

## ADVISORY COUNCIL ON WELLS AND BORINGS

Minnesota Department of Health (MDH)  
625 North Robert Street, St. Paul  
Freeman Building, Room B149

September 6, 2017, Meeting Minutes

### Members Present

Bruce Bloomgren  
Chris Elvrum  
Daniel England  
Annie Felix-Gerth  
Roy Forsstrom  
Daniel Gibbs  
David Henrich (Vice Chair)  
Bruce Johnson  
David Kill  
Dennis Koepf  
Troy Kuck  
Richard Lamb  
Danny Nubbe (Chair)  
Mark Thein

### Members Absent

Michael Liljegren  
Haden Shipman  
Brian Stangret

### Others Present

Kim Benson-Johnson (MDH)  
Nancy Laplante (MDH)  
Ed Schneider (MDH)  
Frieda von Qualen (MDH)  
Jennifer Weier (MDH)

### 1. CALL TO ORDER

Danny Nubbe called the meeting to order at 10:01 a.m.

### 2. WELCOME NEW MEMBERS AND OATH OF OFFICE

Three newly appointed members were welcomed:

- Bruce Johnson, Summit Envirosolutions, Inc., representing environmental well contractors.
- Daniel Gibbs, Geothermal Eco Options, Inc., representing bored geothermal heat exchanger contractors.
- Annie Felix-Gerth, representing the Board of Water and Soil Resources.

Each new member signed the oath of office, which Ed Schneider will forward to the Secretary of State's office.

### 3. REVIEW AND APPROVAL OF DECEMBER 15, 2016, MEETING MINUTES

Ed Schneider reminded the council that there was only an abbreviated council meeting in March to review a license applicant, and no meeting in June, so the December 15, 2016, minutes had not yet been reviewed and approved by the council. A motion was made and seconded to approve the December 15, 2016, meeting minutes, and the minutes were approved on a voice vote.

#### **4. REVIEW AND APPROVAL OF SEPTEMBER 6, 2017, MEETING AGENDA**

A motion was made and seconded to approve the September 6, 2017, meeting agenda, and the agenda was approved on a voice vote.

#### **5. EXPENSE ACCOUNTS**

The new simplified expense report form was provided to council members eligible for expense reimbursement. Ed Schneider provided instructions on completing the new form, and reminded council members to hand in receipts from meals and parking with their expense accounts and to get expense accounts back to him in a timely manner.

#### **6. ANNOUNCEMENTS**

New Well Management Section Staff – Jennifer Weier was introduced as the new Well Management Metro Region Supervisor, filling the position vacated by Ron Thompson’s retirement.

Well Management Section Retirement – Well Standard Representative Steve Bennett retired in August after 25 years of outstanding service. The Well Inspector vacancy has been advertised and applications are being accepted until September 11, 2017.

#### **7. OLD BUSINESS, UPDATES**

- **Bored Geothermal Heat Exchanger (BGHE) Rulemaking Update**

A copy of MDH’s webpage for the Request for Comments (RFC) was provided to the council. The first RFC was published back in 2013. At that time, the proposed rules had not yet been drafted. Due to the length of time since the original RFC, a second RFC was published on July 24, 2017, along with a link to the proposed rules. The comment period remains open until at least September 24, 2017, or until we publish the Intent to Adopt. Any comments received during this comment period will be considered by MDH, and may result in modifications to the proposed rules, at the discretion of MDH. When the Intent to Adopt is published, a new formal comment period opens for at least 30 days, during which time the public again has an opportunity to provide comments, and to request a hearing. MDH must respond to each comment received. A hearing must be held if twenty-five or more persons request a hearing. The current proposed time line is to finish the rulemaking by mid-2018, provided a hearing is not held.

- **Electronic Record Submittal Status**

Well Management Section staff continue to test and work with MDH IT staff to work out bugs in the program. It is hoped that the program will be tested by selected licensed well contractors in the near future.

- **Continuing Education for Contractors – MDH Participation at Pump Schools**

Well Management Section staff provide training at six to eight pump schools each winter/spring. Staff have discussed in the past both internally and with the advisory council whether or not Well Management Section should continue to commit staff time to these trainings. After much deliberation, Well Management Section has decided to continue presenting at the pump schools for the foreseeable future. Reasons include that our training at pump schools reaches those who may not attend MDH-hosted

trainings. Pump schools are attended by not only the certified representatives who are required to obtain continuing education, but also well contractor employees. This provides an important opportunity for Well Management Section staff to have face-to-face contact and discussions with these employees who are doing the work in the field. In order to reduce time spent on continuing education, Well Management Section will host only two, not three, videoconferences in 2018: one in the spring and one in the fall.

David Henrich observed that many of the non-MDH presentations at the pump schools are simply infomercials without significant educational value, and suggested MDH audit classes that are being approved for continuing education credit.

