

CORRESPONDENCE/MEMORANDUM

DATE: April 26, 2022

TO: Advisory Council on Well Drilling, Heat Exchange Drilling & Pump Installing

FROM: Marty Nessman, Private Water Supply Section Chief
DNR Bureau of Drinking Water and Groundwater

SUBJECT: **Advisory Council Meeting Notes**

Date/Time: **Thursday, April 28, 2022 – 9:30AM - 1:00 PM**

Location: Schmeekle Reserve Meeting Room, Stevens Point
Also on Zoom

Meeting Agenda**1. Welcome and Introductions**

Attending: Pete Chase, Bruce Walker, Dennis Crow, Troy Van de Yacht, Steve Tesmer, Eric Schuette, Jeff Beiriger, Rick Peterson, Terry Farago, Terry Marshall, Marty Nessman, Frank Fetter, Stacy Steinke, Bob Gundrum

2. Selection of New Co-Chair of the Private Water Advisory Council

Dennis Crow nominated and appointed new Co-Chair

Frank should get meeting agenda out at least one week in advance

3. DNR Updates**a. Staffing Updates (Nessman/Steinke)**

- i. Marty should be making an offer to potential new Hydrologist (replacement for Jared Niewoehner) any day.
- ii. Stacy about to begin interview process for new field expert position within next 2 weeks

Need to send out updated coverage map – NewsBits and meeting minutes

Main Contacts Link: [Private water supply specialists || Wisconsin DNR](#)
Coverage Map: [Private Water Supply Specialists Field Staff \(wisconsin.gov\)](#)

b. IT Updates (Nessman)

Terry – asked that the unique well number stickers are still planning to be sent out.

Marty confirmed that, yes, we will be working on it.

Two year gap (from Sandy vacancy) currently that needs to be addressed which entails a good deal of work for the DNR to catch up.

Terry had a question about replaced well letters

When they do jobs for plumbers/pump installers – the replacement letters go out to the driller instead of the pump installer – creates extra work when the WD is done and the PI actually did the filling and sealing work

Terry M. requested that letters go to pump installers as well as the well driller. License number to be used to tie pump installer to the well needing to be abandoned.

Stacy noted that we would need to have the license number of the pump installer in the notification/WCR in order to also send those letters to the PI

c. Compliance and Enforcement activities (Steinke/Fetter)

Terry had questions about sch 80 PVC and its use as electrical conduit – can sch 80 be used?

PVC likely noncomplying material. Black poly was commonly used in the past. Terry M. commented that schedule 80 PVC is not approved for electrical conduit. Question as to what is approved.

Terry also had questions about what was required for overflow air gap (mostly concerning wind blowing water on flowing wells)

d. Annual report 2021 (Fetter)

Terry reiterated that he (David Haupt) would like to see that NONs are sent to well driller or PI first – instead of well owner so that the WD/PI has a chance to respond first

Terry also talked about the delay in being able to collect water samples – specifically on seasonal properties where they are unable to go in and collect samples

e. NR 812 Revisions (Fetter)

i. Board Order DG-25-19 update (PVC Casing)

Terry had a question about when the rule would be promulgated – it was clarified that the text that is already written IS the code. Dennis Crow question as to what JCRAR is/ – Jeff B: JCRA is Joint Committee for Rules Administration. Last step before publishing. There are 3 committees of legislature that review before publishing.

Terry is concerned about areas where guys want to put in 300-400 feet of PVC pipe – can't use haliburton method – but can still pressure grout with tremie

Terry M. has not seen the construction standards in code for PVC into bedrock unless it is the same as steel. Marty – not same as steel but details were included in the board order. Frank to provide the latest copy of board order to Terry and will review details with him directly.

Terry M. concerned about migration of water down PVC casing due to lack of adhesion of grout to PVC and possible deformation due to heat of hydration. Also concerned about complete reliance on grout to seal the casing when using PVC. PVC can not be driven to create as seal at the bottom.

Terry also had a question about the new Portland cement – has more lime in it – will it create more heat issues? Marty stated that it has more limestone in it – but he assured Terry that it is a very slight change that may cause only a degree or two higher heat of hydration

Used to use PVC pipe as a sleeve for water lines – but was able to pull the PVC right out of the concrete – the Portland cement does not bond to the plastic like it does steel

Marty clarified that we are allowing cement but does not feel that many drillers will use cement

Only need cement if it is going more than 5 feet into bedrock and we are not allowing PVC to go more than 5 feet into bedrock

Terry is concerned that PVC is much different than steel in these situations because it cannot be driven to a firm seal into the bedrock – drillers will lie on the WCR if they have soft or caving formations and a greater depth of PVC than 5 feet will be cemented in and will likely have a poor seal

Terry feels that the industry was misled or uninformed about this new code requirement.

ii. Training for drillers new to PVC Casing

Governor signed the new rule within days – so now we are scrambling a bit to get training in place or to have appropriate supervisory drillers for this notification requirement

Terry asked if there was a way to note on the notification if the driller intends to case with PVC – can we potentially add this to the new notification system as an option that needs to be selected?

