-loop geothermal borings, and who install soil borings or rock coring are also required to implement a GPP.

It is recommended that you provide to your clients GPPs for water well owners and septic tank systems. These generic plans which have been developed by the Cabinet are available on the Groundwater Section's Web site at:

www.water.ky.gov/gw/gwprotection/pages/groundwaterprotectionplans.aspx

You can also contact Pat Keefe for more information at pat.keefe@ky.gov or 502- 564-3410.

Grievance Process for Denial of Variance

The Cabinet has developed a process for addressing an initial denial of variance in response to concerns raised by applicants. The process is as follows:

1. A determination is made by the Cabinet whether to approve or deny a variance request. This determination will be made to the applicant per 401 KAR Section 1(6)(b)(2).

2. If the applicant is aggrieved by the determination, an appeal can be made to the Kentucky Water Well Certification Board (KWWCB) within 30 days of the written determination.
3. The KWWCB will address the appeal at their next quarterly meeting. Based upon the merits of the appeal, the KWWCB will make a recommendation to the Cabinet on whether to uphold or modify the appealed determination.
4. The Cabinet will take into consideration the KWWCB's recommendation, and will make a final determination to the appeal based upon the KWWCB's recommendation and the standards of 401KAR Section 1(6)(b)(3). The applicant will be notified in writing to this final determination.

This process was official adopted by KWWCB at the June 12, 2009, board meeting at Rough River State Park. And, for those who do not know, the proceedings of the board meetings are open to the public.

The next board meeting will be held at: 13:30 PM, Monday, March 1, 2012 at the Fern Valley Hotel and Convention Center in Louisville, Ky. All Drillers are welcome to attend.

Here are the directions on how to get to the Fern Valley Hotel:

<http://www.fernvalleyhotel.com/map-and-directions/>

The current meeting agenda includes:

1. Kentucky Water Well Certification Board recommended to the Secretary of the Energy and Environment Cabinet that statutes and regulations governing the drilling of Closed Loop Geothermal Borings be developed. On or before February 1, 2012, a final version of KRS 223 requiring the licensing of geothermal drillers for constructing closed loop geothermal wells in Kentucky will be submitted to members of the Kentucky legislature.
2. Progress of the bill in the Legislature KRS Chapter 223 Vertical Closed Loop Geothermal System Installation Practices and Standards



<http://www.KentuckyUnbridledSpirit.com>

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**Energy and Environment Cabinet
Department for Environmental Protection**

**Division of Water
Watershed Management Branch
Groundwater Section
Water Well Drillers Certification Program
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Got an Interesting or Funny Drilling Story or Picture you would like to Share? Then send it to scotty.robertson@ky.gov and you may see it here.

