

The Driller's Digest

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This newsletter is published as a service to certified well contractors and others in the ground water industry. Suggestions for articles for publication in the newsletter are welcome.

Commission Member Changes

by Joanne Rutkofske, WCC Staff

The Well Contractors Certification Commission would like to welcome aboard Mr. John Nykamp. Mr. Nykamp was sworn in at the November 6, 2007 Commission meeting by Elaine Marshall, Secretary of State.

Mr. Nykamp has worked for the Guilford County Department of Public Health as an Environmental Health Program Specialist for about 15 years, troubleshooting problem wells, operating a down-hole well camera, and reviewing inorganic sample results.

Mr. Nykamp is actively involved with the annual Guilford County Well Contractors Day, and has been

a very knowledgeable speaker at various events including the SOP training for new county environmental health specialists.

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At the February 5, 2008 meeting of the Well Contractors Certification Commission, election of officers was conducted. Greg Bright will be returning as Chairman and Bill Magette was selected as the new Vice Chair.



## Statewide Well Rules Are Nearly Here!

by Wilson Mize, DEH Regional Specialist

As most of you are aware by now, every county in North Carolina will be required to permit and inspect private drinking water wells effective July 1, 2008. Many counties have had private well permit and inspection programs, others have begun the process and still more will be starting July 1. As a certified well contractor, it is your obligation to make sure that you have a permit in hand before installing any private drinking water wells after July 1,

2008. Several counties will require permits for irrigation wells, so check with the county you drill in to ensure compliance with their local rules. A permit also will be required to repair a private drinking water well. However, a permit is not required for repairs that involve pumps, pumping equipment, or storage tanks. If you have any questions, you can contact the county Environmental Health staff or your regional specialist. A map with contact information for the regional specialist can be found on the Well Contractors Certification Web Site at [www.ncwelldriller.org](http://www.ncwelldriller.org).

## Summary of Civil Penalty Assessments

*Penalties for violations of NCGS Chapter 87, Article 7A and NCAC Title 15A, Chapter 27 vary depending upon the particular facts and circumstances present in each case. Note: only finalized uncontested cases or cases not seeking remission and at the collection stage are included in this list (payment of fines and corrections of violations may already have occurred).*

(No new *finalized* cases at this time.)

## Certification Rule Changes Update

by Joanne Rutkofske, WCC Staff

The proposed changes to Chap. 27- Well Contractor Certification Rules are moving forward. The Well Contractors Certification Commission heard the official Hearing Officers' report on February 5, 2008 given by Jay Zimmerman, supervisor for the Raleigh Regional Office, Aquifer Protection Section. The commission voted to accept the proposed rules with suggested changes based on the feedback received. The proposed rules are now being reviewed by the Rules Review Commission. After receiving final approval the revised Chap. 27 rules will take effect **May 1, 2008**. A copy of the revised Chap. 27 rules will be mailed to all certified well contractors and the electronic version online will be updated.

**The new certification levels are proposed as follows:**

**Level A**– Includes all well contractor activities.

**Level B**– Includes all well contractor activities except air and mud rotary. Includes hydrofracturing.

**Level C**– Includes grouting, well abandonment, rehabilitating a well due to biofouling, well development (eg.- pumping or surging), packer and liner installations, extending casing above land surface, and all Level D activities.

**Level D**– Includes breaking a well seal and well disinfection.

The Commission also discussed reducing the continuing education requirement for Level D to 4 professional development hours (PDH), but due to limitations in the rulemaking process, have decided to hold off on changes to the continuing education requirement at this time. All four levels will be required to earn 8PDH annually.

Please visit our website at [www.NCwelldriller.org](http://www.NCwelldriller.org) to view the proposed rule language, timeline highlights of the rulemaking process and special notes for new applicants.

For currently certified well contractors, the renewal notice you receive this coming May will provide details on the conversion from our current general certification into the new more specific levels. Basically, currently certified well contractors will “renew into” the new certification levels, selecting which level they want on their renewal form.

The certification wallet card will also undergo some minor changes this year. We will be adding on the prefix “NCWC” and the level (A,B,C,or D) following the certification number. This will provide better clarification on well tags, construction records and even for continuing education events.