David Kill noted that there continues to be a need for more training on well chlorination/disinfection. Grouting was also suggested as a training topic.

- **Survey of Users of Wells with Known Elevated Arsenic – Results**

Frieda von Qualen provided a summary of results of the MDH survey of private well users who had arsenic above 10 micrograms per liter in their new well. She then asked the council for ideas on how MDH could improve communications about arsenic to well users, well contractors and other potential partners.

- Chris Elvrum acknowledged that MDH needs to do a better job educating well contractors about the role they could be playing.
- Denny Koepp noted that Wisconsin has a good program regarding arsenic.
- Annie Felix-Gerth stated that Minnesota Department of Agriculture (MDA) has held local nitrate clinics. Could MDH do something similar with arsenic, with MDH experts and well contractors available to answer questions?
- Frieda noted that one county has received a grant to provide arsenic testing and we are waiting to see how that works and if it may provide a model for local testing programs.
- David Henrich and Annie Felix-Gerth both acknowledged that it is not easy to get people to attend.
- Roy Forsstrom asked how health risks from arsenic exposure in water compare to other health risks. It is likely that, for many, arsenic will be much lower priority than other risks.

Other comments:

- Is there any funding available for water treatment or a replacement well when arsenic is present? Low interest loans may be available through MDA that include installing treatment devices. No cost-share or grant money is known of at this time.
- There are several treatment options that vary widely in cost.
- MDH should highlight the health risks to family members, especially children.
- Since well owners turn to the well contractor for information and solutions regarding high levels of arsenic, MDH must educate the contractors so misinformation is not provided to well owners.
- Make it clear in education materials that go out to well owners that high levels of arsenic are not the well contractor's fault.
- Make it clear for both well owners and well contractors the reasons why the level of arsenic may change over time.

- Marketing to well industry can be difficult, but provide brochures/handouts that contractors can give to clients with high arsenic levels.
- Try to make well owners understand that it costs about a dime a day to run their well system. So, they should invest in treatment if necessary to ensure safe drinking water for themselves and their family.
- It was recommended that MDH consider doing educational events locally. MDH is hoping to start partnering with local government units to do this.

General questions from the council regarding the arsenic survey:

- Does MDH know the breakdown of where people lived and who responded? MDH does not have that breakdown, and may not be able to determine, based on how the data was collected.
- Has MDH looked at other states that are having the same problem? MDH has looked at work being done by other states with arsenic issues, mostly on the east coast. Wisconsin has arsenic issues as well, but doesn't provide much information that is available for outreach purposes.

## 8. NEW BUSINESS

- **MDH Oversight of Local Delegated Well Programs**

Mark Thein described a situation that occurred in summer 2016 while his company was constructing a well for the nuclear plant in Goodhue County. The county well program inspector shut down the well construction work to determine if a possible contamination source was nearby. The shutdown lasted for two weeks. It was eventually determined that there was no contamination source. Mark's concerns are that the local program inspector's actions did not seem to be justified by the available information, and additional costs were incurred as a result. Mark asked how MDH oversees or controls local well programs and inspectors.

Chris Elvrum gave an overview of well program delegation and explained that MDH evaluates local programs every three years and recently completed evaluations of five of the ten delegated well programs. The evaluations affirmed that the delegated well programs meet or exceed most of the delegation agreement requirements. MDH includes the delegated well program's well inspector supervisors in the evaluation process and provides the supervisors, county health board members, and county administrator with a copy of the final evaluation report. MDH is also considering inviting delegated well program inspectors to join in the quarterly meetings that Well Management Section inspectors are currently attending. These quarterly meetings are used to discuss inspector experiences in the field and to build consistency into our practices. The current delegation agreements require that local well program regulations must be as or more stringent than the state's well code.

Roy Forsstrom asked if MDH staff co-inspect with local inspectors and if there are renewal requirements for local inspectors. Kim Benson-Johnson answered that delegated well program inspectors are required to pass the same written qualification exam that is required for well contractor applicants. They are also required to spend up to three days conducting well inspections with a MDH well inspector and must complete six hours of continuing education each year. Roy suggested that the local inspector may have been extra cautious regarding work being done at nuclear power plant site.

David Kill asked if there is a sunset clause for delegation agreements. Chris said no; delegation agreements continue until the delegated well program asks to discontinue the program or MDH finds that the delegated program is unable to properly enforce the well code.

Mark Thein asked if MDH can control local inspectors like employees. Kim said no, and that complaints or concerns regarding a local program inspector should be addressed to the inspector's supervisor or higher-ranking local program officials. If problems persist, contact MDH Well Management regional supervisors (Jennifer Weier or Peter Zimmerman) or Chris Elvrum and MDH will attempt to mediate. Mark said he did raise his complaint to other county officials, and that shortly after the nuclear power plant incident, there were staffing changes at the county (the inspector in question left) and things have been better since then.

