

## PRIVATE WATER ADVISORY COUNCIL

Meeting Notes – April 25, 2019

### 1. Introductions

**Council Member Attendees:** Liesa Lehmann (DNR), Michael Hanten, Bill Hanser, Gary Kuhn, Steve Tesmer, Roger Lang, Eric Schuette, Bruce Walker, Wyatt Buttke, Scott O'Brien.

**Other Attendees:** Bruce Rheineck, Mark Pauli, Frank Fetter, Bob Gundrum, Jared Niewoehner (DNR); Rick Peterson, Jeff Beiriger, Terry Marshall, Dennis Crow, Jason Hintzke, Jeff Kramer.

### 2. Notes from January 2019 meeting

Lehmann handed out meeting notes and summarized the content. No comments. Notes will be distributed by email with the April meeting notes. WGNHS Updates will be a regular agenda item; not on today's agenda because Pete Chase was unable to attend.

### 3. DNR Updates

#### Staffing Updates

- Frank Fetter is new Private Water Policy Coordinator. Frank will be NR 812 expert and lead role in NR 812 Revisions. Council asked if well professionals should call Frank instead of field staff. Lehmann indicated no, please continue to contact field staff first for code questions, and contact Frank if time-sensitive and you can't reach field representative.
- Bob Gundrum is new half-time Licensing Coordinator. Bob will be NR 146 expert and lead for License Applications and Exams, and approval of Continuing Education.
- Jared Niewoehner is new Private Water Hydrogeologist, transferred from Fitchburg field position. Jared's primary assignments are landfill variances, well grant technical review, and geothermal approvals. Jared will also work on Special Well Casing Depth Areas.
- Private Water Field Specialist vacancy in Fitchburg – Marty has started process to fill position.
- PFAS Coordinator - DNR hired Bridget Kelly to work as new coordinator on PFAS issues. Bridget was formerly in the drinking water implementing the Lead and Copper rule with municipal systems, so that priority position is now vacant. Hanten asked for Kelly to come to future Council meeting to give a presentation on PFAS.
- Other – Kuhn asked if any other staff changes are expected. Lehmann indicated that none are announced. Judy Gifford and Sandy Hershberger both have many years of state service, and are likely to retire within the next year.

**NewsBits** – The 2018 Annual Report issue of NewsBits will be released soon. Lehmann previewed annual data from the report.

- Well Construction – One council member suggested that DNR include pre-2008 data. One question about the difference between "industry" and "non-potable" well types. Lehmann indicated industry could be potable – e.g. food processing plant.
- Filling and Sealing - Hanten asked whether there's been an increase in well filling and sealing since the property transfer inspection requirement to inspect for existing wells went into effect in 2014. Lehmann indicated DNR has the data and can look at that.
- Geothermal - number of geothermal projects has been declining. Walker expects 2019 numbers to increase. Beiriger said numbers should come back up but will fall again if federal tax benefit is not made permanent. Uncertainty regarding the direction to be taken with tax credits is keeping some potential users from moving forward.

- Field Inspections - steady at between 10-12% of notifications every year.
- Well Grants – Question about the fund balance and if it's enough to support requests. Lehmann indicated the annual appropriation is \$200,000, and \$139,000 was distributed last year. The Governor's budget proposes to increase the annual appropriation \$1 million and expand the nitrate criteria. Only 56 abandonment grants last year – usually closer to 100/year. Question about how many well compensation grants were for treatment systems - the number is small; most well compensation funds are used for well replacement because grant rules require looking for a safe water supply first. Discussion about how to determine best whether new well or treatment is best solution - consensus that it needs to be case-by-case. DNR recommends well replacement or connection to public water supply as the permanent solutions. Installing UV treatment still requires prior approval; but proposed rule revisions would eliminate approval requirement and require a compliance inspection instead. If a well is contaminated doesn't it have to be filled and sealed? NR 812.26 allows three attempts at batch chlorination before a bacteria-contaminated well has to be filled and sealed. Drilling deeper to address nitrates can result in arsenic issues. In some cases, shorter casing is approved where geology warrants it. Reminder that well grants are considered taxable income, so low income owners could take tax hit by accepting grant funds.
- Licensing – With aging drillers and only ~150 drill rig operators in the pipeline, may be a problem for future well drilling. How many new licenses were issued last year? [2018 new licenses: Pump Installer 25, Well Driller 4, Well Drilling Rig Operator 17] Comment that heat exchange rig operator duplicates water well rig operator - why are there are two separate registrations? When the heat exchange license was added, the NR 146 code language for well drilling was duplicated for heat exchange drilling, so a duplicate rig operator category was added. A code change will be needed to consolidate these.