One of the proposed changes for the 2C.0100 rules currently underway is to exempt certified well contractors from also having to register as a pump installer for those of you who “do it all”. The extra prefix added to the certification number will distinguish your number from a standard pump installer registration number. Please use the new prefix and level indicator wherever you use your certification number.

## Continuing Education– Urgent!

by Joanne Rutkofske, WCC Staff

Just another reminder about the importance of obtaining your continuing education on time. In August 2007, Senate Bill 844 was ratified. In this bill, General Statute 87-98.7(b) was changed to read... “A certificate shall be renewed annually by payment of the annual fee and proof that the applicant has completed any professional development hours as may be required by the rules of the Commission.”...



This means that starting with the 2008 renewal, you must have your PDH hours completed *before* you can renew. PDH deficiencies will no longer be handled by “after the fact” disciplinary action of the Commission. If continuing education is not earned by the June 30th deadline you will not be able to renew.

You can still carry over up to eight additional PDH from year to year. By staying ahead, you can buffer yourself from any possible problems at renewal time.

## Drill Crew Member Lost

by Ted Bush, DWQ- APS Central Office

Excerpt from notification by Ted Bush...  
 "It is with much sadness that I inform you that Mr. Kevin Bubak passed away (March 3rd). For those of you who didn't know Kevin well, he worked the past several years in the Mooresville Regional Office (MRO) responding to well construction concerns, and had just recently accepted a position as a Hydrogeological Drilling Technician II in the Kinston Office of the Aquifer Protection Section (APS). During his time with APS, Kevin proved himself to be a real "go-getter", and was always interested in finding ways to improve himself. In more recent months at MRO, he worked alongside staff of the Division of Environmental Health in providing training to facilitate the statutorily mandated county well programs. Kevin possessed a passion for improving the well program, and was keenly perceptive of the underlying causes of the challenges faced by regulators and the regulated community alike. He had developed an extremely positive reputation among local well drillers and county officials, and was indeed a tremendous asset to our agency. He will be greatly missed.



We ask that you please keep Kevin's family in your thoughts and prayers."

## Registered Pump Installers

by Joanne Rutkofske, WCC Staff

In 87-85(12) of the General Statutes, a well "repair" is defined as including "...work which results in breaking or opening the well seal."

At the February 5, 2008 meeting of the Well Contractors Certification Commission, a motion was made that the commission considers "well disinfection" to be a well contractor activity.

This means that if you are a registered pump installer, you are required to have a certified well contractor present, or be certified as a well contractor, to perform these activities. These are existing rules.

If you are interested in becoming certified, those registered as pump installers since 2003 will qualify to obtain Level D certification without taking an exam.

## North Carolina Well Contractors Certification Commission

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### Commission Members

- Greg Bright, Chairman** - Louisburg, NC
- Mike Floyd** - Charlotte, NC
- Benford Graham** - West End, NC
- Bill Hamlin** - Dobson, NC
- Bill Magette, Vice Chairman** - Ahoskie, NC
- Elmer Newman** - Elkin, NC
- John Nykamp** - Greensboro, NC

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- Drew Morgan, R.S.** (919) 733-0026 x302 (enforcement)  
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Joanne.Rutkofske@ncmail.net
- Gail Winley** (919) 733-0026 x0 (pump installer)  
Gail.Winley@ncmail.net

## Certification Numbers Update

|                                                   |      |
|---------------------------------------------------|------|
| Total number certified.....                       | 1003 |
| Total number of applicants for certification..... | 49   |
| Approved to take exam.....                        | 38   |
| Applications pending.....                         | 11   |
| Certifications currently suspended.....           | 5    |

## NC Division of Water Quality Aquifer Protection Section (APS)

*For assistance with well construction problems, or questions about well construction rules, contact your regional office- Aquifer Protection Section at:*

|                      |              |
|----------------------|--------------|
| <u>Asheville</u>     | 828-296-4500 |
| <u>Fayetteville</u>  | 910-433-3300 |
| <u>Mooresville</u>   | 704-663-1699 |
| <u>Raleigh</u>       | 919-791-4200 |
| <u>Washington</u>    | 252-946-6481 |
| <u>Wilmington</u>    | 910-796-7215 |
| <u>Winston-Salem</u> | 336-771-5000 |

APS website: <http://h2o.enr.state.nc.us/aps>

1250 copies of this document were printed at a cost of \$302.04 or \$0.24 each.