Denny Koepp asked if there is a limit on permit fees that local programs charge. Chris said they can charge higher or lower fees than the state, but must be based on need. Mark commented that most local programs charge the same or less than MDH fees.

Richard Lamb asked how the recent amendments to the monitoring/environmental well statutes will affect local programs. Kim said that those programs that include monitoring/environmental wells in their delegation agreement will need to update delegation agreements and modify their local ordinances. Some of those changes may not take place until after MDH updates its' rules.

- **2017 Amendments to Minnesota Statutes Regarding Wells and Borings**

Handouts summarizing recent changes to Minnesota Statutes, chapter 103I were provided to council members, including:

- MDH Memo dated June 12, 2017, *Well Fee and Policy Changes Effective July 1, 2017*
- MDH Memo dated June 26, 2017, *Environmental Well Requirements*
- MDH flowchart, *Identifying Environmental Wells and Determining Administrative Requirements*
- Copy of new online Environmental Well Construction Notification form
- MDH Memo dated June 22, 2017, *Exploratory Boring and Certified Explorer Fees*

Chris Elvrum summarized the legislative events that led to law change during special session, without any hearing.

**Environmental Wells.** Graig Gilbertson of Minnesota Department of Transportation (MnDOT) gave a brief presentation to the council identifying challenges MnDOT faces attempting to comply with new requirements. Previously unregulated borings for collection of cuttings did not require licensed well contractor or grouting of bore holes. New requirements apply to all borings 15 feet deep or deeper. Graig determined that MnDOT drilled 537 holes greater than 15 feet deep last year, which he estimated would cost \$540,000 to have drilled and sealed by a qualified licensed well contractor. Alternatively, MnDOT would need to get additional staff certified as environmental well contractor representatives, and new costs would be incurred for grouting equipment

and time and materials to perform grouting. Graig was not sure there were sufficient MnDOT staff that would qualify to become certified representatives. Richard Lamb said that currently, each MnDOT district determines whether to do drilling work in-house or hire out to consultant.

Chris Elvrum said that the law change is intended to provide consistent groundwater protection, and that unsealed or improperly sealed bore holes of any depth do create a potential pathway for contaminate migration. David Henrich and Danny Nubbe were supportive of the law change and stated that the grouting of all bore holes 15 feet deep or deeper is the right thing to do.

Ed Schneider indicated that experience drilling previously unregulated borings would count towards the qualification requirements for the certified representative credential.

Roy Forsstrom asked if other government agencies drill environmental wells. Chris said that Department of Natural Resources and MDA do some drilling, although probably not as much as MnDOT.

MDH will invite Graig Gilbertson to be on the rulemaking advisory committee when it is formed for the future rulemaking for environmental borings.

**Exploratory Borings.** Ed Schneider explained that the law change added a requirement for a construction notification fee to be submitted to MDH prior to construction of each exploratory boring. Prior to the law change, a notification was required, but there was no fee.

Dan England stated that he had discussed the notification fee requirement with Chris Elvrum in late winter or early spring 2017, prior to the law change, and expressed his opinion that the fee should be per site or project and not per individual boring. Dan thought that the change to a site fee could be added to the legislation; however, because of how the legislature passed the exploratory boring law without any hearings, there was no opportunity for MDH or other interested parties to propose those language changes. Dan was very disappointed with how the law making process played out. Ed said that he would ask Chris to speak with Dan to try to address any misunderstandings (Chris left the advisory council meeting prior to this discussion).

Other council members also commented that they were not provided the opportunity to review the proposed statute language at any time. Ed acknowledged that MDH should have sought advisory council input. Roy Forsstrom suggested that the council be provided with a legislative calendar that provides important dates/deadlines that MDH has for proposed legislation.

- **Preliminary Discussion of Proposed Rules for Environmental Wells**

The next step is for MDH to start drafting rules. MDH will be forming a rulemaking advisory committee to assist with the rulemaking. Rule drafts will be provided to the advisory council for input.

One council member pointed out that rules should address potential problem of sealing dry holes with current grouting procedures. Nebraska's grout study could provide good insight on using bentonite chips.

#### **9. OTHER BUSINESS**

Danny Nubbe and David Henrich expressed concerns about city well bans and the apparent promotion of well bans by some MDH staff. Ed Schneider explained that MDH does not have the authority to stop cities from setting well construction bans. Ed also explained that MDH is officially neutral on the implementation of well bans and MDH staff should not be promoting well bans. Ed will discuss with Chris Elvrum and Drinking Water Protection Section and report back to council.

#### **10. ADJOURN**

Motion to adjourn was made and seconded, and the meeting was adjourned at 2:20 p.m.