**Compliance and Enforcement** – Lehmann described case of second offense/unlicensed pump installing, and shared related news release. DNR hopes to use this publicity tool for future cases.

**NR 812 Revisions** – Lehmann thanked Advisory Council for attending the March 15 special meeting, to promote greater understanding and perspective about the proposed code revisions. NR 812 Revisions are tentatively scheduled for the May 22 Natural Resources Board meeting in Madison for adoption. Rule documents are expected to be released to the public on May 8. Review by the Governor and Legislature will occur in summer/fall of 2019, and the rule revisions will likely be effective January 1, 2020. Lehmann will notify the Council as soon as the agenda and documents are available.

- Will DNR will print a hard copy for all license-holders? Unknown. Previous printing and mailing cost almost \$10K. After revisions, NR 812 should be fewer pages.
- Discussion about attendance at the NRB meeting and who could speak. Lehmann said the Instructions for registering to speak will be on the NRB web page and NRB agenda.
- Will DNR provide a written summary of the March 15 meeting and discussion of Top 4 items? No, the Response to Comments document was updated to reflect the March 15 discussion, and will be included with the NRB meeting documents.

**Disinfection Guidance** (Lehmann, Pauli, Rheineck)

- DNR plans to develop Disinfection guidance separate from Bacteria publication. Procedures in "[Well Chlorination in Arsenic Sensitive Areas](#)" (pub. DG-069) are proposed as a starting point.
- Industry outreach and input on recommended procedures:
  - Good discussion at statewide continuing ed sessions - about 1000 total attended.

- Lots of interest in the use of salt in chlorination, to cut through iron bacteria slime and allow chlorine to work more effectively. Some concerns about combining chlorine with acid and possibility of producing dangerous gas.
- Council concern was raised about releasing a publication describing mixing acid with chlorine bleach if publication is directed at homeowners. DNR plan is to direct it at professionals, with recommendation to homeowners to hire a professional. Homeowners (especially DIYers) will look for information online, so it's better that they find correct procedures instead of incorrect, incomplete or nonexistent procedures.
- Suggestion for two separate documents - one telling homeowners to hire a professional, and the other giving the professional a how-to guidance.
- Suggested education for emergency management and homeowners for dealing with flooded wells. DNR said it's important to make it clear that homeowners should not do anything until flood water recedes. Industry suggested that best option is to not use the well at all, because contaminated water can get into appliances and plumbing – this should be added to DNR's flooded wells brochure.
- Comments: don't use garden hose because it will outgas chlorine – use an RV hose instead. Never pour chlorine bleach down the top of the well casing, especially not over the top of the pitless adapter! Use a tremie pipe and thoroughly rinse the inside of the casing, or the chlorine will corrode the casing.
- Well owners should not assume they need to chlorinate based on a bacteria-positive test result. First make sure the contamination is from the well by checking to make sure bacteria is not from the pressure tank or distribution system. Emphasize that bacteria are an indicator that other problems may exist that may not be treated with chlorination.
- Keep vegetation away from the well! Wells with a lot of shrubbery or other vegetation will frequently pull bacteria down the vent pipe.
- Use new, unopened bleach. The older the bleach, the less effective it will be.
- Agreement from the group that they field many calls from homeowners asking how to disinfect their own wells. Homeowners need to be educated on limitations of doing their own work. List precautions to be taken if DIY chlorination is done.