## 15A NCAC 2C–Well Construction Rules Update

by Mike Cunningham, DWQ– APS Central Office

The Division of Water Quality – Aquifer Protection Section (APS) has been working to update the 15A NCAC 2C .0100 well construction rules (2C). This update, the first since 2002, is intended to clarify some of the rules, address new well construction materials and enhance protection of the groundwater resource.

These 2C revisions are based on input and assistance from Division of Water Quality (DWQ) staff, local health departments, Division of Environmental Health (DEH), the NC Groundwater Association, the Well Contractors Certification Commission and Clean Water for North Carolina (a grassroots environmental advocacy group). APS has received numerous suggestions and comments about these proposed rule revisions from these groups. APS has also held two formal stakeholder meetings with representatives of these groups to discuss and help formulate these revisions. Unfortunately, there isn't enough room in this article to detail all of the proposed revisions. Here is a brief summary of the ones that may have the greatest effect on certified well contractors:

### Rule .0107:

- Included revision that, in cases where well setbacks are less than the standard distances due to restrictive lot conditions, the well shall be cased to a minimum of 35 feet. This is considered necessary since reduced setbacks due to lot size issues or restrictive lot conditions are becoming more common and superior well construction methods are necessary to help eliminate contamination problems.
- Added bentonite chips or pellets as an allowable grout and provided clarifications to distinguish between bentonite slurry grout and bentonite chips or pellets.
- Current regulation stipulates that bentonite grout may be used from three feet below land surface and deeper, but cement grout must be used in the upper three feet to the surface. This proposed subparagraph would allow the use of bentonite grout to land surface.
- Removed the restriction on pouring grout in the annular space to depths greater than 20 feet in cases where only 20 feet of grout is required.

- Deleted an exemption from the requirement to use a drive shoe for steel casing; all steel casing installed in consolidated rock shall have a drive shoe to prevent deformation of the end of the casing.
- Added drainfield repair areas to the existing required separation distances from septic tanks and drainfields. Reports from DEH and local health departments indicate that repair areas are commonly put into use within 5 to 10 years of initial installation of the septic system. Therefore, it has become common practice for local health departments to require that a drainfield 'repair area' be included as part of the permitted septic area. However, current rules do not recognize this repair area as a potential contaminant source. The proposed rule revision adds these repair areas as potential contaminant sources since they are so commonly put to use after the original drainfield fails.

### Rule .0109:

- Wellhead vents are necessary to prevent large changes in air pressure in the casing as water levels rise and fall during periods of pumping and recovery. However, large scale flooding events such as a hurricane can cause thousands of wells to become contaminated by infiltration of polluted floodwaters into the well. The proposed revision requires that wells located within a 100 year floodplain have a reinforced vent opening and be located above the base flood elevation or must be equipped with a check valve device to prevent the entrance of floodwaters.
- Added a requirement for a threadless sampling tap to enable consistent sampling of wells under the new private well program.
- Requires threaded hose bibbs on the wellhead be equipped with backflow preventers to prevent back-siphoning of contaminants into the well.

### Rule .0110:

- Removes a requirement from the approved procedure for testing public, industrial or irrigation wells that the testing be continued until water levels in the well cease to decline. However, in some circumstances the well will never cease to decline. The removal of this requirement is anticipated to produce better quality data and also waste less of the certified well contractor's time waiting for a water level to cease to decline that

(Continued from page 4)

physically cannot.

#### **Rule .0112:**

- Well liners must be grouted within 10 working days of confirmatory analytical testing results or installation of the liner. Current regulations only allow 10 working days before the liner must be grouted in place, which often isn't enough time for analytical sampling to confirm the liner is properly placed. This revision allows time for confirmatory sampling prior to liner grouting.
- Added a requirement that dewatering wells be permanently abandoned within 30 days of completion of dewatering activities.
- Added the same requirement for abandonment for test borings that are currently in place for temporary wells and monitor wells. This proposed addition is intended to address the issue of test borings (which are primarily geotechnical and environmental soil borings, but can also include borings for mining, etc.). These types of borings can penetrate to considerable depths, and if left ungrouted after completion, they can easily act as conduits for surficial and shallow contamination to reach deep groundwater and aquifers.
- Clarified that wells not maintained or repaired in accordance with this rule must be permanently abandoned. This has been a 'loophole' in the rules that allowed well owners with damaged wells to "temporarily abandon" them (and remain this way indefinitely). Temporary abandonment will not be sufficient with the proposed revision.