Terry would really like DNR specialist onsite for these wells from start to finish – not for only portion of the job

Rick – asked about when you encounter “bad” rock that Terry referred to – what did he mean? If you can’t go any further than 5 feet

Troy – trying to think of one application that he would ever use it – he would likely never use it? The whole process does not make sense to him – thinks it will be very difficult to get a tremie pipe down a 300-400 foot UED alongside PVC. Pointed out that you can use steel pipe with a tremie adhered to it and then the driveshoe will cut the bottom of the tremie to allow Portland cement to flow into UED from bottom.

Jeff B. – need to also consider the DNR training requirements for them to ensure PVC construction per requirements when onsite.

DNR will put drillers on notification for first PVC wells. Marty: The requirement for supervision on first 10 wells really refers to rig operators and their supervisors. It does intend for a supervisor from another driller business to be onsite during the first 10 PVC wells drilled.

Terry M. pointed out that grouting is to be to the top of the pipe and will need to be removed before pitless adapter can be installed. Question as to how grout will be removed without causing damage to the PVC casing.

Dave DeYoung/Michigan – most of the time it is knocked off the PVC.

Bruce W. – it is not as big of a problem to remove the grout from the PVC. It can be removed with a hammer without damaging the pipe. Its no different than with steel pipe.

Troy V. asked by Terry M. about migration down PVC casing due to heat of hydration and shrinkage of casing.

Rick Peterson – what is meant by “bad rock”? Terry M. – it is reached when there is refusal in driving casing further and sluffing occurs at the bottom.

Terry M. – with steel casing you can drive 2” further to create seal where you can not drive PVC to accomplish the same.

Troy V. asked why procedure for PVC was not put into place before the code change has gone into effect? Process should have been determined prior to law going into effect.

Concerned about number of bad wells that may result from use of PVC casing. Listed a number of variables that can cause problems including offset upper enlarged to lower drillhole. For pitless adapter installation, you will need to be careful not to damage the PVC casing. Potential for migration down casing to aquifer.

Jeff B. – don’t think there will be a high number of wells drilled with PVC from the start.

f. Dual Aquifer/Maquoketa Shale issue (Nessman)

Some discussion about making the line firmer (e.g. – only follow the rule on one side of the line) – DNR clarified that the requirement is already in rule – the exact location of the line is NOT and Jeff suggested that that would really limit us. Stacy suggested that message to those who are struggling near the line with a well should reach out to DNR DURING well construction to talk through the concerns rather than dealing with a potential NON afterwards.

Map delineation was revised March of 2020. Is an approximation. Still can hit dual aquifer outside the line. Terry M. feels nonformance enforcement should be lenient in these areas when dual aquifer is encountered outside of the line.

Marty: Recent NONs were for wells inside the line.

g. Licensing and Continuing Education (Gundrum)

i. Continuing Education

1. 2022 attendance

Discrepancy in number of HEDI CE attendance shown on slide. The number 67 HEDI licensees with complete CE for 2022 should be 12 and 46%.

2. Provider application and attendance reporting: changes slated for 2023 calendar year

Jeff pointed out that the OpCert database flags issues when licensees write Bill instead of William (or other similar name issues) and bounces their continuing ed credits in OpCert and then does not notify anyone that the credits were not applied. Should rely on license # instead of first name.

Jeff brought up that if someone needs to leave the WWA continuing ed in the dells early (and would have received 6 credits for staying for the whole thing) that there needs to be a decision if we are going to allow partial credit for what was attended – or are we going to say no credit.

ii. Licensing

- 1. 2022 exam results**
- 2. Testing center update**
Would need to update exam and exam materials to reflect new PVC rules
- 3. License reinstatements**
- 4. Historical data and trends**
 - a. Newly licensed
 - b. Retired & expired

iii. Rig Operator Training

- 1. WGNHS Geology of Wisconsin Presentation**
- 2. Upcoming GEFCO and WYO-BEN training availability for grouting, drilling fluids and well abandonment training and industry interest in attending**
- 3. Northcentral Technical College Certificate Program**

h. Type 1 cement changes (all)

Would want to use the same amount of water with the new formula as with type I in order to have the same performance. May have some more “loss” or “slump” but you want to for sure use the same amount of water.