#### 4. Old Business

- a. **Property Transfer Well Inspection form** – Lehmann provided overview of three documents. The remaining steps to finalize these documents for use are:
- Gather final input from DNR staff and Private Water Advisory Council members
  - Inform Wisconsin Realtors Association
  - Prepare documents in publication format
  - Post documents as [Proposed DNR Program Guidance](#) for 21-day public comment
  - Finalize documents and share with Well Professionals and others
- 1) **Form 3300-221** proposed changes: Location section matches other forms; new box under Comments when no WCR available and can't determine geology for box #24; added third choice under conclusion section – “Complies but more research needed.”
- Discussion/suggestions:
- #24 - add Sandstone to checkbox to reflect 5” wells into sandstone post 1975
  - Add a semicolon to the 3<sup>rd</sup> compliance choice (complies with visual inspection). Or have 3<sup>rd</sup> choice read “NR 812.44” instead of just “NR 812.”
  - #12 – why is it just a driven-point well, and not a drilled well? Language is directly out of NR 812.44, which only refers to point wells.
  - #17 - Black Poly Pipe – reference should be “nonapproved poly pipe”...color is not important. Requirement is based on pressure rating.

- 1) **Proposed PTWI factsheet** – 2-page document language almost identical to DNR web site. Discussion:
  - If the homeowner doesn't want additional wells on the property inspected, does this make the inspected well noncompliant based on the form due to the existence of uninspected wells? Uninspected hi-cap wells on a farm property may also be an issue, unless the farm house is a separate property than the fields.
- 2) **Proposed Understanding your PTWI factsheet** – more detailed explanation of each item on inspection report. Discussion/suggestions:
  - #13 and #15 – why are they necessary? Is pressurized conduit considered dead-end piping? Jet pump elevation - keeping it 12 inches off the floor doesn't make sense; it is a sealed system, so it shouldn't matter. If a basement is flooded, its best to have the pump lower so that it can shut off sooner.
  - #20 and flowing wells – need to clarify what caps are approved
  - Water testing should clarify that it includes “E.coli” which is part of the same test
  - Electrical disconnect - it's not part of the well and pump code; it's part of the electrical code. Some inspectors make a note of any electrical concerns on the form, but it doesn't affect compliance under NR 812.
  - #22 – wires not enclosed in conduit should be reworded to wires not enclosed in conduit *at the well head*. #22 deals with another code – not NR 812.
  - #23 needs to be corrected to match new code. “No matter what the age of the well is” needs to be revised.
  - #24 – Less than 6-inch wells allowed to terminate in sandstone. Should include “sandstone” in comment section item related to #24.
  - #25 - Health and safety if wire not run within a conduit...is this a safety hazard? UF wire run within conduit is not a safety hazard.
  - Pump cable not rated to be “buriable” and not in a conduit. Also outside well code.
  - Consider adding a disclaimer that this inspection does not include electrical or plumbing codes.
  - Concerns over how Realtors will react to third option of “Complies with NR812 but...” Lender may hesitate to move forward with this box checked.

## 5. New Business

- a. **Arsenic and new wells** (Lang) - Arsenic is a big health concern. Arsenic testing is not done after new well construction; only tested after pump work or for property transfer inspection. Suggestion: when state sends well labels, include language that alerts homeowner to potential arsenic contamination, and encourage testing. Discussion:
  - Many homeowners assume the well was tested for arsenic (and other contaminants).
  - Testing should be recommended for 6 months to one-year post-construction.
- b. **Pump Installer/Well Driller licensing exam** (Hanser) - Concerns about misleading or incorrect questions.
  - Question about measuring drawdown in a point well – it can't be done. DNR will look into this exam question.
  - Discussion of forming an industry committee to help develop the test. Issues for confidentiality will need to be addressed. Hanten recommended developing a bank of questions that can be randomized for each exam.
  - DNR will revise the exams due to code revision, and plans to develop study guides.
  - DNR will assess ways that industry could be involved in the study guide or exam development process.

- c. **Location discrepancies** (Schuette) – Concerns about differences in lat-long results for handheld GPS v. DNR maps v. County maps.
- Schuette indicated that they often run into discrepancies when a property is near a section line, or in late summer when under tree canopy. When they get errors when submitting location data in the Online WCR system, he has revisited project sites.
  - Discussion that WDNR GIS is not 100% accurate, and neither are GPS units. Different data layers across different platforms can have small variations.
  - If a field GPS unit is used, DNR recommends ensuring that enough satellites are connected, and then to double check location data using the Well Driller Viewer, and also cross-reference with the PLSS information.

6. **Future Meeting Dates**

- October 2019 – Clean Water Testing, Appleton
- January 2020 – Wisconsin Dells