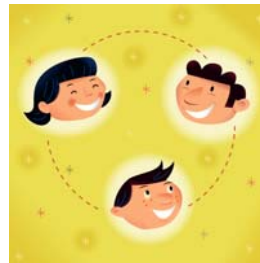
#### **Rule .0113:**

- Currently requires any well not properly grouted in accordance with regulations must be over-reamed and re-grouted prior to abandonment, or the casing must be removed and the well grouted. The proposed revision establishes abandonment requirements for ungrouted water supply wells that were installed prior to the effective date of these regulations. They are often in areas inaccessible to a drill rig and this proposed revision helps address the problem of old, inaccessible wells. It allows ungrouted wells constructed prior to the effective date to be abandoned by a simpler and far less intrusive method.

In summary, these revisions address many of the issues of the current 2C .0100 regulations, new well materials and improve protection of the groundwater

resource. Because the 2C .0100 rules will form the minimum standards for well construction for many local health departments starting in July 1, 2008, the need to clarify them and make them more effective is evident.

These proposed revisions will soon be published in the North Carolina Register (available online) and then a formal public comment period will begin, with public hearings to be held in various parts of the



state. If you have questions, concerns or suggestions regarding these proposed revisions, it is important that you make your concerns known, during the public hearings and public comment period. DWQ is not able to take action on comments submitted prior to the public comment period, and cannot take action on comments submitted after the public comment period is closed. Be on the lookout for announcements of these public hearings through the WCCC Drillers Digest, [www.NCwelldriller.org](http://www.NCwelldriller.org), local newspapers or local health departments.

## **Certification Exams And New Applications**

by Joanne Rutkofske, WCC Staff

New applications for certification will not be accepted after March 25, 2008 in preparation of the upcoming Chap. 27 rule changes proposed to take effect May 1, 2008.

An additional scheduled exam has been added April 28, 2008. Applications must be approved by the March 31st meeting of the Review Committee or sooner to qualify for this exam. All existing qualified applicants and new applicants approved by March 31st will be assigned to this exam.

After the April 28th exam, remaining qualified applicants will need to choose which certification level they are pursuing, as the proposed rule changes are scheduled to take effect May 1, 2008. Those pursuing Level A certification will be required to pass a **Field Observation** before taking the exam.

Application forms for the new levels will be made available online at [www.NCwelldriller.org](http://www.NCwelldriller.org) after May 1, 2008.

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## Variations to 2C

by Andrew Pitner, DWQ– APS Mooresville Regional Office

On occasion, a variance to the 2C rules is necessary to install a water supply well. Variances are specifically allowed by 2C .0118 and they currently require application to the Division of Water Quality, which must find that the well will not endanger human health or the groundwater resource and that construction in accordance with the standards is not technically feasible at an affordable cost. The Division requires sufficient information to be submitted in order to make the decision on the variance request and may impose conditions on the construction and use of the well. DWQ must respond within 30 days to a variance request, which can subsequently be appealed within 60 of that decision.

Most often, a well variance is needed when a particular setback, such as 25 feet to a building foundation, cannot be met. DWQ has developed standard **minimum** guidelines for variance wells in the piedmont/mountains and coastal areas of the state. In general, a variance well that does not meet a setback will have to meet a higher standard of construction, such

as a full grout. These decisions are considered on a case-by-case basis in each regional office. In keeping with 2C .0105(b)(6), DWQ considers the granting of a variance as a permit.

DWQ has recently revised the variance application form (GW-22V) to reflect information needs. This form also recognizes that many county well programs are up and running, that those personnel have been trained on the 2C rules and are most familiar with the site. The new form asks that drillers work first with county staff to confirm the need for a variance and then supply information that most counties have already been requesting. County staff are not required to be included in the variance process in cases where the county does not yet have an established well program or the subject well is of a type not covered by the county program. The new form, which includes guidance on minimum additional construction requirements, can be found online at: <http://h2o.enr.state.nc.us/aps/gpu/forms.htm>.



To Report Violations or Uncertified Well Contractors Call (919) 733-0026 x302