Question raised regarding the difference in chemistry from Type 1 to Type 1L. Marty provided the difference in lime content from 5% to 15%. Percent lime is shown on bag in parenthesis. No risk involved and we have no choice but to use the new formulation.

James Palmer of St Mary’s Cement - provided information on the changes and stated heat of hydration difference of 1.5% is considered negligible. This was introduced in Chicago area last year. Reduction in environmental CO2 factored into decision to switch. Equivalent performance with better earlier strength resulting from Type 1L. Provide email address as james.palmer@vcimentos.com. Feel free to forward any questions to James.

Ground finer and less clinker in Type 1L. Amount of water used does not change significantly. May require slight adjustment to achieve same performance. Water cement ratio should be consistent. Want to maintain same water content even though slump will be slightly different with Type 1L. Type 1 use is 15.2 lbs per gallon. Code requires 15.0 to 15.8 lbs per gallon. No sand, just cement and water – 3.15 to 3.10 specific gravity or 1.5% change in weight.

4. January 2022 Meeting Notes

- a. Council agreed that a meeting summary is better than meeting transcription. Fetter will modify meeting notes for 1/19/22 meeting.

5. WGNHS Updates

- a. Note: WGNHS updates to be moved in front of DNR updates for future meetings

6. Old Business

a. Change in definition of School Wells in NR 812.07(94) (7/20) – Daycares (carried over from January 2022)

Need to send the links to search for licensed daycare centers to Advisory Council - e-mail with links below:

Good Afternoon,

During the March 30th, NN Consistency call I introduced you all to the [ChildCareFinder \(wisconsin.gov\)](http://wisconsin.gov/ChildCareFinder) website that is managed by the Department of Children and Families. On the DCF website they note that the lists may not be inclusive of all facilities in an area that may be providing care to young children. We have discussed during one of our past DNR/DCF workgroup meeting that we need to find a way to identify private daycares since some types of daycares are exempt from DCF licensing. In particular, public and parochial schools are a concern. I came across a website today that does include the public and parochial schools, <https://childcarecenter.us/state/wisconsin>. All you need to do is type in the zip code or the city name and the list comes up. In encourage everyone to visit these webpages to ensure all of the daycare centers are being regulated as required and to ensure the protection of public health for this vulnerable population. Please let me know if you have any questions, thanks.

Time	Agenda Item	Description	Outcomes, Next Steps, Assignments
15 minutes Jennifer Peth	Dept of Children and Families Workgroup	<ul style="list-style-type: none"> • Update • Ops chapter 1.5.2: Determining “Regularly Serving the Same Persons” (Final 10/10/2007, 12/08/2010, 02/03/2022) https://intranet.dnr.state.wi.us/dg/ http://intranet.dnr.state.wi.us/formscatalog/Default.asp x Form 3300-055 Inventory Info Non-Community Public Water Systems • Finding daycares: <ul style="list-style-type: none"> ○ www.childcarefinder.wisconsin.gov ○ Wisconsin Child Care Licensing Home Page • Funding for daycares with MCLs or other issues: <ul style="list-style-type: none"> ○ DCF funding source (Jesse D. facility in process) ○ Water and wastewater funding sources Wisconsin DNR ○ Robin Wagner CC'd Brian Yulga, the DWC for External services to add to webpage 03/10/2022. 	<p>Reviewed revised language to Ops Chapter.</p> <p>Jennifer previewed website for when looking for daycares that may be public systems, but not in our system. Note that lists may not be inclusive and DCF site has this disclaimer “This does not include a relative or guardian of a child who provides care and supervision for the child; a public or parochial school, a person employed to come to the home of the child’s parent or guardian for less than 24 hours a day; or a county, city, village, town, school district, or library that provides programs primarily intended for recreational or social purposes”</p> <p>Possible funding source for daycares through DCF. This could be used for treatment install, but not for a new well or connecting to a MC. Jennifer in communication with External Services to see if link can be added to DNR funding webpage. Jessie Dowding gave an example of a facility (arsenic MCL) he gave this information to.</p>

7. New Business

8. Future Meeting Dates

- a. **October 2022 – Location TBD** (WGNHS Mt. Horeb Facility or Madison Facility suggested by Jeff Beiriger)
- b. **January 2023 – Lake Delton (WWWA Convention)**